3.13

UTILITIES AND PUBLIC SERVICES

3.13.1 Introduction

This section identifies the existing public services (fire protection, emergency medical services, and police protection) and utilities (water services, wastewater, storm drains, solid waste, electricity, and natural gas) within the proposed project area, and addresses potential impacts on public services and public utilities that could result from development of the proposed Project. This section also describes the regulatory setting associated with utilities and public services and the mitigation measures that would reduce impacts, if necessary.

3.13.2 Environmental Setting

For the proposed Project, the environmental setting is localized to the Port of Los Angeles and the community of San Pedro. The public services for these areas and communities are provided by the Port Police, Los Angeles Police Department, Los Angeles Fire Department, and the United States Coast Guard. The public utilities for these areas and communities are provided by the Bureau of Sanitation, Los Angeles County Sanitation Districts and Browning Ferris Industries, Los Angeles Department of Water and Power, and the Southern California Gas Company. Each public service and utility has been actively growing in concert with the growth in the communities and the region. For the proposed Project, each service and utility is described in further detail below to understand its provisions for providing and supplying service and its geographic area, as well as to discuss its individual planning efforts to accommodate anticipated future growth.

3.13.2.1 Public Services

3.13.2.1.1 Police Protection

Police protection for the Port is provided by LAPD and the Port Police (Los Angeles Harbor Department Police) and other neighboring agencies including the United States Coast Guard and the Los Angeles County Sheriff's Department. The Port is located in the LAPD's Harbor Division Area, a 27.5 square-mile area including Harbor City, San Pedro, Wilmington, and Terminal Island.

LAPD

The LAPD Harbor Community station, also known as the Port Police, is located at 221 North Bayview Avenue in Wilmington (LAPD 2005). This station includes a staff of 259 officers (Lieutenant Willis, pers. comm. 2008). Figure 3.13-1 shows the location of this station.

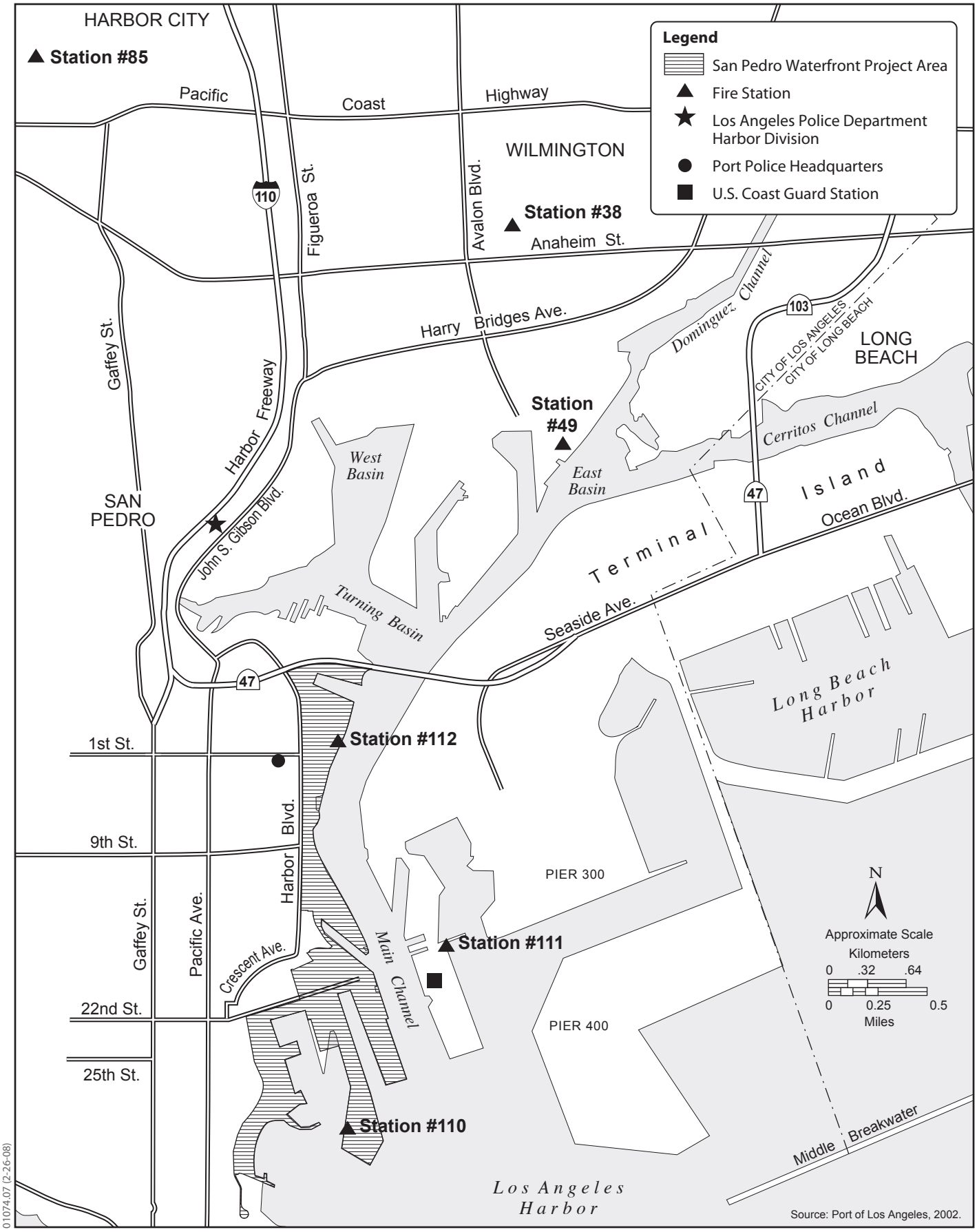
During periods of statistically high crime activity, the number of field officers has increased. Officers employ radio-dispatched cruisers and traffic control motorcycles to patrol the proposed project vicinity. LAPD provides support to the Port Police and responds to Port incidents under the following special circumstances: 1) complex crimes including homicides and major traffic incidents 2) special investigations including narcotics, organized crime, and terrorism and 3) unusual occurrences as identified by City protocol, such as events that require special resources, expertise, or staffing beyond current competencies.

LAPD's department-wide response time is currently 7 minutes, which is considered adequate. However, the department is currently working on ways to further decrease that time. (LAPD 2007a.)

Scheduled improvements to LAPD facilities in the Port area include replacement of the Harbor Community station on the existing station site. These improvements will help to create more efficient levels of service to provide for future growth and development. The new site will consolidate all station functions including patrol, detectives, special investigations, commanding officers' offices, community relations, records, and so on. A 60-prisoner jail is under construction at the new station, with occupancy scheduled for April 2008. (LAPD 2007b.)

Port Police

The Port Police are responsible for patrol and surveillance of the Port and neighboring Port Area communities. The Port Police enforce federal, state, and local public safety statutes as well as environmental and maritime safety regulations. Their primary goal is to protect the Port against all hazards through identification and elimination to ensure the free flow and protection of commerce, and to identify, apprehend, and prosecute persons who would direct criminal activity toward LAHD



Source: Port of Los Angeles, 2002.

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Figure 3.13-1
Community Facilities

properties, customers, or port users. In addition to LAPD and Port Police protection, each tenant occupying a berth or berths in the Port maintains its own internal security staff. (LAHD 2008a.)

Port Police offices are located in the Harbor Administration Building at 425 South Palos Verdes Street in San Pedro. Dive Unit facility boats and offices/lockers are located on 954 South Seaside on Terminal Island. Marine Unit boats and a small office are located at Berth 84, with additional offices in the Crowley Building nearby. Sea Marshals and K-9 units operate out of the Cruise Terminal Berth 93. An Interagency Task Force Unit is located on 239 Avalon in Wilmington. And finally, there is a Port Police training facility located at 300 Ferry Street. (Kirwan pers. comm. 2008.)

The Port Police do not estimate the number of employed officers necessary for the amount of proposed development or anticipated population for a given area. Their staff/sworn officer totals are based on current Homeland Security data and levels of security at other ports of corresponding size and activity. Response times are not estimated by the Port Police as a ratio of measurement and are therefore not estimated for the proposed Project. Presently the Port Police are authorized for a total of 223 positions in the 2007–2008 fiscal year. The number of total sworn staff is 142; however, the Board of Harbor Commissioners has approved the growth of sworn staff to 212. (Kirwan and Provinchain pers. comm. 2008.)

The Port Police maintain 24-hour land and water patrols. They also have Sea Marshals and K-9 units that are dedicated to the cruise terminal when cruise ships are in port. Due to constant patrol of land and water as well as the Port Police's expanding and constantly updated resources the Port area is adequately served. (Kirwan pers. comm. 2008.)

Scheduled improvements for the Port Police include construction of a Wilmington Substation at 300 Water Street around Berth 195, which should be occupied as a temporary substation during 2008. The Port Police are also in the process of building a new station at 330 S. Centre Street (between 3rd and 5th streets). It is projected that the new station will be completed in 2010. Other improvements include expanding the facilities to house mobile incident command vehicles, bicycle unit equipment, security officer equipment and vehicles, hazardous material response vehicles, an expanded marine unit facility, a marine mammal facility, K-9 kennel and K-9 training centers, and a Port Police dive and in-water training center. (Kirwan pers. comm. 2008.)

3.13.2.1.2 Fire Protection

LAFD currently provides fire protection and emergency services for the project site. Fire protection capabilities are based on the distance from the emergency to the nearest fire station and the number of emergency or fire-related calls at the time of any simultaneous emergencies. LAFD has required maximum response times of 9 minutes by land and 14 minutes by water. (Roupoli pers. comm. 2008).

LAFD has 105 fire stations spread throughout the City. Of these, 51 are single-engine houses, while the remainder are task force houses. A single-engine house normally has one engine company, while a task force house has a truck company and two engines. Paramedic and emergency medical technician (EMT) ambulances, battalion chiefs, division chiefs, and special apparatus are also assigned to the various stations. An engine company is the basic "put water on the fire" unit and is typically staffed by a captain, an engineer, and two firefighters. The engine carries up to 500 gallons of water and can pump up to 1,500 gallons per minute. A task force consists of three pieces of apparatus: an aerial truck, an engine company, and a single pump apparatus. A captain, an apparatus operator, and three firefighters work on the truck. (LAFD 2004.)

In the project vicinity, LAFD facilities include land-based fire stations and fireboat companies. In the Port area, Battalion 6 is responsible for all of San Pedro and its water fronts, Terminal Island and all of the surrounding water, Wilmington, Harbor City, and Harbor Gateway. All of these small cities are occupied and controlled by Battalion 6. Within these geographical areas are 10 fire stations composed of fire boats, hazardous material squads, paramedic and rescue vehicles, three-truck companies, an urban search and rescue, and a foam tender apparatus. (Roupoli pers. comm. 2007.)

Fire stations in the Port area include Station 36, Station 85, Station 48, Station 101, Station 38, Station 112, Station 40, Station 49, Station 110, and Station 111. (See Figure 3.13-1.) (City of Los Angeles 2006:K.2-6–K.2-12.)

- Station 36 will be located at 1005 N. Gaffey Street, San Pedro. This fire station is currently under construction.
- Station 48, located at 1601 S. Grand Avenue, San Pedro, is a task force house with a staff of 16. It maintains a truck and engine company and a hazardous materials unit.
- Station 101, located at 1414 25th Street, San Pedro, is staffed by six firefighters and two paramedics. This station has an engine company and paramedic ambulance.
- Station 38, located at 124 E. I Street, Wilmington, is a task force station and has a staff of nine. It maintains a truck and engine company and paramedic ambulance.
- Station 85, located at W. 253rd Street, Harbor City, is a task force station and has a paramedic ambulance, urban search and rescue, a medical supply trailer, and an emergency lighting trailer
- Station 112, located at 444 S. Harbor Boulevard, Berth 86, San Pedro, has a staff of 15, including an emergency medical services supervisor. It has a single engine company, a paramedic rescue ambulance, and one fireboat.
- Station 40, located at 330 Ferry Street on Terminal Island, has four firefighters and two paramedics on staff. It is equipped with a fire engine and two ambulances and has a response time of 8 to 10 minutes.

- Station 49, located at 400 Yacht Street, Berth 194, Wilmington, has a staff of 13. It is equipped with a single engine company and two boats and is Battalion 6 Headquarters.
- Station 110, located at 2945 Miner Street, San Pedro, has a staff of three and is equipped with one fireboat.
- Station 111, located at 1444 S. Seaside Avenue on Terminal Island, has a staff of three and is equipped with one fireboat.

The primary responding fire stations to the proposed project area would be Station 112 located at 444 S. Harbor Boulevard, Berth 86, and Station 110 located just north of Berth 44 in the West Channel adjacent to the former San Pedro Boatworks and the proposed Cabrillo Way Marina.

Station 112 has a marine task force of 15. It houses Fire Boat 2, a single engine company, a paramedic rescue ambulance, and an emergency medical service captain that responds to all large-scale medical emergencies in the Port area. Station 110 houses Fire Boat 5 and has a staff of three including a fireboat mate and two fireboat certified divers. This station is currently located in temporary trailers, with plans pending for a permanent facility on the same site, anticipated to be completed in approximately 3 years. (Roupoli pers. comm. 2007.)

The secondary responding fire station to the proposed project area would be Station 48, located at 1601 S. Grand Ave. This station, considered to be a hazardous materials task force, has a staff of 16, a 10-man truck and engine, a rescue ambulance, and a hazardous materials squad.

The citywide average response time is approximately 6 to 8 minutes. LAFD response time is 5 minutes or less by land and 10 minutes or less by water. As required response times are 9 minutes by land and 14 min by water, these response times are considered adequate. (Roupoli pers. comm. 2007.)

3.13.2.1.3 U.S. Coast Guard

USCG is a federal agency responsible for a broad scope of regulatory, law-enforcement, humanitarian, and emergency-response duties. The USCG mission includes maritime safety, maritime law enforcement, protection of natural resources, maritime mobility, national defense, and homeland security. USCG maintains a post in the Port on Terminal Island. USCG's primary responsibility at the Port is to ensure the safety of vessel traffic in the channels of the Port and in coastal waters.

USCG 11th District supports the Port area and the proposed project area. The USCG 11th District handles marine safety issues including inspection of U.S. and foreign vessels, maritime security, vessel traffic management, search and rescue, response to and planning for pollution incidents, response to vessel or port emergencies and natural disasters, inspections of waterfront facilities and hazardous material containers, monitoring of oil transfers and explosive loads, licensing of mariners,

investigation of marine casualties, and enforcement of fisheries, drug, and other maritime laws. (Gooding pers. comm. 2008.)

USCG 11th District's area of responsibility encompasses 300 miles of California coast from the Monterey County line to Dana Point and out 200 miles. The command uses 430 people to perform missions including operation of four HH-65 helicopters, four 87-foot patrol boats, three 47-foot boats, four 41-foot boats, and nine rigid hull inflatable boats. USCG field presence in the ports of Los Angeles and Long Beach fluctuates daily depending on port operations and incidents but typically involves between 30 to 50 people in the field who manage vessel traffic; conduct boating safety checks, harbor patrols, commercial vessel inspections, waterfront facility inspections, and container inspections; investigate reports of hazardous material and oil spills; and conduct daily search and rescue efforts.

USCG evaluates the location of an operation to ensure that it can adequately respond in a timely fashion. According to USCG policy, USCG must be able to respond within 20 minutes. From underway time to any location, in the worst weather conditions, USCG can reach the proposed project area in less than 15 minutes (10 minutes for getting underway, and 5 minutes for travel time), and thus adequately respond to any call within the proposed project area. The travel time to any portion of the proposed project area is less than 30 minutes. As such, USCG would not have to add additional response resources. (Gooding pers. comm. 2008.)

USCG, in cooperation with the Marine Exchange, also operates Vessel Traffic Information Systems. This voluntary service is intended to enhance vessel safety in the main approaches to the Port.

3.13.2.2 Public Utilities

3.13.2.2.1 Water

Water service is provided to the proposed project area by the City of Los Angeles Department of Water and Power (LADWP). LADWP is responsible for conserving, treating, and distributing water for domestic, industrial, agricultural, and firefighting purposes within the City of Los Angeles. Water sources utilized by LADWP include local sources, such as wells and recycled water (for nonpotable uses), and imported sources, including Los Angeles Aqueducts and purchases from the Metropolitan Water District of Southern California (MWD). MWD imports water from the Colorado River via the Colorado River Aqueduct, from northern California via the State Water Project's California Aqueduct, and from various groundwater sources.

In terms of the City's overall water supply condition, the water requirement for any project that is consistent with the City's general plan has been taken into account for the planned growth of water demand. In an effort to provide a reliable water supply, LADWP has invested in various sources, including groundwater, recycled water, and water conservation. Specific supply and demand side management strategies are designed to provide a "hedge" against droughts and variability of surface water. The

2005 Urban Water Management Plan (UWMP) estimates water demand and supply through and 25-year outlook period, and is updated every 5 years. Calculations in the 2005 UWMP are based on assumptions regarding the various supplies of water available and existing and projected levels of water conservation. Based on these calculations, LADWP has predicted service reliability for average and single-dry-year conditions; LADWP expects to be able meet future demand with a combination of existing supplies, planned supplies, and MWD purchases (LADWP 2005). The proposed Project was not included in estimates for the 2005 UWMP. Water supply and availability are assumed in the pending Water Supply Assessment created for the proposed project; this document is expected by the end of 2008.

In the UWMP, LADWP forecasted the City to grow 0.4% annually over the next 25 years, or approximately 368,000 persons. It is projected that LADWP, along with MWD will have adequate water supply capabilities to meet anticipated growth and increased demands through the outlook period (2030), under wet, dry, and multiple-dry years. (LADWP 2005.)[1]

LADWP requires consultation with applicants, by means of a Service Advisory Request (SAR), to assess whether the current infrastructure would be able to accommodate the increased water demand based on fire flow requirements. If the SAR determines that current infrastructure would not support a project, LADWP requires that additional infrastructure (i.e., water lines) be constructed at the applicant's expense (LADWP 2003).

Water supply and conveyance structures comprise a series of reservoirs and a network of pipelines, including reservoir outlets, major trunk lines, and other delivery lines. In 2005, LADWP supplied approximately 610,000 acre-feet of water.[2] (LADWP 2005.) Distribution water mains are located throughout the proposed project area. Specifically, these mains are located within Harbor Boulevard and Sampson Way, throughout the existing cruise terminal area, 7th Street, Ports O' Call, down to Warehouse No. 1 and the Outer Harbor Terminal, and along Shoshonean Road to Cabrillo Beach.

It is important to note that in addition to development and commercial use, the cruise ships that call into the Port on a daily basis also affect water demand. The World Cruise Center currently operates out of two existing terminals (Berths 91–92 Terminal and Berth 93 Terminal), with two permanent berths (91–92 and 93), and occasionally uses a temporary third berth at Berth 87. These three berths can accommodate three large vessels simultaneously. Each berth is equipped with water lines, sewer lines, and storm drains to provide for the terminal operations as well as the docked ships. The water demand for cruise ships is estimated by the size of the ship and the average amount of passengers/employees it holds. Currently, 17 different cruise lines call at the Port in a given year. A total of 258 ships called at the

[1] The 2005 MWD UWMP is also incorporated by reference and is available at LAHD Environmental Management Division, 425 South Palos Verdes Street, San Pedro, CA and at http://www.mwdh2o.com/. As discussed above, the 2005 LADWP UWMP relies, in part, on water supply purchases from MWD. Section A.3 of the 2005 MWD UWMP provides justifications for its supply projections including existing supplies, historical supplies, and contracts for future supplies.

[2] The 2005 MWD UWMP uses data from the 2003–2004 fiscal year.

Port, in 2006, with a total of 587,446 passengers, and approximately 47.08 million gallons of water use. (Melendez pers. comm. 2008).

3.13.2.1.2 Sewer and Wastewater Treatment Service

The City of Los Angeles Department of Public Works, Bureau of Sanitation, provides wastewater treatment and sewer service to the City. The Bureau of Sanitation operates wastewater treatment and reclamation facilities that serve most of its incorporated areas and several other cities and unincorporated areas in the Los Angeles basin and San Fernando Valley. The existing system comprises two treatment plants; two water reclamation plants; a collection system consisting of over 6,500 miles of local, trunk, mainline, and major interceptor sewers; five major outfall sewers; and 48 pumping plants.

Several functioning sewer lines exist throughout the proposed project area and are currently being used by the existing development. Wastewater from the area flows to the Terminal Island Treatment Plant (TITP), located at 455 Ferry Street, which treats wastewater for the communities of Wilmington, San Pedro, a portion of Harbor City, and the heavily industrialized Terminal Island. (LA Sewers 2007.) The treatment process consists of pretreatment, primary sedimentation, secondary treatment, sludge digestion, and drying. The TITP treats all flow received to at least first-stage tertiary levels. Some wastewater is further treated for reuse in irrigation and industrial water supplies. The liquid effluent flows to the Outer Harbor to a point approximately 3,000 feet off shore via a 60-inch diameter outfall. The TITP is designed to treat 30 million gallons per day (mgd). Currently, the plant is processing at approximately 55% capacity, treating between 16 mgd and 17 mgd. (City of Los Angeles Bureau of Sanitation 2004.)

Cruise ship wastewater is handled off site, on the cruise ship itself. Wastewater on the ship is first treated to tertiary levels. The resulting water, which cannot be reused or recycled, is then dumped offshore. Offshore dumping takes place at least 40 nautical miles past the California State line. (Diamond Princess Cruise Tour 2007.)

3.13.2.1.3 Solid Waste Service

Existing development in the proposed project area generates solid waste consisting of nonhazardous materials, such as food and beverage containers, paper products, and other miscellaneous personal trash; as well as hazardous materials, such as gasoline and diesel from Mike's and Jankovich fueling stations. Construction debris is one of the greatest individual contributors to solid waste capacity, making up approximately 22% of the State of California's waste disposal demand (CIWMB 2004). Due to lower disposal costs, asphalt and concrete are typically recycled for aggregate base or disposed of at inert landfills instead of municipal facilities. All solid waste generated by existing development complies with federal, state, and local regulations and codes pertaining to nonhazardous and hazardous solid waste disposal.

Additionally, The City of Industry recently filed and NOD on an EIR for the Puente Hills Intermodal Facility.[3] On June 26, 2008, the City of Industry Planning Commission approved a Conditional Use Permit for the project (LACSD 2008). This is a waste-by-rail project whose goal is to plan for and accommodate the solid waste removal needs of Los Angeles County. The proposed facility would eventually have the capacity of two trains on a daily basis, handling a total of 8,000 tons of municipal solid waste per day. It is expected to be operational by 2011 (LACSD 2008). With the Sunshine Canyon City/County Landfill and the intermodal system and anticipated recycle diversion rates for the area (discussed below), solid waste removal and disposal would be adequately provided for the proposed project area.

The City of Los Angeles Bureau of Sanitation, in general, and BFI (a private waste management service) provide solid waste collection and disposal services for the proposed project area. The proposed Project is comprised of commercial and industrial uses, so private waste haulers would vary depending on the individual tenant's choice. Los Angeles County Ordinance 7A prohibits solid waste generated in the City from being handled by or disposed of in facilities and landfills operated by the Los Angeles County Sanitation District. Two transfer stations service the proposed project area: the Falcon Refuse Center in the Wilmington Community of Los Angeles, and the Southeast Resource Recovery Facility in the City of Long Beach.

The Falcon Refuse Center, operated by BFI, receives an average of 1,850 tons per day. Its permitted capacity is 3,500 tons per day. BFI accepts solid waste from construction and demolition, as well as industrial and mixed-municipal sources. (CIMWB 2007.)

The Southeast Resource Recovery Facility is located in the City of Long Beach at 120 Pier S Avenue, west of the Terminal Island Freeway (SR 103) and just north of Ocean Boulevard. The facility is owned by a separate authority created by a joint powers agreement between the sanitation districts and the City of Long Beach, but it is operated by a private company under contract. The facility accepts only nonhazardous municipal solid waste (Sanitation Districts of Los Angeles County 2007). Currently, the permitted capacity is 2,240 tons per day. The average currently being accepted is 1,900 tons per day; however, this fluctuates per season. The remaining lifespan of this facility is through 2018 (Amzcua pers. comm. 2007).

To comply with AB 939 and City of Los Angeles Solid Waste Management Policy Plan (CiSWMPP), a new generation study was conducted for 1999 and 2000. The study included an assessment of the disposal and diversion for Port tenants. Technical assistance was provided to tenants to increase their diversion activities. In 2000, LAHD disposed of approximately 5,791 tons of waste and diverted approximately 59,513 tons, achieving a diversion rate of 91%. The waste reduction and recycling assessments in 1999–2000 showed that the tenants audited disposed of 12,496 tons and diverted 12,291 tons, for an overall diversion rate of 49.6%. (City of Los Angeles Bureau of Sanitation 2007.) Currently the proposed project area has a diversion rate of 62%, a goal of 70% by 2015, 90% by 2025, and an ultimate goal of zero waste by 2030. (Pereira pers. comm. 2007.)

[3] CEQAnet Database. 2008. SCH# 2006021097.

Additionally, LAHD's Construction and Maintenance Division recycles asphalt and concrete demolition debris by crushing and stockpiling the crushed material to use on other Port projects. This recycling program resulted in waste disposal savings of 46,852 tons in 2000. (City of Los Angeles Bureau of Sanitation 2007.)

Cruise terminals are estimated to have an average of 200 employees. This includes longshore personnel, ground support personnel, security guards, federal inspection service, and terminal management. Cruise ship and associated terminal solid waste can be created both on shore and off shore. Palettes of solid waste measuring 1 cubic meter are carried off the ship while docked. The total solid waste for cruise ships is estimated for onshore solid waste by the amount of employees per terminal, and for offshore solid waste by the number of passengers per ship.

Storm Drainage

Storm drains are located throughout the proposed project area and maintained by LAHD, City of Los Angeles, and Los Angeles County. Storm drains in the proposed project vicinity have sufficient capacity to accommodate current demands, and are designed to accommodate 10-year storm events. (Zambrano pers. comm. 2008b).

3.13.2.1.4 Electrical Service

The proposed project area is located in the LADWP service area. LADWP maintains various generating and distribution substations throughout the greater Los Angeles area, including generating and distribution centers in and near the Port that serve the proposed project area. LADWP supplies electricity generated by its system of resources, which consist of a mix of renewable energy, hydro generation, gas-fired generation, coal-fired generation, nuclear generation, and purchases from others within the west. (Holloway pers. comm. 2007.)

The industrial power station closest to the Port has four main 138-kilovolt (kV) supply lines: two from the harbor steam plant, and two from North Wilmington. The circuits that serve this area originate from Receiving Station Q (Harbor) located at 150 Island Avenue in the community of Wilmington Several other electrical power lines extend throughout the Port area. LADWP has both 34.5-kV and 4.8-kV overhead and underground lines near the proposed Project area. (Holloway pers. comm. 2007.) LADWP maintains a generating station at the intersection of Swinford Street and North Front Street in the proposed project area, in the vicinity of the Catalina Express Terminal parking lot under the Vincent Thomas Bridge. Overall, LADWP supplies nearly 22 billion kilowatt hours (kWh) of electricity per year for the City's 1.4 million electric customers. (LADWP 2007.)

Total electricity demand for the proposed project area for the baseline year (2006), including commercial demand, cruise ship demand, and Waterfront Red Car Line demand, was 120.08 megawatts (MW) per year. LADWP has a total generating capacity of about 7,000 MW per day to serve a peak Los Angeles demand of about

5,600 MW per day. LADWP's Integrated Resource Plan (IRP) anticipates load growth and plans new generating capacity or demand side management programs to meet load requirements for future customers. Through the IRP and LADWP's current generating capacity, LADWP has adequate generation to serve the current customer load. (Chuck Holloway, pers. comm. 2007.)

Waterfront Red Car Line

The existing Waterfront Red Car Line is an electrically powered trolley service that provides transportation to thousands of Port visitors and surrounding community residents each year. The trolley line consists of four stops/stations, occurring on a 1.5-mile route along Harbor Boulevard. Currently the Waterfront Red Car Line uses 62,000 kWh annually. This is based on 15,500 annual railcar vehicle miles.

Cruise Ship Energy Demand Outlook

The cruise ships that call at the Port will run on alternative marine power (AMP) in the future. AMP reduces emissions from docked container vessels. The AMP program will allow the vessels to plug into shoreside electrical power while docked instead of using their onboard generators, which can emit an array of pollutants. AMP facilities are currently being designed and planned for the existing Inner Harbor Cruise Terminal, which are scheduled to be available for existing ships that are equipped with the infrastructure by 2009; AMP facilities would be available upon opening of the Outer Harbor Cruise Terminal in 2012.

On average, AMP supplies 4-to5 MW per ship with a maximum of 11 to 15 MW depending on the size of the ship and other variables such as weather and use of air-conditioning (Chase pers. comm. 2008). Along with ship AMP, the associated terminals will provide an average of 1.5 MW (Haddadian pers. comm.) For the planning horizon year (2037), power use is not expected to grow beyond the maximum available AMP of 15 MW per ship (Chase pers. comm.). As each berth is built and/or upgraded, it would be modified to accommodate AMP. Each ship docks for an average of 12 hours with an estimated average AMP use of 5 MW docking or 0.42 MW per hour (Chase pers. comm. 2008). The percentages of all ships calling at the Inner Harbor Cruise Terminal that are expected to use AMP while docked are: 30% in 2009 and 80% in 2013 and beyond. Approximately 90% of all ships calling at the proposed Outer Harbor Cruise Terminal are expected to use AMP while docked by 2013 and thereafter.

The construction and installation of the AMP facilities and substation to provide for the AMP upgrades to the cruise ships and terminals has been arranged through a change order to a previously agreed upon contract between the City of Los Angeles and the Griffith Company. The change order will provide additional funding for installing AMP receptacles at the Port's Outer and Inner Harbor Cruise Terminals, thereby encouraging compliance with the Port's Clean Air Action Plan (CAAP). As such, the Director of Environmental Management determined that the AMP facilities construction and installation is exempt from the requirements of CEQA under Article

II, Section 2(If) and Article III, Section 3(4) of the Los Angeles City CEQA guidelines. Therefore, the utility requirements of AMP upgrades will not be analyzed within this EIR.[4]

3.13.2.1.5 Natural Gas Service

Natural gas service to the proposed project area would be supplied by the Southern California Gas Company (Gas Company). As a public utility, the Gas Company is under the jurisdiction of the state Public Utilities Commission (PUC) and can be affected by actions of federal regulatory agencies. California natural gas demand, in general, is expected to grow at a rate of 0.1 percent per year from 2008 to 2030; however, demand in the commercial sector is expected to remain the same during this time period, while the industrial sector will decrease in demand by 1.0 percent per year (California Gas and Electric Utilities 2008). Building and appliance standards have reduced the need for gas space heating and water heating for each business in the state (California Energy Commission 2007).

Additionally, a recently approved Costa Azul facility in Ensenada, Baja California is expected to begin operation by the end of 2008. Current analysis anticipates receiving about 500 million cubic feet a day of natural gas from the facility starting early in 2009. Almost all the Mexican natural gas entering California will displace domestic southwest supplies that currently come to California (California Energy Commission 2007).

California's existing gas supply is regionally diverse (the southwestern U.S., the Rocky Mountains, and Canada) and includes supplies from onshore and offshore sources. Southern California currently operates in an environment where interstate pipeline capacity is in excess of anticipated demand. The interstate pipeline systems, along with local California gas supplies, deliver gas to Los Angeles area customers through the Gas Company. The 2008 California Gas Report forecasts a 22-year period, through the year 2030. The report predicts the natural gas supply for southern California to be 2,624 MMcf/day in 2015 and 2,709 MMcf/day in 2030 (California Gas and Electric Utilities 2008).

3.13.3 Applicable Regulations

LAHD is directed by internal standards and policies that guide the provision of service to its customers. Each agency charged with protecting the public (LAFD, LAPD, Port Police, and USCG) maintains specific standards, such as response times and levels of service that must be adhered to during construction and operation of a project. Each public utility agency and private utility provider, including LADWP and the Gas Company, are directed by internal standards and policies that guide the

[4] The Port of Los Angeles. March 12, 2008. Construction Division. Executive Director's Report to the Board of Harbor Commissioners. Change Order No. 3 – Alternative Maritime Power (AMP) at the Cruise Terminal and Supplemental Agreement No. 1. Contractor: Griffith Company. Specification No. 2686A. Contract No. 2242.

provision of service to their customers. Specific to LADWP and the Gas Company, the California Energy Commission regulates the provision of natural gas and electricity in the state.

3.13.3.1 The Maritime Transportation Security Act

MTSA and its international equivalent, the ISPS Code (adopted by the International Maritime Organization), require port authorities and facility operators to designate and train company, vessel, and facility security officers and develop security plans for facilities and vessels based on security assessments and surveys. MTSA regulations also guide implementation of security measures specific to the operations of each facility and compliance with maritime security levels. Regulations regarding the submittal of security plans became effective December 31, 2003; operational compliance was mandated by July 1, 2004.

3.13.3.2 Senate Bill 610 Water Supply Assessment

Senate Bill No. 610 (Costa) became effective January 1, 2002. The bill requires a city or county that determines that a project (as defined in Water Code Section 10912) is subject to CEQA to identify any public water system that may supply water for the project and to request those public water systems to prepare a specified water supply assessment. The assessment is required to include an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts. The assessment must be approved by the governing body of the public water system supplying water to the project. If the projected water demand associated with the project was included as part of the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in the water supply assessment. The bill requires the city or county, if it is not able to identify any public water system that may supply water for the project, to prepare the water supply assessment after a prescribed consultation.

If the public water system concludes that water supplies are, or will be, insufficient, plans for acquiring additional water supplies are required to be submitted to the city or county. The city or county must include the water supply assessment in any environmental document prepared for the project pursuant to the act. It also requires the city or county to determine whether project water supplies will be sufficient to satisfy the demand of the project, in addition to existing and planned future uses.

3.13.3.3 California Urban Water Management Act

The California Urban Water Management Planning Act requires urban water suppliers to initiate planning strategies that make every effort to ensure the

appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry-water years. LADWP would be the water supplier, and as such the proposed Project would be under the jurisdiction of the LADWP UWMP, prepared pursuant to the California Urban Water Management Planning Act.

3.13.3.4 LADWP Urban Water Management Plan

Consistent with the California Urban Water Management Planning Act, LADWP has prepared an UWMP to describe how water resources are used and to present strategies that will be used to meet the City's current and future water needs. To meet the objectives of the California Urban Water Management Planning Act, the LADWP UWMP focuses primarily on water supply reliability and water use efficiency measures. The California Urban Water Management Planning Act requires water suppliers to develop water management plans every 5 years. LADWP most recently completed this 5-year update in 2005. The 2005 UWMP was completed as an update to the previous 2000 UWMP to comply with the Urban Water Management Planning Act. LADWP also published annual fiscal year updates in the 2005 UWMP. The 2005 UWMP projects water demand and supply through 2030; total demand for water is predicted to be 755,000 acre-feet in 2025 and 766,000 acre-feet in 2030. LADWP expects it will be able meet this demand with a combination of existing supplies, planned supplies, and MWD purchases (existing and planned) (LADWP 2005).

3.13.3.5 California Solid Waste Reuse and Recycling Access Act

The California Solid Waste Reuse and Recycling Access Act of 1991 required each jurisdiction to adopt an ordinance by September 1, 1994, requiring any "development project" for which an application for a building permit is submitted to provide an adequate storage area for collection and removal of recyclable materials. AB 1327 regulations govern the transfer, receipt, storage, and loading of recyclable materials at the Port.

3.13.3.6 Assembly Bill 939: California Integrated Waste Management Act

The State of California requires that all jurisdictions achieve compliance with AB 939, a state mandate that requires jurisdictions to achieve 50% diversion of solid waste from landfills by 2000. AB 939 further requires each city to conduct a Solid Waste Generation Study and to prepare annually a Source Reduction and Recycling Element (SRRE) to describe how it will reach its goals. AB 939 was designed to focus on source reduction, recycling and composting, and environmentally safe

landfilling and transformation activities. This act required cities and counties to divert 25% of all solid waste from landfills and transformation facilities by 1995, and 50% by year 2000. The AB 939 2000 report showed that the City of Los Angeles met and exceeded the 2000 goals; in 2000, the City's diversion rate was 58.8%. In 2000, LAHD's diversion rate was 76.5% (City of Los Angeles 2001a).

3.13.3.7 City of Los Angeles Solid Waste Management Policy Plan

Adopted by the City Council in November 1994, the CiSWMPP is a long-term planning document containing goals, objectives, and policies for solid waste management for the City. It specifies citywide diversion goals and disposal capacity needs. The mandate was enacted to encourage reduction, recycling, and reuse of solid waste generated in the state to preserve landfill capacity, conserve water, energy, and other natural resources, and to protect the state's environment. (City of Los Angeles 2006.)

3.13.3.8 California's Building Code CCR, Title 24, Part 6

Title 24, Part 6 of the California's Building Code describes California's energy efficiency standards for residential and nonresidential buildings. These standards were established in 1978 in response to a legislative mandate to reduce California's energy consumption and have been updated periodically to include new energy efficiency technologies and methods. Title 24 requires building according to energy efficient standards for all new construction, including new buildings, additions, alterations, and, in nonresidential buildings, repairs.

3.13.3.9 Standard Urban Stormwater Mitigation Plan

On December 13, 2001, the Regional Water Quality Control Board issued a Municipal Storm Water National Pollutant Discharge Elimination System Permit (NPDES Permit No. CAS004001) that requires new development and redevelopment projects to incorporate storm water mitigation measures.

Depending on the type of project, either a Standard Urban Stormwater Mitigation Plan or a Site Specific Mitigation Plan is required to reduce the quantity and improve the quality of rainfall runoff that leaves the site. Developers are encouraged to begin work on complying with these regulations by visiting the Watershed Protection Division (WPD) in the design phase of their projects.

3.13.3.10 Fire Protection and Prevention Plan

Fire prevention, fire protection, and emergency medical services in the City of Los Angeles are operated under the Fire Protection and Prevention Plan, an Element of the City of Los Angeles General Plan, and the Fire Code section of the Los Angeles Municipal Code. The Fire Protection and Prevention Plan serves as a guide for the construction, maintenance, and operation of fire protection facilities in the City (City of Los Angeles 2001b). The plan sets forth policies and standards for fire station distribution and location, fire suppression water-flow (or *fire flow*), fire hydrant standards and locations, firefighting equipment access, emergency ambulance services, and fire prevention activities. LAFD also considers population, density, nature of onsite land uses, and traffic flow in evaluating the adequacy of fire protection services for a specific area or land use.

3.13.3.11 Port of Los Angeles Sustainability Plan

The development of the Port of Los Angeles Sustainability Plan is in response to the Mayoral-initialized Executive Directive No. 10, "Sustainable Practices in the City of Los Angeles," passed in June 2007. "This directive sets forth his vision to transform Los Angeles into the most sustainable large city in the country and includes goals in the areas of energy and water, procurement, contracting, waste diversion, non-toxic product selection, air quality, training, and public outreach" (LAHD 2008b). Thirty-two of the Port's current environmental programs already meet, in varying degrees, all the goals of the Executive Directive. However, there are identified areas of improvement, specifically in the areas of employee training and public outreach. Currently, development of the Port of Los Angeles Sustainability Plan is still in progress.

3.13.3.12 Green Building Policy

On August 27, 2003, the Board of Harbor Commissioners approved the LAHD Environmental Management Policy, which includes guidelines on implementation of Leadership in Energy and Environmental Design (LEED) certification and standards for new and existing building construction and/or renovation.

The LEED Green Building Rating System is voluntary, consensus-based, and market-driven, and is based on existing, proven technology that evaluates environmental performance in five categories:

- sustainable site planning,
- improving energy efficiency,
- conserving materials and resources,
- embracing indoor environmental quality, and

- safeguarding water.

Points are earned for goals accomplished in each category, and the certification level for a building is determined by the total amount of points. There are four LEED certification levels: Certified (23–32 points), Silver (33–38 points), Gold (39–51 points), and Platinum (52–69 points).

The City of Los Angeles has adopted the policy that all new City buildings of 7,500 square feet or more should be designed, whenever possible, to meet the LEED Certified level. LAHD has taken this policy further, and under the jurisdiction of the Harbor Department, all construction must meet the following :

- New construction (i.e., office buildings) 7,500 square feet or greater, without compromising functionality, will be designed to a minimum level of LEED New Construction (NC) Gold.
- New construction (i.e., marine utilitarian buildings such as equipment maintenance), without compromising functionality, will be designed to a minimum level of LEED NC Silver.
- Existing buildings of 7,500 square feet or greater will be inventoried as evaluated for their applicability to the LEED Existing Building Standards. Priority for certification will be determined by building operation and maintenance procedures.
- All other buildings will be designed or constructed to meet the highest achievable LEED standard to the extent feasible for the building's purpose.
- In addition, all Port buildings will include solar power to the maximum extent feasible, as well as incorporation of the best available technology for energy and water efficiency.
- A sustainability staff has been created to continuously evaluate and advance LAHD's sustainability practices, as well as develop green guidelines and sustainable strategies.

3.13.4 Impacts and Mitigation Measures

3.13.4.1 Methodology

3.13.4.1.1 Public Services

The proposed Project and alternatives were evaluated to determine if LAPD, Port Police, USCG, and LAFD protection facilities are adequately staffed and located around the proposed Project area to respond to an emergency situation in a timely manner, without the provision of additional physical facilities.

Public services for the proposed Project were assessed in their ability to handle potential physical environmental effects caused by increases in service demand, which could increase the need to build new or additional facilities.

All agencies were contacted to obtain information regarding their existing and projected service capacity, as well as the projected impacts that would result from implementation of the proposed Project. Wherever possible (i.e., for agencies that provided a demand factor or service ratio), quantifications were included to demonstrate specific demands.

3.13.4.1.2 Utilities and Service Systems

Assessment of the proposed Project and alternatives impacts on utilities (water, wastewater, solid waste) and energy providers (electricity and natural gas) varies depending on the utility but generally includes a comparison of the project-generated demand against existing and anticipated resource supplies and/or conveyance capacity. Quantifications of demands and generations were included based on factors provided by the applicable agencies, as shown in Tables 3.13-1 through 3.13-5.

Water supply or conveyance impacts are typically evaluated by estimating water consumption factors associated with proposed project site land uses or, for nonresidential development, unit demand factors per acre or gross square foot, as established by the City of Los Angeles in the *L.A. CEQA Thresholds* (City of Los Angeles 2006:M.1-4). Water demand estimates for the proposed Project have been based on the expected amount of wastewater production. Water use is proportionate to wastewater discharge and is calculated as such. Water consumption is 111% (1.11) of wastewater production (City of Los Angeles Bureau of Sanitation 2005). For cruise ships, water demand has been estimated on a daily passenger use average per ship, based on 2006 water demand data gathered from Pacific Cruise Ship Terminals LLC.

The commercial square footages were determined using the total areas of the various buildings for the proposed Project. Table 3.13-1 shows the water demand, which represents the baseline, proposed Project, and alternative conditions.

Assessment of impacts on sewers or wastewater treatment systems generally includes the comparison of the Project-related, land use-based wastewater flow generation to the existing and projected wastewater treatment capacity of the Treatment Plant. The wastewater generation factors, as stated in *L.A. CEQA Thresholds Guide*, are as follows (City of Los Angeles 2006:Exhibit M.2-12):

- commercial/retail: 80 gallons per day (gpd)/1,000 square feet;
- manufacture/industrial: 80 gpd/1,000 square feet;
- museum: 20 gpd/1,000 square feet;
- surface parking: 80 gpd/1,000 square feet; and
- warehouse: 20 gpd/1,000 square feet.

	*Draft LA CEQA Threshold Development Type Description**	*Average Daily Flow (Gpd/unit)**	*CEQA Baseline 2006 (sq ft)*	*Proposed Project 2015 (sq ft)*	*Proposed Project 2037 (sq ft)*	*Alt. 1 2015 (sq ft)*	*Alt. 1 2037 (sq ft)*	*Alt. 2 2015 (sq ft)*	*Alt. 2 2037 (sq ft)*	*Alt. 3 2015 (sq ft)*	*Alt. 3 2037 (sq ft)*	*Alt. 4 2015 (sq ft)*	*Alt. 4 2037 (sq ft)*	*Alt. 5 (No Federal Action) 2015 (sq ft)*	*Alt. 5 (No Federal Action) 2037 (sq ft)*	*Alt. 6 2015 (sq ft)*	*Alt. 6 2037 (sq ft)*
Catalina Terminal	Commercial Use	80/1000 Gr sq ft	38,642	38,642	38,642	38,642	38,642	38,642	38,642	38,642	38,642	38,642	38,642	38,642	38,642	38,642	38,642
SS Lane Victory	Commercial Use	80/1000 Gr sq ft	2,400	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Cruise Ship Terminals	Commercial Use	80/1000 Gr sq ft	248,140	448,140	448,140	253,250	253,250	448,140	448,140	348,140	348,140	153,250	153,250	153,250	153,250	248,140	248,140
Crowley Marine Tugs	Commercial Use	80/1000 Gr sq ft	4,225	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0	0	0	0	0	0
LA Maritime Institute	Commercial Use	80/1000 Gr sq ft	3,400	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	4,225	5,500	5,500	5,500	5,500
Ralph J. Scott Historic Fireboat	Museum: All Areas	20/1000 Gr sq ft	0	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0	0
Ports O' Call	Commercial/ Retail Use	80/1000 Gr sq ft	150,000	375,000	375,000	375,000	375,000	375,000	375,000	187,500	187,500	375,000	375,000	375,000	375,000	375,000	375,000
Jankovich & Son	Manufacture or Industrial Facility	80/1000 Gr sq ft	10,197	10,197	10,197	10,197	10,197	10,197	10,197	10,197	10,197	10,197	10,197	0	0	10,197	10,197
Mike's fueling station	Manufacture or Industrial Facility	80/1000 Gr sq ft	1,548	1,548	1,548	0	0	1,548	1,548	1,548	1,548	0	0	1,548	1,548	0	0
Municipal Warehouse No. 1	Warehouse	20/1000 Gr sq ft	504,000	504,000	504,000	474,000	474,000	504,000	504,000	504,000	504,000	504,000	504,000	504,000	504,000	504,000	504,000
Waterfront Red Car Maintenance	Manufacture or Industrial Facility	80/1000 Gr sq ft	10,000	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	0	0
Warehouse No. 9	Warehouse	20/ 1000 Gr sq ft	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	0	0
Warehouse No. 10	Warehouse	20/ 1000 Gr sq ft	87,500	87,500	87,500	87500	87500	87500	87500	87500	87500	87500	87500	87500	87500	0	0
Westway Terminal	Manufacture or Industrial Facility	80/1000 Gr sq ft	11,853	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking[1]	Surface Parking	80/1000 Gr sq ft	2,800,000	3,219,045	3,219,045	3,263,820	3,263,820	3,121,088	3,121,088	2,452,410	2,452,410	3,774,982	3,774,982	3,731,452	3,731,452	2,912,468	2,912,468
Total Demand for Development																	
Conversion			(1.11)(275,	(1.11)(344,	(1.11)(344,	(1.11)(331,	(1.11)(331,	(1.11)(336,	(1.11)(336,	(1.11)(259,	(1.11)(259,	(1.11)(363,	(1.11)(363,	(1.11)(359,	(1.11)(359,	(1.11)(297,	(1.11)(297,

1 Parking for the proposed Project and Alternatives has been approximated by aerial estimations.

	*Draft LA CEQA Threshold Development Type Description**	*Average Daily Flow (Gpd/unit)**	*CEQA Baseline 2006 (sq ft)*	*Proposed Project 2015 (sq ft)*	*Proposed Project 2037 (sq ft)*	*Alt. 1 2015 (sq ft)*	*Alt. 1 2037 (sq ft)*	*Alt. 2 2015 (sq ft)*	*Alt. 2 2037 (sq ft)*	*Alt. 3 2015 (sq ft)*	*Alt. 3 2037 (sq ft)*	*Alt. 4 2015 (sq ft)*	*Alt. 4 2037 (sq ft)*	*Alt. 5 (No Federal Action) 2015 (sq ft)*	*Alt. 5 (No Federal Action) 2037 (sq ft)*	*Alt. 6 2015 (sq ft)*	*Alt. 6 2037 (sq ft)*
(111% of Wastewater Flow)			314)	128)	)	643)	643)	292)	292)	997)	997)	488)	488)	139)	139)	146)	146)
Total Water Demand			305,599 gpd	381,982 gpd	381,982 gpd	368124 gpd	368124 gpd	373284 gpd	373284 gpd	288,597 gpd	288,597 gpd	403472 gpd	403472 gpd	398,645 gpd	398,645 gpd	329832 gpd	329832 gpd
Total Water Demand			111.54 mgy	139.42 mgy	139.42 mgy	134.37 mgy	134.37 mgy	136.25 mgy	136.25 mgy	105.34 mgy	105.34 mgy	147.27 mgy	147.27 mgy	145.51 mgy	145.51 mgy	120.39 mgy	120.39 mgy
Total Demand for Cruise Ships Calling at the Port																	
Total Water Demand			128,989 gpd	159,926 gpd	247,907 gpd	159,926 gpd	247,907 gpd	159,926 gpd	247,907 gpd	159,926 gpd	247,907 gpd	152,601 gpd	207,954 gpd	152,601 gpd	207,954 gpd	152,601 gpd	207,954 gpd
Total Water Demand			47.08 mgy	58.37 mgy	90.49 mgy	58.37 mgy	90.49 mgy	58.37 mgy	90.49 mgy	58.37 mgy	90.49 mgy	55.70 mgy	75.90 mgy	55.70 mgy	75.90 mgy	55.70 mgy	75.90 mgy
Total Demand (Development and Cruise Ships)																	
Total Water Demand			158.62 mgy	197.80 mgy	229.90 mgy	192.74 mgy	224.85 mgy	194.62 mgy	226.74 mgy	163.71 mgy	195.82 mgy	202.97 mgy	223.17 mgy	201.21 mgy	221.41 mgy	176.09 mgy	196.29 mgy
Total Water Demand			**486.80 afy**	**607.01 afy**	**705.54 afy**	**591.50 afy**	**690.04 afy**	**597.27 afy**	**695.84 afy**	**502.41 afy**	**600.95 afy**	**622.89 afy**	**684.88 afy**	**617.49 afy**	**679.48 afy**	**540.40 afy**	**602.39 afy**

	*Draft LA CEQA Threshold Development Type Description**	*Average Daily Flow (Gpd/unit)**	*CEQA Baseline (sq ft)*	*Proposed Project (sq ft)*	*Alt. 1 (sq ft)*	*Alt. 2 (sq ft)*	*Alt. 3 (sq ft)*	*Alt. 4 (sq ft)*	*Alt. 5 (No Federal Action) (sq ft)*	*Alt. 6 (sq ft)*
Catalina Terminal	Commercial Use	80/1000 Gr sq ft	38,642	38,642	38,642	38,642	38,642	38,642	38,642	38,642
SS Lane Victory	Commercial Use	80/1000 Gr sq ft	2,400	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Cruise Ship Terminals	Commercial Use	80/1000 Gr sq ft	248,140	448,140	253,250	448,140	348,140	153,250	153,250	248,140
Crowley Marine Tugs	Commercial Use	80/1000 Gr sq ft	4,225	10,000	10,000	10,000	10,000	0	0	0
LA Maritime Institute	Commercial Use	80/1000 Gr sq ft	3,400	4,225	4,225	4,225	4,225	4,225	5,500	5,500
Ralph J. Scott Historic Fireboat	Museum: All Areas	20/1000 Gr sq ft	0	10,000	10,000	10,000	10,000	10,000	10,000	0
Ports O' Call	Commercial/Retail Use	80/1000 Gr sq ft	150,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000
Jankovich & Son	Manufacture or Industrial Facility	80/1000 Gr sq ft	10,197	0	0	0	0	0	0	0
Mike's fueling station	Manufacture or Industrial Facility	80/1000 Gr sq ft	1,548	1,548	0	1,548	1,548	0	1,548	0
Municipal Warehouse No. 1	Warehouse	20/1000 Gr sq ft	504,000	504,000	474,000	504,000	504,000	504,000	504,000	504,000
Waterfront Red Car Maintenance	Manufacture or Industrial Facility	80/1000 Gr sq ft	10,000	17,600	17,600	17,600	17,600	17,600	17,600	0
Warehouse No. 9	Warehouse	20/ 1000 Gr sq ft	70,000	70,000	70,000	70,000	70,000	70,000	70,000	0
Warehouse No. 10	Warehouse	20/ 1000 Gr sq ft	87,500	87,500	87500	87500	87500	87500	87500	0
Westway Terminal	Manufacture or Industrial Facility	80/1000 Gr sq ft	11,853	0	0	0	0	0	0	0
Parking[1]	Surface Parking	80/1000 Gr sq ft	2,800,000	3,219,045	3,263,820	3,121,088	2,452,410	3,774,982	3,731,452	2,912,468
Total Flow (gal/day)			275,314 gpd	343,313 gpd	330,827 gpd	335,476 gpd	259,182 gpd	362,672 gpd	359,139 gpd	296,330 gpd
Total Flow (mil gal/day)			.28 mgd	.34 mgd	.33 mgd	.34 mgd	.26 mgd	.36 mgd	.36 mgd	.30 mgd
TITP Capacity			30 mgd	30 mgd	30 mgd	30 mgd	30 mgd	30 mgd	30 mgd	30 mgd
Percent of TITP Capacity			.009%	.011%	.011%	.011%	.009%	.012%	.012%	.01%

1 Parking for the proposed Project and Alternatives has been approximated by aerial estimations.

Cruise Terminal Employees Per Ship	*CEQA Baseline 2006*	*Proposed Project 2015*	*Proposed Project 2037*	*Alt 1 2015*	*Alt 1 2037*	*Alt 2 2015*	*Alt 2 2037*	*Alt 3 2015*	*Alt 3 2037*	*Alt 4 2015*	*Alt 4 2037*	*Alt 5 (No Federal Action) 2015*	*Alt 5 (No Federal Action) 2037*	*Alt 6 2015*	*Alt 6 2037*
Longshore Personnel	50	55	65	55	65	55	65	55	65	55	65	55	65	55	65
Ground Support Personnel	75	80	90	80	90	80	90	80	90	80	90	80	90	80	90
Security Guards	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Federal Inspection Service	20	25	40	25	40	25	40	25	40	25	40	25	40	25	40
Terminal Management	10	10	15	10	15	10	15	10	15	10	15	10	15	10	15
Total Employees	**200**	**200**	**240**	**200**	**240**	**200**	**240**	**200**	**240**	**200**	**240**	**200**	**240**	**200**	**240**
Ship Calls (yearly)	**258**	**275**	**287**	**275**	**287**	**275**	**287**	**275**	**287**	**275**	**287**	**275**	**287**	**275**	**287**
Solid Waste Generation Rate (lb/employee/day)	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**
Onshore Solid Waste Generation (lb/day) (Employees x calls x generation rate)	1488.625	1586.712	1987.141	1586.712	1987.141	1586.712	1987.141	1586.712	1987.141	1586.712	1987.141	1586.712	1987.141	1586.712	1987.141
Offshore Solid Waste Generation (lb/day)	134.7325	183.8582	342.1388	183.8582	342.1388	183.8582	342.1388	183.8582	342.1388	183.8582	342.1388	183.8582	342.1388	183.8582	342.1388
Total Solid Waste Generation (lbs/day)(Cruise Terminals)	**1623.357**	**1770.571**	**2329.28**	**1770.571**	**2329.28**	**1770.571**	**2329.28**	**1770.571**	**2329.28**	**1770.571**	**2329.28**	**1770.571**	**2329.28**	**1770.571**	**2329.28**
Other Development Solid Waste Generation															
Residential Solid Waste generation Residents (Other Development-Residential)															
Fire Station 112	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Residential Solid Waste Generation Rate	**12.23**	**12.23**	**12.23**	**12.23**	**12.23**	**12.23**	**12.23**	**12.23**	**12.23**	**12.23**	**12.23**	**12.23**	**12.23**	**12.23**	**12.23**
Total Solid Waste Generation (lb/day) (Other Development-Residential) (Fireman x generation rate)	**183.45**	**183.45**	**183.45**	**183.45**	**183.45**	**183.45**	**183.45**	**183.45**	**183.45**	**183.45**	**183.45**	**183.45**	**183.45**	**183.45**	**183.45**
Commercial Solid Waste Generation Employees (Other Development – Commercial)															
Crowley Marine Tugs	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
LA Maritime Institute	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Millennium Tugs	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Ports O'Call Development	300	750	750	750	750	750	750	375	375	750	750	750	750	750	750
Ralph J. Scott Fireboat	4	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Waterfront Red Car Museum	0	0	0	25	25	0	0	25	25	25	25	0	0	0	0
SS Lane Victory	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
Total Employees (Other Development – Commercial)	**419.9**	**889.9**	**889.9**	**914.9**	**914.9**	**889.9**	**889.9**	**539.9**	**539.9**	**914.9**	**914.9**	**889.9**	**889.9**	**865.9**	**865.9**
Commercial Solid Waste	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**	**10.53**

Cruise Terminal Employees Per Ship	*CEQA Baseline 2006*	*Proposed Project 2015*	*Proposed Project 2037*	*Alt 1 2015*	*Alt 1 2037*	*Alt 2 2015*	*Alt 2 2037*	*Alt 3 2015*	*Alt 3 2037*	*Alt 4 2015*	*Alt 4 2037*	*Alt 5 (No Federal Action) 2015*	*Alt 5 (No Federal Action) 2037*	*Alt 6 2015*	*Alt 6 2037*
Generation Rate															
Total Solid Waste Generation (lb/day) (Other Development-Commercial) (Employees x generation rate)	**4421.547**	**9370.647**	**9370.647**	**9633.897**	**9633.897**	**9370.647**	**9370.647**	**5685.15**	**5685.15**	**9633.897**	**9633.897**	**9370.647**	**9370.647**	**9117.927**	**9117.927**
Industrial Solid Waste Generation Employees (Other Development-Industrial)															
Jankovich & Son	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mike's fueling station	17	17	25	0	0	17	25	17	25	0	0	17	25	0	0
Municipal Warehouse No 1	1008	1008	1008	948	948	1008	1008	1008	1008	1008	1008	1008	1008	1008	1008
Waterfront Red Car Maintenance	11	34	68	34	68	34	68	34	68	34	68	34	68	0	0
Warehouse No. 9	140	140	140	140	140	140	140	140	140	140	140	140	140	0	0
Warehouse No. 10	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westway Terminal	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Employees (Other Development-Industrial)	**1405**	**1199**	**1241**	**1122**	**1156**	**1199**	**1241**	**1199**	**1241**	**1182**	**1216**	**1199**	**1241**	**1008**	**1008**
Industrial Solid Waste Generation Rate	**8.93**	**8.93**	**8.93**	**8.93**	**8.93**	**8.93**	**8.93**	**8.93**	**8.93**	**8.93**	**8.93**	**8.93**	**8.93**	**8.93**	**8.93**
Solid Waste Generation (lb/day) (Other Development – Industrial) (employees x generation rate)	**12546.65**	**10707.07**	**11082.13**	**10019.46**	**10323.08**	**10707.07**	**11082.13**	**10707.07**	**11082.13**	**10555.26**	**10858.88**	**10707.07**	**11082.13**	**9001.44**	**9001.44**
Total Solid Waste Generation (lb/day) (Other Development)	**20820.91**	**24458.43**	**24917.49**	**23930.07**	**24301.69**	**24458.43**	**24917.49**	**20072.93**	**20531.99**	**24585.87**	**24957.49**	**24458.43**	**24917.49**	**22070.08**	**22070.08**
Total Solid Waste Generation (Entire Development) (lb/day)	**43292.4**	**50714.65**	**52191.48**	**49657.93**	**50959.88**	**50714.65**	**52191.48**	**41943.65**	**43420.48**	**50969.53**	**52271.48**	**50714.65**	**52191.48**	**45937.95**	**46496.66**
Recycle Diversion Rate (Current)	*62%*	*62%*	*62%*	*62%*	*62%*	*62%*	*62%*	*62%*	*62%*	*62%*	*62%*	*62%*	*62%*	*62%*	*62%*
Recycle Diversion Rate (Goal Estimate)	*62%*	*70%*	*100%*	*70%*	*100%*	*70%*	*100%*	*70%*	*100%*	*70%*	*100%*	*70%*	*100%*	*70%*	*100%*
Solid Waste Generation Base on Current Recycle Diversion Rate															
Total Solid Waste to Sunshine Landfill (lbs/day)	16451.11	19271.57	19832.76	18870.02	19364.76	19271.57	19832.76	15938.59	16499.78	19368.42	19863.16	19271.57	19832.76	17456.42	17668.73
Total Solid Waste to Sunshine Landfill (tons/day)	**8.2256**	**9.6358**	**9.9164**	**9.4350**	**9.6824**	**9.6358**	**9.9164**	**7.9693**	**8.2499**	**9.6842**	**9.9316**	**9.6358**	**9.9164**	**8.7282**	**8.8344**
Solid Waste Generation Based on Goal Recycle Diversion Rate															
Total Solid Waste to Sunshine Landfill (lbs/day)	16451.11	15,214.40	0.00	14,897.38	0.00	15,214.40	0.00	12583.10	0.00	15,290.86	0.00	15,214.40	0.00	13,781.39	0.00

Cruise Terminal Employees Per Ship	*CEQA Baseline 2006*	*Proposed Project 2015*	*Proposed Project 2037*	*Alt 1 2015*	*Alt 1 2037*	*Alt 2 2015*	*Alt 2 2037*	*Alt 3 2015*	*Alt 3 2037*	*Alt 4 2015*	*Alt 4 2037*	*Alt 5 (No Federal Action) 2015*	*Alt 5 (No Federal Action) 2037*	*Alt 6 2015*	*Alt 6 2037*
Total Solid Waste to Sunshine Landfill (tons/day)	**8.2256**	**7.6072**	**0.00**	**7.4487**	**0.00**	**7.6072**	**0.00**	**6.2915**	**0.00**	**7.6454**	**0.00**	**7.6072**	**0.00**	**6.8907**	**0.00**
Sunshine Permitted Throughput (tons/day)(b)[1]	6,600	12,100	12,100	12,100	12,100	12,100	12,100	12,100	12,100	12,100	12,100	12,100	12,100	12,100	12,100
Project Solid Waste % Sunshine Permitted Throughput (Current Recycle Diversion Rate)	**.12%**	**.08%**	**.08%**	**.08%**	**.08%**	**.08%**	**.08%**	**.07%**	**.07%**	**.08%**	**.08%**	**.08%**	**.08%**	**.07%**	**.07%**
Project Solid Waste % Sunshine Permitted Throughput (Goal Recycle Diversion Rate)	**.12%**	**.06%**	**0%**	**.06%**	**0%**	**.06%**	**0%**	**.05%**	**0%**	**.06%**	**0%**	**.06%**	**0%**	**.06%**	**0%**

[1] In June of 2008, Sunshine Canyon SLF became Sunshine Canyon City/County Landfill and was extended to accept 12,100 tons per day. However, because the proposed Project's baseline year is 2006, the permitted throughput to the landfill will remain at 6,600 tons per day for the baseline. Although the proposed project would create more waste than baseline estimates, due to the increase in permitted throughput at the new Sunshine Canyon City/County Landfill, the percentage of the permitted tonnage being sent to the landfill will be lower for the proposed Project and all the alternatives compared to the baseline estimate.

	CEQA Baseline 2006	*Proposed Project 2015*	*Proposed Project 2037*	*Alt 1 2015*	*Alt 1 2037*	*Alt 2 2015*	*Alt 2 2037*	*Alt 3 2015*	*Alt 3 2037*	*Alt 4 2015*	*Alt 4 2037*	*Alt 5 (No Federal Action) 2015*	*Alt 5 (No Federal Action) 2037*	*Alt 6 2015*	*Alt 6 2037*
Commercial Electricity Use															
Total Commercial (Million Square Feet)	3.94	4.71	4.71	4.37	4.37	4.70	4.70	3.72	3.72	4.59	4.59	4.58	4.58	3.98	3.98
Projected Electricity Demand KW hours/year (millions)	**57.95**	**69.25**	**69.25**	**64.27**	**64.27**	**69.03**	**69.03**	**54.64**	**54.65**	**67.50**	**67.50**	**67.34**	**67.34**	**58.52**	**58.52**
Cruise Ship Electricity Use															
Average Ship Size (Passengers)	2235	2620	3934	2620	3934	2620	3934	2620	3934	2500	3300	2500	3300	2500	3300
Annual Cruise Calls	258	275	287	275	275	275	287	275	275	275	275	275	275	275	275
Average Electricity Usage Per Ship (KW hours/day)	8000	8600	11000	8600	11000	8600	11000	8600	11000	8470	9800	8470	9800	8470	9800
Projected Electricity Demand Cruise Ships (KW hours/year) (millions)	**2.06**	**2.37**	**3.16**	**2.37**	**3.03**	**2.37**	**3.16**	**2.37**	**3.03**	**2.33**	**2.70**	**2.33**	**2.70**	**2.33**	**2.70**
Waterfront Red Car Electricity Use[1]															
(1) Projected Electricity Use Waterfront Red Car (KW hours/year)	**62,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**550,000**	**62,000**	**62,000**
(2) Project Electricity Use Waterfront Red Car (KW hours/year)	**62,000**	**684,252**	**684,252**	**684,252**	**684,252**	**684,252**	**684,252**	**684,252**	**684,252**	**684,252**	**684,252**	**684,252**	**684,252**	**62,000**	**62,000**
Total Electricity Demand															
(1) Total Projected Electricity Demand (KW hours/years) (Millions)	**60.07**	**72.17**	**72.96**	**67.19**	**67.85**	**71.95**	**72.74**	**57.56**	**58.22**	**70.38**	**70.75**	**70.22**	**70.59**	**60.36**	**60.73**
(2) Total Projected Electricity Demand (KW hours/years) (Millions)	**60.07**	**72.30**	**73.09**	**67.32**	**67.98**	**72.08**	**72.87**	**57.69**	**58.15**	**70.51**	**70.88**	**70.35**	**70.72**	**60.36**	**60.73**

[1] Due to a range of estimated Waterfront Red Car vehicle miles traveled (the higher estimate is due to the addition of vehicle miles travelled by the City Dock no. 1 Shuttle), a range of electricity consumption estimates will be presented to provide a conservative impact analysis.

	CEQA Baseline 2006	*Proposed Project*	*Alternative 1*	*Alternative 2*	*Alternative 3*	*Alternative 4*	*Alternative 5 (No Federal Action)*	*Alternative 6*
Total Commercial (million square feet)	3.94	4.71	4.37	4.70	3.72	4.59	4.58	3.98
Natural Gas Consumption Rate[1]	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Projected Natural Gas Demand (cubic feet/day) (millions)	0.38	0.45	0.42	0.45	0.35	0.44	0.44	0.38
Predicted Natural Gas Supply in 2015[2] 2,624 MMcf/day								
Predicted Natural Gas Supply in 2030 2,709 MMcf/day								
Percent of supply used 2015	0.01%	0.02%	0.02%	0.02%	0.01%	.02%	.02%	.01%
Percent of supply used 2030	0.01%	0.02%	0.02%	0.02%	0.01%	.02%	.02%	.01%

[1] Consumption factors derived from SCAQMD CEQA Air Quality Handbook, 1993.
[2] Many factors can affect the potential natural gas supply for California. These predictions have been created with the current information and statistical data available.

Table 3.13-1 describes the water demand that would be created by the proposed Project. Table 3.13-2 shows the total wastewater that would be generated under all conditions and the percent these generations would contribute to the existing flow and to the TITP capacity.

Impacts related to solid waste generally involve the estimation of the project-related, land use-based, solid waste generation compared to the capacity of the landfills serving the proposed project area. The solid waste generated under baseline, proposed Project, and alternatives conditions was determined using a generation factor provided by LAHD. For cruise ship solid waste estimates, onshore solid waste creation was estimated by a commercial conversion factor of 10.53 pounds per day per employee, while offshore solid waste was estimated by a ratio of average passenger to waste pallet per ship. For all other land uses, there were multiple conversion factors:

- commercial: 10.53 pounds per day per employee, and
- industrial: 8.93 pounds per day per employee.

The percent contribution to the permitted daily throughputs of the Sunshine Canyon Landfill, subtracted by the anticipated recycle diversion rate, was then determined based on the solid waste generation, as shown in Table 3.13-3.

The determination of impacts on electricity and natural gas supplies depends on an estimation of demand generated by the proposed project uses compared to availability and capacity of existing supplies and the conveyance infrastructure, as shown in Tables 3.13-4 and 3.13-5.

3.13.4.1.3 Energy Conservation

Appendix F of the 2008 CEQA guidelines states that EIRs are required to include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Furthermore, energy conservation implies that a project's cost effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For many projects, lifetime costs may be determined more by energy efficiency than by initial dollar costs.

3.13.4.2 Thresholds of Significance

The following significance criteria are based on the *L.A. CEQA Thresholds Guide* (City of Los Angeles 2006) and other criteria applicable to Port projects. According to the *L.A. CEQA Thresholds Guide*, project impacts on fire protection and law enforcement services are determined based on several underlying factors, described in further detail below that can affect the need for additional infrastructure to maintain these public services. Although the *L.A. CEQA Thresholds Guide* does not address thresholds of significance in regards to the Port Police and the USCG, these

law enforcement agencies serve the proposed Project and would potentially be affected by proposed project activities. Accordingly, USCG and Port Police are addressed in this discussion.

The following factors are used to determine significance for impacts on public services:

PS-1: A project would have a significant impact if it would burden existing USCG, LAPD, or Port Police staff levels and facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities construction that could cause significant environmental effects.

PS-2: A project would have a significant impact if it would require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

The following factors are used to determine significance for impacts on public utilities:

PS-3: A project would have a significant impact if it would require or result in the construction or expansion of utility lines that would cause significant environmental effects.

PS-4: A project would have a significant impact if it would exceed existing water supply, wastewater, or landfill capacities.

PS-5: A project would have a significant impact if it would require new, offsite energy supply and distribution infrastructure or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.

3.13.4.3 Impacts and Mitigation

3.13.4.3.1 Proposed Project

Impact PS-1: The proposed Project would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.

At no time will construction of the proposed Project impact response times for USCG, LAPD, or the Port Police. Project construction would require the use of one or more sites for construction staging of equipment and materials, which would be vulnerable to unauthorized trespassing or theft; however, private security provided by

the Port and LAPD, as needed, would protect against such risk. Furthermore, LAHD will be required, pursuant to the Watch Manual, to coordinate with law enforcement agencies, during construction of all roadway improvements, to establish emergency vehicular access and ensure continuous law enforcement access to surrounding areas.

LAPD is not the primary police service provider in the Port area; it primarily provides support to the Port Police under special circumstances. As such, LAPD response times would not be affected by the proposed Project.

The proposed Project would not burden the Port Police such that they would not be able to maintain their current level of service to the Port Area. Port Police do not base staff levels on the amount of proposed commercial development or on the anticipated population growth of a given area. Their staff numbers are based on the current Homeland Security Data and levels of security at other ports of corresponding size and activity. Response times are not estimated by the Port Police as a ratio of measurement and are therefore not estimated for the proposed Project. The Port Police maintains 24-hour land and water patrols. They also have Sea Marshals and K-9 units that are dedicated to the cruise terminal when cruise ships are in port. Due to constant patrol of land and water and the Port Police's expanding and constantly updated resources, the proposed project area can be adequately served. (Kirwan pers. comm. 2008.)

The USCG's ability to respond would not be affected by the proposed Project's increase in cruise berths/terminals in the Outer Harbor, because all of the components of the proposed Project are within areas that the USCG is currently able to respond to adequately. The USCG has adequate personnel to serve the proposed Project. Currently, the USCG has 360 personnel assigned to the local unit for the upcoming year. These personnel numbers are based on USCG's multi-mission response goals, which include maritime security tasks, merchant vessel inspections, as well as responding to terrorist threats. (Peterson et al. 2006.) Because the proposed Project does not change the baseline demands of how many personnel are needed within the Port Area, and is it within the current USCG coverage area, USCG would not need to increase number of personnel. However, the 11th District may add 8 to 10 personnel in the coming year to aid in consistency during its annual transfer season. (Gooding pers. comm. 2008.)

CEQA Impact Determination

The emergency response time for each public service provider in the proposed project area is considered adequate. Although the Outer Harbor Cruise Terminal operations would result in an increase in calls to the Port Police and/or LAPD, provisions for security features mandated by the MTSA would reduce the demand for law enforcement. The Port Police are adequately staffed with sworn personnel to provide for the activities of the Port; their ability to provide for the Port is not expected to change with increases in development. The proposed Project would be located within the same operating distance of other facilities served by USCG; USCG emergency response times would not increase. Additionally, the increase of 17 cruise vessel calls per year by 2015 and 29 vessels through 2037, over CEQA baseline levels would not reduce available USCG resources or impact its ability to

adequately serve the area. Because the proposed Project would be constructed in locations that USCG can adequately respond to, USCG would not have to add additional response resources (Gooding pers. comm. 2008). Accordingly, the proposed Project would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities. However, project construction could have temporary impacts on emergency access to portions of the proposed project area; these impacts would be significant.

Mitigation Measures

MM PS-1. Coordinate with law enforcement agencies. LAHD will be required, pursuant to the Watch Manual, to coordinate with law enforcement agencies, during construction of all roadway improvements, to establish emergency vehicular access and ensure continuous law enforcement access to surrounding areas.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The proposed Project would include new facilities subject to NEPA, including the Outer Harbor cruise terminals, parking structure in the Inner Harbor, and waterfront promenade areas; however, the associated increase in calls to the Port Police and LAPD would not substantially impact existing levels of service during proposed project construction due to the proposed Project's security features. Increases in cruise berths and corresponding terminals would not put an increased burden on current LAPD, USCG, or Port Police supplies or services. The proposed Project would be located within the same operating distance of other facilities served by the USCG and would therefore not increase emergency response times. Additionally, the increase of 12 vessel calls per year, through 2037, over NEPA baseline levels would not reduce available USCG resources or increase response times. Accordingly, the proposed Project would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, the construction of which could cause significant environmental effects. However, project construction could have temporary impacts on emergency access to portions of the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

Impact PS-2: The proposed Project would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

The proposed Project would be designed and constructed to meet all applicable state and local codes and ordinances to ensure adequate fire protection. Construction and operation of the proposed Project starting in 2009 and carrying through 2037 would not result in an increase of average emergency response times, and LAFD would be able to accommodate project-related fire protection demands. At no time will project construction impact LAFD response times to the area. However, prior to construction activities LAHD would be required pursuant to the Watch Manual to coordinate with LAFD during construction of all roadway improvements to establish emergency vehicular access, ensuring continuous law enforcement access to surrounding areas. LAFD and the Port discussed the need for more personnel or equipment due to the increase in commercial activity, and it was established that no additions would be necessary for the proposed Project. (LAHD pers. comm. 2008.)

CEQA Impact Determination

At no time will project construction impact response times to the area. However, LAHD, in compliance with the Watch Manual, will establish emergency vehicular access routes (Watch Manual 2006). LAHD coordinates with LAFD to review and comment on proposed project features affecting emergency access. The proposed Project would not increase the demand for fire services to a degree that would require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. However, project construction might temporarily impact LAFD emergency access to portions of the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The proposed Project would include water-dependent construction activities (i.e., dredging and filling) and new construction of cruise terminals, parking areas, and waterfront promenade areas that would not be part of the NEPA baseline. Project operations would not affect emergency response times, no existing fire lanes or hydrants would be removed, and site access would be reviewed and approved by LAFD as required by MM PS-1. The proposed Project would not increase the demand for fire services to a degree that would require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to

maintain service. However, project construction might temporarily impact LAFD emergency access to portions of the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

Impact PS-3: The proposed Project would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.

No new major utility lines or facilities would need to be constructed in the proposed project area. However, the Promenade, Outer Harbor cruise terminals, and the Ports O' Call could require upgrades or relocation of utility lines to accommodate the planned development. All infrastructure improvements and connections would occur within existing or proposed city streets, would comply with the City's municipal code, and would be performed under permit by the City Bureau of Engineering and/or LADWP.

CEQA Impact Determination

Proposed project construction and development may require upgrades and relocations of utility lines to provide for and adjust to the development of additional cruise berths in the Inner and Outer Harbors. However, these possible upgrades or relocations would not cause significant environmental effects. LAHD would be required, pursuant to the Watch Manual, to coordinate with law enforcement agencies during construction of all roadway improvements. Additionally, during any construction, recycling efforts would be implemented in order to limit the amount of waste created. The following mitigation measures would ensure that impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

MM PS-2: Recycle construction materials. Demolition and/or excess construction materials will be separated on site for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials will be provided on site.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Proposed project construction activities subject to NEPA would not require the removal and/or relocation of water supply distribution mains and sewer trunk lines within the proposed project vicinity. Because public utilities would not be affected by dredging and filling, adverse impacts associated with construction and/or expansion of utility lines would not occur. Therefore, there would be no impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact PS-4: The proposed Project has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.

The proposed Project would result in a water demand of approximately 229.90 mgd per day, or 705.54 acre-feet per year, in 2037.

Proposed project activities would generate 0.34 mgd of wastewater, a 0.2% increase from the baseline percentage going toward the TITP daily capacity.

Construction and demolition activities would generate debris that would require disposal in a landfill. Construction and demolition materials would include asphalt, concrete, building materials, and solids. Dredged material generated during construction would be reused in the proposed Project as fill on Anchorage Road or transported to the LAHD nonhazardous material upland disposal site. In the event that unidentified hazardous materials are encountered during proposed roadway improvements and/or project construction, recycling options would be explored. However, if recycling is not an option, disposal of hazardous materials at a Class I landfill would be based on facility and hazardous material requirements.

The proposed Project would generate approximately 25.4 tons of solid waste per year. However, not all solid waste created by the proposed Project would be sent to Sunshine Canyon City/County Landfill. The Bureau of Sanitation has a current recycle diversion rate of 62%, with a goal of 70% by 2015 and 100% by 2030. With the current recycle diversion rate of 62%, the amount of solid waste that would go the landfill represents 0.08% of the permitted daily throughput of 12,100 tons[5]. If the

[5] In June 2008, Sunshine Canyon SLF became Sunshine Canyon City/County Landfill and was extended from a 6,600 tons per day throughput to 12,100 tons per day. However, because the proposed Project's baseline year is

goal of 70% diversion is achieved by 2015, that amount would be reduced to 0.07%. Finally, if the goal of 100% diversion is achieved by 2030, the amount of solid waste sent to Sunshine Canyon City/County Landfill would be 0% for 2037. It is important to note that these goals are optimistic but obtainable, and should be analyzed.

CEQA Impact Determination

The proposed Project would result in an increased water demand from the baseline level of 486.80 acre-feet per year, of approximately 217.76 acre-feet per year in 2037. However, this increase in demand would not negatively impact future supply. Preliminary discussions with LADWP indicate that a pending Water Supply Assessment would confirm that adequate supplies exist to serve the proposed project. In addition, coordination with LADWP would ensure that the increased demands would be accommodated by existing infrastructure.

Proposed project-generated wastewater would constitute 1.1% of the TITP daily capacity, which exceeds the baseline levels of 0.9%. However, because the TITP currently operates at 55% capacity, these increases would be considered negligible. The proposed Project would not exceed the capacity of the TITP or conveyance system to accommodate anticipated increases. The minimal amount of increased wastewater generated by proposed project construction and operations would not exceed the 30-mgd capacity of the TITP or sewer trunk lines in the proposed project area.

The amount of solid waste generated by construction activities would result in a substantial contribution to the solid waste stream, possibly contributing to the exceedance of solid waste facility capacities. Although hazardous materials could be encountered and require disposal during construction activities, several contaminated soil treatment and disposal options and Class I landfills are available for offsite disposal, providing adequate capacity. The proposed project operations would generate 9,256 tons of solid waste per year, or 1,356 tons above the 2006 baseline level of 7,900 tons per year. At the current recycle diversion rate of 62%, this would represent an increase to the permitted throughput at the Sunshine Canyon City/County Landfill from 0.07% to 0.08%. However, if the recycling goals of 70% diversion by 2015 and 100% diversion by 2030 are achieved, this percentage would lower to 0.06% for 2015 and then 0% for 2037. The negligible increases in solid waste that would be diverted to the Sunshine Canyon City/County Landfill are considered less than significant. Additionally, proposed project operation would be required to comply with all existing hazardous waste laws and regulations, including the federal Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and CCR Title 22 and Title 26. The Sunshine Canyon City/County Landfill would be able to accommodate the negligible increase in solid waste generated by proposed project operations. Additionally, with the Puente Hills Intermodal Facility project and anticipated recycle diversion rates for the area, solid waste removal and disposal

2006, the permitted throughput to the landfill remains at 6,600 tons per day for the baseline. Although the proposed Project would create more waste than baseline estimates, due to the increase in permitted throughput at the new Sunshine Canyon City/County Landfill, the percentage of the permitted tonnage being sent to the landfill would be lower for the proposed Project and all the alternatives compared to the baseline estimate.

would be adequately provided for in the proposed project area through 2037, and there would no longer be an impact.

Therefore, impacts associated with exceeding the capacity of the existing water supply and the TITP wastewater treatment facility would be less than significant. However, because solid waste generated during construction activities is not quantifiable and construction debris is one of the greatest individual contributors to solid waste capacity, impacts associated with solid waste generation during construction activities would be significant.

Mitigation Measures

Implementation of Mitigation Measures MM PS-2 through MM PS-5 would reduce the amount of solid waste from project construction that would require transportation to a landfill. To further reduce impacts on water demand and wastewater capacities, LADWP has supplied water conservation measures that would be implemented for the proposed Project.

MM PS-3: Use materials with recycled content. Materials with recycled content, such as recycled steel from framing and recycled concrete and asphalt from roadway construction, will be used in project construction. Wood chippers registered through the California Air Resources Board's Portable Equipment Registration Program will be used on site during construction, using wood from tree removal, not wood from demolished structures, to further reduce excess wood for landscaping cover.

MM PS-4: Comply with AB 939. LAHD and Port tenants will implement a Solid Waste Management Program including the following measures to achieve a 50% reduction of current waste generation percentages by 2037 and ensure compliance with the California Solid Waste Management Act (AB 939).

a. Provide space and/or bins for storage of recyclable materials on the project site. All garbage and recycle bin storage space will be enclosed and plans will show equal area availability for both garbage and recycle bins in storage spaces.
b. Establish a recyclable material pick-up area for commercial buildings.
c. Participate in a curbside recycling program to serve the new development.
d. Develop a plan for accessible collection of materials on a regular basis.
e. Develop source reduction measures that indicate the method and amount of expected reduction.
f. Implement a program to purchase materials that have recycled content for project construction and operation (e.g., lumber, plastic, office supplies).
g. Provide a resident-tenant/employee education pamphlet to be used in conjunction with available Los Angeles County and federal source reduction educational materials. The pamphlet will be provided to all commercial tenants by the leasing/property management agency.

h. Include lease language requiring tenant participation in recycling/waste reduction programs, including specification that janitorial contracts support recycling.

MM PS-5: Water Conservation and Wastewater Reduction. LAHD and Port tenants will implement the following water conservation and wastewater reduction measures to further reduce impacts on water demand and wastewater flows.

a. The landscape irrigation system will be designed, installed, and tested to provide uniform irrigation coverage for each zone. Sprinkler head patterns will be adjusted to minimize overspray onto walkways and streets. Each zone (sprinkler valve) will water plants having similar watering needs (i.e., shrubs, flowers, and turf will not be in the same watering zone). Automatic irrigation timers will be set to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times will be adjusted for all zones seasonally, reducing length and frequency of waterings in the cooler months (i.e., fall, winter, spring). Adjust sprinkler timer run time to avoid water runoff, especially when irrigating sloped property. Sprinkler times will be reduced once drought-tolerant plants have been established.

b. Drought-tolerant, low-water consuming plant varieties will be used to reduce irrigation water consumption.

c. The availability of recycled water will be investigated as a source to irrigate large landscaped areas.

d. Ultra-low-flush toilets, ultra-low-flush urinals, and water-saving showerheads must be installed in both new construction and when remodeling. Low-flow faucet aerators will be installed on all sink faucets.

e. Significant opportunities for water savings exist in air conditioning systems that utilize evaporative cooling (i.e., employ cooling towers). LADWP will be contacted for specific information of appropriate measures.

f. Recirculating or point-of-use hot water systems will be installed to reduce water waste in long piping systems where water must be run for considerable period before heated water reaches the outlet.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The total water demand for the cruise ships and terminals at the Port would be 322.28 acre-feet per year in 2037. This is a 271.73 acre-feet per year increase above the baseline demands of 50.55 acre-feet per year. This estimated water demand increase is not considered significant and preliminary discussions with LADWP indicate that the pending Water Supply Assessment would confirm that adequate supplies exist to serve the project and that this increase in demand would not negatively impact future supply. In addition, coordination with LADWP would ensure that any increased demands would be accommodated by existing infrastructure.

Cruise ship and terminal wastewater would constitute 0.4% of the TITP daily capacity under the proposed Project, a 0.2% increase from baseline levels. As the TITP currently operates at 55% capacity, this amount would be considered negligible. The proposed Project would not exceed the capacity of the TITP or conveyance system to accommodate anticipated increases in wastewater demands associated with the project operations.

The amount of solid waste generated by construction activities is not quantifiable but would result in a substantial one-time contribution to the solid waste stream, possibly contributing to the exceedance of solid waste facility capacities. Dredged material generated during construction would be reused within the proposed project area as fill during subsequent construction phases (i.e., on Anchorage Road) or transported to the LAHD nonhazardous material upland disposal site. Hazardous waste landfill capacity would not be substantially affected by the proposed Project. There are multiple landfill sites in the vicinity that accept hazardous waste, such as contaminated soil, sludge, industrial waste, asbestos, treated wood waste, etc. The landfill sites accepting these types of hazardous waste include: Puente Hills Landfill, Lancaster Landfill and Recycling, and Chiquita Canyon Sanitary Landfill. These landfills would be available for offsite disposal, providing adequate capacity (CIWMB 2008).

Cruise ship onshore and offshore solid waste would generate 323 tons of solid waste per year for the interim year (2015) and 425 tons of solid waste per year for the build out year of 2037. This is an increase of 129 tons compared to the 2006 baseline level of 296 tons per year. At the current recycle diversion rate of 62%, this would represent a small increase to the permitted throughput at the Sunshine Canyon City/County Landfill from the baseline amounts. Furthermore, if the recycling goals of 70% diversion by 2015 and 100% diversion by 2030 are achieved, this percentage would be lower. The negligible increase in solid waste created by the cruise ships, terminals, and promenade operations that would be diverted to the Sunshine Canyon City/County Landfill is considered less than significant.

Impacts associated with exceeding the demand or capacity of the existing water supply and the TITP would be less than significant. Solid waste generated during proposed project operations would not exceed the capacity of the Sunshine Canyon City/County Landfill and impacts would be less than significant. However, because solid waste generated during construction activities is not quantifiable and construction debris is one of the greatest individual contributors to solid waste capacity, impacts associated with solid waste generation during construction activities would be significant.

Mitigation Measures

Implement Mitigation Measures MM PS-2 through MM PS-5.

Residual Impacts

Impacts would be less than significant.

Impact PS-5: The proposed Project would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.

Energy (diesel fuel and electricity) would be used during construction of the proposed Project. Energy expenditures during construction would be short term in duration, occurring periodically during each of the proposed project construction phases. Construction would not result in substantial waste or inefficient use of energy because programs such as the Green Terminal Program and the Construction Recycling Program implement policies that make construction and development projects more energy efficient. (LAHD Environmental Programs 2008.) Additionally, construction of modern buildings and structures incorporates energy-efficient designs that are mandated by current building codes. Currently, LAHD's goal is for the Port of Los Angeles to be the most energy efficient port to date. To accomplish this task, the LAHD has committed to design any new building over 7,500 square feet with a minimum LEED Silver certification. As such, energy efficiency standards would be incorporated on various buildings to decrease energy demands.

Electricity and natural gas demands at the proposed project site would be related to commercial, cruise ship, and Waterfront Red Car Line uses. Commercial electricity use is estimated by the total square footage, and the Waterfront Red Car Line's estimated demand is 550,000 to 684,252 KWh per year (Smatlak pers. comm. 2008).[6]

The cruise ships that call in the Port would have an impact on the energy demands of the proposed Project. On the basis of the number of ships calling at the Port of Los Angeles that are currently AMP-ready, the percentage of all ships calling at the Inner Harbor Cruise Terminal that would use AMP would be at minimum: 30% in 2009 and 80% in 2013 and thereafter; Outer Harbor Cruise Terminal minimum percentages would be: 97% in 2013 and thereafter. Additionally, by 2013, all ships retrofitted for AMP shall be required to use AMP while hoteling, with a compliance rate of 100%, with the exception of circumstances when an AMP-capable berth is unavailable due to utilization by another AMP-capable ship. A new substation (next to the existing substation) is planned outside of the proposed project area (Zambrano pers. comm. 2008a) to support AMP and project-related energy demands as part of a separate project.

The proposed Project would not generate demands for natural gas associated with space and water heating that supersede available supply. The baseline percentage of natural gas demand compared to the current supply available is 0.01%. The proposed project would have a natural gas demand of 0.02% of the projected supply in 2015

[6] Due to a range of estimates for Waterfront Red Car vehicle miles travelled (the higher estimate is due to the addition of vehicle miles travelled by the City Dock No. 1 Shuttle), a range of electricity consumption estimates will be presented to provide a conservative impact analysis.

and 2030.[7] Due to current and future anticipated resources available, natural gas demands past 2030 through the build out year of 2037 are not expected to increase to an amount that would exceed availability. The minimal amount of increased demand for natural gas, specifically a 0.01% increase, would be accommodated by the Gas Company via the existing infrastructure located adjacent to and within the proposed project site.

CEQA Impact Determination

Energy (diesel fuel and electricity) would be required to support proposed construction activities. Energy demands during construction activities would be short-term and temporary; they are not anticipated to result in substantial waste or inefficient use of energy, because energy-efficiency and conservation strategies will be implemented throughout all construction stages, as described above.

Project operations would generate demands for electricity associated with commercial, Waterfront Red Car Line, and cruise ship uses. The total electricity use for the proposed Project would be 72.96 to 73.09 million kWh per year in 2037, 12.89 to 13.02 million kWh per year more than the 2006 baseline demand (60.07 million kWh per year). The increased natural gas demand of 0.01% from baseline demand would not supersede project natural gas supply. Additionally, POLA has committed to design of new buildings over 7,500 square feet to be built with minimum LEED Silver certification. As such, energy efficiency standards would be incorporated on various buildings to decrease energy demands.

LADWP's IRP anticipates load growth and plans new generating capacity or demand side management programs to meet load requirements for future customers. Additionally, the proposed Project would incorporate energy conservation measures in compliance with California's Building Code CCR Title 24 that requires energy efficiency standards for new construction, including requirements for new buildings, additions, alterations, and repairs to nonresidential buildings. Incorporation of these design standards, as required by state law, would reduce wasteful energy consumption. While incorporation of these design measures would reduce impacts related to reducing energy consumption, impacts would remain significant.

Mitigation Measures

MM PS-6: Employ energy conservation measures. During the design process, LAHD will consult with LADWP's Efficiency Solutions Business Group regarding possible energy efficiency measures. LAHD and its tenants will incorporate measures to meet or, if possible, exceed minimum efficiency standards for Title XXIV of the California Code of Regulations, such as:

a. Built-in appliances, refrigerators, and space-conditioning equipment will exceed the minimum efficiency levels mandated in the California Code of Regulations.

[7] The 2008 California Gas Report is a 22-year analysis, ending at 2030. There is no natural gas demand data available for the build out year of 2037.

b. High-efficiency air conditioning will be installed that is controlled by a computerized energy-management system in office and retail spaces and provides the following:

- a variable air-volume system that results in minimum energy consumption and avoids hot water energy consumption for terminal reheat,
- a 100% outdoor air-economizer cycle to obtain free cooling in appropriate climate zones during dry climatic periods,
- sequentially staged operation of air-conditioning equipment in accordance with building demands,
- the isolation of air conditioning to any selected floor or floors, and
- considers the applicability of the use of thermal energy storage to handle cooling loads.

c. Ventilation air will be cascaded from high-priority areas before being exhausted, thereby decreasing the volume of ventilation air required. For example, air could be cascaded from occupied space to corridors and then to mechanical spaces before being exhausted.

d. Lighting system heat will be recycled for space heating during cool weather. While exhaust lighting-system heat will be recycled from the buildings, via ceiling plenums, to reduce cooling loads in warm weather.

e. Low and medium static-pressure terminal units will be installed, as well as ductwork to reduce energy consumption by air-distribution systems.

f. Buildings must be well sealed to prevent outside air from infiltrating and increasing interior space-conditioning loads. Where applicable, design building entrances with vestibules to restrict infiltration of unconditioned air and exhausting of conditioned air.

g. A performance check of the installed space-conditioning system will be completed by the developer/installer prior to issuance or the certificate of occupancy to ensure that energy-efficiency measures incorporated into the proposed Project operate as designed.

h. Exterior walls will be finished with light-colored materials and high-emissivity characteristics to reduce cooling loads. Interior walls will be finished with light-colored materials to reflect more light and, thus increase light efficiency.

i. White reflective material will be used for roofing meeting California standards for reflectivity and emissivity to reject heat.

j. Thermal insulation that exceeds requirements established by the California Code of Regulations will be installed in walls and ceilings.

k. Window systems will be designed to reduce thermal gain and loss, thus reducing cooling loads during warm weather and heating loads during cool weather.

l. Heat-rejecting window treatments will be installed, such as films, blinds, draperies, or others on appropriate exposures.

m. Fluorescent and high-intensity discharge lamps that give the highest light output per watt of electricity consumed will be installed wherever possible, including all street and parking lot lighting, to reduce electricity consumption. Reflectors will be used to direct maximum levels of light to work surfaces.

n. Photosensitive controls and dimmable electronic ballasts will be installed to maximize the use of natural daylight available and reduce artificial lighting load.

o. Occupant-controlled light switches and thermostats to permit individual adjustment of lighting, heating, and cooling will be installed to avoid unnecessary energy consumption.

p. Time-controlled interior and exterior public area light will be installed, limited to that which is necessary for safety and security.

q. Mechanical systems (HVAC and lighting) in the building will be controlled with timing systems to prevent accidental or inappropriate conditioning or lighting of unoccupied space.

r. Windowless walls or passive solar inset of windows will be incorporated, where feasible, in building design.

s. Project will focus pedestrian activity within sheltered outdoor areas.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The proposed Project would include construction activities subject to NEPA that would affect energy demands. Although terminal and promenade construction would require additional energy usage, these demands would be short-term and temporary, and they are not anticipated to result in the substantial waste or inefficient use of energy. The proposed Project would provide new energy distribution infrastructure required to support cruise ship terminal and promenade operations; it would not exceed existing supplies and/or result in the need for major new facilities.

Under the proposed Project, cruise ships and cruise terminals would have an electricity demand of 8.95 million kWh per year in 2015 and 9.74 million kWh per year in 2037. This is an increase from the baseline (5.71 million kWh per year) by 3.24 million kWh in 2015 and 4.03 million kWh in 2037. However, these increases have been anticipated in LADWP's IRP, which estimates load growth and plans new generating capacity or demand side management programs to meet load requirements for future customers. While incorporation of the energy consumption measures referenced above would reduce impacts, impacts would remain significant.

Mitigation Measures

Implement Mitigation Measure MM PS-6.

Residual Impacts

Impacts would be less than significant.

3.13.4.3.2 Alternative 1—Alternative Development Scenario 1

Alternative 1 differs from the proposed Project with regard to utilities and public services in that it would:

- demolish Berth 91 terminal and rebuild it at 200,000-square-foot to serve the Inner Harbor;
- construct and operate one new 1,250-foot-long berth in the Outer Harbor at Berths 45–47, as opposed to two at Berths 45–47 and Berths 49–50;
- construct and operate one 100,000-square-foot Outer Harbor Cruise Terminal, as opposed to two terminals totaling 200,000-square-feet;
- reduce Harbor Boulevard to a one-lane street southbound, with a northbound roundabout at 13th Street to prevent northbound traffic; and
- reduce cruise ship parking by 875 spaces.

Impact PS-1: Alternative 1 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.

Alternative 1 has one less cruise berth and terminal than the proposed Project, which would result in fewer parking spaces than under the proposed Project. This reduction in cruise berth, terminal, and parking would suggest that less security would need to be provided by USCG, LAPD, and Port Police than under the proposed Project.

CEQA Impact Determination

Alternative 1 would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities. However, project construction could have temporary impacts on emergency access to portions of the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The decrease in cruise berths under Alternative 1 would require less in-water and wharf construction than under the proposed Project, and eliminates one Outer Harbor cruise terminal. This would reduce the level of impact estimated under the proposed Project. However, as with the proposed Project, construction of Alternative 1 could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

Impact PS-2: Alternative 1 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

One less cruise berth is proposed under Alternative 1 than under the proposed P**r**oject. With one less berth and terminal, there would be fewer cruise ship parking spaces required than under the proposed Project. This decrease in terminal and parking area would suggest that the emergency demands on LAFD under Alternative 1 would be less than under the proposed Project.

CEQA Impact Determination

Construction of Alternative 1 could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Construction of Alternative 1 could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

Impact PS-3: Alternative 1 would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.

Impacts on utility lines, under Alternative 1, would be similar to under the proposed Project. Construction and development may require upgrades and relocations of utility lines to provide for and adjust to the development of additional cruise berths in the Inner and Outer Harbors.

CEQA Impact Determination

Alternative 1's utility upgrades and relocations could have minor impacts on traffic flow and circulation. However, these possible upgrades or relocations would not cause significant environmental effects. LAHD would be required, pursuant to the Watch Manual, to coordinate with law enforcement agencies during construction of all roadway improvements. Additionally, during any construction, recycling efforts would be implemented in order to limit the amount of waste created. The following mitigation measures would ensure that impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measures MM PS-1 and MM PS-2.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Impacts would be similar to those identified under the proposed Project. NEPA project elements would not require the removal and/or relocation of water supply distribution mains and sewer trunk lines in the proposed project vicinity. There would be no impacts under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact PS-4: Alternative 1 has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.

The amount of water required, wastewater produced, and construction waste generated under Alternative 1 would be less than that for the proposed Project. As shown in Table 3.13-1, water demand under Alternative 1 would be approximately 690.04 acre-feet per year in 2037, 15.50 acre-feet per year less than under the proposed Project. Alternative 1 would generate 12,486 gpd less wastewater than the proposed Project. Wastewater generated by operations under Alternative 1 would constitute 1.1% of the daily capacity; this exceeds the baseline contribution of 0.9% and is the same as under the proposed Project (Table 3.13-2). Although the TITP currently operates at 55% capacity, this increase would be considered negligible. Solid waste percentages for Alternative 1 going to Sunshine Canyon City/County Landfill in 2015 and for the build out year of 2037 would be the same as the proposed Project.

CEQA Impact Determination

Impacts related to the amount of water required, wastewater produced, and construction waste generated under Alternative 1 would be less than that for the proposed Project but would remain significant.

Mitigation Measures

Implement Mitigation Measures MM PS-2 through MM PS-5.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Impacts related to the amount of water required, wastewater produced, and construction waste generated under Alternative 1 would be less than that for the proposed Project but would remain significant.

Mitigation Measures

Implement Mitigation Measures MM PS-2 through MM PS-5.

Residual Impacts

Impacts would be less than significant.

Impact PS-5: Alternative 1 would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.

With elimination of the Outer Harbor Cruise Terminal, under Alternative 1, the demand for electricity would be reduced by 5.11 million kWh per year for 2037 compared to under the proposed Project. Natural gas demands would also be reduced with the reduction in commercial and industrial square footage, under Alternative 1. Alternative 1 would not require new, offsite energy supply facilities and distribution infrastructure or capacity-enhancing alterations to existing facilities. Cruise ships and cruise terminals, under Alternative 1, would have an electricity demand of 6.09 million kWh per year in 2015. With the increase in ship use of AMP while docked, electricity demand is projected at 6.75 million kWh per year for 2037, a decrease of approximately 2.86 million kWh in 2015 and 2.99 million kWh in 2037, compared to the proposed Project. The demand for electricity and natural gas is less under Alternative 1 than under the proposed Project.

CEQA Impact Determination

While incorporation of the building design standards referenced above for the proposed Project would reduce impacts, impacts would remain significant.

Mitigation Measures

Implement Mitigation Measure MM PS-6.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 1 would include fewer project elements subject to NEPA than the proposed Project. While incorporation of the building design standards referenced above for the proposed Project would reduce impacts, impacts would remain significant.

Mitigation Measures

Implement Mitigation Measure MM PS-6.

Residual Impacts

Impacts would be less than significant.

3.13.4.3.3 Alternative 2—Alternative Development Scenario 2

Alternative 2 differs from the proposed Project in regards to utilities and public services in that Alternative 2 would:

- locate the parking for the Outer Harbor Terminal at the Outer Harbor instead of shuttling passengers from the Inner Harbor, decreasing surface parking; and
- reduce Harbor Boulevard to one lane southbound, with a roundabout at 13th Street to prevent northbound traffic along Harbor Boulevard, and constructing the Crescent Street extension between Miner Street and Sampson Way.

Impact PS-1: Alternative 2 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.

The reduction of roadway modifications and parking construction, under Alternative 2, suggests that the security required by USCG, LAPD, and Port Police would be less than that estimated under the proposed Project.

CEQA Impact Determination

Alternative 2 would not increase the demand for additional law enforcement officers and/or facilities compared to the proposed Project such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities. However, Alternative 2 construction could have temporary impacts on emergency access to portions of the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 2 would include construction of project elements subject to NEPA similar to those described under the proposed Project. Although Alternative 2 would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, construction of Alternative 2 could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

Impact PS-2: Alternative 2 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

Alternative 2 would reduce Harbor Boulevard to one lane in each direction. Like the proposed Project, Alternative 2 would be designed and constructed to meet all applicable state and local codes and ordinances to ensure adequate fire protection and access. Demand for LAFD officers and/or facilities would not increase under Alternative 2, compared to the proposed Project.

CEQA Impact Determination

Construction of Alternative 2 could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

In-water construction activities under Alternative 2 would not differ from those under the proposed Project. Alternative 2 operations would not affect emergency response times or remove existing fire lanes or hydrants; site access would be reviewed by LAFD. Alternative 2 would not increase the demand for fire services to a degree that would require the addition of a new fire station or the expansion, consolidation, or

relocation of an existing facility to maintain service. However, construction of Alternative 2 could have temporary impacts on LAFD emergency access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

Impact PS-3: Alternative 2 would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.

As under the proposed Project, construction of Alternative 2 may require upgrades and relocations of utility lines to provide for and adjust to additional cruise berths in the Inner and Outer Harbors.

CEQA Impact Determination

Alternative 2's utility upgrades and relocations could have negative impacts on traffic flow and circulation. However, these possible upgrades or relocations would not cause significant environmental effects. LAHD would be required, pursuant to the Watch Manual, to coordinate with law enforcement agencies during construction of all roadway improvements. Additionally, during any construction, recycling efforts would be implemented in order to limit the amount of waste created. The following mitigation measures would ensure that impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measures MM PS-1 and MM PS-2.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 2 in-water construction activities would be the same as under the proposed Project and would not require the removal and/or relocation of water supply distribution mains and sewer trunk lines in the proposed project vicinity. No impacts would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact PS-4: Alternative 2 has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.

Alternative 2 and the proposed Project are very similar in design and operation, as such, under Alternative 2 wastewater would remain at an approximate 1.1% increase on TITP capacity, not exceeding the capacity of the TITP or conveyance system. Water demand would not be more than what has been estimated under the proposed Project. The percentage of solid waste going to Sunshine Canyon City/County Landfill in 2015 and 2037 would be the same as the proposed Project.

CEQA Impact Determination

Impacts would be the same as under the proposed Project and would be significant.

Mitigation Measures

Implement Mitigation Measures MM PS-2 through MM PS-5.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Impacts would be the same as under the proposed Project and would be significant.

Mitigation Measures

Implement Mitigation Measures MM PS-2 through MM PS-5.

Residual Impacts

Impacts would be less than significant.

Impact PS-5: Alternative 2 would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.

The decrease in surface parking under Alternative 2, would reduce electricity demands compared to the proposed Project. Alternative 2 electricity demands are 0.22 million kWh per year less than the proposed Project in 2037. Furthermore, the decrease in square footage reduces estimated natural gas demands compared to the proposed Project.

CEQA Impact Determination

While incorporation of the building design standards referenced above for the proposed Project would reduce impacts, impacts would remain significant.

Mitigation Measures

Implement Mitigation Measure MM PS-6.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

In-water construction activities for Alternative 2 would not differ from that of the proposed Project. While incorporation of the building design standards referenced above for the proposed Project would reduce impacts, impacts would remain significant.

Mitigation Measures

Implement Mitigation Measure MM PS-6.

Residual Impacts

Impacts would be less than significant.

3.13.4.3.4 Alternative 3—Alternative Development Scenario 3 (Reduced Project)

Alternative 3 differs from the proposed Project in regards to utilities and public services in the following ways:

- A 100,000-square-foot terminal would be constructed in the Outer Harbor (reduced from 200,000 square feet under the proposed Project), providing for one new cruise berth (a reduction by one berth as compared to the proposed Project).
- Inner Harbor parking located at Berths 91–93 would consist of 3,325 spaces. These spaces would be located in a new 3-level structure covering 9.1 acres and at surface parking areas at the Cruise Center (compared to 4,600 spaces under the proposed Project).
- Total development for Alternative 3 at Ports O'Call would be 187,500 square feet (compared to 375,000 square feet under the proposed Project).

Impact PS-1: Alternative 3 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.

The commercial square footage of Alternative 3 is approximately 22 percent less than under the proposed Project. This reduction in development of cruise ship berths, parking, and Ports O' Call space suggests that the security required from LAPD and the Port Police under Alternative 3 would be less than under the proposed Project.

CEQA Impact Determination

Vessel calls per year would be less than the proposed Project; as such, demand on USCG resources and response times would be slightly reduced. However, construction of Alternative 3 could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 3 would include less construction subject to NEPA than the proposed Project. Although it would not increase the demand for additional law enforcement officers and/or facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without additional facilities, construction of Alternative 3 could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

Impact PS-2: Alternative 3 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

Alternative 3 would be designed and constructed to meet all applicable state and local codes and ordinances to ensure adequate fire protection. The Ports O' Call development would be reduced by 150,000 square feet compared to the proposed Project, and one Outer Harbor terminal building and berth would be eliminated under Alternative 3, lessening the demand for fire facility enhancement or construction. However

CEQA Impact Determination

Construction for Alternative 3 could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The elimination of the second cruise berth in the Outer Harbor, under Alternative 3, would decrease the amount of construction subject to NEPA compared to the proposed Project. This reduced development would result in decrease in fire protection demands, compared to the proposed Project. However, construction of Alternative 3 could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

Impact PS-3: Alternative 3 would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.

Impacts on utility lines under Alternative 3 would be the same as identified under the proposed Project.

CEQA Impact Determination

Alternative 3's utility upgrades and relocations could have negative impacts on traffic flow and circulation. However, these possible upgrades or relocations would not cause significant environmental effects. LAHD would be required, pursuant to the Watch Manual, to coordinate with law enforcement agencies during construction of all roadway improvements. Additionally, during any construction, recycling efforts would be implemented in order to limit the amount of waste created. The following mitigation measures would ensure that impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measures MM PS-1 and MM PS-2.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The reduction of construction subject to NEPA, under Alternative 3 compared to the proposed Project, would reduce impacts on utility demands. Because Alternative 3 is adjacent to the harbor, construction and/or expansion of offsite stormwater drainage facilities would not be required. Public utilities would not be affected by construction activities in the in-water project area, and adverse impacts associated with construction and/or expansion of water, wastewater, and storm drain infrastructure would not occur. Therefore, there would be no impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact PS-4: Alternative 3 has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.

The reduction in cruise berths and surface parking, under Alternative 3, would result in an approximate 0.9% increase of wastewater flow on TITP capacity, 0.2% less than the proposed Project and equal to the baseline percentage. Compared to the proposed Project, Alternative 3 would decrease flow to the TITP and, therefore, would not exceed its capacity or conveyance system. Total water demand under Alternative 3 would be 600.95 acre-feet per year in 2037, 104.59 acre-feet per year less than under the proposed Project. As such, Alternative 3 impacts would be lower than under the proposed Project. Under Alternative 3, in 2015, solid waste would contribute 0.07% with the current recycle diversion rate of 62% or 0.05% with the estimated goal diversion rate of 70%. In 2037, solid waste would contribute 0.07% with the current recycle diversion rate of 62% or 0% with the estimated goal diversion rate of 100%. This solid waste throughput to Sunshine Canyon City/County Landfill is less than estimated for the proposed Project.

CEQA Impact Determination

Impacts on existing facility demand and capacity for water, wastewater, and solid waste would be less than significant. However, construction debris impacts would be significant.

Mitigation Measures

Implement Mitigation Measures MM PS-2 through MM PS-5.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Impacts on existing facility demand and capacity for water, wastewater, and solid waste would be less than significant. However, construction debris impacts would be significant.

Mitigation Measures

Implement Mitigation Measures MM PS-2 through MM PS-5.

Residual Impacts

Impacts would be less than significant.

Impact PS-5: Alternative 3 would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.

The decrease in surface parking, cruise berths, and Ports O' Call development, under Alternative 3, would result in reduced impacts on electricity and natural gas demands, compared to the proposed Project. The decrease in surface parking would reduce electricity use by 14.74 million kWh per year for 2037 compared to the proposed Project. Under Alternative 3, cruise ships and cruise terminals would have an electricity demand of 7.48 million kWh per year in 2015 and 8.14 million kWh per year in 2037 due to increased ship use of AMP. This is a decrease of 1.47 million kWh in 2015 and 1.60 million kWh in 2037, compared to the proposed Project. Additionally, with the substantial decrease in commercial square feet, Alternative 3 natural gas demands would be significantly lower than proposed Project estimates.

CEQA Impact Determination

While incorporation of the building design standards referenced above for the proposed Project would reduce impacts, impacts would remain significant.

Mitigation Measures

Implement Mitigation Measure MM PS-6.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 3 involves less construction subject to NEPA compared to the proposed Project. While incorporation of the building design standards referenced above for the proposed Project would reduce impacts, impacts would remain significant.

Mitigation Measures

Implement Mitigation Measure MM PS-6.

Residual Impacts

Impacts would be less than significant.

3.13.4.3.5 Alternative 4—Alternative Development Scenario 4

Alternative 4 differs from the proposed Project in regards to utilities and public services in the following ways.

- The North Harbor would not be constructed under this alternative.
- Alternative 4 would not develop the two berths in the Outer Harbor. The existing terminal at Berth 91 would be demolished, and a new 200,000-square-foot terminal to serve Berths 91 and 87 would be developed.
- The Inner Harbor parking would be located at Berths 91–93 and would consist of 3,525 spaces. These spaces would be located in a new 3-level structure covering 4.3 acres (reduced in size compared to the proposed Project) and at surface parking areas at the Cruise Center. The structure and surface parking would be dedicated to the Catalina Express Terminal and the Inner Harbor Cruise Terminals. No Outer Harbor Cruise Terminal parking would be included in Alternative 4.

Impact PS-1: Alternative 4 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.

The reduction in cruise ship berths and development under Alternative 4 compared to the proposed Project, suggests a corresponding reduction of security demands. Although surface parking would increase, it would not impact Port Police or security demand over what has already been assessed for the proposed Project. With the planned growth in Port Police staff levels as well as the construction of an additional station and facility expansion projects, the Port Police would likely supply adequate security for any increased security demand. Vessel calls per year would reduce by 2037 compared to the proposed Project, and as stated for the proposed Project, would not reduce available USCG resources or increase response times.

CEQA Impact Determination

Alternative 4 would have a lesser affect on the demand for law enforcement officers and/or facilities than the proposed Project. Alternative 4 construction activities could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Reduced construction subject to NEPA under Alternative 4 compared to under the proposed Project would likely correspond to reduced security demands. As with the proposed Project, Alternative 4 construction activities could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

Impact PS-2: Alternative 4 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

Cruise berth construction and port development would be reduced under Alternative 4 in comparison to under the proposed Project. Alternative 4 would be designed and constructed to meet all applicable state and local codes and ordinances to ensure adequate fire protection and access. The demand for LAFD officers and/or facilities under Alternative 4 would be the same as that identified under the proposed Project.

CEQA Impact Determination

Alternative 4 construction activities could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

With elimination of the construction of the two Outer Harbor cruise berths and terminals, Alternative 4 would include less construction subject to NEPA than the proposed Project. Consequently, Alternative 4 would have less of an impact on LAFD. Alternative 4 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. Alternative 4 construction activities could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

Impact PS-3: Alternative 4 would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.

Elimination of the construction of two cruise berths and structured parking in the Outer Harbor and reduction of parking in the Inner Harbor under Alternative 4 would correspond with reduced utility demands compared to under the proposed Project. The terminal and berth reconstruction at the Inner Harbor would not require or result in the construction or expansion of utility lines to amounts above proposed Project estimates.

CEQA Impact Determination

Alternative 4's utility upgrades and relocations could have negative impacts on traffic flow and circulation. However, these possible upgrades or relocations would not cause significant environmental effects. LAHD would be required, pursuant to the Watch Manual, to coordinate with law enforcement agencies during construction of all roadway improvements. Additionally, during any construction, recycling efforts would be implemented in order to limit the amount of waste created. The following mitigation measures would ensure that impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measures MM PS-1 and MM PS-2.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

The reduction of construction under Alternative 4 compared to the proposed Project would reduce impacts on utility demands. Because Alternative 4 is adjacent to the harbor, construction and/or expansion of offsite stormwater drainage facilities would not be required. Public utilities would not be affected by construction activities in the in-water project area, and adverse impacts associated with construction and/or expansion of water, wastewater, and storm drain infrastructure would not occur. Therefore, there would be no impacts.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact PS-4: Alternative 4 has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.

Wastewater flows under Alternative 4 would equate to 1.2% of TITP capacity or 0.1% more than under the proposed Project. This negligible increase would not exceed TITP capacity or conveyance system as TITP currently functions at 55% capacity. Total water demand for Alternative 4 would be 684.88 acre-feet per year in 2037, 20.66 acre-feet per year less than under the proposed Project. Solid waste percentages for Alternative 4 going to Sunshine Canyon City/County Landfill in 2015 and 2037 would be the same as estimated for the proposed Project.

CEQA Impact Determination

Impacts to water demand would be slightly less than the proposed Project. The small increase in wastewater created compared to the proposed Project would not be a significant impact on wastewater capacity because the TITP currently operates at 55% capacity and has sufficient capacity remaining to provide for Alternative 4's increase of 0.1%. With elimination of the Outer Harbor Cruise Terminal construction, Alternative 4 would have less impact on solid waste than the proposed Project. However, construction debris impacts would be significant.

Mitigation Measures

Implement Mitigation Measures MM PS-2 through MM PS-5.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 4 would include less construction subject to NEPA than the proposed Project. This reduction in cruise berth construction and water cuts would correspond to a reduction in impacts on wastewater, water demand, and solid waste compared to the proposed Project. However, construction debris impacts would be significant.

Mitigation Measures

Implement Mitigation Measures MM PS-2 through MM PS-5.

Residual Impacts

Impacts would be less than significant.

Impact PS-5: Alternative 4 would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.

The reduction in surface parking and cruise berths, under Alternative 4 compared to under the proposed Project, would correspond with a reduction in impacts on electricity and natural gas demands by decreasing security lighting as well as terminal facilities. Commercial development is reduced by 119,097 square feet, under Alternative 4 as compared to the proposed Project. Consequently, electricity use under Alternative 4 would decrease by 1.79 million kWh per year for 2015 and by 2.21 million kWh per year for 2037. Cruise ships and cruise terminals under Alternative 4 would have an electricity demand of 4.58 million kWh per year for 2015 and 4.95 million kWh per year in 2037 with the increase in ship use of AMP while docked. This is a decrease, compared to the proposed Project, of 4.37 million kWh in 2015 and 5.37 million kWh in 2037.

CEQA Impact Determination

While incorporation of the building design standards referenced above for the proposed Project would reduce impacts, impacts would remain significant.

Mitigation Measures

Implement Mitigation Measure MM PS-6.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Alternative 4 would include less construction subject to NEPA than the proposed Project. While incorporation of the building design standards referenced above for the proposed Project would reduce impacts, impacts would remain significant.

Mitigation Measures

Implement Mitigation Measure MM PS-6.

Residual Impacts

Impacts would be less than significant.

3.13.4.3.6 Alternative 5—No-Federal-Action Alternative

Alternative 5 differs from the proposed Project in regards to utilities and public services in that Alternative 5 would not include:

- development of the North Harbor, Downtown Harbor, 7th Street Harbor, 7th Street Pier, Waterfront Promenade, pedestrian and waterfront access linkages, or the Outer Harbor Cruise Terminal;
- Inner Harbor wharf construction; and
- harbor cuts in the Downtown Harbor area.

Alternative 5 would include:

- demolition of the existing terminal at Berth 91 and development of a new 200,000-square-foot terminal to serve Berths 91 and 87;
- Inner Harbor parking at Berths 91–93, which would consist of 3,525 spaces located in a new 3-level structure covering 4.3 acres as well as at surface parking at the Cruise Center; and
- some surface parking to support the 6-acre Outer Harbor Park (approximately 60 spaces).

Impact PS-1: Alternative 5 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.

The reduction in commercial and industrial square footage under Alternative 5 as compared to under the proposed Project would correspond with reduced demand on LAPD and Port Police. The Outer Harbor Cruise Terminal would not be developed, further decreasing security demands under Alternative 5. Surface parking under Alternative 5 would increase compared to under the proposed Project. However, this would not have an impact on available services, because with planned increases in Port staff levels, construction of an additional station, and facility expansion projects the Port Police are expected to adequately supply the minimal increased demand. Vessel calls per year would be less than the proposed Project by 2037, thereby not reducing available USCG resources or increasing response times as discussed under the proposed Project.

CEQA Impact Determination

Alternative 5 construction activities could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because the No-Federal-Action Alternative is identical to the NEPA baseline, this alternative would have no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact PS-2: Alternative 5 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

The reduction in commercial and industrial square footage under Alternative 5, as compared to the proposed Project, would correspond to a reduction in demand on LAFD. Alternative 5 would be designed and constructed to meet all applicable state and local codes and ordinances to ensure adequate fire protection and access.

CEQA Impact Determination

Alternative 5 construction activities could have temporary impacts on emergency vehicle access to the proposed project area; these impacts would be significant.

Mitigation Measures

Implement Mitigation Measure MM PS-1.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because the No-Federal-Action Alternative is identical to the NEPA baseline, this alternative would have no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact PS-3: Alternative 5 would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.

With the decreased commercial development in the Ports O' Call and Outer Harbor, utility demands under Alternative 5 would be significantly lower than under the proposed Project.

CEQA Impact Determination

Alternative 5's utility upgrades and relocations could have negative impacts on traffic flow and circulation. However, these possible upgrades or relocations would not cause significant environmental effects. LAHD would be required, pursuant to the Watch Manual, to coordinate with law enforcement agencies during construction of all roadway improvements. Additionally, during any construction, recycling efforts would be implemented in order to limit the amount of waste created. The following mitigation measures would ensure that impacts would be less than significant.

Mitigation Measures

Implement Mitigation Measures MM PS-1 and MM PS-2.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because the No-Federal-Action Alternative is identical to the NEPA baseline, this alternative would have no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

Impact PS-4: Alternative 5 has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.

CEQA Impact Determination

Wastewater under Alternative 5 is 1.2% of the TITP capacity, 0.1% more than under the proposed Project. This is a minimal increase and would not have adverse impacts on TITP as the facility currently functions at only 55% capacity. Total water demand under Alternative 5 would be 679.48 acre-feet per year in 2037, 23.85 acre-feet per year less than under the proposed Project. Solid waste under Alternative 5 is the same as the proposed Project. Impacts would be significant.

Mitigation Measures

Implement Mitigation Measures MM PS-2 through MM PS-5.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because the No-Federal-Action Alternative is identical to the NEPA baseline, this alternative would have no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact would occur.

Impact PS-5: Alternative 5 would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.

With the decreased commercial and industrial development in the Ports O' Call and Outer Harbor, energy and natural gas demands under Alternative 5 would be significantly lower than under the proposed Project. Electricity use would be 2.37 million kWh per year less under Alternative 5 than under the proposed Project for 2037, while natural gas demand would be 10,000 cubic feet per day less than the proposed Project.

CEQA Impact Determination

While incorporation of the building design standards referenced above for the proposed Project would reduce impacts, impacts would remain significant.

Mitigation Measures

Implement Mitigation Measure MM PS-6.

Residual Impacts

Impacts would be less than significant.

NEPA Impact Determination

Because the No-Federal-Action Alternative is identical to the NEPA baseline, this alternative would have no impact under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

3.13.4.3.7 Alternative 6—No-Project Alternative

This alternative considers what would reasonably be expected to occur on the site if no LAHD or federal action would occur. LAHD would not issue any permits or discretionary approvals and would take no further action to construct or permit the construction of any portion of the proposed Project. The USACE would not issue any permits or discretionary approvals for dredge and fill actions or for construction of wharves. This alternative would not allow implementation of the proposed Project or other physical improvements associated with the proposed Project.

Impact PS-1: Alternative 6 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.

CEQA Impact Determination

Alternative 6 would not increase USCG, LAPD, or Port Police staff levels beyond those anticipated in the General Plan; therefore, there would be no impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

This alternative is not applicable to NEPA.

Mitigation Measures

Not applicable.

Residual Impacts

Not applicable.

Impact PS-2: Alternative 6 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.

CEQA Impact Determination

Alternative 6 would not increase fewer fire services beyond levels anticipated in the General Plan; therefore, there would be no impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

This alternative is not applicable to NEPA.

Mitigation Measures

Not applicable.

Residual Impacts

Not applicable.

Impact PS-3: Alternative 6 would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.

CEQA Impact Determination

Alternative 6 would not require construction or expansion of utility lines beyond those anticipated in the General Plan; therefore, there would be no impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

This alternative is not applicable to NEPA.

Mitigation Measures

Not applicable.

Residual Impacts

Not applicable.

Impact PS-4: Alternative 6 has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.

CEQA Impact Determination

Water demand, wastewater demand, and landfill capacity for Alternative 6 would not exceed levels anticipated in the General Plan; therefore, there would be no impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

This alternative is not applicable to NEPA.

Mitigation Measures

Not applicable.

Residual Impacts

Not applicable.

Impact PS-5: Alternative 6 would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.

CEQA Impact Determination

Energy consumption for Alternative 6 would not exceed levels anticipated in the General Plan; therefore, there would be no impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impacts would occur.

NEPA Impact Determination

This alternative is not applicable to NEPA.

Mitigation Measures

Not applicable.

Residual Impacts

Not applicable.

3.13.4.3.8 Summary of Impact Determinations

Table 3.13-6 summarizes the CEQA and NEPA impact determinations for the proposed Project and its alternatives related to public services. This table is meant to facilitate comparison of potential impacts of the proposed Project and its alternatives with respect to this resource. Identified potential impacts may be based on federal, state, and City significance criteria, LAHD 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.

Table 3.13-6. Summary Matrix of Potential Impacts and Mitigation Measures for Utilities and Public Services Associated with the Proposed Project and Alternatives

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
3.13 UTILITIES AND PUBLIC SERVICES				
Proposed Project	**PS-1:** The proposed Project would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.	CEQA: Significant	**MM PS-1. Coordinate with law enforcement agencies.** LAHD will be required, pursuant to the Watch Manual, to coordinate with law enforcement agencies, during construction of all roadway improvements, to establish emergency vehicular access and ensure continuous law enforcement access to surrounding areas.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-1.	NEPA: Less than significant
	PS-2: The proposed Project would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.	CEQA: Significant	Implement Mitigation Measure MM PS-1.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-1.	NEPA: Less than significant
	PS-3: The proposed Project would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.	CEQA: Significant	Implement Mitigation Measure MM PS-1. **MM PS-2: Recycle construction materials.** Demolition and/or excess construction materials will be separated on site for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials will be provided on site.	CEQA: Less than significant
		NEPA: No impacts	No mitigation is required.	NEPA: No impacts

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	PS-4: The proposed Project has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.	CEQA: Significant	Implement Mitigation Measure MM PS-2. **MM PS-3: Use materials with recycled content.** Materials with recycled content, such as recycled steel from framing and recycled concrete and asphalt from roadway construction, will be used in project construction. Wood chippers registered through the California Air Resources Board's Portable Equipment Registration Program will be used on site during construction, using wood from tree removal, not wood from demolished structures, to further reduce excess wood for landscaping cover. **MM PS-4: Comply with AB 939.** LAHD and Port tenants will implement a Solid Waste Management Program including the following measures to achieve a 50% reduction of current waste generation percentages by 2037 and ensure compliance with the California Solid Waste Management Act (AB 939). a. Provide space and/or bins for storage of recyclable materials on the project site. All garbage and recycle bin storage space will be enclosed and plans will show equal area availability for both garbage and recycle bins in storage spaces. b. Establish a recyclable material pick-up area for commercial buildings. c. Participate in a curbside recycling program to serve the new development. d. Develop a plan for accessible collection	CEQA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
			of materials on a regular basis. e. Develop source reduction measures that indicate the method and amount of expected reduction. f. Implement a program to purchase materials that have recycled content for project construction and operation (e.g., lumber, plastic, office supplies). g. Provide a resident-tenant/employee education pamphlet to be used in conjunction with available Los Angeles County and federal source reduction educational materials. The pamphlet will be provided to all commercial tenants by the leasing/property management agency. h. Include lease language requiring tenant participation in recycling/waste reduction programs, including specification that janitorial contracts support recycling. **MM PS-5: Water Conservation and Wastewater Reduction.** LAHD and Port tenants will implement the following water conservation and wastewater reduction measures to further reduce impacts on water demand and wastewater flows. a. The landscape irrigation system will be designed, installed, and tested to provide uniform irrigation coverage for each zone. Sprinkler head patterns will be adjusted to minimize overspray onto walkways and streets. Each zone	

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
			(sprinkler valve) will water plants having similar watering needs (i.e., shrubs, flowers, and turf will not be in the same watering zone). Automatic irrigation timers will be set to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times will be adjusted for all zones seasonally, reducing length and frequency of waterings in the cooler months (i.e., fall, winter, spring). Adjust sprinkler timer run time to avoid water runoff, especially when irrigating sloped property. Sprinkler times will be reduced once drought-tolerant plants have been established. b. Drought-tolerant, low-water consuming plant varieties will be used to reduce irrigation water consumption. c. The availability of recycled water will be investigated as a source to irrigate large landscaped areas. d. Ultra-low-flush toilets, ultra-low-flush urinals, and water-saving showerheads must be installed in both new construction and when remodeling. Low-flow faucet aerators will be installed on all sink faucets. e. Significant opportunities for water savings exist in air conditioning systems that utilize evaporative cooling (i.e., employ cooling towers). LADWP will be contacted for specific	

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
			information of appropriate measures. f. Recirculating or point-of-use hot water systems will be installed to reduce water waste in long piping systems where water must be run for considerable period before heated water reaches the outlet.	
		NEPA: Significant	Implement Mitigation Measures MM PS-2 through MM PS-5.	NEPA: Less than significant
	PS-5: The proposed Project would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.	CEQA: Significant	**MM PS-6: Employ energy conservation measures.** During the design process, LAHD will consult with LADWP's Efficiency Solutions Business Group regarding possible energy efficiency measures. LAHD and its tenants will incorporate measures to meet or, if possible, exceed minimum efficiency standards for Title XXIV of the California Code of Regulations, such as: a. Built-in appliances, refrigerators, and space-conditioning equipment will exceed the minimum efficiency levels mandated in the California Code of Regulations. b. High-efficiency air conditioning will be installed that is controlled by a computerized energy-management system in office and retail spaces and provides the following: ❑ a variable air-volume system that results in minimum energy consumption and avoids hot water energy consumption for terminal	CEQA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
			reheat, ❑ a 100% outdoor air-economizer cycle to obtain free cooling in appropriate climate zones during dry climatic periods, ❑ sequentially staged operation of air-conditioning equipment in accordance with building demands, ❑ the isolation of air conditioning to any selected floor or floors, and ❑ considers the applicability of the use of thermal energy storage to handle cooling loads. c. Ventilation air will be cascaded from high-priority areas before being exhausted, thereby decreasing the volume of ventilation air required. For example, air could be cascaded from occupied space to corridors and then to mechanical spaces before being exhausted. d. Lighting system heat will be recycled for space heating during cool weather. While exhaust lighting-system heat will be recycled from the buildings, via ceiling plenums, to reduce cooling loads in warm weather. e. Low and medium static-pressure terminal units will be installed, as well as ductwork to reduce energy consumption by air-distribution systems.	

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
			f. Buildings must be well sealed to prevent outside air from infiltrating and increasing interior space-conditioning loads. Where applicable, design building entrances with vestibules to restrict infiltration of unconditioned air and exhausting of conditioned air. g. A performance check of the installed space-conditioning system will be completed by the developer/installer prior to issuance or the certificate of occupancy to ensure that energy-efficiency measures incorporated into the proposed Project operate as designed. h. Exterior walls will be finished with light-colored materials and high-emissivity characteristics to reduce cooling loads. Interior walls will be finished with light-colored materials to reflect more light and, thus increase light efficiency. i. White reflective material will be used for roofing meeting California standards for reflectivity and emissivity to reject heat. j. Thermal insulation that exceeds requirements established by the California Code of Regulations will be installed in walls and ceilings. k. Window systems will be designed to reduce thermal gain and loss, thus reducing cooling loads during warm weather and heating loads during cool	

Alternative	Environmental Impacts*	Impact Determination	Mitigation Measures	Impacts after Mitigation
			weather. l. Heat-rejecting window treatments will be installed, such as films, blinds, draperies, or others on appropriate exposures. m. Fluorescent and high-intensity discharge lamps that give the highest light output per watt of electricity consumed will be installed wherever possible, including all street and parking lot lighting, to reduce electricity consumption. Reflectors will be used to direct maximum levels of light to work surfaces. n. Photosensitive controls and dimmable electronic ballasts will be installed to maximize the use of natural daylight available and reduce artificial lighting load. o. Occupant-controlled light switches and thermostats to permit individual adjustment of lighting, heating, and cooling will be installed to avoid unnecessary energy consumption. p. Time-controlled interior and exterior public area light will be installed, limited to that which is necessary for safety and security. q. Mechanical systems (HVAC and lighting) in the building will be controlled with timing systems to prevent accidental or inappropriate conditioning or lighting of unoccupied	

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
			space. r. Windowless walls or passive solar inset of windows will be incorporated, where feasible, in building design. s. Project will focus pedestrian activity within sheltered outdoor areas.	
		NEPA: Significant	Implement Mitigation Measure MM PS-6.	NEPA: Less than significant
Alternative 1	**PS-1:** Alternative 1 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.	CEQA: Significant	Implement Mitigation Measure MM PS-1.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-1.	NEPA: Less than significant
	PS-2: Alternative 1 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.	CEQA: Significant	Implement Mitigation Measure MM PS-1.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-1.	NEPA: Less than significant
	PS-3: Alternative 1 would not require or result	CEQA: Significant	Implement Mitigation Measures MM PS-1 and MM PS-2.	CEQA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	in the construction or expansion of utility lines that would cause significant environmental effects.	NEPA: No impacts	No mitigation is required.	NEPA: No impacts
	PS-4: Alternative 1 has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.	CEQA: Significant	Implement Mitigation Measures MM PS-2 through MM PS-5.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measures MM PS-2 through MM PS-5.	NEPA: Less than significant
	PS-5: Alternative 1 would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.	CEQA: Significant	Implement Mitigation Measure MM PS-6.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-6.	NEPA: Less than significant
Alternative 2	**PS-1:** Alternative 2 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level	CEQA: Significant	Implement Mitigation Measure MM PS-1.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-1.	NEPA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	of service without requiring construction of additional facilities that could cause significant environmental impacts.			
	PS-2: Alternative 2 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.	CEQA: Significant	Implement Mitigation Measure MM PS-1.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-1.	NEPA: Less than significant
	PS-3: Alternative 2 would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.	CEQA: Significant	Implement Mitigation Measures MM PS-1 and MM PS-2.	CEQA: Less than significant
		NEPA: No impact	No mitigation is required.	NEPA: No impact
	PS-4: Alternative 2 has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.	CEQA: Significant	Implement Mitigation Measures MM PS-2 through MM PS-5.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measures MM PS-2 through MM PS-5.	NEPA: Less than significant
	PS-5: Alternative 2 would not require new,	CEQA: Significant	Implement Mitigation Measure MM PS-6.	CEQA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.	NEPA: Significant	Implement Mitigation Measure MM PS-6.	NEPA: Less than significant
Alternative 3	**PS-1:** Alternative 3 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.	CEQA: Significant	Implement Mitigation Measure MM PS-1.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-1.	NEPA: Less than significant
	PS-2: Alternative 3 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.	CEQA: Significant	Implement Mitigation Measure MM PS-1.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-1.	NEPA: Less than significant
	PS-3: Alternative 3 would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.	CEQA: Significant	Implement Mitigation Measures MM PS-1 and MM PS-2.	CEQA: Less than significant
		NEPA: No impacts	Mitigation not required.	NEPA: No impacts

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	PS-4: Alternative 3 has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.	CEQA: Significant	Implement Mitigation Measures MM PS-2 through MM PS-5.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measures MM PS-2 through MM PS-5.	NEPA: Less than significant
	PS-5: Alternative 3 would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.	CEQA: Significant	Implement Mitigation Measure MM PS-6.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-6.	NEPA: Less than significant
Alternative 4	**PS-1:** Alternative 4 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.	CEQA: Significant	Implement Mitigation Measure MM PS-1.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-1.	NEPA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	PS-2: Alternative 4 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.	CEQA: Significant	Implement Mitigation Measure MM PS-1.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-1.	NEPA: Less than significant
	PS-3: Alternative 4 would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.	CEQA: Significant	Implement Mitigation Measures MM PS-1 and MM PS-2.	CEQA: Less than significant
		NEPA: No impact	No mitigation is required.	NEPA: No impact
	PS-4: Alternative 4 has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.	CEQA: Significant	Implement Mitigation Measures MM PS-2 through MM PS-5.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measures MM PS-2 through MM PS-5.	NEPA: Less than significant
	PS-5: Alternative 4 would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not	CEQA: Significant	Implement Mitigation Measure MM PS-6.	CEQA: Less than significant
		NEPA: Significant	Implement Mitigation Measure MM PS-6.	NEPA: Less than significant

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	anticipated by adopted plans or programs.			
Alternative 5	**PS-1:** Alternative 5 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts.	CEQA: Significant	Implement Mitigation Measure MM PS-1.	CEQA: Less than significant
		NEPA: No impact	No mitigation is required.	NEPA: No impact
	PS-2: Alternative 5 would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service.	CEQA: Significant	Implement Mitigation Measure MM PS-1.	CEQA: Less than significant
		NEPA: No impact	No mitigation is required.	NEPA: No impact
	PS-3: Alternative 5 would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.	CEQA: Significant	Implement Mitigation Measures MM PS-1 and MM PS-2.	CEQA: Less than significant
		NEPA: No impact	No mitigation is required.	NEPA: No impact
	PS-4: Alternative 5 has sufficient water supplies available to serve the project from existing entitlements and	CEQA: Significant	Implement Mitigation Measures MM PS-2 through MM PS-5.	CEQA: Less than significant
		NEPA: No impact	No mitigation is required.	NEPA: No impact

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.			
	PS-5: Alternative 5 would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.	CEQA: Significant	Implement Mitigation Measure MM PS-6.	CEQA: Less than significant
		NEPA: No impact	No mitigation is required.	NEPA: No impact
Alternative 6	**PS-1:** Alternative 6 would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that the USCG, LAPD, or Port Police would not be able to maintain an adequate level of service with additional facilities, the construction of which could cause significant environmental effects.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Not applicable	Not applicable	NEPA: Not applicable
	PS-2: Alternative 6 would not require the addition of a new fire station or the expansion, consolidation, or	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Not applicable	Not applicable	NEPA: Not applicable

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
	relocation of an existing facility to maintain service.			
	PS-3: Alternative 6 would not require or result in the construction or expansion of utility lines that would cause significant environmental effects.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Not applicable	Not applicable	NEPA: Not applicable
	PS-4: Alternative 6 has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Not applicable	Not applicable	NEPA: Not applicable
	PS-5: Alternative 6 would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs.	CEQA: Less than significant	No mitigation is required.	CEQA: Less than significant
		NEPA: Not applicable	Not applicable	NEPA: Not applicable

Notes:

* Impact descriptions for each of the alternatives are the same as for the proposed Project, unless otherwise noted.

Alternative	*Environmental Impacts**	*Impact Determination*	*Mitigation Measures*	*Impacts after Mitigation*
† The term *not applicable* is used in cases where a particular impact is not identified as a CEQA- or NEPA-related issue in the threshold of significance criteria, or where there is no federal action requiring a NEPA determination of significance.				

3.13.4.4 Mitigation Monitoring

Table 3.13-7. Mitigation Monitoring for Utilities and Public Services

Impact PS-1: The proposed Project would not burden existing USCG, LAPD, or Port Police staff levels and facilities such that USCG, LAPD, or Port Police would not be able to maintain an adequate level of service without requiring construction of additional facilities that could cause significant environmental impacts. *(Also applies to Impact PS-1 for Alternatives 1–5.)*	
Mitigation Measure	**MM PS-1. Coordinate with law enforcement agencies.** LAHD will be required, pursuant to the Watch Manual, to coordinate with law enforcement agencies, during construction of all roadway improvements, to establish emergency vehicular access and ensure continuous law enforcement access to surrounding areas.
Timing	During construction
Methodology	Implementation of Watch Manual procedures to reduce construction-related impacts to law enforcement agencies.
Responsible Parties	LAHD Engineering
Residual Impacts for Impact PS-1	Less than significant
Impact PS-2: The proposed Project would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service. *(Also applies to Impact PS-3 for Alternatives 1-5.)*	
Mitigation Measure	See Mitigation Measure MM PS-1 above.
Residual Impacts for Impact PS-2	Less than significant
Impact PS-3: The proposed Project would not require or result in the construction or expansion of utility lines that would cause significant environmental effects. *(Also applies to Impact PS-3 for Alternatives 1-5.)*	
Mitigation Measure	See Mitigation Measure MM PS-1 above.
Residual Impacts for Impact PS-3	Less than significant
Impact PS-4: The proposed Project has sufficient water supplies available to serve the project from existing entitlements and resources; it would not exceed wastewater requirements, require new wastewater treatment facilities, require new landfills, or exceed existing landfill capacities. *(Also applies to Impact PS-4 for Alternatives 1-5.)*	
Mitigation Measure	**MM PS-2: Recycle construction materials.** Demolition and/or excess construction materials will be separated on site for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials will be provided on site.
Timing	During construction and operation
Methodology	Prepare a plan to identify materials to be recycled during construction, indicate bin location during construction, and identify the recycled materials to be used during construction. On the project plans, identify all water conservation measures and locations of such measures.
Responsible Parties	LAHD Engineering
Mitigation Measure	**MM PS-3: Use materials with recycled content.** Materials with recycled content, such as recycled steel from framing and recycled concrete and asphalt from roadway

	construction, will be used in project construction. Wood chippers registered through the California Air Resources Board's Portable Equipment Registration Program will be used on site during construction, using wood from tree removal, not wood from demolished structures, to further reduce excess wood for landscaping cover.
Timing	During construction and operation
Methodology	Prepare a plan to identify materials to be recycled during construction, indicate bin location during construction, and identify the recycled materials to be used during construction. On the project plans, identify all water conservation measures and locations of such measures.
Responsible Parties	LAHD Engineering
Mitigation Measure	**MM PS-4: Comply with AB 939.** LAHD and Port tenants will implement a Solid Waste Management Program including the following measures to achieve a 50% reduction of current waste generation percentages by 2037 and ensure compliance with the California Solid Waste Management Act (AB 939). a. Provide space and/or bins for storage of recyclable materials on the project site. All garbage and recycle bin storage space will be enclosed and plans will show equal area availability for both garbage and recycle bins in storage spaces. b. Establish a recyclable material pick-up area for commercial buildings. c. Participate in a curbside recycling program to serve the new development. d. Develop a plan for accessible collection of materials on a regular basis. e. Develop source reduction measures that indicate the method and amount of expected reduction. f. Implement a program to purchase materials that have recycled content for project construction and operation (e.g., lumber, plastic, office supplies). g. Provide a resident-tenant/employee education pamphlet to be used in conjunction with available Los Angeles County and federal source reduction educational materials. The pamphlet will be provided to all commercial tenants by the leasing/property management agency. h. Include lease language requiring tenant participation in recycling/waste reduction programs, including specification that janitorial contracts support recycling.
Timing	During construction and operation
Methodology	Prepare a plan to identify materials to be recycled during construction, indicate bin location during construction, and identify the recycled materials to be used during construction. On the project plans, identify all water conservation measures and locations of such measures.
Responsible Parties	LAHD Engineering
Mitigation Measure	**MM PS-5: Water Conservation and Wastewater Reduction.** LAHD and Port tenants will implement the following water conservation and wastewater reduction measures to further reduce impacts on water demand and wastewater flows. a. The landscape irrigation system will be designed, installed, and tested to provide uniform irrigation coverage for each zone. Sprinkler head patterns will be adjusted to minimize overspray onto walkways and streets. Each zone (sprinkler valve) will water plants having similar watering needs (i.e., shrubs, flowers, and turf will not be in the same watering zone). Automatic irrigation timers will be set to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times will be adjusted for all zones seasonally, reducing length and frequency of waterings in the cooler months (i.e., fall, winter, spring). Adjust sprinkler timer run time to avoid water runoff, especially when irrigating

	sloped property. Sprinkler times will be reduced once drought-tolerant plants have been established. b. Drought-tolerant, low-water consuming plant varieties will be used to reduce irrigation water consumption. c. The availability of recycled water will be investigated as a source to irrigate large landscaped areas. d. Ultra-low-flush toilets, ultra-low-flush urinals, and water-saving showerheads must be installed in both new construction and when remodeling. Low-flow faucet aerators will be installed on all sink faucets. e. Significant opportunities for water savings exist in air conditioning systems that utilize evaporative cooling (i.e., employ cooling towers). LADWP will be contacted for specific information of appropriate measures. f. Recirculating or point-of-use hot water systems will be installed to reduce water waste in long piping systems where water must be run for considerable period before heated water reaches the outlet.
Timing	During construction and operation
Methodology	Prepare a plan to identify materials to be recycled during construction, indicate bin location during construction, and identify the recycled materials to be used during construction. On the project plans, identify all water conservation measures and locations of such measures.
Responsible Parties	LAHD Engineering
Residual Impacts for Impact PS-4	Less than significant
Impact PS-5: The proposed Project would not require new, offsite energy supply and distribution infrastructure, or capacity-enhancing alterations to existing facilities that are not anticipated by adopted plans or programs. *(Also applies to Impact PS-5 for Alternatives 1-5.)*	
Mitigation Measure	**MM PS-6: Employ energy conservation measures.** During the design process, LAHD will consult with LADWP's Efficiency Solutions Business Group regarding possible energy efficiency measures. LAHD and its tenants will incorporate measures to meet or, if possible, exceed minimum efficiency standards for Title XXIV of the California Code of Regulations, such as: a. Built-in appliances, refrigerators, and space-conditioning equipment will exceed the minimum efficiency levels mandated in the California Code of Regulations. b. High-efficiency air conditioning will be installed that is controlled by a computerized energy-management system in office and retail spaces and provides the following: ❑ a variable air-volume system that results in minimum energy consumption and avoids hot water energy consumption for terminal reheat, ❑ a 100% outdoor air-economizer cycle to obtain free cooling in appropriate climate zones during dry climatic periods, ❑ sequentially staged operation of air-conditioning equipment in accordance with building demands, ❑ the isolation of air conditioning to any selected floor or floors, and ❑ considers the applicability of the use of thermal energy storage to handle

	cooling loads. c. Ventilation air will be cascaded from high-priority areas before being exhausted, thereby decreasing the volume of ventilation air required. For example, air could be cascaded from occupied space to corridors and then to mechanical spaces before being exhausted. d. Lighting system heat will be recycled for space heating during cool weather. While exhaust lighting-system heat will be recycled from the buildings, via ceiling plenums, to reduce cooling loads in warm weather. e. Low and medium static-pressure terminal units will be installed, as well as ductwork to reduce energy consumption by air-distribution systems. f. Buildings must be well sealed to prevent outside air from infiltrating and increasing interior space-conditioning loads. Where applicable, design building entrances with vestibules to restrict infiltration of unconditioned air and exhausting of conditioned air. g. A performance check of the installed space-conditioning system will be completed by the developer/installer prior to issuance or the certificate of occupancy to ensure that energy-efficiency measures incorporated into the proposed Project operate as designed. h. Exterior walls will be finished with light-colored materials and high-emissivity characteristics to reduce cooling loads. Interior walls will be finished with light-colored materials to reflect more light and, thus increase light efficiency. i. White reflective material will be used for roofing meeting California standards for reflectivity and emissivity to reject heat. j. Thermal insulation that exceeds requirements established by the California Code of Regulations will be installed in walls and ceilings. k. Window systems will be designed to reduce thermal gain and loss, thus reducing cooling loads during warm weather and heating loads during cool weather. l. Heat-rejecting window treatments will be installed, such as films, blinds, draperies, or others on appropriate exposures. m. Fluorescent and high-intensity discharge lamps that give the highest light output per watt of electricity consumed will be installed wherever possible, including all street and parking lot lighting, to reduce electricity consumption. Reflectors will be used to direct maximum levels of light to work surfaces. n. Photosensitive controls and dimmable electronic ballasts will be installed to maximize the use of natural daylight available and reduce artificial lighting load. o. Occupant-controlled light switches and thermostats to permit individual adjustment of lighting, heating, and cooling will be installed to avoid unnecessary energy consumption. p. Time-controlled interior and exterior public area light will be installed, limited to that which is necessary for safety and security. q. Mechanical systems (HVAC and lighting) in the building will be controlled with timing systems to prevent accidental or inappropriate conditioning or lighting of unoccupied space. r. Windowless walls or passive solar inset of windows will be incorporated, where

	feasible, in building design. s. Project will focus pedestrian activity within sheltered outdoor areas.
Timing	During project design
Methodology	Meet with LADWP's Efficiency Solutions Business Group as the first step in developing a plan to implement energy efficiency measures. LAHD and its tenants will be required to incorporate a minimum number of these measures to meet or, if possible, exceed minimum efficiency standards for Title XXIV of the California Code of Regulations. Develop a performance plan so that each tenant is required to implement a required number of these items.
Responsible Parties	LAHD Engineering
Residual Impacts for Impact PS-5	Less than significant

3.13.5 Significant Unavoidable Impacts

No significant unavoidable impacts on public services or utilities would occur during construction or operation for the proposed Project or the alternatives.