

2.0

PROJECT DESCRIPTION

2.1 Project Overview

The USS *Iowa* Project (project) includes the relocation of ex-USS *Iowa* (BB-61) battleship from San Francisco to the Port of Los Angeles, placing her at existing Berth 87 for use as a museum/educational facility. This exhibit would be for the public to learn and explore the history of US Navy battleships, the USS *Iowa*, the *Iowa*-class battleships and their characteristics, service history, and crew. The proposed project includes the transport of USS *Iowa* from San Francisco Bay to the selected hull cleaning location off the coast of Los Angeles, and into the Port of Los Angeles by tugboat; year-round mooring of the battleship at Berth 87 in the North Harbor area of the Port of Los Angeles; use of an existing parking lot in a shared arrangement with other Port attractions; placement of temporary structures to include the delivery and set up of a prefabricated 480 sq. ft. single-story Ticket Booth/Office, a prefabricated 480 sq. ft. single-story Restroom facility, and two prefabricated Entry Platforms to accommodate access and egress from the USS *Iowa*; construction of an approximately two-story 33,800 sq. ft. footprint landside Visitor Center (Education Center, Museum, Ticketing, Restrooms, Gift Shop, Offices) during Phase 2, and; ongoing operations and maintenance. Phase 2 would include the removal of all temporary structures to be replaced by the permanent Visitors Center when funding is available. Phase 2 is anticipated to occur within 6 to 8 years after the completion of Phase 1.

2.2 Project Location

The proposed project location includes the existing location of the battleship – San Francisco Bay near San Francisco, CA and Berth 87 in the Port of Los Angeles. Refer to Exhibit 1, *Regional Location Map* (San Francisco Bay to Port of Los Angeles); Exhibit 2, *Port of Richmond Terminal 3*; and Exhibit 3, *Port of Los Angeles – Berth 87*. The proposed project site is located within the Port of Los Angeles, San Pedro Waterfront Plan area, which encompasses approximately 400 acres along the western boundary of the Port, adjacent to the community of

San Pedro. The project locations are further described in subsection 2.3, *Existing Setting*, below.

2.3 Existing Setting

2.3.1 Port of Los Angeles, Berth 87

The Port is located in San Pedro Bay near the San Pedro community of the City of Los Angeles. The Port is 20 miles south of downtown Los Angeles and encompasses 7,500 acres of land and water along 43 miles of waterfront. The Port has 270 berths, 75 container cranes, 17 marinas with 3,800 boat slips, and over 20 terminals. This gateway to international commerce is also known as “America’s Port” due to its reputation of moving more containers than any other port in the nation. The Port is deeply committed to promoting sustainability and known worldwide for their environmental leadership.

The Port was once used as a U.S Navy Base from 1919 until after WWII. The Port became known as “Battleship Country” as the battleship fleet was stationed here in Los Angeles during most of the 20th century. The location at Berth 87 offers the best visibility within the Port as it is adjacent to the cruise ship terminal which supports over 1 million cruise passengers each year.

Last year, the Port approved the \$1.2 billion dollar San Pedro Waterfront (SPW) Development Plan which will bring more tourist and regional residents to the Port area. Nearby Berth 87 lies north of the destination of restaurants and shops known as Port’s of Call (or Port’s O’Call). Revitalization plans of this area include complete redevelopment of all buildings and the addition of a 60,000 sq. ft. conference hall. Several maritime and military museums including the Los Angeles Maritime Museum, the S.S. Lane Victory, and the Fort MacArthur Museum exist within the area. Berth 87 is easily reached from the 110 freeway at the west side of the Vincent Thomas Bridge.

Project activity will be focused at Berth 87 within an area encompassing approximately 4.5 acres, which is bordered by the Main Channel on the east and Harbor Boulevard on the west. Refer to Exhibit 4, *Berth 87 and Proposed Site Plan*. Berth 87 contains an existing parking lot and is currently used for temporary cargo and cruise ship docking. The Maritime Museum is located to the south and a cruise ship terminal and the S.S. Lane Victory to the north of Slip 93. Container ships and cranes are located across the water. No dredging will be necessary as water depths are adequate at this site ranging from 38 feet on the pier side to 55 feet on the channel side

A Navy fuel surge line runs through the project site at Berth 87. It requires a setback of 8 feet on each side, for a total easement of 16 feet in width. No permanent structures, such as the Visitor Center, may be placed on the surface of the land above the surge line while it is active and in use. Thus, prior to the

construction of the Visitor Center, the fuel line would have to be realigned or capped. Refer to Exhibit 4, *Berth 87 and Proposed Site Plan*, for the location of the existing surge lines and project setbacks.

2.3.2 San Pedro Waterfront Project

Berth 87 is located within the San Pedro Waterfront (SPW) project area. The overall purpose of the SPW project is to create an active public waterfront in downtown San Pedro. The SPW project elements include the creation of three new harbors and a public pier at 7th Street; new development, redevelopment, and cultural assets; completion of eight miles of waterfront promenade and open space for public enjoyment and recreation; and a wide variety of transportation options and improvements. The SPW project proposed a North Harbor cut located at Berths 87-90, which would accommodate approximately 12 tugboat vessels and the historic naval ship, the S.S. Lane Victory. The North Harbor cut would displace the occasional, temporary cruise ship docking at these berths. The SPW project proposed surface parking, the docking of the S.S. Lane Victory, and the S.S. Lane Victory Office at Berth 87 (refer to SPW Figure 2-9, San Pedro Waterfront – North Harbor). The LAHD decided to delay the North Harbor Cut as originally proposed, to provide parking for cruise ships. Per LAHD staff recommendation, the Final SPW project included an extension of surface parking to Berth 87, and restriping the lot to provide for more efficient use of space.

2.4 Project Background

The USS *Iowa* is the lead battleship of the *Iowa*-class battleships. The USS *Iowa* was built at the New York Navy Yard, Brooklyn, New York and commissioned in February 1943. The USS *Iowa* was the U.S. Navy's first new World War II era battleship whose design was not encumbered by treaty limits and is the namesake of the four *Iowa*-class battleships. She was a new, "fast battleship", intended to protect aircraft carriers against the threat of similar Japanese "big-gun" ships. She was known as President Franklin D. Roosevelt's "Big Stick".

The USS *Iowa* spent her initial service in the Atlantic and carried President Franklin D. Roosevelt to and from Casablanca, Morocco, in November 1943. Early in January 1944, the USS *Iowa* was sent to the Pacific where she took part in the Marshalls Campaign and campaigns to capture the Marianas, the Palaus, the Battles of the Philippine Sea and Leyte Gulf, Okinawa and the surrender of Japan in Tokyo Bay. The USS *Iowa* next served in the Korean War. The battleship was then modernized under the 1980s defense buildup and re-commissioned in April 1984. She went to European waters during the 1980s, with the latter cruise continuing into the Indian Ocean and Arabian Sea. The USS *Iowa* was decommissioned for the last time in October 1990.

The USS *Iowa* was one of approximately 50 ships (as of April 2011) docked in Suisun Bay in Benicia, California, in the United States Maritime Administration's (MARAD) National Defense Reserve Fleet (NDRF), also known as the "mothball fleet" or the "ghost fleet". The NDRF was established under Section 11 of the Merchant Ship Sales Act of 1946 to serve as a reserve of ships for national defense and national emergencies. In the 1950s, the NDRF held over 2,000 ships at eight locations in the US. Ships from the NDRF have been reactivated and used in recent emergencies such as Hurricane Katrina and the earthquakes in Haiti. The USS *Iowa* is the only battleship remaining in the NDRF, which mostly consists of navy supply ships. The USS *Iowa* is held under the "custody vessel" category where ships are held on a reimbursable basis for other agencies, such as the U.S. Navy and U.S. Coast Guard.

The USS *Iowa* is the last battleship of her kind available for donation. There are no battleships currently located on the West Coast of the United States available for public tours. The USS Midway open for public tours in San Diego is an aircraft carrier. Today, seven battleships are available to visit in the United States: four on the east coast, two on the Gulf coast, and one in Hawaii. Congress has stipulated that the USS *Iowa* must reside in the State of California as a resource to West Coast populations. This is also supported by Port of Los Angeles Resolutions: Determining the Availability of Berth 87 for the USS *Iowa* (November 16, 2010) and Staff Response to the Port of Los Angeles Community Advisory Committee Recommendation Nos. 104 and 105 Regarding Locating the USS *Iowa* at Berth 87 (March 30, 2011).

The USS *Iowa* offers a unique educational experience. This battleship has been a vital part of some of the Nation's most important historical events. It represents the pride and determination of a generation of Americans to meet the intense challenges of World War II, the Korean War and succeeding conflicts in Europe and the Middle East.

Suisun Bay

Suisun Bay (Bay) is located in Benicia, California, northeast of San Francisco Bay through the Carquinez Strait and San Pablo Bay. Suisun Bay is approximately 26 miles northeast of downtown San Francisco. Since the 1940s, the Bay has been the home to decommissioned US Navy ships known as the Suisun Bay Reserve Fleet (SBRF), part of the greater National Defense Reserve Fleet (NDRF).¹

Environmentalists have been concerned about toxins leaching into the bay from the ships in the SBRF including paint chemicals and metals; however, a study

¹U.S. Department of Transportation, Maritime Administration, National Defense Reserve Fleet.
http://www.marad.dot.gov/ships_shipping_landing_page/national_security/ship_operations/national_defense_reserve_fleet/national_defense_reserve_fleet.htm

conducted by the National Oceanic and Atmospheric Administration (NOAA) in February 2009 concluded that sediments have a low to moderately low potential for toxicity to benthic invertebrates (such as clams and mussels). In the project area, 18% of the surface sediment grab samples contained such debris or paint chips, which is expected when observing the paint wearing off of the ships. NOAA did not find polychlorinated biphenyls (PCBs) or polycyclic aromatic hydrocarbons (PAHs) in the project area at concentrations that exceeded sediment quality guidelines or ambient values. There were some instances where concentrations of arsenic, copper, lead, and chromium observed across the project area were elevated relative to ambient values reported for other parts of San Francisco Bay.²

Port of Richmond

The USS *Iowa* was transported from Suisun Bay to the Port of Richmond. The traveling distance from the Suisun Bay to the Port of Richmond is approximately 30 miles. At this Port, work on the USS *Iowa* included painting of the exterior of the ship from the waterline to the top and replacement of the mast structure, radar arrays, and forward wood deck (from approximately mid-ship forward to the anchor/windlass).

2.4.1

Pacific Battleship Center

PBC is a non-profit organization formed to acquire the USS *Iowa* through donation from the US Navy and operate the tourist attraction and landside visitor center in the Port of LA. PBC has support from numerous volunteers and veterans. At this time, the PBC is awaiting US Navy approval for donation of the battleship. The conditional award has been granted and is contingent upon the PBC Compliance Agreement from EPA Region 9 and Navy NEPA Compliance. The PBC would accept the battleship from the Navy under the condition that it could be called to duty and must remain “battle ready”. PBC is also seeking a lease for the project from the Port. The initial lease will be for a term of 10 years with options for renewal to be determined in accordance with Port leasing policies. For analysis purposes, this EIR assumes the permanent mooring of the battleship at Berth 87 for duration of 30 years.

2.5

Project Objectives

The purpose of the proposed project is to:

- Bring the USS *Iowa* to the Port, and place her at Berth 87 for year-round mooring; and,

² National Oceanic and Atmospheric Administration (NOAA), *Assessment of Environmental Contaminants Associated with the National Defense Reserve Fleet in Suisun Bay, California* (February 2009).

http://response.restoration.noaa.gov/book_shelf/1845_ReportText_SuisunBayReportFinal.pdf

- Prepare and fit the battleship as a tourist attraction, offering an interactive public experience that honors the historic contributions of USS *Iowa* and her crews. The history and technology of the battleship will provide the basis for educational programs teaching lessons in history, battleship design, mathematics, physics, science, leadership, team-building, character development, and community service.

2.6 Project Characteristics

The USS *Iowa* project consists of the following elements:

- Preparation and transport of the USS *Iowa* from San Francisco Bay to the Port of LA;
- Mooring the battleship at Berth 87 in the North Harbor area of the Port of Los Angeles;
- Use of an existing parking lot;
- Delivery and set up of a prefabricated 480 sq. ft., single-story Office/Ticket Booth;
- Delivery and set up of a prefabricated 480 sq. ft., single-story Restroom facility;
- Delivery and set up of two prefabricated Entry Platforms to accommodate access and egress from the USS *Iowa*;
- Construction of an approximately two-story 33,800 sq. ft. footprint landside Visitor Center during Phase 2, and;
- Ongoing operations and maintenance.

2.6.1 Preparation and Transport

The USS *Iowa* will be transported from San Francisco Bay to the Port of Los Angeles by a single ocean-going tug boat, according to a Navy approved tow plan. The battleship will make a brief stop offshore for hull cleaning before entering the Port of Los Angeles to avoid the spread of invasive species residing on the hull of the battleship. In preparation to receive visitors, safety railing, directional markers, hazard identification, and some interior painting will occur.

Preparation Prior to Berthing - Offshore Cleaning

The battleship will be towed to the approved offshore location depicted in Exhibit 2.0-6, *Off Shore Hull Cleaning Location*, for hull cleaning prior to placement in the Port of Los Angeles (outside of the 3 nautical mile [nm] limit line). The location is not approved by the Navy, as the Navy is not doing the cleaning. The location is approved by the Port of Los Angeles based on the hull cleaning location designated as SF3 and is located four nautical miles (nm) off shore from Seal Beach, California (approximately 8 nm from Berth 87), at coordinates 33-39.27 N 118-07.07 W and in sixteen fathoms (96 foot water

depth). Hull cleaning will remove invasive and non-native species residing on the battleship's hull.

Hull cleaning will be accomplished in accordance with U.S. Navy protocol as presented in S9086-CQ-STM-010, *Waterborne Underwater Hull Cleaning of Navy Ships*. The hull cleaning will be performed by Muldoon Marine Services, Inc., utilizing a combination of underwater tools from hydraulic powered multi and single brushed machines, to divers utilizing hand scrapers and low pressure water. These methods will be used to clean the battleship as efficiently and as carefully as possible. During the hull cleaning, the USS *Iowa* will remain hooked up to the tug but utilize her own anchor. The USS *Iowa*'s existing hull paint is a tributyltin (TBT)-free anti-fouling coating. TBT is a chemical that has significant environmental effects, especially during hull cleaning, and was present in older anti-fouling hull coatings used on ships. The USS *Iowa*'s existing hull coating does not contain TBT.

The cleaning of the USS *Iowa*'s hull will take approximately 48 hours during which Muldoon Marine will utilize 2 teams, each working one 12-hour shift each day for a total of 48 hours. Working in this manner will shorten the overall cleaning duration in order to reduce tug standby costs. However, the bottom of the hull will be cleaned only during daylight hours. The sides will be cleaned around the clock to reduce the hull cleaning duration. Lights will illuminate the sides for cleaning during darkness. After hull cleaning, the USS *Iowa* will raise her anchor and be towed via the ocean-going tug to a location inside the Los Angeles breakwater where she will be transferred to local tugs for placement at Berth 87.

In addition to hull cleaning, some interior painting and preparations to receive visitors would occur during this time. Improvements would include guard railings, security barriers, directional markers, and hazard identification.

Preparation at Berth 87

Upon initial mooring at Berth 87, the USS *Iowa* will undergo refurbishment in preparation for visitors. Approval will be required from the Los Angeles Regional Water Quality Control Board (LARWQCB) that all work is done in accordance with standard requirements and stipulations to ensure the protection of water quality. The work will take approximately nine months to complete and includes general cleaning, painting of exposed surfaces, and upgrading onboard restroom facilities. Painting of the interior and exterior surfaces would utilize paints that meet the current standards to prevent corrosion.

Berth 87

Berth 87 is currently used periodically for cargo and cruise ship docking. The existing mooring facilities and dredge depth are suitable for the USS *Iowa*.

Water, electric, sewer, and telephone utilities needed for operation of the project are located at, or near, the berth. Approximately 500 feet of trenching will be necessary to install the 8-inch sewer line and electrical lines. While the USS *Iowa* is moored at Berth 87, the battleship will be tugged out of the Main Channel annually and turned for even weathering.

Parking Lot

The existing lot will accommodate parking in a shared arrangement with other Port attractions. The parking area will include ingress lanes that direct traffic to the parking area past a small entry gate and at least one egress lane to return traffic to a controlled intersection at Harbor Boulevard. Parking to the north of the USS *Iowa* lot is designated as cruise ship parking and may be used as overflow parking when cruise ship operations are not occurring, which is generally in the summer months. Refer to Section 3.3, *Traffic and Circulation*, for a more detailed discussion regarding parking.

A Visitor's Center is planned for Phase 2 (6 to 8 years post Phase 1 completion). When constructed, the structure will reduce available shared parking within the existing lot. Additional offsite parking will be required at this time to accommodate the shared parking. Existing offsite parking sites have been identified across Harbor Boulevard along with various other sites identified in the Waterfront EIR.

2.6.2 Construction Activities

Construction activities will include a security fence, the set up of a prefabricated office/ticket booth, a prefabricated restroom facility and two prefabricated access platforms and brows to board the USS *Iowa*. The ticket booth structure, the restroom facilities both cover approximately 1,000 square feet and will consist of temporary, moveable, and self contained units.

Two prefabricated access platforms will be installed for ingress and egress to the USS *Iowa*. The structures consist of stairs and gangways sufficient in size to accommodate peak visitor traffic. They will be designed and constructed of steel or similar material and each will contain a chair lift built in accordance with the ADA requirements.

Construction activities will employ approximately 30-40 workers over a period of 6 to 9 months. Work will take place Monday through Saturday from 7:00 a.m. to 5:00 p.m. Truck trips and delivery of materials by land is expected to be minimal as the structures are limited in size and scope. Commencement of work is dependent upon funding and regulatory approvals. Work is tentatively scheduled to begin in early 2012.

Visitor Center

Only when funding is identified, an approximately two-story 33,800 sq. ft. footprint landside Visitor Center may be constructed as Phase 2 of the project. The anticipated structure will be multi-story conventional building construction. The facility will house the educational exhibits, murals, models, artifacts, audio-visual presentations, food, concessions, gift shop, offices, ticketing, and restroom facilities.

An existing Navy fuel surge line transects the parking area (Exhibit 2.0-4). Currently, construction of permanent structures must not be closer than 8 feet from the pipeline. Future construction of the Visitors Center may require the surge line to be placed outside of the easement or may require the relocation of the surge line if still operative, in cooperation with the U.S. Navy. This will be subject to further CEQA review.

2.6.3 Operations and Maintenance

Day-to-day operation of the facility includes various tours of the battleship; guided and self-guided. The battleship will be presented as a “living” battleship which provides “at sea” experiences. Audio and visual backgrounds, interactive exhibits, and commemorative information will be provided to help visitors understand the history and function of the USS *Iowa* over her 50 years of service.

Several types of programs will be offered to a variety of groups that visit the battleship. Public battleship tours, K through 12 educational programs to supplement state curriculum guidelines, and youth and family weekend programs will provide different ways to understand the significance of the USS *Iowa*. A General Battleship Tour is primarily a brief overview of the major spaces aboard battleship including the *Officers’ Wardroom*, *Captain’s Quarters*, *Main Gun Turret*, *Command Engagement Center (CEC)*, *Secondary 5” Gun Mount*, *Main Bridge*, *Anti-Missile Battery “CWIS”*, *Tomahawk Cruise Missile Armored Box Launchers*, *Anti-Ship Harpoon Missile Launchers* and the *Crew’s Galley and Mess Deck*. Specialized tours include a *Main Gun* tour, an *Engineering and Armor* tour, and other specific tours to accommodate special interest groups.

Operation of the battleship includes the various tours, food and drink concessions, and security personnel. The USS *Iowa* will be open from 10:00 a.m. to 5:00 p.m., seven days per week. Annual visitor estimates are approximately 430,000 during the first year of operation and stabilizing to 386,000 during subsequent years.

Pacific Battleship Center has prepared a Maintenance Plan that will assist the caretakers of the battleship with tools for long-term planning and care of the historic vessel. The Maintenance Plan is a result of an extensive ship inspection

by former naval architects, construction professionals, and battleship enthusiasts. The full Maintenance Plan is included in Appendix C.

In general, the USS *Iowa* must be maintained in a condition satisfactory to the Secretary of the Navy. The detailed Maintenance Plan includes specific maintenance operations for the initial restoration work before the battleship opens to the public and an ongoing Maintenance Plan. The restoration of the battleship to be completed prior to opening to the public includes the following list of planned activities:

- General cleaning;
- Painting of exposed metal surfaces;
- Interior painting;
- Covering the damaged wood deck with marine-grade plywood and sealing with caulk and non-slip gray paint until replacement of the permanent teak decking;
- Dock maintenance as required;
- Mooring line replacement as needed;
- Hooking up of utilities (water, sewer, electric, etc); and
- Safety items (guard rails, security barriers to non- public areas).

The Maintenance Plan includes maintenance tasks to be completed daily/weekly, annual/intermediate, and long term. Long-term (periods longer than annual) maintenance tasks would be performed as-needed and the full-time maintenance staff would develop and keep track of the long-term maintenance schedule.

The following items will be performed on a daily/weekly basis:

- Prepare and paint exterior topside areas by battleship's maintenance team.
- Daily clean topside and interior spaces by battleship's maintenance team.
- Prepare and paint interior spaces by battleship's maintenance team.
- Clean interior spaces by battleship's maintenance team.
- Ensure watertight integrity of vessel.
- Inspect and repair as needed all electrical harnesses, light fixtures, shore power connections and cables. Inspect and properly tag all active circuits; properly tag all circuits and equipment that are not to be energized.
- Repair/maintain the vessel's plumbing system.
- Repair/maintain the vessel's ventilation (heating & cooling) system.
- Repair/maintain the vessel's over-the-side cathodic protection system.

- Inspect/repair/maintain the vessel's lifelines and other safety systems (high bilge alarms, fire alarms, pumps, etc.). Inspect all ladders and stairwells for loose fittings.
- Repair/maintain the vessel's security systems. Ensure a proper space lock system is in place.
- Visually inspect condition of vessels mooring lines, pad eyes and pier head facilities.
- Repair/maintain the Visitor Center's grounds and buildings.
- Prepare/maintain the vessel's exhibits.
- Prepare/maintain new spaces within the battleship open to public visitation.
- Prepare daily work plans and budgets needed to implement the Maintenance Plan.
- Prepare ongoing maintenance data into a central planning effort.
- Repair/replace teak decking as needed. Ensure proper drainage of topside spaces and piping.
- Inspect/tag fire extinguishers throughout vessel.
- Plan for annual budget tasking; submit input for Annual and Long-Term Maintenance Planning.
- Establish battleship's library of structural drawings, reference publications and battleship's manuals for quick/easy reference.

Along with the items listed in the daily/weekly maintenance schedule, the following items will be performed on an annual/intermediate basis:

- Perform annual repair/maintenance of vessel's plumbing system.
- Consider flushing piping systems, cleaning/replacement of filters and traps, inspection of piping joints and support hangers. Inspect toilet/shower facilities and repair, as needed.
- Repair/maintain the vessel's HVAC ventilation (heating & cooling) system. Clean ducts, fan units, heating elements, and periodically replace filters (as needed).
- Repair/maintain the vessel's cathodic protection system. During annual dive inspection of hull bottom, inspect, clean and replace (as needed) the systems anodes. Ensure divers inspect bases of sheet pile walls, concrete abutments, and mooring chain (and weights) that are drooped into the water.
- Perform annual tests on other safety systems (high bilge alarms, fire alarms, pumps, etc. Ensure local fire department, ambulatory crews and other safety/security personnel are walked through vessel and are familiar with vessel layout and emergency procedures.
- Perform test vessel's security systems.

- Prepare plans for repair/maintenance of Museum's grounds and buildings.
- Have divers survey vessel's underwater shell plating and appendages. Perform underwater inspection and cleaning/replacement of anodes for cathodic protection system.
- Conduct annual environmental testing for PCBs, asbestos, lead and air quality as required under the EPA Agreement.
- Prepare ongoing annual and long-term maintenance data into a central planning effort.
- Repair teak deck as needed. Prioritize teak deck repair tasking and include extraordinary teak deck repairs/replacement into Long-Term Maintenance Plan. Investigate the teak market for best pricing and procure teak wood (or composite varieties) in stock on an annual basis.
- Sound all of the vessel's fuel and/or ballast tanks from locations provided within the Ship's Information Book.
- Inspect/tag fire extinguishers throughout vessel.
- Update Visitor Center's Emergency Procedures Manual as needed.
- Test vessel's electrical systems under full load conditions for the spaces utilized and make adjustments to vessel's load carrying capacity by adding or subtracting circuits as needed throughout battleship. Decommission all unutilized circuitry by removing fuses from panels and tagging.
- Prioritize areas of the exterior that require painting and obtain estimates from Contractors.
- Prioritize areas of the interior that require painting and obtain estimates from Contractors.
- Develop priority budgetary planning and tasking for long-term maintenance.

The following items will be performed on a long-term basis:

- Ensure the even weathering of the USS *Iowa*. She will be towed out and turned once per year.
- Prepare and implement vessel dry-docking.
- Consider viability of existing HVAC, CHT, DH (de-humidification) and fresh water plumbing systems. Plan for systems replacement/augmentation.
- Prepare tasking and planning needed for shoreside and mooring structures. Repair/replace mooring lines and tie-downs as needed.
- Inspect and repair/replace as needed the vessel's shore power cables and hangers.
- Inspect and repair/replace as needed the vessel's fendering.

- Complete prioritizing of teak deck replacement, investigate best method of preserving existing deck, and install teak plank replacements as needed.
- Ensure environmental aspects of this tasking are not overlooked.
- Establish grant writing team/specialist(s) to work with vessel's maintenance supervisor and management to develop emergency/intermediate/long term funding of projects aboard this vessel.

A Professional Maintenance Team is essential to the execution of the Maintenance Plan to ensure that the ongoing repairs are completed in a timely and safe manner. Given the experience of other historic ships, typical battleship museums (Massachusetts, New Jersey and Missouri, etc.) have one (1) full-time Engineer/Shipboard manager and eight (8) full-time or full-time-equivalent maintenance personnel (highly skilled and trained in their particular fields) as the minimum number of personnel required to carry out the Plan. There are additional plans for an increase of personnel following stabilization of revenue. The PBC plans to employ the following staff to support the maintenance of the battleship:

- Maintenance Supervisor/Ship's Engineer
- Electrician 1
- Electrician 2 (position after stabilized revenue)
- Pipe Fitter 1
- Pipe Fitter 2 (position after stabilized revenue)
- Ship Fitter 1
- Ship Fitter 2
- Carpenter 1
- Carpenter 2 (position after stabilized revenue)
- HVAC Tech 1
- HVAC Tech 2
- Painter 1
- Painter 2 (position after stabilized revenue)

2.6.4 Project Schedule

The proposed project would be completed in two phases. The first phase (Phase 1) includes the items listed in the Project Elements section above, except for the Visitor Center in Phase 2. Phase 1 is anticipated to be completed for a grand opening on July 4th, 2012.

Phase 2 is likely to occur 6 to 8 years after the completion of Phase 1. The construction of Phase 2 depends on funding. In Phase 2, the 480 sq. ft. prefabricated ticket booth/office and 480 sq. ft. prefabricated restroom facility

would be replaced by a permanent structure to be called the Visitor Center. The Visitor Center would include ticket booths, offices, restrooms, museum/educational exhibits, and gift shop.

2.6.5 Project Alternatives

The Los Angeles Harbor Department's preferred alternative entails the siting of the USS *Iowa* at Berth 87 in the Port of Los Angeles in the Main Channel. Multiple sites were analyzed in the preliminary environmental stage for consideration for placement of the USS *Iowa*, many of which were determined to be infeasible and were therefore eliminated from further consideration. These alternative sites are discussed in Section 6.0, *Project Alternatives*. The remaining sites determined to be feasible are listed below and are considered in this EIR:

- Proposed Project (Berth 87)
- Alternative 1 – S.P. Slip
- Alternative 2 – Berths 45-47
- Alternative 3– No Project Alternative

Proposed Project (Berth 87)

The proposed project places the USS *Iowa* battleship at Berth 87 – the site of the proposed North Harbor Cut of the San Pedro Waterfront project. The harbor cut was planned to house the S.S. Lane Victory, a historic navy ship, and tugboats. With this alternative, the approved proposed project would not be constructed. The S.S. Lane Victory is currently moored at Berth 94 as a tourist attraction. Berth 87 is currently used intermittently for temporary loading and unloading of cruise ships and includes an existing parking lot that has at least 4.5 acres of backland available for the proposed project. Ongoing operations and maintenance would be required for all alternatives.

Initial Site Preparation (Phase 1)

The site consists of a vacant parking lot that will be used in conjunction with nearby lots under a shared parking arrangement with other Port attractions. Prefabricated (constructed off-site) structures would be set up onsite and would include a 480 sq. ft., single-story Office/Ticket Booth; 480 sq. ft., single-story Restroom facility; two Entry Platforms to accommodate access and egress from the USS *Iowa*. On a yearly basis, the battleship would be towed out of the Main Channel to be rotated at the berth to ensure even weathering.

Construction of Permanent Landside Structures (Phase 2)

Phase 1 structures (except for entry platforms) would be removed and replaced with the construction of an approximately two-story 33,800 sq. ft. footprint

landside Visitor Center that would include all previous uses (office/ticket booth and restroom facility). The entry platforms to the battleship may remain.

Alternative 1 – S.P. Slip

This alternative would place the USS *Iowa* into the Southern Pacific Slip (S.P. Slip), an existing boat slip in the south part of the harbor between Berths 72 and 74 that is home to an active commercial fishing fleet. This fleet remains intact after over 100 years of providing fresh fish to the US and Asian markets. Placing the USS *Iowa* at this location would displace a portion of the commercial fishing fleet, reducing fishing operations and hinder dockside work.

Initial Site Preparation (Phase 1)

Parking lots are adjacent to both sides of the SP Slip. The parking area to the north is used by visitors of the Ports O' Call Waterfront and Village dining and shopping areas. Several existing uses would need to be shut down and little to no structures would be demolished or reused.

Construction of Permanent Landside Structures (Phase 2)

The construction of a permanent landside structure would be possible, however, space is limited and some of the existing parking area may need to be repurposed.

Alternative 2 – Berths 45-47

Berths 45-47 is a 15 acre site located in the Outer Harbor of the Port of Los Angeles on the peninsula between the East Channel and West Channel. This site is a former liquid bulk berth and has a terminal control building that is not usable in addition to an 800 foot long concrete wharf structure. The existing Berths 45–47 are used on occasion by visiting cruise ships and other large wharf vessels, such as the visiting U.S. Navy vessels on Armed Forces Day. This alternative would prevent cruise ships from loading and unloading at this site. In addition, this site is not located near any freeways and would result in significant impacts to traffic, especially to Harbor Boulevard, Sampson Way, and Crescent Avenue.

Initial Site Preparation (Phase 1)

The site would require grading and asphalt paving for the necessary parking spaces. Two of the adjacent uses are associated with railroad.

Construction of Permanent Landside Structures (Phase 2)

The site has two small existing structures that would be demolished for the new landside Visitor Center, unless they are reused. These structures would need to be analyzed further before potential re-use.

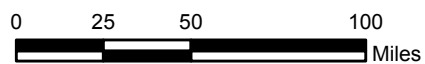
Alternative 3 – No Project Alternative

The no project alternative would assume that the USS *Iowa* does not get relocated by tugboat to the Port of Los Angeles. The USS *Iowa* would be removed from San Francisco Bay as a result of the Obama Administration's commitment to clean up the environment to protect the unique ecosystem of the bay; however the fate of the battleship is unknown. Most of the ships in the Suisun Bay Reserve Fleet are slated for disposal.

The Preferred Alternative and other site alternatives (Alternatives 1 and 2) include the year-round mooring of the battleship for use as a tourist attraction and a Visitor Center including restrooms, food service, offices, and gift shop. Alternative 1 would displace an existing commercial fishing fleet, and Alternative 2 would displace cruise ship loading/unloading.



12/20/2011 JN65-100853 01_Regional_Location_Map.mxd AP



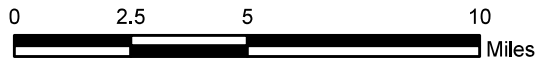
Source: ESRI World Street Map

USS IOWA PROJECT - EIR
 Regional Location Map

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12/20/2011 JN65-100853 02_Richmond.mxd AP



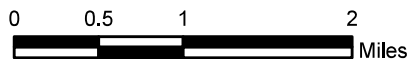
Source: ESRI World Street Map

USS IOWA PROJECT EIR
 Port of Richmond, Terminal 3

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12/20/2011 JN 65-100853 03_Port of LA.mxd AP



Source: ESRI World Street Map, ESRI World Imagery

USS IOWA PROJECT EIR
 Port of Los Angeles - Berth 87

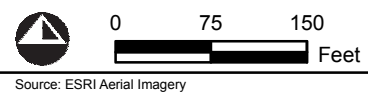
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12/20/11 _JN 65-100653 Berth87&ProposedSitePlan.mxd AP

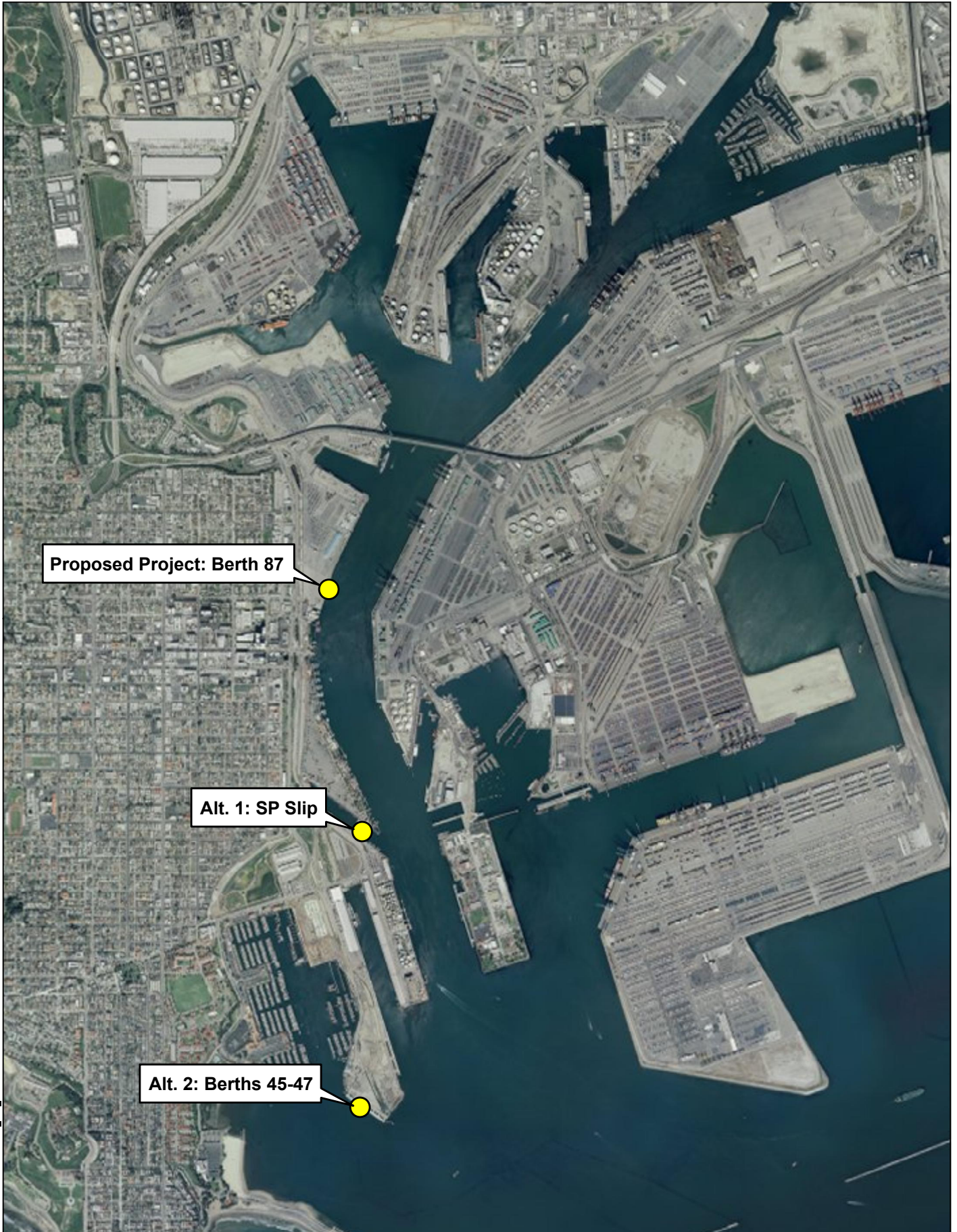
Legend

- Navy Fuel Surpline

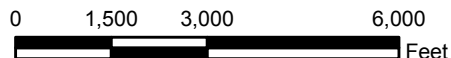


USS IOWA PROJECT - EIR
Berth 87 & Proposed Site Plan

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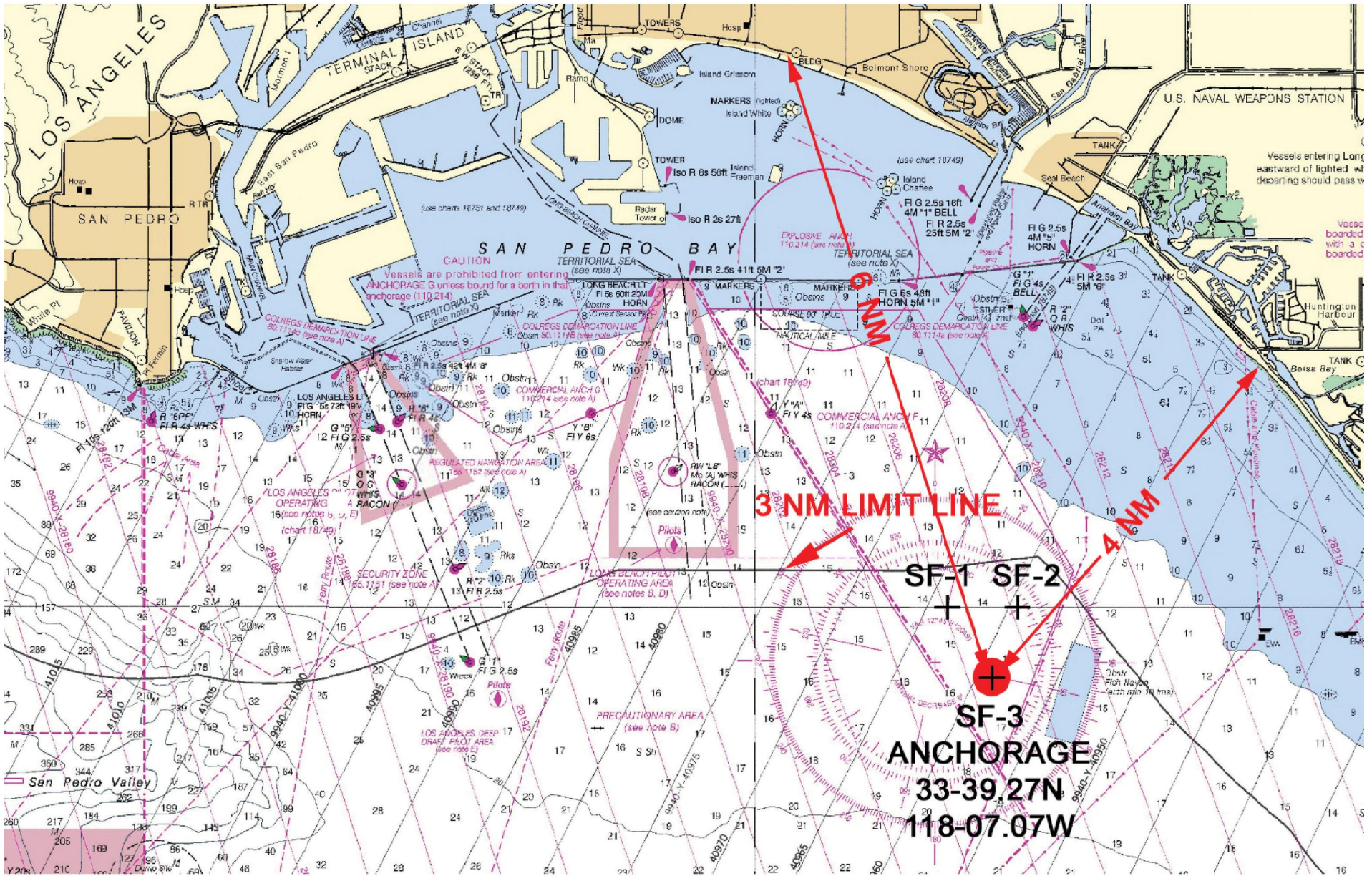
11/14/11_JN 65-100853_Alt_Site_Locations.mxd AP



Source: ESRI World Imagery

USS IOWA PROJECT - EIR Alternative Site Locations

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