

# PORTS & HARBORS

*Engineering design solutions  
to support terminal and  
waterfront operations*

## DESIGN SOLUTIONS FOR PORT OPERATIONS

For 34 years, P2S has brought innovative and sustainable engineering solutions to Ports and Harbors up and down the west coast. From terminal and backland infrastructure to shore and crane power, our experts understand the nuts and bolts of waterfront operations, and how to ensure that they run efficiently. Even better, our team is constantly working to find innovative ways to reduce energy use and emissions and build greener ports all around.

**30<sup>+</sup>** YEARS OF  
SERVICE

**9<sup>+</sup>** MAJOR PORTS  
SERVICED

**100<sup>+</sup>** PORT  
PROJECTS

## FUTURE FOCUSED TERMINALS

Whether a small renovation or multi-billion dollar pursuit, our expert team has experience with a broad range of port and terminal related projects including:

- Automated Terminal Development
- Electrical Infrastructure Assessment
- Pier Administration Buildings
- Terminal Electrification & KVA Demand Analysis
- Shore Power Infrastructure Design
- HVAC Assessment & Improvements
- Photovoltaic Farms & Electric Vehicle Charging
- Substructure Mapping
- Fire Boat Stations & Boat Bays

## PORTS & HARBORS

### STANDARD FOR SHORE TO SHIP POWER AND TERMINAL LIGHTING

P2S CEO Kevin Peterson chaired the shore-to-ship power international standards committee. In addition, Market Segment Leader Kent Sayler and Ben Chavdarian are both members of IES Port Terminal Lighting Committee that developed the Recommended Practice for Lighting Port Terminals. There's nothing like having a world-renowned expert to put minds at ease.

### OVER A QUARTER CENTURY OF PORT DESIGN EXPERIENCE

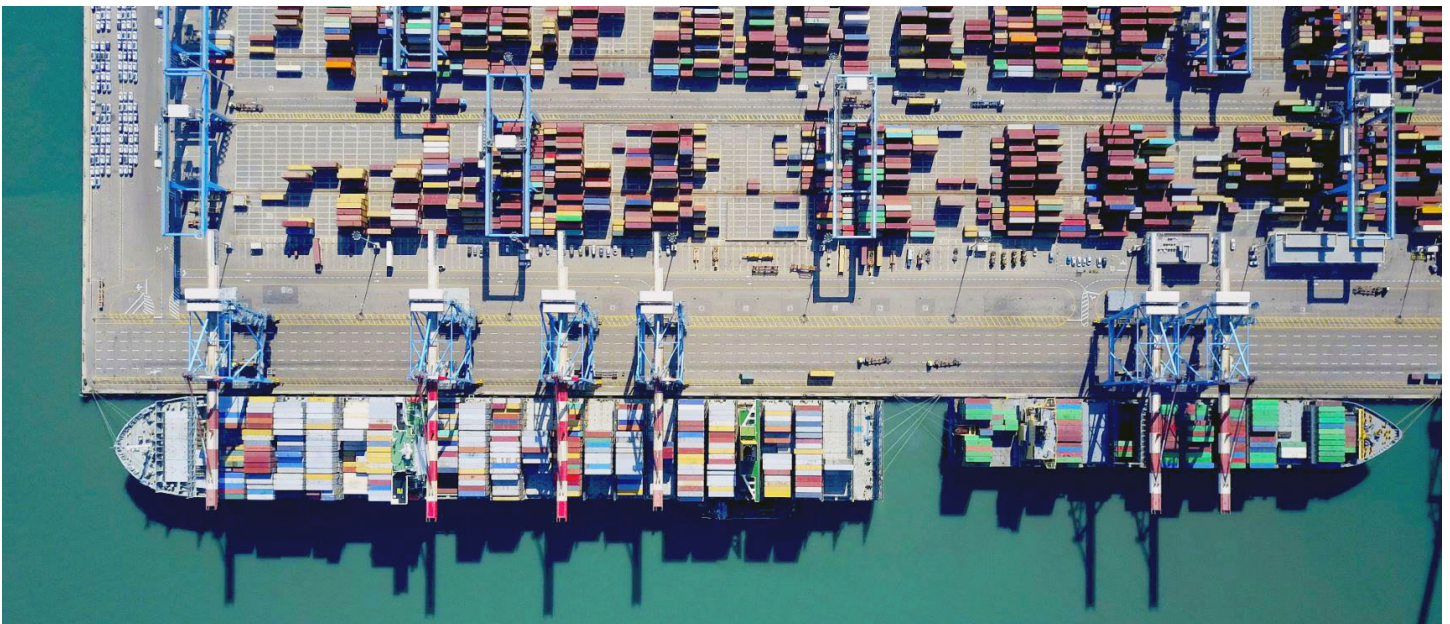
We have the expertise port tenants need to successfully complete projects. Our extensive experience at the Port of Long Beach, Port of Los Angeles, Port of Hueneme, Port of Everett, Port of Port Angeles, and Port of Seattle is a testament to sustained port design excellence.

### ENGINEERS FOR THE RECORD

We're the electrical engineer of record for the largest automated container terminal in North America. Our team is uniquely positioned to leverage our experience should your facility decide to invest in automated container terminal technology. P2S Inc. has extensive knowledge of zero emission technology, charging, and fueling, and is currently the Engineer of Record on multiple zero emissions projects at the Port of Long Beach and Port of Los Angeles which utilize plug-in and wireless charging technology. P2S leadership and staff are active members in developing International Standards for all ships - large and small - and are continually reviewing technologies available that will satisfy the purpose of these standards in meeting zero emission goals.

### PORT SECURITY AND MISSION CRITICAL FACILITIES

P2S can support the technology and security needs for Harbor facility command and control centers, from functional office spaces and meeting rooms, to site-wide security systems, WiFi access points, media displays, telepresence and data center infrastructure.



## PROJECT MANAGEMENT

P2S uses the Project Manager method of administrating projects. Each project is carefully planned and developed to match the objectives and requirements of the client. The project manager selects a team of staff specialists who have the specific experience required for the project. Use of the project manager type of organization provides the client with a focal point for each project. This centralized focus for project authority and responsibility provides an effective channel for communication, and ensures that the client's requirements will be integrated into the project.



## PROJECT EXPERIENCE

### PORT OF LONG BEACH

- » Pier G Redevelopment
- » Pier J Zero Emissions Infrastructure Master Plan
- » Middle Harbor Redevelopment
- » Electrical Infrastructure Assessment
- » Fire Boat Stations 15 and 20
- » Pier C, F & J Shore to Ship Power
- » Pier T Hanjin Terminal and Site Buildings
- » Pier T Marine Terminal Container Yard Expansion
- » North and South Battery Exchange Building
- » POLB Electrical Design Guidelines
- » Zero Emissions Projects at Long Beach Container Terminal

### PORT OF LOS ANGELES

- » TRAPAC Crane Maintenance Building
- » NYK Terminal Administration Building
- » Substructure Mapping

### PORT OF SAN FRANCISCO

- » Pier 70 Renovations

### PORT OF EVERETT

- » North & South Marina Lift Stations
- » South Marina Covered Moorage Maintenance & Repair
- » South Terminal Wharf
- » Waterfront Place Central
- » Marina Fuel Tank Design

### PORT OF SEATTLE

- » Terminal 18 Shore Power
- » SeaTac Concourse B & C
- » Concourse D Annex
- » Maritime Industrial Center
- » Terminal 91 Uplands Development
- » Terminal 46 Substation Replacement
- » North Terminal Utilities

### PORT OF PORT ANGELES

- » Boat Haven Fuel Float Replacement

### PORT OF HUENEME

- » Naval Base Mechanical Services
- » Shore Power Infrastructure

### PORT OF BENTON

- » High Dock and Barge Study

### PORT OF TACOMA

- » Washington United Terminal Shore Power
- » Clean Energy Services

### PORT OF VANCOUVER

- » Terminal 2 Berth 3 Crane Electrification
- » Terminal Lighting Assessment
- » Berth 8/9 Crane Electrification
- » Energy Masterplan

### PORT OF OLYMPIA

- » New Warehouse Design

### PORT OF PORT TOWNSEND

- » Sea Level Rise Project

### US COAST GUARD

- » Base Kodiak Fuel Pier Repairs

### US NAVY

- » P-907 Transportation Protection Program Pier & Support Facilities
- » Dry Dock 4 & Pier 3 Modernization Study & Design
- » Multi-Mission Dry Dock Alternatives Feasibility & Engineering Study
- » P356 CVN Maintenance Pier Replacement



## PORT OF LONG BEACH

### Middle Harbor Redevelopment

With a focus on future demand loads, the Port of Long Beach hired P2S to design a new and improved electrical infrastructure for its Middle Harbor region, including shore power, lighting and other key improvements. Budgeted at \$1.2 billion, the project encompasses 4280 SF of wharf plus over 300 acres of backland improvements. P2S is responsible for the electrical engineering, design and construction administration for the project, which will span through the end of the decade.

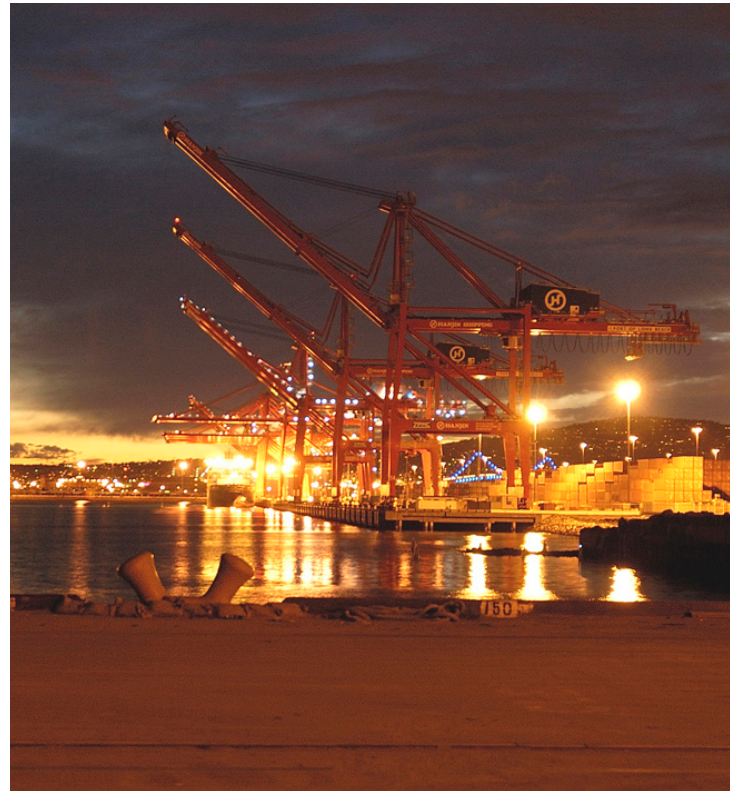
Once completed, the Middle Harbor Terminal (MHT) will be the first fully-automated and electrified container terminal in the country. The power infrastructure will have the capacity to fully support not only typical terminal needs (medium voltage quay cranes, site lighting, and building distribution), but also “greener” port technologies such as shore-to-ship power, LED high-mast lighting and electrified rail-mounted gantry cranes in the container yard. The MHT is projected to increase throughput at the Port of Long Beach by as much as 50% and create 14,000 permanent jobs in Southern California.

### OUR SOLUTIONS:

- 66-12kV substation to serve the terminal, crane power, shore power, area lighting, and communications
- 20,000 feet of new underground duct banks for distribution
- 7.5 MVA, 6.6 kV connection points every 250 ft. along the wharf for shore power connections to ships
- 12kV crane power systems to support 18 wharf cranes, 69 automated stacking cranes, and five
- Rail-mounted gantry cranes, all of which will be supplied via a 12 kV power reels
- Area lighting utilizing 120 feet poles with 12 500-watt, LED fixtures each
- 2,250 new reefer outlets including associated substations and switchboards

### CLIENT REFERENCE:

Port of Long Beach  
Monique Lebrun, Senior Program Manager  
P: 562.283.7385 | E: monique.lebrun@polb.com



## PORT OF LONG BEACH

### Pier T Marine Terminal Container Yard Expansion

P2S provided electrical engineering services as a subconsultant for this project at the Port of Long Beach. P2S designed the electrical infrastructure for the Pier T Phase 3 Container Yard Redevelopment. The project included area lighting, reefers, relocating the terminal queue and a dredge substation for future dredge operations. The project was also designed to have future growth for electrified rail-mounted gantry cranes.

#### OUR SOLUTIONS:

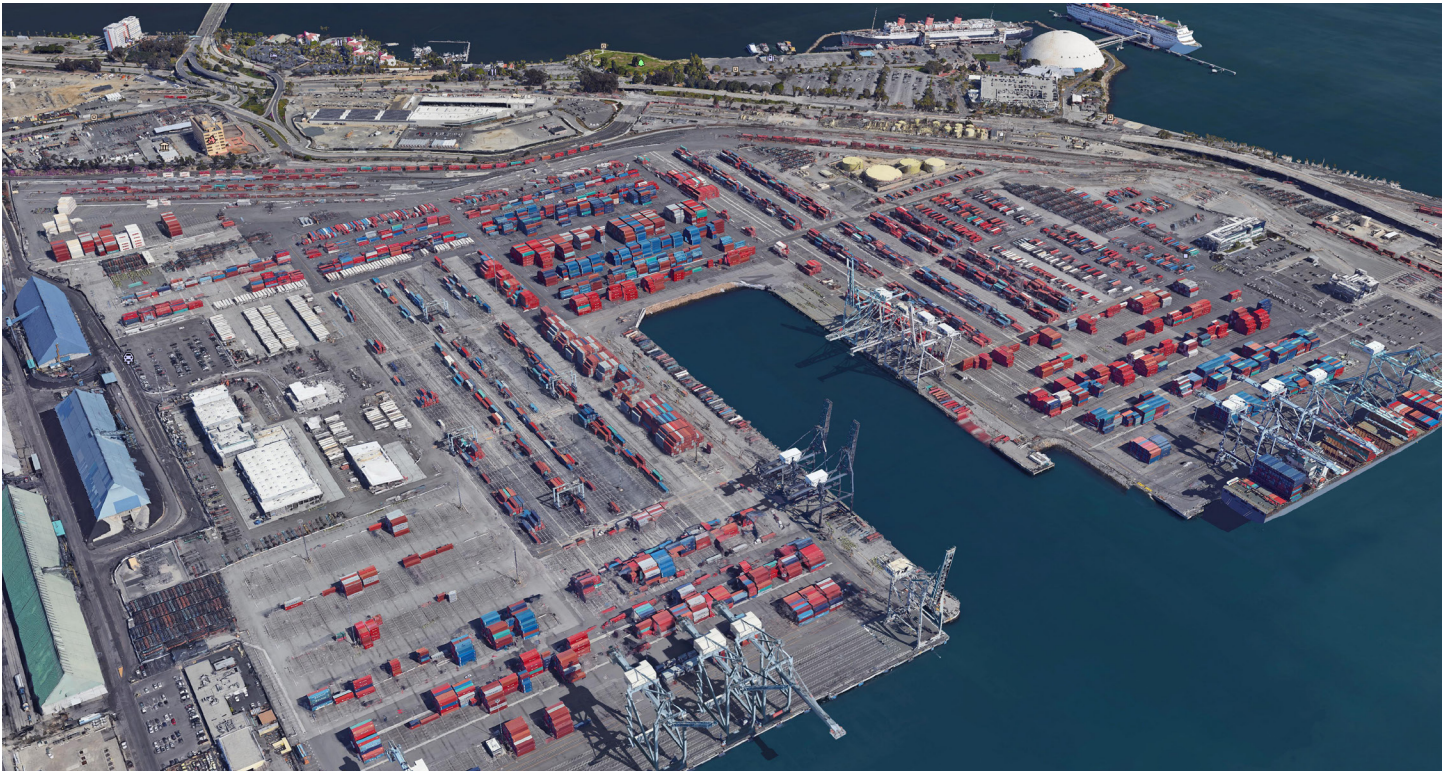
The electrical design included 24.9kV distribution via underground ductbanks to provide power for reefer substations, lighting transformers and the dredge substation. P2S also performed power system analysis including short circuit, load flow and arc flash.

#### CLIENT REFERENCE:

##### Port of Long Beach

Monique Lebrun, Senior Program Manager

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## PORT OF LONG BEACH

### Pier G Terminal Redevelopment

The Pier G Redevelopment Program, a multi-year effort estimated at \$500 million, will consolidate and modernize the entire terminal with more efficient, environmentally friendly truck gates, rail facilities and berths. P2S is currently providing electrical design services that include a complete field verification of the existing electrical systems, master planning, coordination with Southern California Edison, substation consolidations, power for crane power systems, shore-to-ship power systems, area lighting systems and reefer distribution systems.

The project and work started in 2000 with a storage rail lines, truck gate and deep-water berth project. This was followed by various marine and landside projects that provided additional land for trade and more rail yard capacity to eliminate trucks from freeways. Construction of LEED Certified “green building” complexes showcasing sustainable construction in a container shipping terminal was also implemented. Once completed, the project will encompass over 4,000 SF of wharf and over 250 acres of backland improvements.

### OUR SOLUTIONS:

- Two new 66-12kV substations to serve the terminal, crane power, shore power, area lighting, and communications
- 7.5 MVA, 6.6 kV connection points planned every 200 ft. along the wharf for shore power connections to ships
- 12kV crane power systems designed to support 12 wharf cranes, as well as stacking and rail-mounted

### CLIENT REFERENCE:

Port of Long Beach  
Deepen Upadhyay, Program Manager  
P: 562.283.7381 | E: [deepen.upadhyay@polb.com](mailto:deepen.upadhyay@polb.com)



## PORT OF HUENEME

### Shore Power Infrastructure Project

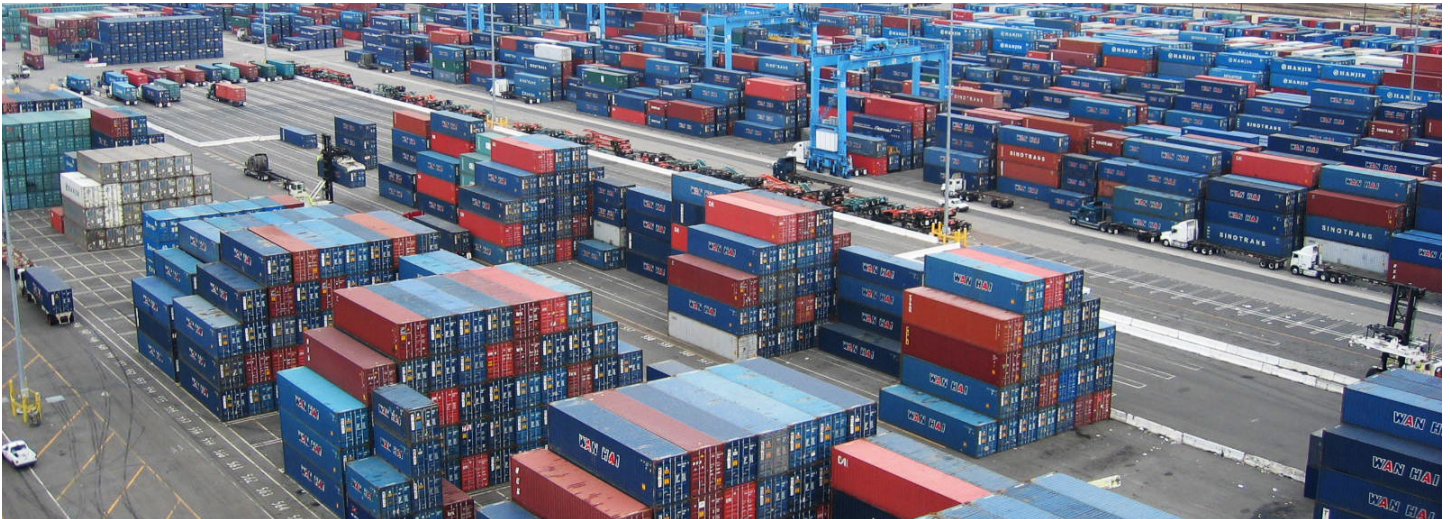
P2S served as prime consultant for the retrofit of shore-power outlets to feed three berths at this operating container terminal and was responsible for the engineering, design and construction administration for the two-year project. The project included new 16.9kV service switchgear, 2,000 feet of duct banks, two shore power substations and six shore power outlet boxes. Our task was to design a shore power solution providing 3 MVA, 6.6 kV connection points for ships to “plug-in” while at berth. To install each of these 12’ x 5’ x 3’D vaults, which had to be on the water edge of the wharf, we had to cut into the existing wharf structure. Plus, construction would occur in an operating terminal so work sequences had to be carefully planned and delineated in the construction documents. This project was designed “fast-track”. Procurement specifications were provided to the Port to purchase the switchgear six weeks into the design. Construction documents for plan check submittal were completed in four months. P2S also coordinated the new service and Rule 21 agreement with Southern California Edison on this compressed schedule.

### CLIENT REFERENCE:

Port of Hueneme

KJ May

P: 805.488.3677 | E: [kmay@portofhueneme.org](mailto:kmay@portofhueneme.org)



## PORT OF LONG BEACH

### On-Call Electrical Engineering Services

P2S is currently providing engineering services for multiple electrical and mechanical projects at the Port of Long Beach through the current oncall engineering services contract. These projects have ranged from complete electrical and mechanical designs to deliverables for small, quick-turnaround tasks and have required field investigation and condition assessment of multiple POLB facilities, coordination with Southern California Edison, design collaboration with POLB Engineering Design Division, development of construction and/or demolition drawings and specifications, bid and construction support, obtaining plan check approval from Long Beach Development Services, temporary power coordination, commissioning of building HVAC systems, and reviews and assessments. Projects include:

- 4th Track at Ocean Blvd
- Pier E Zero Emissions Projects
- Pier S Rubble Site Electrical Service
- Shore-to-Ship Power Utilization Reports
- Pier T Modular Component Investigation
- Harbor Department Admin Building Demolition
- Pier G Harbor Plaza Facilities Site Improvements
- IAO Analysis of Smoke Control and Exhaust Fan Design
- Pump Station SCADA Review
- IAO Pressurized Stair Shaft Analysis
- IAO HVAC System Assessment & Replacement
- Terminal Island Green Mulch Wall Acoustic Evaluation
- Pier G Metro Electrical Assessment Report Review

### OUR SOLUTIONS:

- 12kV-480V substation and underground infrastructure to serve the power, lighting, and communications needs for the Harbor Plaza area at Pier G
- Street lighting and crossover switch power for a street and rail realignment on Ocean Blvd
- Infrastructure to power charging equipment for electric top picks and yard hostlers
- 12kV-480V substation & underground infrastructure to serve the power/lighting needs at POLB Rubble Site

### CLIENT REFERENCE:

#### Port of Long Beach

William Stone, Electrical Engineer

P: 562.283.7855 | E: [william.stone@polb.com](mailto:william.stone@polb.com)



## PORT OF LONG BEACH

### Electrical Infrastructure Assessment

In 2015, P2S began a three-phase assessment to evaluate the electrical infrastructure in a majority of POLB's 3,200 acre district. Start to finish, the project aims to review all current electrical design records, resolve any inaccuracies in the records, and finally determine alternate business continuity strategies to ensure that electrical power flows to critical Port resources in case of electrical incident. A brief description of the phases is as follows:

**PHASE 1:** Thoroughly review electrical design records (as-built plans, site plans, electrical single line diagrams, source and load charts, and GIS database information) to ensure accuracy; field verify the location of all substations (both owned by SCE and the Port), panel boards, switchboards, facilities (i.e. sewer lift stations, storm pump stations, administrative/control facilities, etc.), and equipment (i.e. gantry cranes, lighting, refrigeration units, etc.) as identified in the drawings; field test and validate any ambiguous source and load information. Provide detailed report of locations, sources and load inaccuracies to the POLB.

**PHASE 2:** Correct the electrical source and load information inaccuracies identified during Phase 1. Prepare and provide corrected electrical single-line diagrams and site plans using existing electrical design records. Review CAD files and GIS information, identify, and verify all sources of power for main electrical feeders to each major electrical asset on the terminal. Tag and populate all facility electrical loads and locations in the GIS database following POLB CAD and GIS standards.

**PHASE 3:** Determine and specify alternate business continuity strategies to ensure electrical power to critical Port resources during an incident; determine practical and efficient re-power strategies on a case-by-case basis; evaluate obstacles to strategy implementation and the sourcing of equipment required for implementation. During this phase our team will continue conversations with USACE about availability of generator facilities during various events. P2S will prepare and provide to the Port electrical reports and concept designs for the recommended emergency power equipment/strategies. These conceptual designs will provide details on how to implement the recommended strategy and allow us to estimated associated electrical construction costs.

### CLIENT REFERENCE:

#### Port of Long Beach

Brian Lam, Project Manager, Safety Specialist  
P: 562.901.1777 | E: brian.lam@polb.com



## PORT OF LOS ANGELES

### TRAPAC Crane Maintenance Building

P2S provided mechanical, electrical, plumbing, and telecommunications (MEPT) services for the TraPac Crane Maintenance building to support current and future crane operations. The facility included two bays for shuttle carrier maintenance, supporting machine shops, offices and restroom facilities.

**CLIENT REFERENCE:** Andrew Nickerson, PSOMAS | P: 213.229.1512 | E: [anickerson@psomas.com](mailto:anickerson@psomas.com)

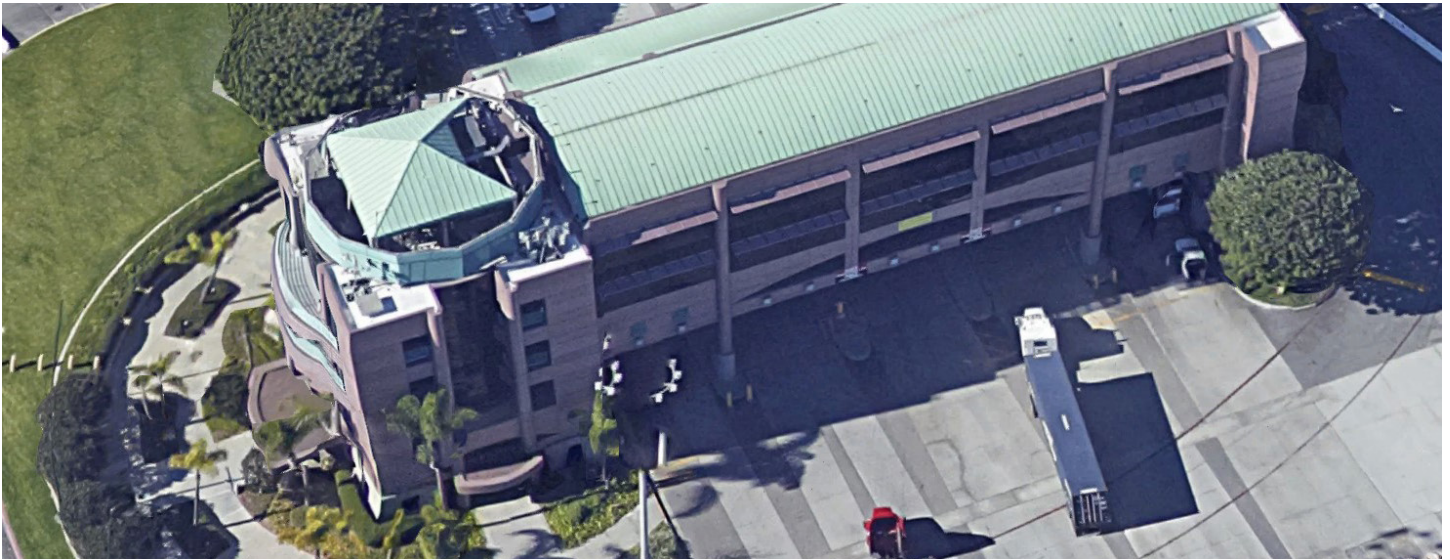
## PORT OF LOS ANGELES

### Berths 225-232 Evergreen Terminal

P2S provided mechanical, plumbing, and electrical engineering services for renovation of the Evergreen America Corporation Terminal. The Evergreen terminal is 125-acres with the potential for future expansion to 196-acres. A key element of this project was the development of phased construction schedules that allowed ongoing terminal operations to be maintained throughout the construction period.

The focus of the renovated terminal is a new two 6,000 sf, three-story Administration Building and Entry Gate Complex. Other main components designed for the Evergreen Container Terminal include a 33,000 SF Maintenance & Repair Building and 32,000 SF of support facilities (i.e., power shop/engine repair shop, container/chassis repair shop), secondary gate facility, Marine Buildings, inbound/outbound checker booths, reefer wash, Terminal Island Container Transfer Facility (TICTF) gate, guardhouses, and terminal infrastructure. A temporary M&R facility was also designed to provide service during construction.

**CLIENT REFERENCE:** Romeo Martin, Port of Los Angeles | P: 310.732.3668



## PORT OF LOS ANGELES

### NYK Terminal, Berths 212-216 Administration Building HVAC Upgrade

P2S held an on-call contract with the Port of Los Angeles as a subconsultant to a larger civil engineering firm. Due to the nature of this project, P2S was the primary consultant for the project and effectively served as the principal contact and project manager for the consultant team.

P2S Engineering provided mechanical, electrical and plumbing engineering services for the design of a new HVAC system to replace the existing heat pump system for the NYK administration building. P2S provided an initial study to determine required capacities and replacement system selection, then provided construction documents, specification for the installation and construction administration of a new HVAC system.

P2S provided several options for the installation of a new cooling and heating system for the four-story building including the advantages, disadvantages and costs. The options considered were rooftop single-zone system with VAV box and hot water reheat coils, self-contained water-cooled unit system, terminal packaged units, chilled water cooling tower system, chilled water air cooled condenser system and a Hydronic radiant panel system. Due to cost constraints and minimal space available on the roof, a direct replacement water-source heat pump system was selected, but of much higher efficiency. Scope of work included replacement of the closed circuit cooling tower on the roof and the heat pump units in the ceiling space. P2S support was continued through the construction phase, where the project was phased per floor to allow the building to continuously operate for three shifts per day.

There was a challenging aspect with the replacement of the fluid cooler located on the roof of the partially covered building. The manufacturer of the original unit was no longer in business, and none of the manufacturer's standard units fit into the allowed space. P2S engaged with one manufacturer for a custom design of the fluid cooler that was more efficient, would last longer in the coastal environment, and would physically fit in the same location without structural upgrades to the building. These goals were achieved with the diligence of all parties and the replacement system operated very efficiently with reduced noise.

### CLIENT REFERENCE:

Port of Los Angeles

Frank Lin

P: 310.732.3673 | E: FLin@portla.org



## PORT OF PORT ANGELES

### Boat Haven Marina Fuel Float Replacement

The Port Angeles Boat Haven marina provides moorage and amenities for more than 440 commercial and recreational vessels, including boat launch, guest vessel moorage, fuel float, pump-out station, dry boat storage, and boatyard. To maintain its vessel fueling services, the Port required replacement of its 1970s-era timber fuel float to complete modernization of its marina fueling system.

The new float configuration consists of a 10'x15' gangway landing float and a 15'x70' floating fuel float and will be fitted with the following utilities:

- diesel fuel marine (DFM)
- gasoline fuel
- sanitary sewer
- potable water
- dry fire water
- electrical power lines

### OUR SOLUTIONS:

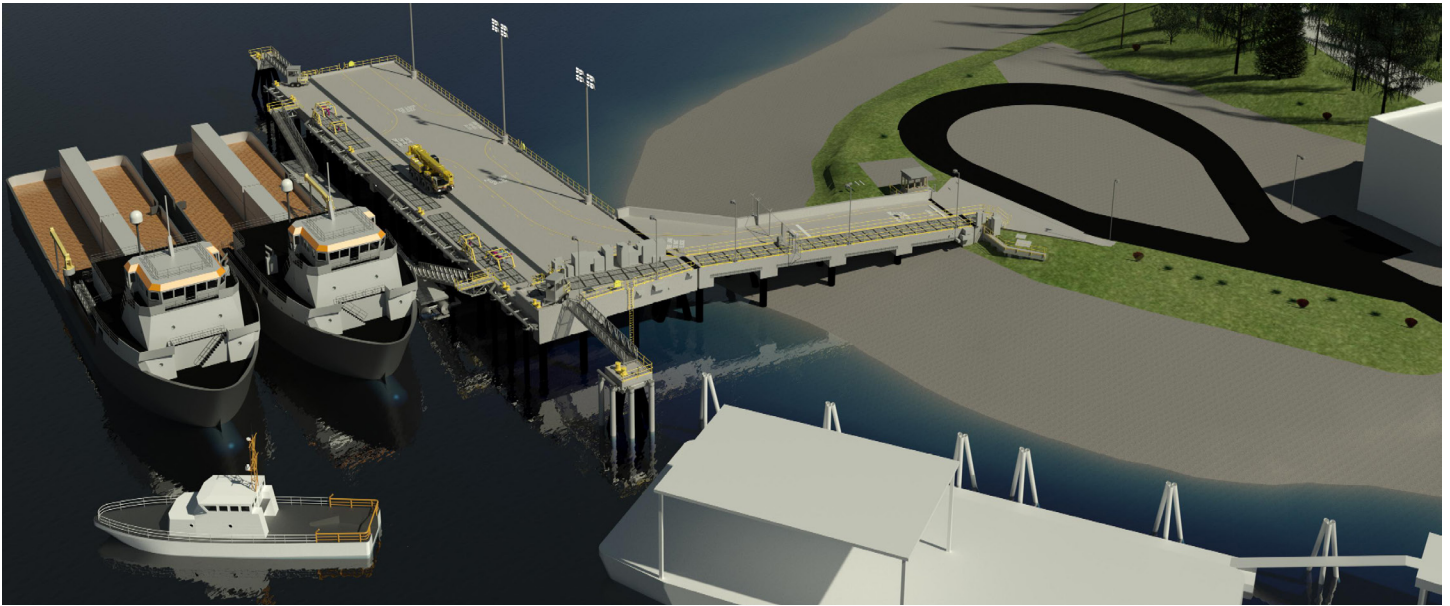
P2S engineers provided full mechanical engineering design services. The fuel float incorporates a utility trench for the fuel lines and other utilities to be routed from the gangway to the utility hookup locations on the float. A 3-foot by 5-foot transition sump (approximately 2-feet deep) will also be included on the fuel float to house the fuel line valves. All utilities will be routed into the float from upland points of connection via hanging supports on the underside of the gangway. The sewage pumpout station on the existing floating fuel float will be salvaged

### CLIENT REFERENCE:

Moffatt & Nichol

Emy Carpenter

P: 206.622.0222 | E: [ecarpenter@moffattnichol.com](mailto:ecarpenter@moffattnichol.com)



## US NAVY

### P-907 Transportation Protection Program Pier & Maintenance Facility

P-907 supports Naval Base Kitsap's Transit Protection Program (TPP) with a permanent berthing pier for two 250-foot blocking vessels; a 18,290 SF Vessel Maintenance Facility (VMF) complete with three high bays, production areas, and administrative space; and a fuel facility including two 20,000-gallon underground storage tanks with double containment piping from the storage and unloading facility to the KB Dock dispensers and a vault to support the P-932 future expansion.

P2S engineers provided full mechanical engineering design services. Utilities on the pier, including potable water, sanitary sewer, oily waste, fire protection, and diesel fuel marine, increased in size to accommodate a future small craft berthing project, and future points of connection, with valves, were provided. Piping for all mechanical utilities is routed in a utilidor with a clean and dirty side; dirty utilities (sanitary sewer and oily waste) will be conveyed in double-walled pipe. The project meets the requirements of UFC 1-200-02 High Performance and Sustainable Building Requirements and will achieve third party certification through the Green Building Initiatives (GBI) Guiding Principles Compliance New Construction for Department of Defense.

**CLIENT REFERENCE:** NAVFAC Northwest, Tyson Boling, PE | P: 360.315.3006 | E: tyson.boling@navy.mil

## US NAVY

### San Diego Naval Base P-440 Pier 8 Replacement

P2s is working with the Navy to replace the existing pier with a new single deck General Purpose Berthing Pier which will be 187,200 SF and will provide capacity for four large ship berths. As the electrical engineer of record P2S is responsible for designing the new site electrical and communications utility system for the Pier 8 facility which will consist of all power, lighting, security, telecommunications, grounding, and fiber optic cabling. Once complete, the utility system will be comprised of loop-fed, medium-voltage, skid mounted substations and SF6 gas insulated switches. SCADA/UCS via fiber optic cable will be used to monitor switchgear status, provide remote control of substation switchgear breakers, and monitor switch status. Construction Cost: \$93 million.

**CLIENT REFERENCE:** NAVFAC Southwest, Alberto Sanchez, Design Manager | P: 619.532.4857



## GREG ALEXANDER

PE

Senior Project Manager, Civil Engineer | P2S

### EDUCATION

MS, Environmental Engineering, University of Southern California

BS, Biology, Harvey Mudd College

### REGISTRATIONS

Civil Engineer,  
California, 74070

### CERTIFICATIONS

- Qualified SWPPP Practitioner/Developer (QSP/D)

### AFFILIATIONS

- Harbor Association of Industry & Commerce (HAIC)
- American Association Port Authority (AAPA) - Environmental/Energy Committee
- International Trade Education Program (ITEP)

Greg Alexander brings over 20 years of analytical and regulatory experience in the public and private sectors. He has focused much of his career on the goods movement and power generation industries. Over that time, he has helped clients successfully navigate the regulatory and technical obstacles necessary to reduce air emissions, operating costs, and eliminate inefficiencies. He has been deeply involved in emission reduction and electrification strategies for ocean going vessels, cargo handling equipment, and on-road trucks. This has included at berth emission controls for vessels, as well as programs to reduce vessel emissions while in transit.

As a senior project manager at P2S, Greg is responsible for ensuring the organized delivery of our services to our clients. He is closely involved with the Harbor Association of Industry and Commerce and American Association Port Authorities.

### RELEVANT PROJECT EXPERIENCE

- **Port of Long Beach**  
Pier J Zero Emissions Infrastructure Master Plan  
Long Beach, CA
- **Port of Long Beach**  
Port-wide Electrical Infrastructure Project  
Long Beach, CA
- **Port of Long Beach**  
Environmental Planning Division Program Management Services  
Long Beach, CA
- **Port of Long Beach**  
Shore Power Infrastructure Report  
Long Beach, CA
- **Port of Long Beach**  
Clean Trucks Program  
Long Beach, CA
- **Port of Long Beach**  
Arc Flash Studies - Multiple Sites  
Long Beach, CA
- **Port of Long Beach**  
Vessel Speed Reduction Green Flag Program  
Long Beach, CA
- **Port of Long Beach**  
Power System Resilience Assessment  
Long Beach, CA
- **Port of Long Beach**  
Container Terminal Microgrid Facility Assessment & Conceptual Design  
Long Beach, CA
- **Port of Los Angeles**  
Air Quality On-Call Services  
San Pedro, CA
- **Port of Los Angeles**  
Pier 400-APM Terminals High Mast Light LED Upgrades  
San Pedro, CA
- **Port of Los Angeles**  
Pier 400 Maintenance & Repair Training Facility  
San Pedro, CA
- **SSA Marine**  
Decarbonization Infrastructure Planning for 19 California & Washington Terminals  
Various Locations, CA & WA



## AKSHAY PRABHU

PE, LEED GA, DBIA

Associate Principal, Senior Electrical Engineer | P2S

### EDUCATION

MS, Electrical Engineering,  
Arizona State University

BS, Electrical Engineering,  
University of Mumbai, India

### REGISTRATIONS

Electrical Engineer,  
California, E21837  
Washington, 21003394  
Alabama, PE50286  
Alaska, 217113

### CERTIFICATIONS

- LEED Green Associate
- Design-Build Institute of America (DBIA) Certified

### AFFILIATIONS

- Institute of Electrical & Electronics Engineers (IEEE)
- Design-Build Institute of America (DBIA)
- American Council of Engineering Companies (ACEC)

Akshay Prabhu has a decade of electrical engineering and project management experience including new system design, electrical system upgrades, medium voltage infrastructure design, facility assessment, and utility master plans. His experience includes electrical design and assessment of projects in ports and harbors, higher education, healthcare, commercial, municipal, and industrial fields. The electrical systems involved in design projects have included building systems, medium voltage (12kV and 5kV) power distribution and substation design, emergency systems, fire alarm systems and other specialty electrical systems.

Akshay has served as a project manager for several MEPT projects as well as electrical engineer providing comprehensive solutions on various building and infrastructure design projects. His other duties include attending meetings, estimating construction costs, project schedules, preparing construction documents, construction administration and preparing electrical distribution system analysis and arc flash assessment reports. Known for his client-focused approach, Akshay builds strong relationships and delivers tailored solutions aligned with client goals.

### RELEVANT PROJECT EXPERIENCE

- **Port of Long Beach**  
Middle Harbor Redevelopment  
Long Beach, CA
- **Port of Long Beach**  
Port-wide Electrical Infrastructure Project  
Long Beach, CA
- **Port of Long Beach**  
Fireboat Stations #15 & #20  
Long Beach, CA
- **Port of Long Beach**  
Harbor Plaza Facilities Site Improvements  
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Seattle, WA
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Terminal 46 Substation Replacement  
Seattle, WA
- **Port of Seattle**  
Terminal 18 Shore Power  
Seattle, WA
- **Port of Vancouver**  
Energy Master Plant, Grant Application & Electrification  
Vancouver, WA
- **Port of Vancouver**  
Berth 8/9 Crane Electrification  
Vancouver, WA
- **Port of Tacoma**  
Clean Energy Services  
Tacoma, WA
- **Port of South Whidbey**  
Clinton Passenger-Only Ferry Dock Replacement  
Freeland, WA
- **Port of Benton**  
Barge & High Dock Facility  
Richland, WA



## Contact

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## Our Locations

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### Los Angeles

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### San Diego

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### San Jose

18 South 2nd Street, Suite 114  
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### Seattle

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