THE PORT OF LOS ANGELES

LAWaterfront

February 2014, Version 2

LA WATERFRONT DESIGN GUIDELINES

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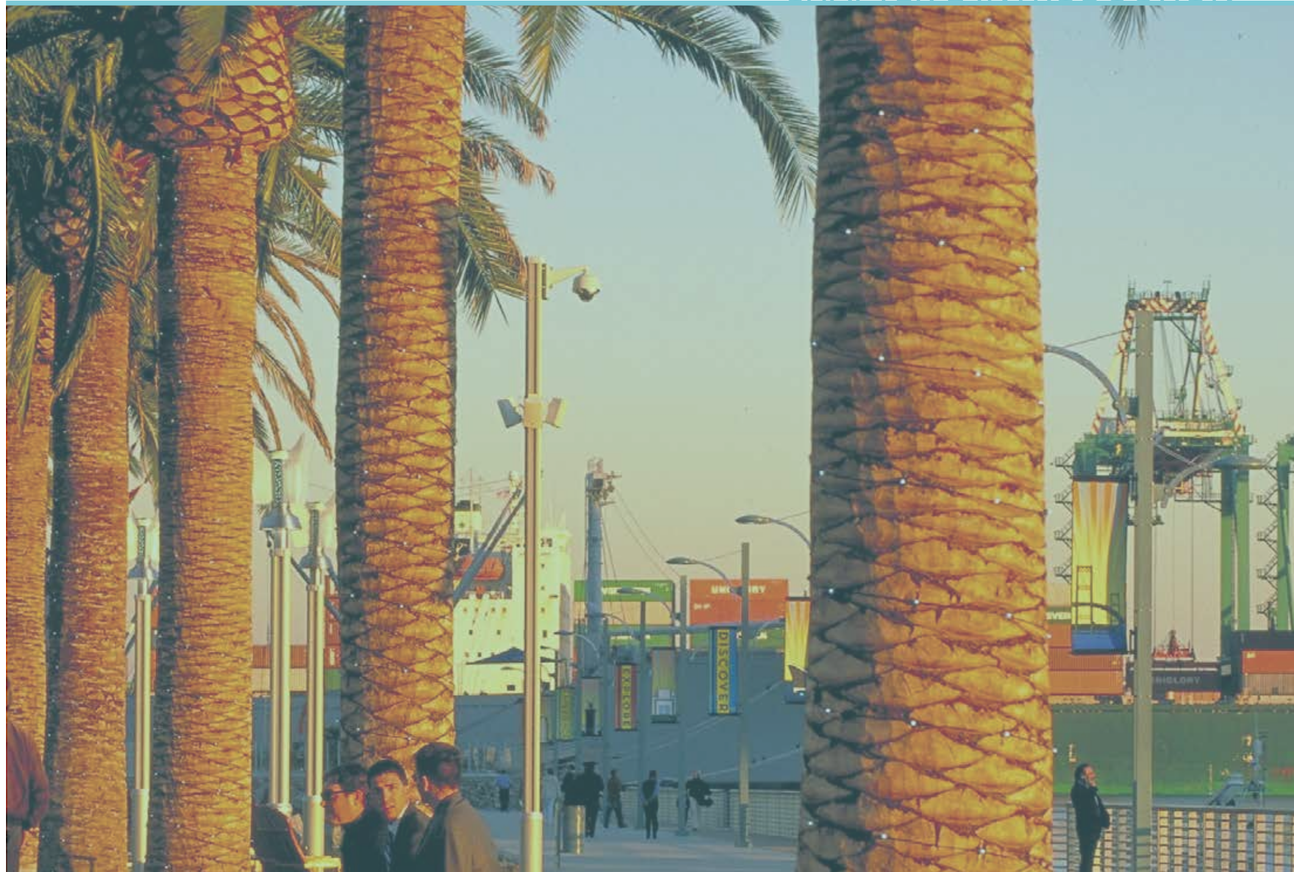

DISCOVERY

1. Introduction

These design guidelines provide the framework for projects to be constructed along the LA Waterfront of the Port of Los Angeles. The LA Waterfront consists of waterfront development and community enhancement projects in the Port's Wilmington and San Pedro districts. This document brings together open space, architectural, signage, lighting, and sustainability guidelines for the unified development of the LA Waterfront, while also connecting with the unique history and visions of Wilmington and San Pedro.

The LA Waterfront has been developed through a partnership among the Port of Los Angeles and stakeholders, including the City of Los Angeles, the Mayor's Office, PCAC, the communities of Wilmington and San Pedro, and adjacent tenants. Years of collaboration have yielded numerous plans and studies focusing on land use, development, economics, transportation, engineering, and design.

In 2002 the Waterfront Access Taskforce for the Community and Harbor developed the Promenade and Downtown San Pedro Interface Project: Final Report proposing a continuous grand promenade. Also in 2002 the Urban Land Institute (ULI) investigated downtown San Pedro and issued San Pedro, California: A Redevelopment Plan for the Downtown and Waterfront. After the ULI report was released, the San Pedro Coordinated Plan Sub-Committee of the PCAC released the San Pedro Coordinated Framework Plan, seeking to bring together previous efforts. Then in 2003 the San Pedro Waterfront and Promenade from Bridge to Breakwater Master Development Plan was completed by the Port. The planning process hosted over nine public workshops and open houses. In 2004 a concept plan was presented to the Los Angeles Board of Harbor Commissoners and the environmental review process was begun. On September 29, 2009, the Board certified the SPWP EIR/EIS, which included a waterfront promenade, new harbors, open space and public access improvements, redeveloped and new cruise facilities, commercial redevelopment, extension of the Waterfront Red Car Line and adaptive reuse of warehouses. A separate study, The Harbor Boulevard Seamless Study, looked at the integration of access and urban design along Harbor Boulevard between the San Pedro waterfront and San Pedro Community.

The Wilmington Waterfront Development Project Environmental Impact Report (WWDP EIR) was certified by the Board of Harbor Commissioners (Board) on June 18, 2009. Project elements include open space, plazas, a waterfront promenade, water features, an observation tower, a Red Car Museum, and commercial and light industrial (green tech) development. These Design Guidelines are broad statements that steer the implementation of waterfront projects. The Design Guidelines are intentionally broad; they are meant to allow designers considerable creative latitude when designing projects. Rather than being prescriptive standards, these guidelines express the essence and character, particularly of the public realm, intended for the LA Waterfront through text and accompanying graphics. The guidelines address issues relevant to the entire LA Waterfront while also identifying guidelines that are specific to a particular area.

LA Waterfront Planning Area

Overview of Planning Area

The LA Waterfront encompasses an area stretching from the Federal Breakwater to the south, and extends north between the water of the main channel and the community of San Pedro, wrapping northeast around the Port to the area adjacent to the community of Wilmington, and ultimately concluding at the water once more at Banning's Landing.

The San Pedro Waterfront Project area extends from the Federal Breakwater to Vincent Thomas Bridge. This area has been identified in the past as the Bridge to Breakwaters.

The Wilmington Waterfront Development Program project area extends from the Vincent Thomas Bridge on the west, along Front Street, Pacific Avenue, John S. Gibson Boulevard, Harry Bridges Boulevard, Anaheim Street, and Henry Ford Avenue, to the Leeward Bay Marina on the east. The center of activity of the project area is in an area directly adjacent to the Wilmington community between Figueroa Street and Broad Avenue and between C Street and Banning's Landing.

Goals of Port of Los Angeles Waterfront Property

A unique and adaptable resource, the LA Waterfront embodies the distinctive character and charm of San Pedro and Wilmington's maritime industrial past and speaks to a future that integrates this history into a modern community amenity. The following are key goals for the development of these two communities:

- Celebrate the significance of the Port, Wilmington, and San Pedro: past, present, and future.
- Improve public access to the LA Waterfront, increasing connectivity and linkages to the communities of Wilmington and San Pedro.
- Create a unified waterfront through the integration of consistent and/or complementary publicly-oriented improvements.
- Establish world-class design to solidify a regional draw to the Port and enhance the visitor experience.
- Reinforce the vitality of Wilmington and San Pedro and serve commercial opportunities along the waterfront.
- Develop a continuous promenade that affirms the waterfront as a public resource.
- Grow the Port in a sustainable manner.

Use and Format of Design Guidelines

What are the Design Guidelines?

The LA Waterfront Design Guidelines serve as a blueprint for the long-term design and development of Port property. The guidelines serve as a reference to project developers and designers, articulating the overall envisioned character and specific design features desired for LA Waterfront projects. The guidelines identify the best examples of existing lighting fixtures, signage, open spaces, and other elements of the public realm. These existing components establish a desired character for the public realm and should be taken as the starting point for the design process for future projects.

While the guidelines primarily address the public realm, their content should be used to inform the design of a complementary private realm. While none of the elements are required and there is broad latitude for creative, responsive design, they do establish a desired unified character and level of quality for the waterfront that should be maintained.

How Should They Be Used?

Project developers and designers should be aware that, while these guidelines speak to issues addressed in other regulatory documents, this document is a supplement to—and not a replacement of—those documents. Therefore, project developers and designers are responsible for complying with all other applicable city, state, federal, and other regulatory documents.

Who Uses Them?

These guidelines are intended to be used by port staff, developers, and members of the Wilmington and San Pedro communities.

These guidelines are intended to be used by port staff when designing or renovating any area of the Port identified in these guidelines. For example, when port staff needs to repair or replace light fixtures within Wilmington, this document will be used as a guide to ensure consistency of style and fixtures. Moreover, when reviewing design documents prepared by outside consultants, the port staff will ensure consultants have copies of this document. Staff will review project construction drawings to ensure consistency with these guidelines.

These guidelines are intended to be recommended by the Port when issuing a request for proposal for development of Port Property within the areas identified in this design guideline book. Developers proposing on projects for Port Property will be required to use these design guidelines. The communities of Wilmington and San Pedro are also encouraged to review projects proposed by the Port using these guidelines.

When Should They Be Used?

The guidelines will be distributed to project designers and also used as a reference by the Public Design Workshops when evaluating projects subject to design review. The general public and affected tenants will attend these project-specific design workshops. A minimum of two workshops, preferably three, will be conducted to solicit design, present design alternatives based on feedback, and present the preferred design.

How Are They Structured?

Within this document, each chapter follows a similar organization. Broad goals are presented to communicate the vision and overall objectives of the topic. For example, lighting will improve safety and also provide visual connectivity with surrounding communities. Any general guidelines that apply universally across varying types or topics are presented up front. These are followed by more technical guidelines that apply to all types. Guidelines are then presented for each type or larger topic. Topics are organized as follows: open space; architectural character; signage; lighting; and sustainability. The signage and lighting sections contain more detailed guidelines than seen in a typical design guideline document.

The design guidelines within each chapter are presented in a consistent fashion, according to the model shown to the right. Guidelines contain broad direction and, in the case of lighting fixtures and signage, specifications based on existing installations.

Sample Page from Guidelines

Existing Plans

Over the last 15 years, the Port of Los Angeles has undertaken numerous planning efforts directed at transitioning their waterfront properties adjacent to communities from industrial to more commercial and recreational uses. The following describes two areas and some of the more significant planning efforts for communities adjacent to the Port of Los Angeles that provide the basis for these guidelines.

Wilmington and San Pedro are waterfront gateways to the City of Los Angeles. Both of these vibrant communities sit adjacent to the Port of Los Angeles, which is the largest container port in the country. Following is a more in-depth description of these two communities and their corresponding planning efforts.

Wilmington

The Wilmington Waterfront Development Program, prepared in 2004 with the Wilmington Waterfront Development Subcommittee and accepted by the Board, establishes the broad conceptual framework for the Wilmington Waterfront. It is consistent with earlier plans prepared for this area, including the Wilmington-Harbor City Community Plan, a part of the City of Los Angeles General Plan. The Board approved the EIR in June of 2009.

The Wilmington Waterfront Development Program establishes a framework for public and private improvements that will enhance community life for Wilmington and ensure the long-term viability of adjacent Port of Los Angeles operations. The program creates a vibrant residential community and vital and active industrial uses that can co-exist. This program also reflects the Port's ongoing efforts to improve Port operations, air quality and overall environmental stewardship, community relations, public access, and the character and "branding" of the LA Waterfront.

San Pedro

Prepared in 2005, the San Pedro Waterfront Master Development Plan establishes the overall conceptual plan and design intent and guidelines for waterfront improvements to the San Pedro portion of the Port waterfront. The planned and implemented improvements in the San Pedro waterfront set the stage and design standards for improvements in Wilmington and along the entire waterfront, contributing to the Port's vision for a "unified waterfront." The Board approved the plan in concept (and the EIR based on the plan) in September of 2009

The principal goal of the San Pedro Waterfront Plan is to improve public access to San Pedro's main attraction — its working and recreational waterfront. As such, the design of the plan is focused on creating an active, high quality, varied, and accessible environment at the water's edge through public and private amenities. The success of the plan relies on the proposed public improvements and the character of development that defines and activates the public realm rather than on specific uses. Public improvements, such as an extensive waterfront promenade and network of recreational opportunities, are the backbone of the plan.

Waterfront Sub-Areas

Following is an overview of the character of each of the separate planning sub-areas that constitute the larger LA Waterfront. The description of each sub-area provides a general overview of its existing character and conditions as they exist today, primary land uses and major public infrastructure and open space investments.

LA Waterfront Sub-Areas

Wilmington Sub-Areas

W1: Waterfront District

The Waterfront District is composed of a linear series of plazas, parks, and terraces that provide direct, safe, and inviting access to the water's edge. Recent improvements have overcome one of the biggest obstacles in reaching the waterfront – the existence of active railroad lines – by placing a 5-acre raised park space on an expansive bridge beginning near A Street to the north. The bridge also crosses Water Street, relocated from the water's edge and placed adjacent to the railroad. The relocation of Water Street creates a 7-acre open space adjacent to Banning's Landing and unobstructed access for pedestrians. The park provides places for public gathering, informal play, sitting, and promenading.

EAST: *North Avalon Boulevard*
NORTH: *East Harry Bridges Boulevard*
WEST: *North Marine Avenue/South Fries Avenue*
SOUTH: *Main Channel*

W2: Industrial District/ Avalon Corridor

The industrial area between Lagoon and Broad Avenues builds upon the area's existing character, providing opportunities for infill development of light industrial uses. The existing north-south streets afford primary access to area businesses. C Street, although fronted by industrial uses, has more of a pedestrian-character promoted by urban design guidelines and landscape improvements. The multi-use California Coastal Trail and historic Red Car Line form the southern edge of the district along Harry Bridges Boulevard. A diagonal open space parkway provides public access along an historic railroad right-of-way, as well as an outdoor gathering space for the future Red Car Museum.

Avalon Boulevard is a central commercial corridor leading to the Waterfront District. The corridor emphasizes commercial activities, such as maritime-related professional services, storefront retail, and, possibly, an open-air market (Mercado) on the block southwest of the intersection of Harry Bridges and Avalon Boulevards. The street's character and land uses are oriented to pedestrians. The gateway intersection to the Wilmington waterfront (at Avalon and Harry Bridges Boulevards) incorporates two plazas, one on the northwest corner at the terminus of the historic Red Car and the other on the southeast corner. The plaza on the southeast corner at Avalon Triangle Park commences the network of open spaces leading to the water's edge.

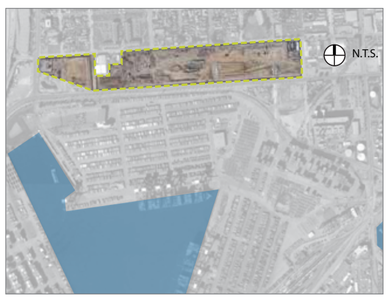
EAST: *North Avalon Boulevard*
NORTH: *East C Street*
WEST: *Lagoon Avenue North*
SOUTH: *East Harry Bridges Boulevard*

W3: Wilmington Waterfront Park

With the vacation and removal of most north-south streets (King Avenue excluded), the buffer between Figueroa Street and Lagoon Avenue is a mostly continuous open space parkway offering places for public gathering, community events, informal play, sitting, and promenading. An iconic gateway element at the western end of the Wilmington Waterfront Park identifies Wilmington for those traveling on the Harbor Freeway or using the freeway interchange at Harry Bridges Boulevard. Farther east on the north side of the Wilmington Waterfront Park along C Street is a series of multi-use open space fields for informal recreation, pick-up games, and family events. A plaza at the east end, across from the Wilmington Recreation Center, offers a central venue for community events. Public art punctuates the open space, enriching the experience of visitors to the area.

The southern portion of Wilmington Waterfront Park serves as a barrier between Port operations and truck traffic on Harry Bridges Boulevard and surrounding residential areas. This barrier uses raised landforms and a tree canopy to offset visual, noise, and air pollution. It is also an attractive backdrop to the informal play areas and serves as a dramatic location for the California Coastal Trail. In selected areas at-grade, north-south access points along former street rights-of-way connect bicyclists, pedestrians, and emergency and maintenance vehicles through the landform to Harry Bridges Boulevard.

The California Coastal Trail runs atop the landforms on Wilmington Waterfront Park's southern edge, offering stunning views out to Port operations and the harbor. The Coastal Trail connects to San Pedro and to points east via crosswalks on Harry Bridges Boulevard at Figueroa Street and Avalon Boulevard. The Coastal Trail and an enhanced C Street on Wilmington Waterfront Park's northern edge provide safe and attractive pedestrian and bicycle connections to Avalon Boulevard and its linkage to the Wilmington waterfront. The historic Red Car Line links San Pedro with Avalon Boulevard along a right-of-way adjacent to Harry Bridges Boulevard.



EAST: *Lagoon Avenue North*
NORTH: *East C Street*
WEST: *Figueroa Street and Mar Vista Avenue*
SOUTH: *East Harry Bridges Boulevard*

EAST: *Bound by Figueroa Street*
NORTH/SOUTH: *Runs between the Harbor Freeway (110)/ John S Gibson Boulevard to the South*
At John S Gibson Boulevard/North Pacific Avenue transition, runs between North Pacific Avenue/Knoll Dr. to East
WEST: *Ends at Vincent Thomas Bridge*

W4: Red Car Line Connection

The Red Car Line Connection area extends on John S. Gibson Boulevard from the Vincent Thomas Bridge on the south to Harry Bridges Boulevard to the north. John S. Gibson Boulevard is a four-lane roadway with a painted or raised median, on-street bicycle lanes on the east side, and a continuous 12-foot wide sidewalk on the east side of the street.

The area is reserved for a potential Wilmington Extension of the existing 1.5-mile Waterfront Red Car Line, a vintage streetcar that links together the waterfront's key activity centers. The Wilmington Extension will enhance the linkages between the San Pedro and Wilmington communities and synergize redevelopment opportunities along the entire waterfront area. The rail segment would be within or adjacent to the John S. Gibson Boulevard right-of-way, using either a median or the current freight corridor on the east side of the street.

San Pedro Sub-Areas

SP1: Cruise Terminal

This sub-area is characterized by the iconic Vincent Thomas Bridge and working Port operations both at the Cruise Terminal and across the channel. The Cruise Ship Promenade just south of the bridge, the Gateway Plaza and Fanfare Fountain, and the Harbor Boulevard Promenade enhancements completed between 2006 and 2009 have provided a significant opportunity for local residents in the adjacent residential neighborhoods, as well as visitors to the LA Waterfront, to experience the Port and its majestic workings.

EAST: *Main Channel*
NORTH: *Vincent Thomas Bridge*
WEST: *South Harbor Boulevard*
SOUTH: *West 3rd Street Pierhead*

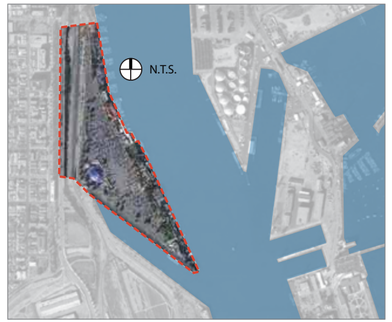
SP2: Downtown Harbor

The Downtown area is characterized in the upland area by the San Pedro City Hall and the termination of 6th Street, the historic and most important retail street in the downtown area. On the water's edge is the historic Ferry Terminal (today a Maritime Museum) and Fire Boat Station

EAST: *Main Channel*
NORTH: *West 3rd Street perpendicular to Pierhead*
WEST: *South Harbor Boulevard*
SOUTH: *West 7th Street perpendicular to Pierhead*

SP3: Ports O' Call

Characterized today by a varied and largely disparate grouping of restaurants and shops along the waters' edge, the Ports O' Call Village does not currently provide a continuous walking/promenading experience along the water. One of the most character-defining areas is the SP Slip, the working fisherman's harbor, which should be preserved and enhanced as an authentic element of any future plans.



EAST: *Main Channel*
NORTH: *West 7th Street perpendicular to Water/Harbor Line*
WEST: *South Harbor Boulevard*
SOUTH: *Water/Harbor Line and between Water/Harbor Line and West 13th Street*

SP4: Parks District

The San Pedro Park encompasses approximately 18 acres north of 22nd Street, south of Crescent Avenue, and west of Sampson Way. The San Pedro Park is designed to expand on and complement the 16-acre 22nd Street Landing Park that was previously approved under the San Pedro Waterfront Enhancements Program.

EAST: *Main Channel*
NORTH: *Water/Harbor Line and West 13th Street*
WEST: *South Harbor Boulevard/South Crescent Avenue*
SOUTH: *Bound by West 22nd Street/North edge of Study Area SP5*

SP5: City Dock No. 1

City Dock offers unique opportunities for marine research including its proximity to the open ocean, alongside space for research vessels, a significant amount of land, proximity to services and businesses in San Pedro, good access to freeways for researchers and students, and an attractive waterfront site.

The Historic Warehouse No. 1 will be adaptively reused, as will the wharf-side warehouses and public access will be provided.

EAST: *Main Channel*
NORTH: *Bound by South edge of Study Area SP4*
WEST: *Water/Harbor Line*
SOUTH: *Water/Harbor Line*

SP6: Cabrillo Marinas

The Cabrillo Marinas District serves both visitors and locals, with hotel accommodations, offices, restaurants, boating facilities, public parking, and other waterfront serving uses. A continuous promenade and other public gathering spaces are provided throughout the Marinas District.

EAST: *Main Channel and West edge of SP7*
NORTH: *West 22nd Avenue*
WEST: *Via Cabrillo Marina and Shoshonean Road*
SOUTH: *from West 31st Street to West edge of SP7*

SP7: Outer Harbor (lefthand side)

The Outer Harbor Cruise Terminal area contains a Fire Station, a former ship repair facility, and an omni terminal break/bulk operations. Operations for the omni terminal are anticipated to end shortly. 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.

Future use includes a 6-acre open space park with landscaping, hardscape, lighting, benches, two new cruise terminals serving two cruise berths, and surface parking.

EAST: *Main Channel*
NORTH: *West 31st Street perpendicular to the Water/Harbor Line*
WEST: *Shoshonean Road and Stephen M White Drive*
SOUTH: *Main Channel*

SP8: Cabrillo Beach (righthand side)

Beyond Via Cabrillo Marina, extending to the south along the east side of Shoshonean Drive, are the Cabrillo Beach Youth Camp, the Salinas de San Pedro Saltwater Marsh, the Cabrillo Marine Aquarium, picnic areas, and the historic beach house. At the terminus of the SP8 sub-area is Inner Cabrillo Beach, a public recreation area used for swimming and other beach activities operated pursuant to agreements with the Los Angeles Department of Recreation and Parks. This area also features a public boat launch and public parking. The aquarium is used for educational purposes and frequently hosts large school groups.

EAST: *Main Channel*
NORTH: *South edge of Study Area SP6*
WEST: *Main Channel*
SOUTH: *Main Channel*

2. Open Space

The open space design guidelines are intended to provide the overall vision for the LA Waterfront along with general direction for the development of open space and public amenities. The guidelines address open space, public access, and public amenities. Included in this section are the unifying open space elements for the entire waterfront along with a vision for the open space types, character, landscape elements, and plant materials for the promenade. The open spaces and streets of the LA Waterfront will establish a unified character and high quality public realm for the area and improve connections with Wilmington and San Pedro.

The system of open spaces and circulation will set the tone for the public realm of the LA Waterfront, creating the lasting fabric for the community and giving the place its character. An inter-connected series of waterfront open spaces, promenades, and street corridors is envisioned to re-establish visual and physical connections to the waterfront, create strong connections from the waterfront to upland areas, and provide much- needed open space. Building upon existing attractions, the waterfront open space system will capitalize on the waterfront location; balance and integrate recreation, art, and nature; and provide a series of open spaces to create an authentic, local waterfront.

The central feature of the open space system will be a continuous pedestrian promenade extending from the Federal Breakwater to Banning's Landing, parallel to the waterfront. This promenade will provide extensive public access to a full range of recreational activities at the water's edge. The primary feature of the circulation system in Wilmington is the improvement of Harry Bridges Boulevard and adjacent interconnected parks, plazas, and landscaped bridge increasing linkages between the community and the waterfront.The main feature of the circulation system in San Pedro is an improved Harbor Boulevard, promoting both pedestrian and vehicle access to the waterfront and connecting the gateway from the 110 Freeway to Cabrillo Beach. The grand boulevard also integrates the Red Car Line and offers connections to the promenade.

This section presents guidelines for how to configure and design open space and public access, including the promenade, sidewalks and paths, plazas, and playgrounds. These guidelines also address plant materials, site furnishings, paving and wall materials, water features, and public art.

Public Realm Goals

- Unify the LA Waterfront through improvements to the public realm.
- Design a vibrant open space system with a continuous waterfront promenade and areas for recreation that serve both the immediate community and visitors.
- Create an active, high-quality, varied, and accessible environment at the water.
- Ensure strong visual and physical connections between the waterfront and upland areas, including Wilmington and San Pedro.
- Reflect the environmental and cultural history of the region as a working maritime community in the design of open spaces and public amenities.
- Showcase the rich marine ecology of the area.
- Encourage low impact, sustainable design within the public realm.
- Use high-quality materials that are well suited for the waterfront location and require low periodic maintenance.

General Public Realm Guidelines

Flexibility

- Guidelines for the public realm are general and establish an overall character for the LA Waterfront through common materials and landscape treatments.
- Flexibility should be maintained to encourage unique designs for projects within the Port that remain consistent with the overall waterfront character.

Materials

- Site furnishings, railings, fences, bollards, and other features in the public realm should be made of high-quality, durable materials that are suitable for the marine environment with a long lifespan and minimal periodic maintenance.
- These include aircraft-grade stainless steel, aluminum, bronze, brass, concrete, or tropical hardwoods.
- Any tropical hardwoods should come from certified forests approved by the Forest Stewardship Council (FSC).

Identity

- Hardscape elements within the public realm should be selected that are appropriate for their use and setting within the landscape and should be designed or selected so as to reinforce the identity and sense of place of the sub-area and the larger waterfront.

Code Compliance

- Open space and public rights-of-way should be in compliance with all applicable city, state, and federal standards. More specifically:
  - Sidewalks, paths, and crosswalks and curb ramps, as well as the materials from which they are constructed, should comply with City of Los Angeles, State of California, and Federal Americans with Disabilities Act (ADA) codes and standards.
  - Bike facilities should comply with the California Department of Transportation (Caltrans) Highway Design Manual bikeway classifications and City of Los Angeles and Los Angeles Department of Transportation codes.
  - Seating, railings, and structures and materials in play areas should comply with ADA codes standards for accessibility.

Public Realm Style Guidelines

Circulation

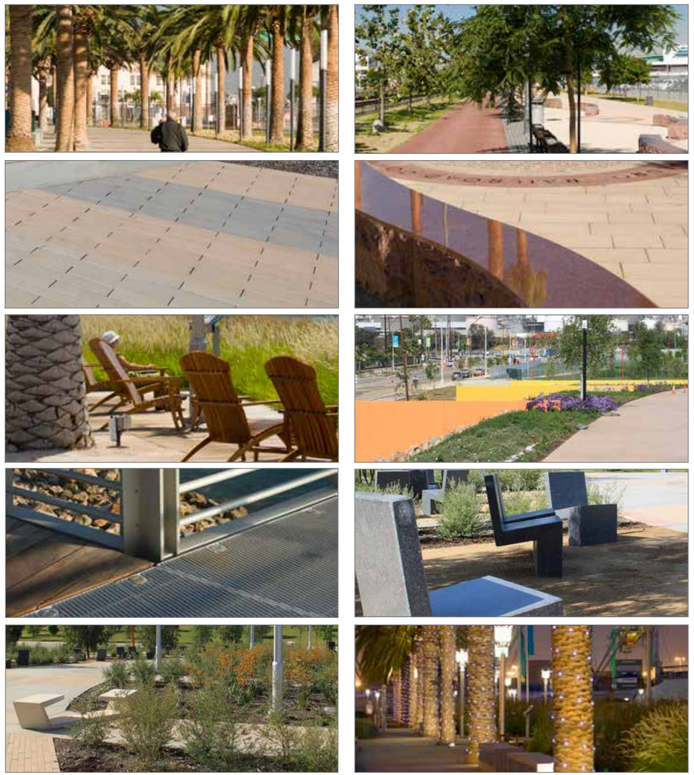
A new system of streets and pedestrian linkages will increase access to the waterfront, provide linkages to upland areas, and ease circulation throughout the waterfront. In addition, rights-of-way should protect and enhance existing water view-corridors and provide increased visual access to the waterfront.

Promenade

A continuous pedestrian promenade lines the LA Waterfront. This path runs from W1 – Waterfront District to SP8 – Cabrillo Beach. It is a unifying open space/circulation element for the LA Waterfront. This multi-purpose public open space corridor is a critical investment toward the redevelopment of the harbor.

The promenade provides continuous off-street circulation for pedestrians and bicyclists with views to the harbor. This pathway is seamlessly integrated with water taxis, bike paths, and the Red Car Trolley Line and connects a series of smaller adjacent parks and plazas. It also offers connections to the California Coastal Trail. It offers a generous right-of-way and ample opportunities for seating, walking, rollerblading, biking, people-watching, and fishing, as well as an area to host art shows, festivals, and opportunities for learning about the waterfront. It is also a key site for public art.

In most locations, the promenade will have two zones. The zone closer to the water's edge should focus on providing access to the water and water activities. The zone farther from the water's edge should include separated walking and cycling paths, seating areas, and facilities for events. It will be characterized by a continuous shaded alley of trees. In some places along the promenade, these two zones will be separated by a grade change. For example, as the promenade runs through Wilmington, it is raised atop a landform along Harry Bridges Boulevard that is at grade along C Street.



Steel, wood, and concrete are widely used throughout the site. Granite and decomposed granite are found in smaller quanitites. Mediterranean climate adapted plants are the dominant plant materials.

Guidelines

- A continuous promenade should be provided, where possible, at the water's edge. Generally this path should be 30 feet wide but can vary in width based on anticipated pedestrian and bicycle traffic and given varying site conditions.
- Views of the water should be maximized whenever possible.
- Create and provide for multiple zones of use within the promenade defined by different uses, varying materials, and grade.
- Locate guardrails or low walls as required along the edges of the promenade to protect pedestrians from elevation changes.
- Provide distinct marked paths for walking and cycling to separate use and promote safety.
- Create a unified pathway feeling through the consistent application of design and materials.
- Utilize rows of trees to define pathways.
- To the extent feasible, design with a significant material change within 6 feet of the water's edge using wood for pathways and metal grating in areas over water.
- Provide seating elements, including benches, seat walls, and stairs, with water views along the length of the promenade.
- Locate furnishings, such as benches and waste receptacles, along a consistent zone adjacent to or within the promenade.
- Integrate pedestrian lighting into the design of the promenade.
- Integrate banners into the light fixtures at the waterfront to advertise events, festivals, and seasonal celebrations.

To the left is a palette of common materials that are found throughout the promenade. These materials establish a consistent design theme that defines the character of this vibrant public space. Newly developed portions of the promenade should either use these same site furnishings, fixtures, and landscape materials or use elements of the same materiality.

Rights-of-Way

The public rights-of-way, including sidewalks, paths, and the waterfront promenade, provide essential connections throughout the Port properties while also providing meaningful public spaces. Rights-of-way will be well-designed spaces with public amenities such as seating, lighting, art, and interpretive panels. These spaces will not be barriers but rather function as a seam that connects the waterfront to the neighboring communities. The Port's sidewalks and paths will offer a great shared public resource.

- Pathways should connect parks and plazas to other public areas. Where segments must be separated, visual cues should provide connections.
- To the extent possible, pathways should connect to existing or planned city-wide and regional trails such as the California Coastal Trail.
- Sidewalks should be the primary pedestrian connections along city streets.
- Sidewalks should have a minimum width of 8 feet to allow pedestrians to move freely and comfortably.
- Sidewalks in areas with higher use and commercial or mixed-use facilities should be wider, a minimum of 12 feet wide.
- Streets should create a complete multi-modal system that prioritizes walking, bicycling, and transit use over private automobile use.
- Design streetscapes to balance a range of functions including safe pedestrian travel, bicycle, transit, and vehicle movement; use as a public space; stormwater management; parking and loading requirements; and emergency access.
- To ensure that sidewalks and paths are active public spaces, provide amenities such as landscaping, lighting, seating, and interpretive displays. These amenities should be balanced with the need for clear and accessible travel for pedestrians.
- Three distinct zones should be established: frontage zone, throughway zone, and furnishing zone. The frontage zone is adjacent to the property line and functions as a transition between private and public space. The throughway zone is for unimpeded pedestrian travel. The furnishing zone is for the dedicated siting of street trees, landscaping, transit stops, lighting, and other furnishings.
- To improve the safety of the sidewalk, pedestrians should be buffered from moving traffic through the use of landscape, site furnishings, or parallel parking.
- Crosswalks and curb ramps should be located at each corner intersection to provide safe, accessible street crossings. Signalized crosswalks should be provided at major intersections.
- Design intersections to promote pedestrian safety and comfort by minimizing crossing distance, maximizing pedestrian visibility, and slowing traffic.
- Curb cuts should be minimized with alleys used, where possible, for service and access functions to reduce disruption to the streetscape and avoid conflicts with pedestrians and bicycles.
- Wherever possible, commercial, industrial, and large residential properties should consolidate driveways by interconnecting parking lots and loading area entries.
- Utilities should be located to minimize disruption to pedestrian travel and site furnishings or landscaping while still maintaining necessary access for maintenance and emergencies.

Bicycle Facilities

- Bike lanes should be a minimum width of 5 feet, wider if space is available or usage is high.
- Provide designated bike lanes marked with non-slick reflective material and stencils.
- To increase visibility, lanes can be colored continuously in addition to striping. A portion of a lane can be colored in high-conflict areas to alert drivers of the presence of bicyclists.
- Dashed markings should be used through intersections to guide bicyclists and alert drivers to the presence of bicyclists.
- On lower volume streets, bicycle traffic can share the roadway with vehicles. This should be indicated through stencilled arrows "sharerrows" noting the shared lane.
- In active use pathways, bicycle and pedestrian traffic should be separated for safety reasons. These pathways should be indicated with stencils.
- Drainage grates should either not be placed in bike lanes or designed so as not to disrupt safe and continuous travel by bicycles.
- Provide secure and convenient short-term bicycle parking at mixed-use and commercial locations, parks, work sites, and transit stops.

Sharrows mark streets where bicycle traffic shares the roadway with vehicles to alert drivers

Bicycle traffic and pedestrian traffic should be separated in active use pathways

Open Space

Open spaces are noteworthy places on the waterfront because the quality of their design sets the tone for the public realm. The open space system is envisioned to consist of a network of connected smaller outdoor recreational areas that provide amenities for the immediate neighborhoods while also providing places for regional events. The system provides as much enhanced public access to a full range of public activities at the water's edge as commercial operations and security needs allow. Plazas and open spaces of varying scales along the waterfront are the settings for casual gatherings, public events, informal recreation, and the celebration of the area's history and culture. Each component of the open space system represents opportunities to develop a strong sense of place unique to the LA Waterfront. The design of open spaces must reflect the environmental and cultural history of the region as well as the current maritime activities.

Parks

- All uses should be in compliance with the California Tidelands Public Trust Doctrine and should be water dependent or related. Acceptable uses include recreation, bathing, swimming, boating, habitat, wildlife refuges, and open space.
- Parks should encourage diversity in activities (passive and active recreation uses) to attract a range of users and provide facilities including restrooms, wayfinding, and bicycle facilities.
- Parks should connect and respond to surrounding land uses while providing an overall unified character.
- Develop parks as inviting, urban open spaces with vegetation, continuous pedestrian pathways, and a built edge of appropriate scale and character along its length.
- Parks should connect to citywide, regional, and statewide systems such as the California Coastal Trail.
- Provide pathways that link to pedestrian and bicycle systems.
- Allow appropriate hardscape to accommodate a variety of uses.
- Reinforce views of the harbor.
- Encourage accessory uses such as restaurants or pavilions.
- Design active recreation spaces for a range of multi-users.
- Design paths, crossing spaces, and seat groupings to encourage incidental social interactions. Shaded places and sheltered outdoor spaces can provide this opportunity.
- Security cameras may be included in all open spaces to encourage safety.

Plazas

- Plazas should engage the public, be accessible to the community, and provide opportunities for public/semi-private gatherings.
- Plazas should be constructed of the highest-grade materials in the landscape.
- Infrastructure for special events, including water, power, and data, should be designed into the layout of select plazas.
- Plazas should incorporate shade either through structures and/or tree canopies.
- Opportunities for seating should accommodate both individuals and groups.
- Furnishings, such as waste receptacles and bike racks, should be accessible from plazas but located away from paths of travel, gathering areas, or viewsheds.
- Security cameras may be included in all plazas to encourage safety.

Landscape Elements and Plant Materials

The waterfront climate consists of a mild marine environment with usually foggy mornings, clearing to warm afternoons. The temperatures are typically mild in the winter and warm to hot in the summer, and the air seldom ever dry. Most of the open space areas are not directly in contact with the ocean influence; however, on-shore winds carry salt spray inland. The soils throughout much of the area consist of fill materials due to the expansion of Port operations over the past century.

The selection of planting materials should be carefully considered to create a palette that enhances the character and image of the open space while responding to the local climate. Due to the different functions, context, and physical and geographical constraints of the open space areas, a distinct planting list should be determined based on design requirements and the soil, horticultural, and microclimate conditions of the specific sites. Native, naturalized, robust plants should be selected, and all species selected should be researched to ensure they are not designated as invasive in the state of California. Additionally, care should be taken when selecting planting materials adjacent to water features given the potential impact of persistent moist conditions as well as chemicals used for water treatment.

Plant Palettes should focus on increasing biodiversity and reducing water and fertilizer usage as well as maintenance needs. A combination of California native plants and Mediterranean climate adapted plants are acceptable choices. Water consumptive plantings shall be used sparingly. Ornamental grasses shall also be used extremely sparingly due to high

maintenance needs and lack of year-around appeal. Canary Island Palms shall no longer be used due to their susceptibility to Fusarium Wilt. Designs need to take into consideration all prevalent diseases in the local region affecting tree and palm species and eliminate or severly limit the amount of susceptable species used. Increasing plant species biodiversity around the Port of Los Angeles will not only assist with resisting disease and pestilence, but will create unique character and aesthetics for each of the various zones of the Harbor area.

Mexican Fan Palms mark important civic gathering areas and give vertical presence. Large feather palms can be used in significant gathering spaces where a tree canopy is not desirable, and can be used to frame a pedestrian space. Shade trees should line promenades to provide shade for users. Use appropriate plantings for screening undesirable views. Avoid overly dense shrub plantings that create securirty and public safety hazards. Where possible, use a naturalistic planting design with native plants to create a sense of place and history as well as to minimize maintenance needs. Using naturalistic plantings will create landscape that allows for plants to be pruned or replaced without disrupting the look of the entire planting area and will help provide year-round appeal, as well as reduce water usage and fertilizer inputs. In significant gateway and high use pedestrian areas, plants with strong architectural forms arranged in simplistic designs can be utilized to create a dramatic impact.

Soil

- Select plants that tolerate marine conditions including salts, wind, and local soil conditions where planting areas are exposed to the ocean and salt spray.
- Test soils in project areas in the project design phases and include soil improvement measures in project documents.
- Mulch all tree and shrub beds with 2 to 4 inches of high-quality shredded bark mulch. Maintain this depth to reduce water use and weeds.

Trees

- Canopy trees should be used to create shade for pedestrians on sidewalks and in seating and gathering areas.
- Plant trees no smaller than 24” box size in general. On streets and in areas where shade is desired, plant larger sizes to provide shade faster. Select tree species with long lifespans.
- Avoid trees with known pests and diseases or that are known to damage pavement or utilities.
- Provide adequate root zone space for trees in all planting areas and raised planters. Wherever possible, provide continuous or planting areas between trees to increase the root zone. Take into consideration future growth and minimize impact on lighting features such as at-grade flood lights and strings of tree-mounted lights.
- Use structural soils or a structural cellular support system under paving to allow for root growth. Install root barriers at the edge of pavement, not at the edge of the rootball.
- Continuous planting areas between trees should be provided, where possible, to increase air and water infiltration into the root zone.
- Structural planting soil or a structural cellular support system should be used for trees in paved areas. Structural soil or support system should be extended to the extent of pavement to encourage root growth to adjacent planting areas.

Ground Cover

- Use turf in areas intended for recreation and gatherings. Synthetic turf can be considered in lieu of natural turf to reduce maintenance and watering demands. Use low-growing ground cover in other areas to reduce watering and maintenance needs.
- No planting material should be used that is classified as a California State noxious weed so as not to pose an invasive threat.

Maintenance

- Select plants that can be maintained in their natural forms to reduce required trimming, energy use, and green waste.
- Develop plantings with a hierarchy of maintenance needs where highest use areas and selected gardens can afford higher maintenance.

Spatial Considerations

- Use vegetation to support spatial definition, define views, or to enhance sense of place.
- Maintain required sight distances and visibility along streets and at curb cuts.
- Vines and shrubs should be used to screen parking, service, and loading areas from public view. When adjacent to pedestrian walks, plant materials should be appropriately scaled to minimize hiding areas or pockets .

Sustainability

- Reduce, if not eliminate, dry weather runoff flows through the use of landscaping irrigation controls.
- Highly efficient irrigation equipment compatible with the Port systems should be used for all planting areas. Irrigation systems should be fully automatic and designed with moisture sensors and automatic shut-offs. The system should be designed for future integration into a non-potable water system.
- Install reclaimed water systems for landscaping.
- Where trees are surrounded by pavement, utilize porous pavements to allow for water and gas exchange. Use decomposed granite as the surface of tree wells wherever possible.
- Install a minimum of 20%, with a goal of 50%, native or drought-tolerant plants.

Site Furniture Palette

- Select appropriate plant materials and use other methods to minimize the amount of landscaping waste. Compost green waste on site or allow green waste to be used as mulch in planting beds.
- Select plants with low water use. Where moderate and higher water use is required, plants should be consolidated and grouped by hydro-zone for water use efficiency.
- Select shrubs and groundcovers that can serve as wildlife habitat, encouraging the presence of migratory birds, butterflies, and other species.
- California native or compatible plant species should be used where possible.
- Select plants that require minimal fertilization and pest control to improve stormwater quality. Use integrated pest management when possible.
- Select plant materials for bioswales or other stormwater cleansing based on filtration qualities.
- Shade trees should be used in surface parking lots to reduce the heat-island effect at a minimum ratio of one tree per every six spaces.

Site Furnishing

The relationship of landscape furnishings to buildings, plazas, walks, and promenades is important to the character of the designed landscape. All of these elements, in combination, reinforce the design, provide identity, and create a sense of place. These elements range from the smaller scale of materials such as paving, railings, and plantings to the larger scale of public art and site furnishings. While all furnishings are functional some additionally serve as art pieces, such as the sinuous benches along the San Pedro waterfront or tiles inlaid in concrete benches.

Site Furnishing

The family of furnishings for the LA Waterfront consists of seating, waste and recycling containers, bike racks, drinking fountains, picnic tables, and shade structures. They are made of a consistent palette of materials including wood, concrete, and steel that are appropriate to the waterfront location. All of these elements have the potential to reinforce strong design themes, identity, and sense of place. A palette of the elements for Wilmington and San Pedro is found below. New site furnishing should be of a similar materiality and character.

- All elements of the site furnishing palette should support and enhance the maritime nature of the site.
- Site furnishings should be designed or selected in concert with the site interpretive program.
- Appropriate and durable materials suitable for the marine environment include stone, metal (bronze and brass), concrete, and hard woods such as ipe and teak (when allowed to weather naturally).
- Metals should have rust-inhibiting finishes such as galvination or powder coating and be resistant to UV light, chipping, flaking, and salt spray.
- Anti-graffiti coating (either liquid-applied non-sacrificial surface sealer or liquid-applied sacrificial surface coating) should be used to minimize maintenance.
- Waste receptacles should be identifiable as recycling collection containers, and quantities should be determined to allow the separated collection of waste by glass/plastic, paper, and general waste, unless other recycling programs are conducted.
- Waste receptacles should have lockable covers

Paving Palette

and removable liners to conceal waste and allow for simple maintenance. They should be sized appropriately based on anticipated use of areas to reduce maintenance.

- Seating should be selected to provide comfortable opportunities for resting, and different sizes should be grouped to facilitate diversity in usage.
- Seating should allow a free flow of pedestrian traffic, offer clear sight lines, and not pose a hazard to anyone using the streets, sidewalks, or plazas.
- Freestanding moveable seating should be capable of permanent attachment except where moveable furniture is utilized and stored in a secure location.
- Seating material should be timber or other material that does not conduct heat or cold excessively.
- Seating may be designed as detached, constructed, retaining walls, or terraced steps. Inviting seating such as seatwalls and steps are appropriate for public plazas.
- Shade structures or umbrellas should be utilized to provide shaded seating areas. These structures should be designed to withstand coastal winds and UV light.

Paving

Consistent use of selected paving materials enriches the pedestrian environment, improves its functional and aesthetic qualities, and furthers the Port's unified waterfront goals. Paving materials should be compatible with the desired intent and function of the space in which they are used. The family of paving materials, commonly used in marine environments, should include concrete, colored concrete, concrete and stone pavers, wood decking, aggregate, and turf.

- Paving should have a low albedo (minimum 0.3 factor) to reduce glare and heat absorption thereby decreasing the heat-island effect.
- Permeable paving materials should be used to the extent possible given specific soil conditions of a site to reduce stormwater utility infrastructure and promote the infiltration and collection of stormwater.
- Paving should be used to tie the promenade together.
- Paving materials should incorporate recycled materials when possible such as glass aggregate, fly ash, or recycled aggregates.
- Mesh metal walkways should be used over water. Wood decking such as ipe should be used in areas adjacent to water.
- Decomposed gravel should not be used on sloped areas due to maintenance concerns. It should be used within defined areas to minimize run-off.

Seat Wall Palette

Walls

Walls in the landscape retain slopes, create raised planters, or separate outdoor spaces. They can also be used to integrate outdoor seating into the landscape.

- The family of wall materials includes stone veneer, formed concrete, and precast concrete.
- Anti-graffiti coating (either liquid-applied non-sacrificial surface sealer or liquid-applied sacrificial surface coating) should be used on pre-cast and cast-in-place concrete walls to minimize maintenance.
- Walls should be designed to discourage skateboard or in-line skating use along wall edges and surfaces.
- Wall design should incorporate opportunities for seating when possible.
- Walls can be softened with landscaping to tone down the impact of hardscape.

Fences and Railings

Fences may serve as barriers for pedestrians where hedges would be ineffective or out of character. Railings may also be used to provide another type of barrier for pedestrians but only physical, not visual. The family of fence and railing materials appropriate for the LA Waterfront includes metal and/or wood.

Fences

- Fences should be tall enough to screen unwanted views but not over-scaled if located adjacent to a pedestrian environment.
- Fences should accommodate vine plantings when possible.
- Fence materials should be compatible with adjacent architectural materials, colors, and textures.
- Anti-graffiti coating (either liquid-applied non-sacrificial surface sealer or liquid-applied sacrificial surface coating) should be used to minimize maintenance.

Railings

- Use railings where necessary to protect pedestrians from sudden changes in elevation or provide assistance along stairs and ramps.
- Railings should not act as obstructions in pathways.
- Railings should not be used on the working water's edge where they would impede maritime use.
- Anti-graffiti coating (either liquid-applied non-sacrificial surface sealer or liquid-applied sacrificial surface coating) should be used to minimize maintenance.

Bollards

Bollard can be used to limit vehicle access to selected roads, walks, and plazas. In addition, they can provide seating to pedestrians.

- Bollards should be selected that are appropriate for their use and setting within the landscape.
- If removable bollards are used, they should be hydraulic or pneumatic retractable.
- Bollards should incorporate lighting as an integral feature, where appropriate.
- Anti-graffiti coating (either liquid-applied non-sacrificial surface sealer or liquid-applied sacrificial surface coating) should be used to minimize maintenance.

Public Art

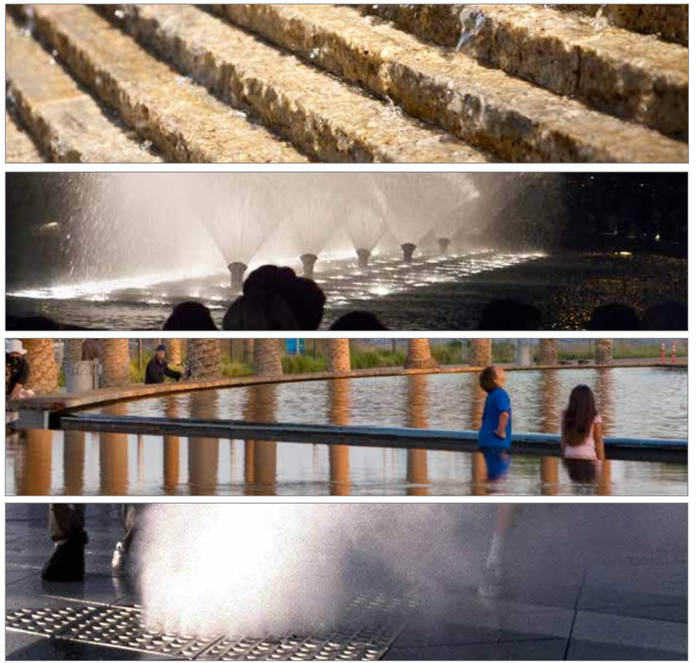
The inclusion of public art makes the LA Waterfront a unique destination, reflecting its history and diversity and giving voice to its grand civic position. Art should reference the waterfront and surrounding communities' history and should reflect the people that live in Wilmington and San Pedro. Public art should be encouraged throughout the waterfront to enhance the quality of life for the community with beauty, identity, and meaning. Art will also make a contribution to the aesthetic environment and stimulate interest and cultural vitality.

- All public art in both Wilmington and San Pedro should refer to the LA Waterfront Public Art Master Plan and Implementation Guidelines for siting, funding and selection requirements.
- Art should reflect the unique history, culture, and environment of the location and the Port's history and function as a working waterfront.
- Specific ideas and sites for public art should be determined in the early phases of development.
- Opportunities should be created for the design of public art by local residents and schools.
- Public art can use lighting as a feature.

Water Features

Water features can activate spaces while providing a cooling effect on hot summer days. The use of water in the landscape can take on many forms based on its desired function. Plans for both Wilmington and San Pedro identify a variety of water features including splash fountains for children, cascading water weirs, wave pools, and watery marsh gardens that are located at areas of high public use. Water features are activity generating and respond to the waterfront location.

- Water features should provide a range of experiences including public gathering spaces, places for quiet contemplation, iconic features, and play areas.
- Lighting should be integral to the water feature as the nighttime appearance is just as important as the daytime.
- Equipment should be housed in adjacent buildings or below-grade vaults.
- The impact of water features on adjacent landscaping should be minimized.
- To offset the high water demand of fountain elements, all efforts should be made to use recycled water. To reliably clean captured stormwater, new technologies (such as UV filtration, bio-filtration, ozone, and activated carbon filters) should be explored for feasibility.



Palette of Water Features

3. Architectural Character

This section provides guidelines for the architectural elements of buildings along the waterfront. While the majority of the spaces within the Port property on the LA Waterfront are open spaces, opportunities do exist for future waterfront development. The architectural guidelines establish the character and quality for new development desired by the Port and the community. These design guidelines do not set a particular style of architecture or design theme. Rather, they establish a greater sense of quality, unity, and conformance with surrounding communities, befitting the physical assets and civic role of the public realm of the LA Waterfront. In addition, the guidelines establish principles of good design including treatments and materials that complement the promenade and waterfront location, visual and physical access to the water, and pedestrian orientation.

Areas identified with specific architectural development opportunities include:

- **SP3 – Ports O' Call**: Ports O' Call is envisioned as a revitalized retail and restaurant district that capitalizes on the views and improves pedestrian access to the water.
- **SP4 – Parks District:** Warehouses 1, 9, and 10 provide opportunities for development of arts spaces and/or offices for design firms.
- **SP5 – City Dock No.1:** Opportunities exist for educational uses and supporting commercial/restaurant uses.
- **SP6 – Cabrillo Marinas:** Opportunities exist for additional development of restaurants and commercial spaces serving the marinas.
- **SP7 – Outer Harbor:** The Outer Harbor has opportunities for adaptive re-use of historic warehouse buildings. Additional opportunities exist for educational uses and additional cruiseship facilities.
- W1 - Waterfront District: A new visitor-serving waterfront development, with potential for restaurants, cultural facilities, and educatoinal uses exist for this area.
- **W2 Industrial District/Avalon Corridor:** Existing piers and warehouses can be re-used for new industrial uses.

This development is envisioned to be mixed use and commercial maritime. Architectural design guidelines should be developed for each of these areas as development agreements are prepared. These guidelines should be consistent with the general guidelines identified within this document.

Several iconic historic buildings are found throughout the waterfront in Wilmington and San Pedro including the Maritime Museum, warehouses found throughout the waterfront, the fish market, the Bekins Building, and the bath house at Cabrillo Beach. These buildings should be preserved and revered in future development, not necessarily mimicked. New iconic buildings with varying styles should be designed to create a vibrant waterfront. As such, the architectural guidelines focus on building form rather than architectural styles. The guidelines address buildings' relationships to public streets and pathways, buildings' overall character, street-level treatment, and parking and service access. The guidelines will help ensure that each incremental development will consistently contribute to the area's character and pedestrian orientation.

Architectural Goals

The design emphasis for the redevelopment of the LA Waterfront is the creation of a system of mixed-use development sites organized around major public improvements. The scale of the project is intended to have a level of complexity in building design common to urban areas constructed over a number of generations. Thus, variety in architecture is purposely sought to avoid an appearance of the redevelopment being constructed at one time. The anticipated build-out of the redevelopment is expected to range between 20 and 30 years. This length in time in itself will assist the main goal of creating a long-lived and human-scaled place.

- Create a long-lived, human-scaled place that embraces the waterfront location.
- Develop at a scale similar to surrounding communities and reflect the environmental and cultural history of the Port as a working waterfront.
- Ensure strong visual and physical connections between the waterfront and upland areas, protecting views of the water whenever posible.
- Design architecture with a variety of scales and styles to avoid the appearance of redevelopment being constructed at one time.
- Create a series of mixed-use developments with public amenities organized around major public improvements.

Architectural Design Guidelines

Pedestrian Orientation

Key north-south streets within Wilmington and east-west streets within San Pedro that provide access to the waterfront are envisioned as highly active pedestrian streets. These streets will enhance pedestrian linkages from upland areas, improving connections to the surrounding communities, and enliven the waterfront. Areas on the waterfront along the promenade will also be highly active pedestrian spaces. Therefore, new development in these areas should have a strong pedestrian orientation. Façades should come to the edge of the sidewalk and maintain a strong relationship with the street and waterfront promenade. A large portion of buildings should come to the front of the lot, creating a consistent street wall. Entrances should be oriented to the sidewalk. Building faces should be transparent and individually articulated to engage pedestrians.

Setbacks and Stepbacks

- Generally, all buildings should be brought to the front of the lot to provide a consistent street wall that frames the pedestrian space/promenade. Ideally, setbacks will range from 0 to 5 feet. This is important in key locations such as buildings along the promenade where it is desirable to frame the space and have an attractive public realm.
- The maximum setback from the front lot line is 10 feet.
- Setbacks should provide for landscaping, particularly along building walls that are inactive and/or are without windows and entries.
- Building stepbacks should be employed to ensure that views to the water are preserved and enhanced from upland areas and building massing is mitigated.
- Building setbacks and stepbacks should be in compliance with the City of LA Building and Safety Code.

Building Orientation

- Buildings should be oriented to existing public spaces such as plazas or courtyards. New buildings should be clustered to define active public spaces.
- Pedestrian access to the water's edge should be maintained where possible (exceptions can be made for purposes of security and for existing use issues). On larger lots, mid-block connections should be offered.
- A building's primary entrance should be oriented to the street. Where a building fronts on more than one public street, the primary entrance should generally face the higher order street.
- The principal entrance should be easily identifiable as such from the sidewalk.
- Buildings at corner parcels should orient to both streets with the primary entrance located at the corner.

Locate active uses along the promenade to create an interesting pedestrian environment

Avoid long, blank walls that detract from pedestrian realm

Building Façade

- Commercial buildings and buildings on the promenade should locate active uses such as retail, offices, public activities, and employee gathering along the waterfront promenade to create an inviting and interesting pedestrian environment.
- Windows are encouraged to provide visual interest and a connection between the promenade and activities within the buildings, particularly on the ground-level.
- The use of black or reflective glass is prohibited.
- Place windows to maximize views of the water.
- The use of blank walls should be minimized by the incorporation of architectural features of interest and utility.
- Long walls that do not require windows or entries should be articulated in a way to break up long, monotonous planes.
- Building façades should be articulated to create variety and interest.
- Ground floor spaces should be articulated as distinct parts of the building façades, with materials and treatments that offer visual interest to the pedestrian.
- The first two floors should be articulated with architectural detailing such as storefront design and awnings.
- Buildings on the corner of intersections should have articulated treatments on the two façades adjoined at the corner. Special features could include rounded or cut corners, articulated corner entrances, display windows, pronounced articulation and cornice lines, and/or corner roof features.
- The use of awnings is encouraged to provide shelter and shade for pedestrians. Awnings should not block views to the water however.
- Extending outdoor cafés or other active uses into the promenade is encouraged to reinforce the sense of place and vitality of the public realm.

Storage and Equipment

- Outdoor storage of materials should be minimized to the extent practical. Materials stored outdoors should be screened from public rights-of-way, with screen walls and landscaping. Materials should not be stored above the height of the walls.
- Rooftop mechanical equipment should be located and/or screened so that it is hidden from public view. Screening devices should be architecturally integrated with the design of the roof and building.
- Mechanical equipment at ground level and exterior trash and recycling should be screened in a manner that is compatible with the overall building design and streetscape treatment. This may include landscaping, fencing or walls, or a combination of these elements.

Building Form

New development along the LA Waterfront should be active, high quality, and varied. New and existing uses are major draws not only for the surrounding communities but for regional visitors. Therefore, buildings need to be visually attractive and enhance the overall character of the public realm, responding to and supporting the character established in the waterfront promenade and other open spaces. Buildings also need to respond to the existing context of Wilmington and San Pedro. Taken together, the public realm and buildings will give prominence to the waterfront, create a cohesive streetscape, and provide continuous waterfront access.

- All buildings frontages should be articulated to that façades contribute to public realm with details scaled to the viewpoints of pedestrians.
- To mitigate the scale of development and create a pedestrian-friendly environment, building massing should be modulated and articulated to create interest and visual variety.
- Unarticulated, monolithic buildings that negate or turn their back on the street or promenade are discouraged.
- Blocks designed by one entity should use a diverse architectural vocabulary to ensure variety.
- Long buildings should be divided to maintain views to the water.
- Clearly differentiate between the base, middle, and top of buildings.

Differentiate the base, middle, and cap or top of buildings

Maintain views and public access to the water

Architecturally relevant historic buildings in Wilmington

Height

Fundamental to the development of the LA Waterfront is the desire to create exceptional public spaces that take advantage of the unique environment of Wilmington and San Pedro and their waterfront. As such, buildings should be developed in a way that protects view corridors from the existing communities to the harbor. In general, building heights should decrease as they approach the water and tower elements should be used to decrease the bulk of buildings. Additionally, building heights should be suitable so that new developments integrate with the existing scale and character of Wilmington and San Pedro.

- Buildings should protect upland views to the water and adhere to the existing scale of development in Wilmington and San Pedro.
- The maximum building height for development should comply with the City of Los Angeles Zoning Ordinance. Where deemed appropriate by the Port, however, buildings can exceed this height through a variance.
- Roof elements such as poles and masts and other structures that occupy no more than 10% of the roof area are exempt from building height limits.
- Buildings should generally decrease in height as they approach the waterfront, with taller buildings away from the water and shorter buildings nearer the promenade.
- Tower elements or those portions of a building over 60 feet should be designed as slender structures to minimize view obstructions from inland areas and maintain upland views and east-west view corridors from existing streets.

Historic Context

A rich collection of historic buildings is found in both Wilmington and San Pedro. These buildings are important to the identity of these communities, and it is important that new development not only preserve existing historic buildings but also reflect them in their design. New buildings adjacent to historic buildings should be of similar scale, use similar materials, and use similar architectural treatments.

- Architecture should not mimic historic buildings. New buildings can either reflect historic architecture or chose to contrast with a varying style.
- Any alterations to buildings that are listed on the State and/or National Register of Historic Places or are deemed architecturally relevant by the Port should be carried out in a manner that is consistent with all applicable state and federal requirements.
- New buildings adjacent to or near existing historic buildings should be respectful in scale, character, massing, materials, siting, and degree of façade articulation.
- New development could incorporate historic façade elements and details (e.g., cornice, belt course, display window, canopies and awnings, hanging or otherwise unique signage, transom windows, kick plate, recessed entry way, parapet) to maintain the street wall articulation.

Vehicle Access

While the promenade offers opportunities for circulation by pedestrian and alternate modes of transit, vehicles will continue to need to access the Port. A strategy is envisioned that reduces points of conflict with pedestrians and bicycles while shielding surface and structured parking to mitigate negative impacts on the pedestrian environment.

Parking should be dispersed throughout the site, combining existing parking areas with new facilities associated with new development. This strategy will consist of street parking, public and shared structured parking, and surface parking lots dispersed at key locations throughout the site and in adjacent upland areas. Any new parking lots and structures should be located away from the waterfront to enhance the quality of the promenade and the public realm at the water's edge.

Vehicle Access

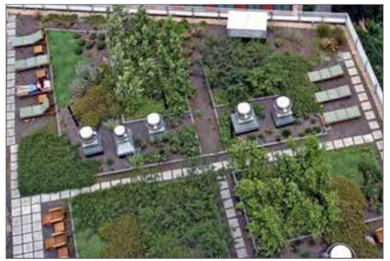
- The use of shared driveways between adjacent parcels is encouraged.
- When feasible, new development should be linked to adjacent property by common circulation areas for cars and people.
- When no development exists on adjacent properties, consider how sites can develop common circulation linkages in the future.

Loading and Service Areas

Given the industrial nature of the Port of Los Angeles, loading and service areas are an integral part of development. Development should allow for these needs while mitigating their impact on the high-quality public realm through careful location on the site and attractive screening.

- Standards for off-street loading and unloading should comply with the City of Los Angeles Zoning Ordinance.
- Loading and service areas should be located away from public view or secondarily beside buildings.
- Loading and service areas should be located so as to minimize points of conflict with pedestrians and vehicle circulation.
- Loading and service areas should be fully screened from public view using either hardscape or landscape.

Shielding loading and service areas improves the aesthetic of the public realm.



Green roof treatment for a parking structure

Conceal views of parked cars and headlights with green planted screens

Parking and Access

- Off-street parking standards should comply with the City of Los Angeles Zoning Ordinance.
- Where not functionally required, parking should be located away from the water's edge.
- Surface parking lots should be located to the rear of the building. A pleasant pedestrian passage should be provided from the rear parking to the street/primary building entrance. If this is not possible, a less desirable alternative is to locate surface parking to the side of the building.
- Surface parking should be well screened from public street views by the placement of trees, a low hedge, wall, or fence within the landscaped setback and should be well-lit.
- Above-ground structured parking should be designed to conceal the views of all parked cars to eliminate direct headlight intrusion into adjacent buildings, mitigate noise, and avoid unsightly views at the pedestrian scale.
- Structures can be clad or screened by plantings, green walls, or architectural elements. The ground level can be lined with other active uses.
- Ceiling-mounted lighting within the structure should be screened from grade-level view.
- Above-grade parking should be designed to appear as an integral part of the building façade. Openings should be carefully composed within the structure's wall to appear as well-proportioned windows rather than a continuous open strip.
- Where feasible, use green roof, roof garden, or solar panel systems on all or a portion of the roof of structured parking to mitigate solar heat gain and provide an amenity. Roof drainage should be collected and reused for irrigation.
- Driveways and access to parking areas should meet City standards.
- Driveway curb cuts should be as narrow as possible and as limited in number as possible.
- To reduce the number of driveways and parking lots, shared parking is encouraged.
- Where possible, the primary point of entry to parking lots should be on side streets or alleys.
- Parking circulation should be designed to allow vehicles to maneuver on site without obstructing pedestrian or vehicle circulation.

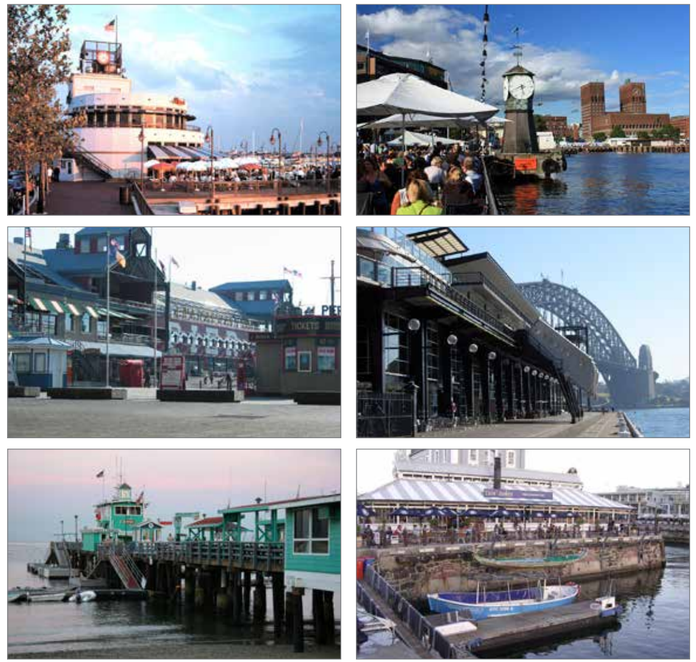
Building Design Typologies Precedents

The following photos illustrate recommended development types. Through visual cues, these precedents describe those features recommended by different land uses. These examples are not intended to recommend that particular architectural styles or building forms are be copied, but rather that the salient elements that contribute to the character of those forms be incorporated in new development. The recommendations are meant to create an environment that relates to the waterfront, promenade, and surrounding communities' unique history and environment and ensure a character and quality of development desired by the Port of Los Angeles.

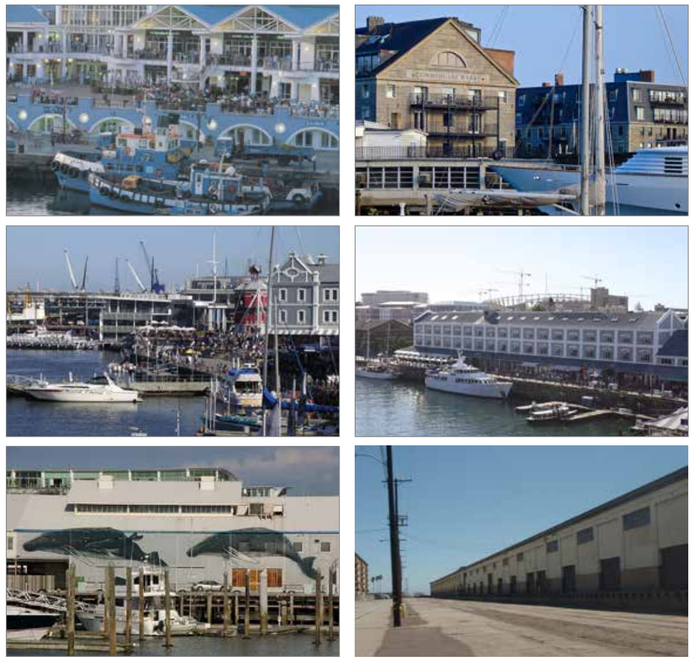
Waterfront Restaurant/Commercial Structure

To the right are examples of the types of structure that are recommended for the waterfront promenade. Commercial uses include cafe or restaurant and/or retail stores. Similar structures are recommended at, but not limited to, the Downtown Harbor District, SP Slip/Ports O' Call District and at appropriate locations in the 22nd Street/Marinas and Beach Districts. The following elements contributing to the character of this building are recommended:

1. Oriented to views of the water.
2. Indoor/outdoor connection enforced through use of glass and multiple openings.
3. Shaded outdoor areas (awnings, umbrellas, etc.) and seating to provide access to water.
4. Use of light colors to reflect location.
5. Materials including timber, glass, and metal.



Waterfront restaurant/commercial building typologies



Working/commercial wharf typologies

Working/Commercial Wharf

To the left are examples of the types of structure and space recommended for the SP Slip area of the San Pedro waterfront. Elements of these building should be incorporated in, but not limited to, the water's edge at the SP Slip and the Warehouse District. The following elements contributing to the character of this space are recommended:

1. Working wharf located underneath a public promenade to minimize conflicts.
2. Active public ground level with public promenade that has cafes, retail, and restaurants (outdoor dining) above or at grade.
3. Articulated (warehouse) roofs that reflect maritime character.
4. Glass and light colors give open and light feel.
5. Second floor balcony provides views.
6. Strong base, middle, and top to convey a sense of human scale and visually identify transitions between building floors.

Maritime Structure

To the right are examples of typical maritime structures recommended for the waterfront, including cruise terminals. The Maritime Museum is an excellent example of the Art Deco style of building found throughout San Pedro and its waterfront. Elements of this building should be incorporated in, but not limited to, the water's edge at the SP Slip and Ports O' Call. The following elements contributing to the character of this structure are recommended:

1. Civic in scale.
2. Primary emphasis is horizontal to reflect maritime character.
3. Vertical emphasis at the entry and decorative vertical detailing break massing of building up horizontality.
4. Repetition of lines and geometric forms articulate the façade and mimic historic character.

Maritime structure typologies

Parking structure typologies

Parking Structure

To the left are examples of typical parking structures recommended for the waterfront. The following elements contributing to the character of this structure are recommended:

1. Appropriate scale to urban context. Replicates a building façade in scale, proportion, and form.
2. Active ground floor uses to maintain continuity in pedestrian orientation.
3. Punched openings in the façade that read as windows.
4. Contributes to the pedestrian environment through awnings, hanging signs, etc.
5. Vehicles on roof and inside structure screened to views from street, adjacent buildings, and higher elevations.
6. Articulated roofline so garage reads as building.

4. Signage

This section provides guidelines for the public signage and environmental graphics for the overall waterfront and individual areas in the Wilmington and San Pedro communities. Public signage, along with lighting, is a unifying element for the whole of the Port's waterfront, connecting Wilmington and San Pedro.

Signage should be consistent and continuous throughout the LA Waterfront with key elements such as directional signage for vehicles and maps and directories for pedestrians. In addition, identity signage should reinforce the overall character of the LA Waterfront, such as stanchions attached to Angel Lights, and highlight distinct sub-areas within the waterfront, such as the different banner signs.

This suite of signs serves multiple purposes: to unify various sub-areas within the waterfront, provide a comprehensive wayfinding system to direct visitors and community members to key points-of-interest throughout the area, and to connect the waterfront to surrounding neighborhoods.

Outlined below are the goals and general and technical design guidelines for signage used throughout Wilmington and San Pedro. The guidelines apply to public signage. Signs on private property will be subject to administrative review on a case-by-case basis. The design guidelines outline three signage types, detailing where graphics change within sub-areas, and general equipment standards. Recommendations for signage types are provided based on existing installations on Port property. The guidelines encourage well-designed and properly placed signs of a high quality construction and finish, contributing positively to the vitality and future development of the waterfront.

Signage Goals

The custom signage program for the LA Waterfront should:

- Use public signage as a unifying element to help create an integrated waterfront.
- Design public signage that reflects the unique character of the Port, Wilmington, and San Pedro.
- Use public signage to strengthen connectivity with surrounding communities.
- Create clear, concise, and consistent wayfinding and signage.
- Provide signage that informs and educates visitors about the history, cultural, and natural features of the waterfront.

General Signage Guidelines

Following are general guidelines that apply to all types of signs.

Flexibility

- While the proposed suite of signs is designed to be universally applied throughout Wilmington and San Pedro, flexibility should be maintained allowing the design of unique signage for sub-areas that remain compatible.

Identity

- Signs along the developed areas of the waterfront should be inspired by the colors of the Port and enliven the areas with their vibrancy.
- The design and color palette of the custom sign program should announce to pedestrians, bicyclists, and drivers that they have entered a new place. More specific color palettes can be found below.

Scale

- Signs should be scaled based on their environment and intended user. For example, larger signs should be used for drivers moving at faster speeds while smaller signs should be used for pedestrians.

Location

- Signs should be located where most effective in terms of decision points and information needs. They should be located for prominence and readability.
- Signs intended for vehicle use, including trail blazers, should be consistently located on the right-hand side of the street on their own dedicated pole.
- Although positioned for legibility, signs should be located so that neither they nor their users obstruct traffic.
- Signs should not limit the effective width of sidewalks or clear space overhead or block the clear path of pedestrians or those using assistive devices for mobility. The bottom of vehicle sign panels should not be closer than 8.5 feet to the ground elevation. The edge of the sign panel should have a minimum clearance of 1.5 feet from the edge of any curb.
- Pedestrian-scaled signs should be co-located with street furniture to reduce visual clutter.
- Where possible the Holophane modular urban pole system should be used to group signs on a single pole to further reduce clutter.

Visibility

- Signs should be illuminated uniformly and use appropriate contrasting backgrounds to ensure visibility and legibility, even during night hours. Glare and reflection should be minimized.

Communication

- Whenever possible, graphic symbols should be used as they are easily identifiable and bridge language barriers.
- Signage should provide efficient and effective communication and facilitate wayfinding. This should be done by placing messages at optimum locations to improve pedestrian, bicycle, and vehicle safety while advancing an attractive waterfront design aesthetic.

Materials

- Signage should be made of high quality, durable materials that are suitable for the marine environment, require minimal periodic maintenance, and are vandal resistant.

Efficiency

- Often times, with careful planning, some signs can serve double duty, or multiple message panels can be combined onto one custom pole for a cohesive and uncluttered look. Over-signing should be avoided as too many signs can distract and confuse users.

Font

- The font type “Neutra” by House Industries has been selected as the font style and is currently used at the Cruise Ship Terminal in San Pedro. Signs in Wilmington and San Pedro should be consistent with this font style. A secondary type face that complements Neutra may be used.

Compliance

- Signage should comply with all applicable city, state, and federal standards.

General Technical Guidelines

Following are general technical guidelines that apply to all types of signs.

Message Quantity

- The ideal number of messages for wayfinding signage is three with one message per panel. There should be a maximum of six messages per side of a sign.
- The limit for message lines in the Los Angeles Department of Transportation (LADOT) right-of-way (all non-Port of Los Angeles property) is four lines. The limit for messages on vehicle directional signs on Port of Los Angeles property is five lines. These limits do not consider the number of messages but instead count the total number of lines on the sign panel.

Message Order

- The order of messages should be kept consistent from sign to sign. Messages at the top of vehicle signs should target drivers who need to make the biggest decision of change. Messages at the bottom of the sign should be for drivers who will not be making a change (for example continuing straight). The closest message destination should be at the top of pedestrian signs. Further destinations can follow.
- The directional order for messages on vehicle signs is suggested to be the following:
  1. Left turn messages first, at the top of the sign
  2. Left-angled turn messages
  3. Right-angled turn messages
  4. Right turn messages
  5. Messages directing drivers to go straight at the bottom of the sign panel

Type Size

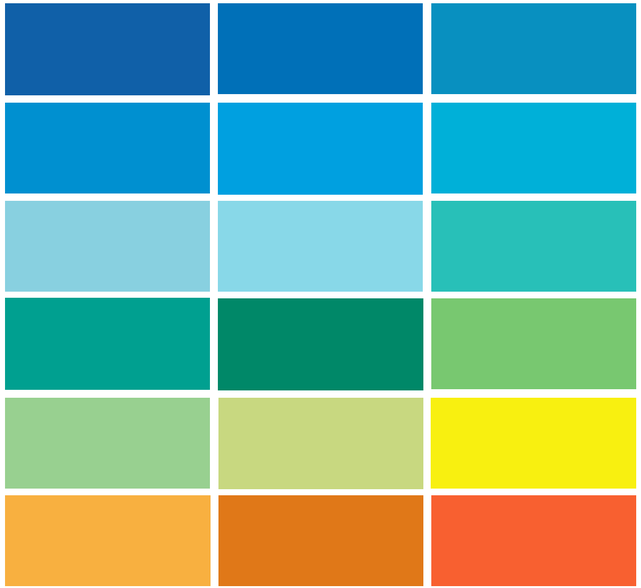
- The recommended type size should vary depending on the purpose of the sign and the speed of traffic viewing it.
- On vehicle signs within the LADOT right-of-way, the type should have a cap height of 6 inches. The cap height can be found by measuring the size of the capital letter “H.” Vehicle signs within the Port of Los Angeles property boundaries should have a cap height of 4 1/2 inches. Pedestrian signs should have a cap height of 2 inches.

Legibility

- Messages should be spelled out with both upper and lower case lettering. At a distance it is easier to read words with only the first letter capitalized because the use of lower case ascenders (b, d, f, h, k, l, t) and descenders (g, j, p, q, y) helps the viewer read from afar.
- Tight letter spacing is discouraged since it can impair legibility.

Reflective Sign Panels

- Vehicle signs should have reflective lettering that can be viewed at all times without depending on external light sources, other than a car’s headlights. It is recommended that the entire sign panel be covered with reflective 3M film and screened over with transparent 3M inks (or equivalent). This has been shown to improve message readability. Pedestrian signs should also be reflective when possible to improve legibility.



Color palette for Wilmington and San Pedro signage.

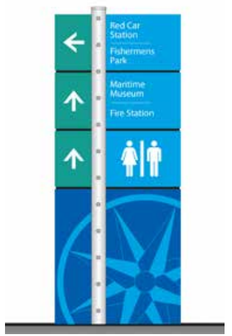
Color

- Most Departments of Transportation prefer that directional sign colors be of a cool palette. Warm colors such as red, orange, and yellow already have specific meanings attached to them such as “stop’,” “caution,” and “yield.” The darker colors of the cool palette are more suitable to sign backgrounds since white, contrasting lettering can be placed on it that will be easy to read day or night.

- To the left is the approved color palette for universally applied vehicle and pedestrian signage found in both Wilmington and San Pedro. This palette was designed to reflect the waterfront location, primarily using shades of blue and green with accents of orange and yellow. All colors come from the catalog of Matthews Paint. Rather than cite the colors used in each type of sign in the guidelines, users should use this color palette as a guide and use the specific paint colors indicated in the construction specs.

- Wilmington has a unique color palette for its signs as identified below to maintain a distinct identity for the community. A palette for the larger Wilmington Waterfront design was developed with public input and reflects the preference of residents. The sign palette flows from these overall colors.

Color palette for Wilmington.



Sign with San Pedro color palette

Sign with Wilmington color palette

Signage Style Guidelines

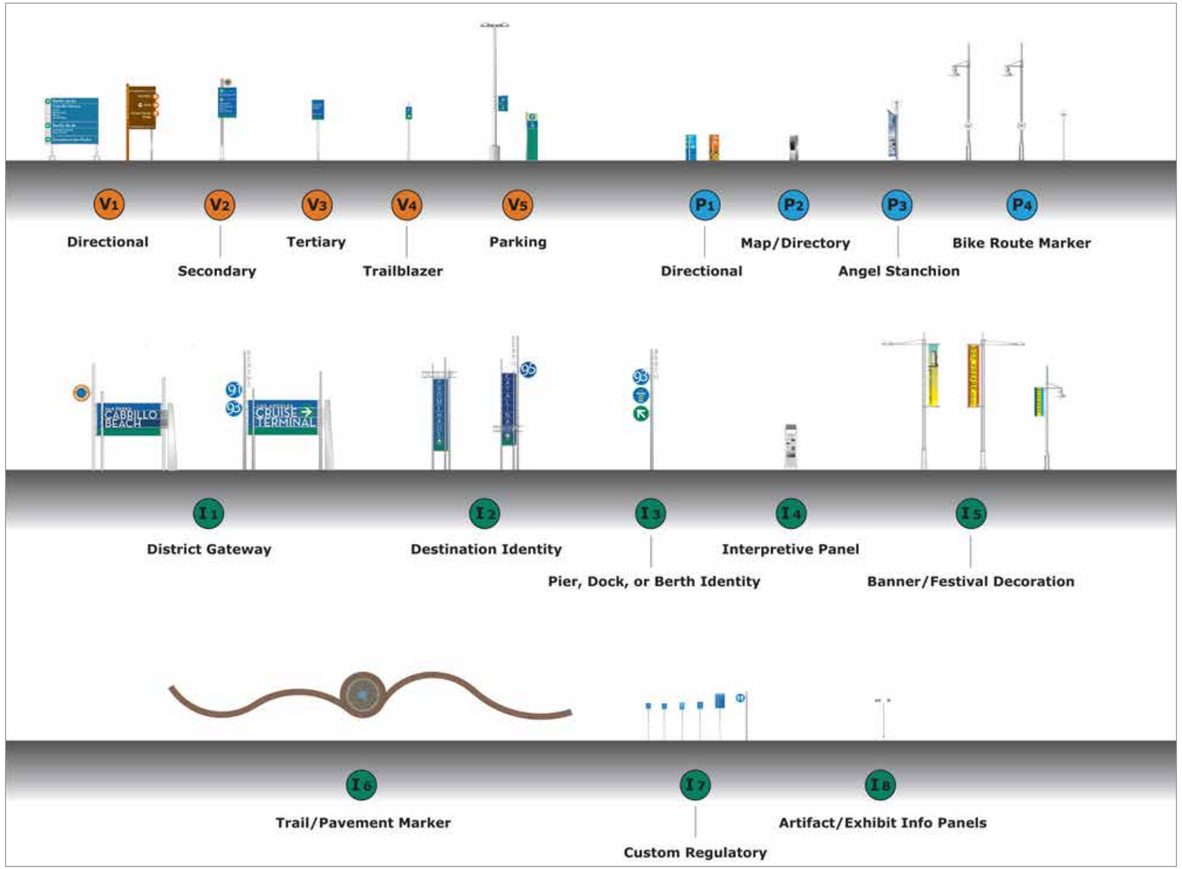
Environmental graphics include directional, informational, and identity signage, district identifiers and gateways, and interpretive panels and banner programs all of which are important elements in the built environment. The guidelines have bundled the environmental graphics into three different signage types:

Vehicle Signage – These signs provide directional information to vehicles.

Pedestrian Signage – These signs provide direction to pedestrians and bicyclists

Identity Signage – These signs provide a unified character and a sense of place to Wilmington and San Pedro, as well as unique sub-areas within these two communities. They also serve as beacons, assist with wayfinding, and provide interpretive information

The following graphic demonstrates the families of environmental graphics within each of the three signage types. The following design guidelines are organized by the three types. Within each type, areas where this signage type may be used are indicated. Detailed specifications are then presented for each sign type and any options. The guidelines address the design specifications including materials, dimensions, siting, and lighting.



Vehicle Directional Tertiary

Vehicle Directional

Vehicle Directional Secondary

Vehicle Signage

To implement the most user-friendly wayfinding signage, the LA Waterfront must be considered as a whole. It is recommended that all existing directional signage be removed and replaced with the new sign system. Vehicle directional signage should be a consistent, citywide system, functioning as single, seamless unit to guide drivers from the freeway, along Harbor Boulevard, and to the different destinations of the city.

These signs should vary in size according to the street size and speed limits of the areas they are located; they are made up of a family of signs, each designed for a specific purpose. Larger signs are required for bigger open areas and wide streets with faster moving traffic. Medium signs should be used on streets with less traffic. Special district names signs can be attached to the sign pole but on a separate panel. The district name would change while the overall look of the sign remains the same.

The following section examines the standards for each type of vehicle signage.

V1: Vehicle Directional

Applicable Areas

Large vehicle signs provide direction at key intersections along the entire waterfront corridor and on key arterials in Wilmington and San Pedro, guiding motorists to waterfront amenities, community buildings, and Port-owned parking areas. These signs are primarily targeted to faster moving traffic and direct drivers to primary destinations along the waterfront. Primary vehicle directional signage should be followed up by secondary directional signage

Design

10’ tall by 6’ 3” wide 3/16” thick painted aluminium sign cabinet with reflective vinyl type messages and 16” painted aluminium bar mechanically fastened to cabinet channel cap attached to existing 8” diameter steel post with ¼” thick 6” x 2” stainless steel channel mechanically fastened to sign panels at a total height of 18.’ Painted aluminium discs with applied vinyl arrows indicating direction of locations attached flush to painted aluminium bars.

V2: Vehicle Secondary Directional

Applicable Areas

Secondary signs should provide direction to key destinations to drivers on streets with less traffic in Wilmington and San Pedro. The size of the sign and lettering should be smaller commensurate with the slower speed of traffic.

Design

6’ 6” tall by 4’ wide 0.25” thick rectangular aluminium sign panel with vinyl applied graphics on both sides securely mounted to an internal aluminium tube frame with counter set screws on top and bottom of sign cabinet mechanically fastened to a 5 ¾” break away four-sided extruded galvanized metal post by Holophane (or approved equal). One side to have text and arrows indicating directionals for vehicles. The other side to have large LA Waterfront logo. 1’ 9” diameter round painted aluminium panel with the waterfront logo welded to custom sleeve at 16’ 8” height.

Lighting

In-ground up light spotlight centered on panel.

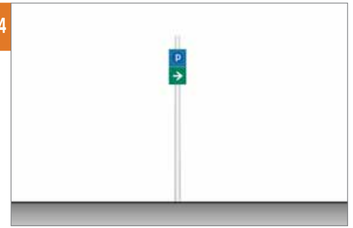
V3: Vehicle Tertiary Directional

Applicable Areas

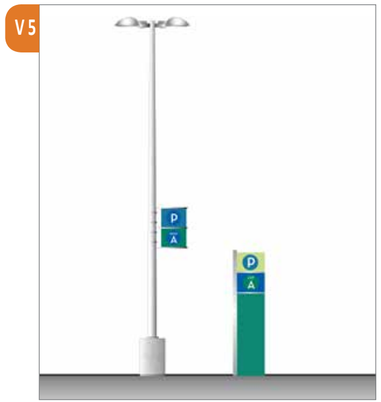
These signs should be smaller signs indicating destinations. They are of a scale that they can be used by either vehicles or pedestrians and are located on smaller arterial streets in Wilmington and San Pedro. These signs are free-standing but could also potentially be attached to existing poles, such as light poles, if necessary.

Design

4’ tall by 2’ 6” wide aluminium panel with silk-screened graphics on front and back welded to 4” steel square tube painted to match Holophane poles. Aluminium sign bracket welded to sign panel back. Mechanically attaches panel to post with countersunk tamper-resistant fasteners. One side to have text and arrows indicating directionals for vehicles. The other side to have large LA Waterfront logo.



Vehicle Trailblazer



Parking Sign

Parking Sign

V4: Vehicle Trailblazer

Applicable Areas

Nearing a major attraction, when an entire directional sign is not needed for multiple messages, a series of trailblazers can lead the way. This system of symbol signs enhances the existing vehicle system and directs visitors to major destinations along the waterfront. Typically used symbols are well-known, easily recognizable, and especially designed to be read at average vehicle speeds. Trailblazers can also be used to direct visitors back to main access routes such as the freeway. This type of sign should be used in Wilmington and San Pedro.

Design

2’ square 0.25” thick painted aluminium panel with vinyl applied graphics securely mounted to internal aluminium tube frame with counter-sunk set screws on top and bottom of sign cabinet mechanically fastened to break-away pole provided and installed by Holophane. Multiple aluminium sign panels can be stacked on a 12’ pole to provide numerous directionals.

V5: Parking Sign

Applicable Areas

Public parking signs and parking lot/structure identity signs should be integrated with the directional system. For instance, the same shape and color used on the directional signs should be used on the parking signs to allow for easy recognition as the driver becomes accustomed to looking for the established design. These signs should be used in all current and future Port parking facilities in Wilmington and San Pedro.

Design: Light Pole Sign

1’ 6” tall by 2 ‘ 6” wide ¼” thick mounted painted aluminium plate with vinyl applied graphics attached to V1 fixture (see Lighting Guidelines) by stainless steel straps. The bottom of the sign should be 8’ 5” high off the ground.

Design: Freestanding Sign

10’ 4” tall by 2’ 7 ½” wide free-standing sign consisting of 1’ 4” tall 2” thick double-sided painted aluminium cabinet with applied 3M vinyl graphics with 1” thick aluminium square rod spacers inset 1” from cabinet edge stacked on top of a 6’ 9” painted 2” thick aluminium cabinet welded to a ½” thick square structural steel vertical post with exposed 1” Hexbolt.

Lighting

In-ground up lit spotlights centered on sign.

Pedestrian Signage

The pedestrian sign program should be continuous and consistent throughout the entire waterfront. Continuity in the system will unify various sub-areas of the waterfront and establish a comprehensive wayfinding system. Pedestrian signs should include directionals and maps that direct visitors on foot and travelling by bike to destinations and services off and on the promenade, as well as major destinations within the downtown area within walking distance from the waterfront, such as the California Coastal Trail or major parks.

These elements of the system should be consistent throughout the entire waterfront. Additional pedestrian signs should have elements that change from district to district. These elements might include banners and interpretive panels and would have their own look and feel, while still relating in some way to the overall system.

P1: Pedestrian Directional

Applicable Areas

Pedestrian directional signs are smaller and lower than vehicle signs and direct the visitor from parking areas and public transit stops to their final destination. These directionals can contain more information than vehicle signage since pedestrians can easily stop to read the messages. 'Walking Times' could be listed on signs for distances that are more than a 10 minute walk from the sign location. These signs should blend into park settings.

Design

6' tall by 2' 3" wide rectangular 2" thick aluminium sign cabinet with applied 3M vinyl graphics welded to vertical unfinished two-sided extruded galvanized Holophane post.

Location

Minimum 1' 6" setback from the sidewalk edge.

Lighting

In-ground spotlight on either side centered on sign.

Pedestrian Directional

Pedestrian Map/Directory

P2: Pedestrian Map/Directory

Applicable Areas

Maps and directories are an essential part of the pedestrian system and improve circulation throughout the waterfront. They should be consistently located at all major gathering places or points of decision, such as intersections, exits of parking lots and parking structures, and at transit stops. They should include a map of the downtown waterfront listing and locating all major destinations, parking facilities, and transit routes within the waterfront and in the surrounding community and can include walking times from point to point. Detailed information about the area can be found on these directories to inform the viewer of additional points of interest, even outside of the immediate district, to encourage further movement through the community and show connections between the community and the waterfront.

Maps should always be oriented so that the top of the map is the direction the viewer is facing. For example if the viewer is facing a map that is facing east, then the direction at the top of the map should also be east.

Design

7' 8" tall 2' 9 ½" tall double-sided aluminium sign panel painted metallic silver with clear-coating on all visible surfaces with a 32" LCD touch screen, information text screen printed, and a map of the Downtown San Pedro waterfront etched on the face. ¼" thick clear acrylic push-through letters with frosted white faces and frosted blue returns that run vertically down the side of the sign. A ½" thick round aluminium panel with the logo graphic for San Pedro should be attached to the sign cabinet. A ½" thick decorative aluminium cover at the base should have SS Marine-grade bolts.

Lighting

Push-through letters lit with white LED light strips.

Angel Stanchion

P3: Angel Stanchion

Applicable Areas

This type of sign is found in areas designated in conjunction with the Angels Walk. These signs commemorate the history, architecture, and culture of neighborhoods throughout Los Angeles and encourage pedestrians to explore the city on foot and on public transportation. Through photos and text, these stanchions tell pedestrians about the history of San Pedro. They should be located in any area designated to be part of the Angels Walk trail.

Design

Center light fixture with glass panels. Two ¼" low iron clear glass panels with polished edges and copy etched and in-filled second surface sandwiching film with photographic images and laminated together to hold film in place. Three of these glass panels of different heights (5', 3', and 4' high) attached to a 2 ½" square aluminium channel painted to match Holophane post with linear fluorescent lighting fixture with internal ballast. Channel attached to four-sided galvanized metal post by Holophane (or approved equal) with angel light fixture (see Lighting Guidelines type S2). Copy and photos to be determined and designed by Angels Walk LA.

Location

Minimum 1' 6" setback from landscaping or sidewalk.

Lighting

In-ground spotlight centered on glass panel and fluorescent lighting fixture with internal ballast in aluminium channel attached to Holophane post.

P4: Bike Route Marker

Applicable Areas

Bike route markers provide special lanes for bicycles and caution pedestrians and cyclists alike on POLA waterfront property. They should also dot the pathway to keep bicycles on the correct route and provide directional information as needed. Signs can be combined onto other poles along the bike route to reduce visual clutter and unnecessary poles.

Light Pole Design

¼" thick 1' 9" diameter circular aluminium painted with powder-coated finish panel with applied vinyl welded to aluminium cabinet encasing existing light fixture (see Type P1 Boulevard Light). Bottom of sign set at 6' 9" off the ground.

Color

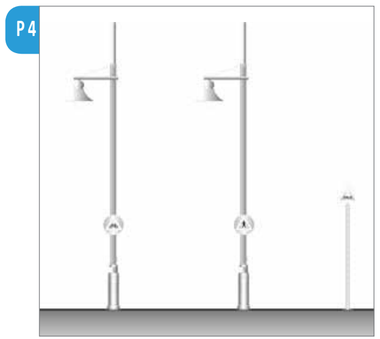
Aluminium panel painted to match existing light pole. Triangle applied white reflective vinyl. Black lettering/symbol.

Free-Standing Design

¼" thick 1' 4" tall triangular aluminium painted with powder-coated finish panel with applied vinyl mechanically attached to 1" thick steel rod space inset 1" from cabinet edge welded to vertical post with ½" thick square structural steel tubes with exposed 1" Hex-bolts running vertically.

Color

Aluminium panel, space, and vertical post painted to match existing light pole. Triangle applied white reflective vinyl. Black lettering/symbol.



Bike Route Marker

I1

District Gateway

I1

District Gateway

Identity Signage

The use of scale is important in a big Port such as this. Within the large area of the Port, it is important to use smaller gateways throughout. These gateways should identify the communities of Wilmington and San Pedro and smaller sub-areas and should create memorable icons for residents and visitors alike. Multi-functional gateways are suggested, for example a tower that is also an attraction, allowing visitors to elevate themselves above the city for breath-taking views of the Port and coastline.

Identity signage is used to promote the overall LA Waterfront and smaller sub-areas and destinations and to help people navigate their way. Sub-area names and signs are attached to other environmental graphic elements to designate sub-area names throughout the waterfront. This helps define the character of the waterfront as a whole and its individual sub-areas, as well as aids in wayfinding by demarcating borders.

I1: District Gateway

Applicable Areas

Custom designed gateway markers should not only serve to symbolize Wilmington and San Pedro and their sub-areas but also make useful contributions to wayfinding as they are beacons from a distance. As such these signs should be large enough to be seen from several blocks away, serving as orienting points that inspire travel from downtown to the piers and docks.

They should mark the entry points into a sub-area and introduce the character for project areas. These elements provide opportunities for public artists and designers to capture the essence of the community and make a unique statement. They should reflect the qualities and characters of their sub-areas and of Wilmington and San Pedro.

Design

Two sign panels offset at a 14 degree angle with two pipes of sign being 1’ 8” apart on one side.

Rear sign to be perforated metal panel painted two colors with 2 1/2” metal tube frame around perimeter welded to two 6” – 7” diameter aluminium pipes with ¼” minimum wall thickness with varying heights with the shorter pipe roughly 21’ tall and the taller pipe ranging from 23’ to 26’. Taller pipe to have 3’ 6” diameter fabricated aluminium cabinet with orange medallion indicating sub-area or blue medallion indicating berth number. Cabinet to have ½” thick acrylic push-through graphics with translucent vinyl overlay, internally illuminated, and attached to pipe by welded metal arm.

Forward sign between 13’ 6” and 14’ 6” wide by 3’ 4” to 3’ 10” tall panel with three 2” by 4” metal tubes interspersed with eight 1” square metal bars attached to 17’ 2” to 17’ 8” metal flag pole with 6” diameter on left and square fabricated metal cabinet on right with 1’ diameter on top, increasing in width toward the ground. Metal cabinet to house electrical and transformers. Fabricated aluminium channel letters with white acrylic faces attached to metal tubes indicating district name. Shorter flat cut-out aluminium letters with oversized contour cut backer attached to top of sign panel.

Lighting

Backer to flat cut out aluminium letters on top of sign to be lit from below with LED in 2” x 4” tube structure. Letter faces to be internally illuminated with 15 MM 6500 degree white neon. Letters/numbers on attached decorative disc to be internally illuminated. Front of sign to be up lit with three at-grade lights (see Type S10 in Lighting Guidelines).

I2: Destination Identity

Applicable Area

These signs are found in SP1: Cruise Terminal, SP3: Ports O' Call, and SP8: Cabrillo Beach. These signs identify destinations and provide directional information. They also serve as beacons for both vehicles and pedestrians.

Destination Identity

Design

Rear sign 15' 8" tall by 3' 6" wide vinyl sign panel printed with digital color bolted to 3" channel with Hex-bolt fasteners. Channel welded to 21' 6" tall 7" diameter flag pole with metal bar spaces on right and 24' tall flag pole on left.

Forward sign panel attached to same 24' tall flag pole and offset at an angle by 2' 6". 1" square aluminium tubes attached to sign poles with attached fabricated aluminium channel letters with white acrylic faces running vertically announcing destination. ¼" aluminium disc mounted to back side of tube with contrasting color. ¼" aluminium directional arrow mounted to front of tube and centered in disc.

Two 2" by 4" by ¼" aluminium tubes framing fabricated aluminium channel letters with sub-area name topping sign panel attached to flag poles.

Lighting

Aluminium channel letters on top of sign and running vertically down sign to be illuminated with 15 mm 6500 degree white neon. Disc and arrow not to be illuminated. Front of sign to be up lit with at-grade light (see Type S10 in Lighting Guidelines).

Options

1. Two 2" by 4" by ¼" aluminium tubes framing fabricated aluminium channel letters with sub-area name attached in middle of sign panel to flag-poles.
2. Addition of Type I3 sign.

I3: Pier, Dock, or Berth Identity

Applicable Area

Identity signs for all piers, docks, and berths located within the LA Waterfront to educate visitors about Port operations and continue the unified appearance of the Port's waterfront. In addition, these signs identify locations for water taxis, the Angelina Port Police slips, and public piers. These signs should be used in conjunction with vehicle and pedestrian directional signs to enhance wayfinding.

Design

3" thick fabricated channel letters with illuminated faces and berth number on push-through acrylic double-faced 8" thick 3' 6" diameter disc with numerals and graphics on both faces welded to 29' pole for additional identifying information about pier, berth, or dock at destination.

Pier, Dock, or Berth Identity

Interpretive Panel

I4: Interpretive Panel

Applicable Areas

Interpretive panels along the promenade and waterfront should explain the history and ecology of the Port, identify types of marine craft or life in the harbor, support the Maritime Museum exhibits, and/or explain the geography of the immediate area and deal with other themes related to the area. These panels should relate to the sign system but may have a very different character within each sub-area. Two options are detailed below, presenting a horizontal and a vertical treatment.

Interpretive panels should set a tone for the area and for the destination they are marking. These unique signs should be contextually harmonious and aesthetically pleasing to create interest in the places they identify. They can be found on walls, around streetscaping, and in the paving.

Horizontal Design

5’ 9” wide by 1’ 3” tall angled painted aluminium cabinet with open back with painted aluminium frame panels with digitally printed exhibit graphics attached flush to cabinet face covered with 0.125” thick circular glass panel inset attached to ¼” aluminium back plate with painted rods with internal steel sign structure. Cabinet mechanically attached to aluminium sign support with threaded rod. Front aluminium frame mechanically attached to aluminium cabinet face with exposed 1” aluminium Hexbolts. Steel sign support may be welded to existing railing support structure.

Vertical Design

Bridge Kiosk Panel: 9’ 4” tall ½” thick structural glass panel with silk-screen photographs and etched filled typography on first-surface inset into square structural steel vertical posts with powder-coated finish and recessed LED lighting edge-lighting glass panels. A sun ray graphic should be etched on the second surface of the glass panel and a solar panel attached to structural steel posts at top of sign with 1’ space between top of glass panel and bottom of solar panel.

I5: Banner/Festival Decoration

Applicable Areas

Banners and art displays reinforce the identity and increase the interest and attractiveness of the waterfront. These types of signs provide opportunities to celebrate and announce Port events, community festivals, or local art programs. A flexible system of signs along major arterials (such as Harbor, Gaffey, Harry Bridges Boulevard, Avalon Boulevard, and C Street, and connecting downtown streets in San Pedro) and the promenade should allow for changeable promotional banners along with the pedestrian lights. The infrastructure could also be used to support holiday and festival decorative elements, lighting, and sound systems. These systems should be designed to comply with any City street lighting standards .

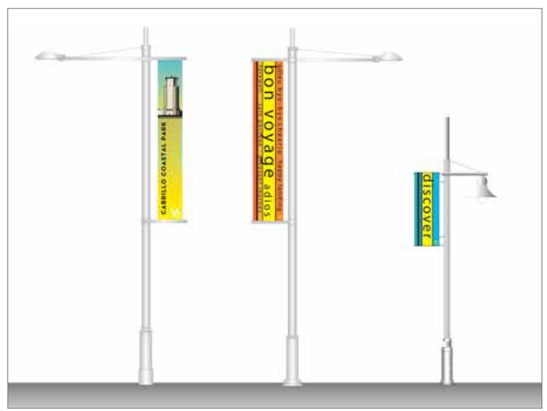
Similar to the interpretive panels above, banners should relate to the overall sign system, although variety may exist between sub-areas. Two options have been detailed below to provide direction for banners at both the pedestrian and vehicle scale. In general banners should be the same scale as the two options presented below and use the established color palettes and font type to reduce visual clutter. However, additional designs can be used with the approval of the Port. For example, historic images can be used to reference a sub-area’s history and culture.

Vehicle Scale

16’ tall by 2’ 6” wide vinyl banner with digitally printed graphics attached to existing light poles (see Lighting Type V1: Street Light). Banner may include either vertically oriented words with bands of bright color from the established color palette, or icons relating to the historic culture and use of the working waterfront.

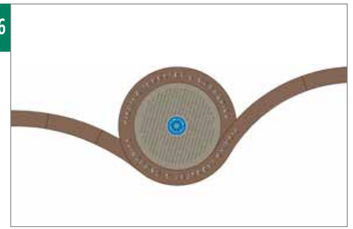
Pedestrian Scale

2’ wide vinyl banner with color theme from established palette with vertically oriented words digitally printed attached to existing light fixture (see Lighting Type P1: Boulevard Light) with custom aluminium bracket finished and painted to match existing light pole. Bottom of banner to be 9’ 6” off the ground.

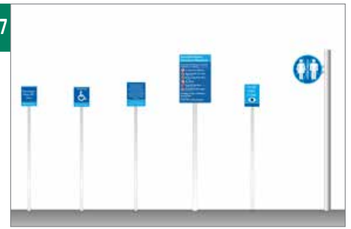


Festival/Banner Decoration

I6



I7



Trail/Pavement Marker

Custom Regulatory

Custom Regulatory - Wilmington

I6: Trail/Pavement Marker

Applicable Area

This type of sign is found throughout the waterfront in San Pedro. It is found along the pedestrian walk and used to mark this high-use promenade. The logo reinforces the identity of the larger waterfront, and text surrounding the medallion etched into the concrete functions as a story rope, providing educational information and creating interest for visitors.

Design

2’ wide diameter circular Terrazzo pattern inlay with 1/8” wide horizontally brushed 316 gauge stainless steel medallion compass framework inset flush into medallion. Medallion attached to concrete pad with 3/4” tamper resistant stainless steel bolts that allow medallion to be removed for lighting access. Terrazzo pavement medallion inset flush into existing pavement. Medallion must be completely level and engineered to withstand the weight of vehicle traffic. Medallion must face true north.

Lighting

Internally illuminated with inset custom LED units

Manufacturer and Catalog: Gardco 101-MT-243-[VOLT]-NP=WG; Lamp Type: PLT42/830/GX240-4/4P 42 WATT PL-T CFL 82 CRI/3000 K 12,000 Hours) behind 1” thick acrylic face on four points of star sandblasted for inset stainless steel letter and behind star. Provide at least 4” LED setback from acrylic for even diffusion of light across surface. Maximum watt is 84, and center of fixture should be mounted at 7’ 3” A.F.G.

Materials

Terrazzo pattern inlay should be epoxy resin composition incorporating marble chip aggregates. Finish should be thin-section, jointless and durable.

Location

Trail marker to be installed in center of concrete pad.

I7: Custom Regulatory

Applicable Areas

It is recommended that regulatory signs be upgraded to be part of the custom sign package. By integrating the look of these (often times off-the-shelf) signs into the color and type scheme of the city’s sign system, a real sense of place becomes uniquely and cohesively established. Below is a detailed description of each of these custom regulatory signs.

Crime Free Zone

A 1’ 6” by 1’ painted aluminium panel with silk-screened graphics front and back welded to sign bracket. Sign bracket sleeves over and mechanically fastens to a 2” steel square tube.

Rules and Regulations

A 3’ 10” by 2’ 6” aluminium panel with silk-screened graphics front and back welded to sign bracket. Sign bracket sleeves over and mechanically fastens to a 4” square steel tube.

In some areas where applicable, regulatory signs should outline additional rules and regulations. For example, at beach locations, regulatory signs should include additional rules for swimming and fishing.

Passenger Drop-Off

A 1’ 3” by 1’ painted aluminium panel with silk-screened graphics front and back welded to sign bracket. Sign bracket sleeves over and mechanically fastens to a 2” steel square tube.

Accessible Parking

A 1’ 3” by 1’ painted aluminium panel with silk-screened graphics front and back welded to sign bracket. Sign bracket sleeves over and mechanically fastens to a 2” steel square tube.

Parking Regulatory

A 2’ 2 ½” by 1’ 7 ½” painted aluminium panel with applied vinyl graphics on front panel welded to sign bracket. Sign bracket sleeves over and mechanically fastens to a 2” steel square tube.

Restroom

2’ 4” diameter circular aluminium cabinet with ½” thick white acrylic push-through images welded to 3” long square tube spaces welded to 7” diameter metal flag-pole to be tapered/modified by sign fabricator. Base of circular cabinet to be mounted at 10’ 3” above the ground on 13’ tall metal pole.

Numbers to be internally illuminated. Electrical transformers and components for illuminating images to be located in discs.

I8: Artifacts/Exhibit Information Panels

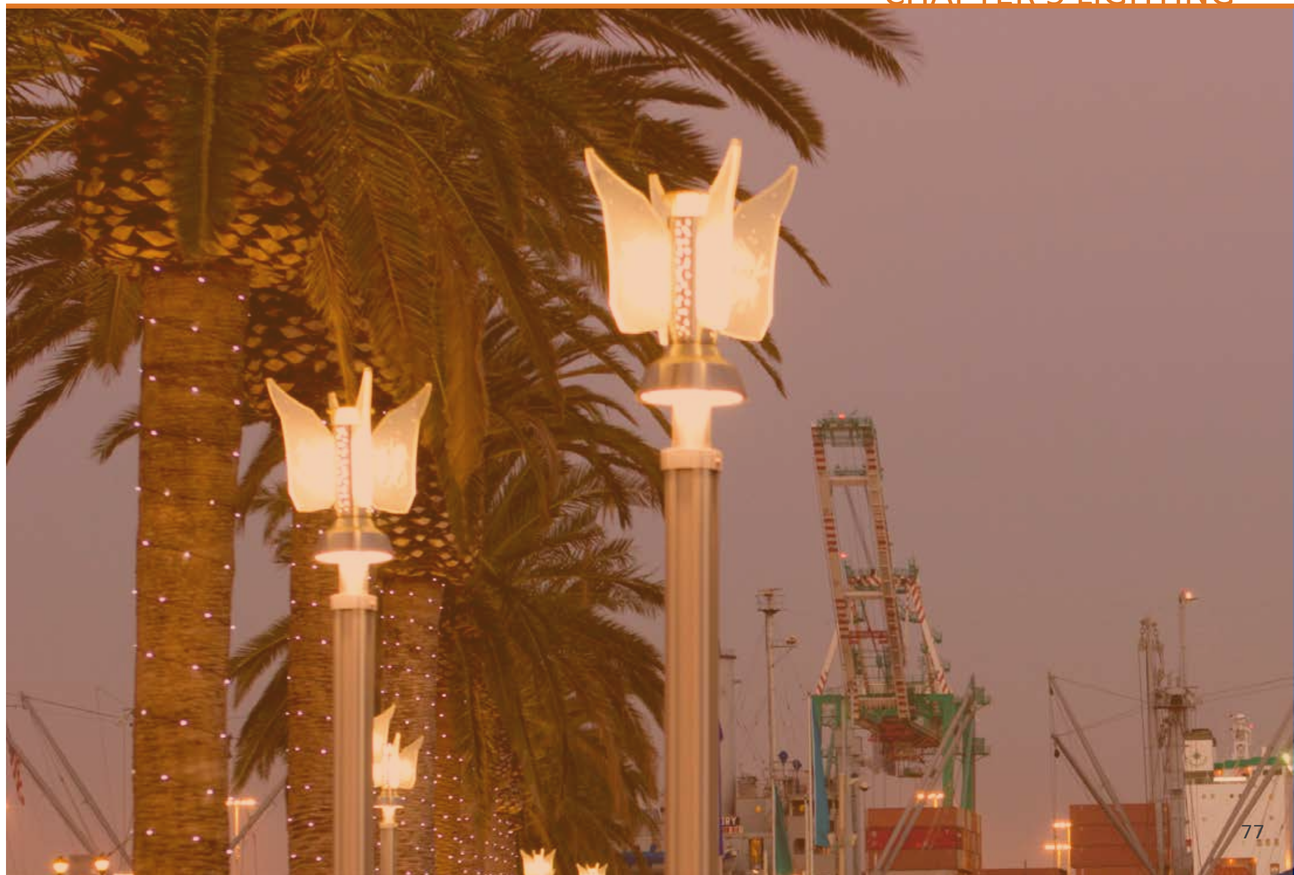
Artifact/Exhibit Information

Applicable Area

This type of sign is found in SP2 – Downtown Harbor. It is used to provide public information at key pedestrian intersections or circulation paths. This panel accompanies artifacts and contains educational and historic information.

Design

½" thick 3/16L-Marine-grade solid brushed stainless steel embedded into recessed finished grade with welded threaded studs. 6" high by 1' wide square with 4 ½" space for text or 9" diameter circle with 7 ½" inch diameter area for text. Frame to be flush to the ground. 1/8" deep etched inner surface. Text 1/16" deep etched. Letters type style Neutra demi for headline, painted-filled black. 1/16" deep etched key line. Text to be provided by exhibit designer. Exact location to be coordinated in field.



5. Lighting

This section provides guidelines for illuminating public open spaces along the LA Waterfront. The guidelines primarily apply to lighting provided by the Port. Lighting on private property would be subject to administrative review on a case-by-case basis. Outlined below are the goals for both the general lighting of the waterfront and the lighting of specific areas in Wilmington and San Pedro. Lighting types are described for the general character of the waterfront and any additional detail by sub-area is described.

Recommendations for lighting types are provided based on installations. Equipment guidelines seek to create a uniform electrical system and maintenance program for all standard lighting elements in public spaces. The LA Waterfront Design Guidelines establish an integrated lighting program to create a unified look and feel. The lighting guidelines outline lighting types for specific areas and general lighting and equipment standards.

Lighting Goals

The following goals define the overall approach to lighting within the LA Waterfront.

- Foster a unified LA Waterfront through high-quality, consistent, and complementary lighting design throughout the LA Waterfront.
- Utilize lighting to increase connectivity with the surrounding communities through common lighting elements.
- Create an attractive, safe, and active daytime and nighttime waterfront environment for vehicle, pedestrian, and bicycle use.
- Provide sufficient, uniform light for designated tasks based on activity levels and minimize light pollution, trespass, and glare.

General Lighting Guidelines

The following guidelines apply to lighting in all areas of Wilmington and San Pedro.

Flexibility

- While the lighting types establish a suite of fixtures, flexibility remains to allow other lighting types.
- Proposed lighting should, however, maintain a high level of quality and complement established lighting design precedents in areas adjacent to the project area.

Connectivity

- A high priority is placed on strengthening visual connectivity between LA Waterfront project areas and the communities of Wilmington and San Pedro.
- Careful attention should be paid to the design, placement, and illumination levels of lighting, among other considerations.

Lighting Type Variety

- The use of the three lighting types (Vehicle ,Pedestrian, and Specialty)is encouraged within each project to emphasize a variety of public access means and to give depth to the waterfront at night.

Light Levels

- Light levels are recommended to go beyond meeting minimum light level requirements to enhance prominent features, break up space, and establish character.

Activity Levels

- Light levels as measured in foot candles should be proportional to varying levels of activity.

Pole System

- To reduce visual clutter, a Holophane modular urban pole system has been selected for the waterfront. This pole design addresses lighting, signage, communication, traffic, and security within one unit.
- Where possible, this distinctly stylized pole should be used to create a strong linkage element along the waterfront.
- Pole design and configuration, including the fixtures and bases, should be unique to each subarea.
- Pole placement should be coordinated among various agencies to ensure that poles are placed in locations advantageous for all current and future needs.

Compliance

- In general, all lighting should comply with Illuminating Engineering Society of North America (IESNA) standards, the City of Los Angeles Bureau of Street Lighting, and the International Dark-Sky Association (IDA).
  - Vehicle lighting should comply with the City of Los Angeles Bureau of Street Lighting for local and collector streets.
  - For vehicle lighting, also specifically consult the Recommended Practices for Roadway Lighting (RP-08) IESNA for compliance with the City of Los Angeles Bureau of Street Lighting.

General Technical Guidelines

All lighting for the LA Waterfront included in these design guidelines should comply with the following:

Color Rendering

- Site areas requiring the quality of true color rendering at night, such as plazas and paths, should use a source with a CRI of 80+, such as ceramic metal halide, induction, or fluorescent.
- Incandescent sources greater than 100W are not permitted.
- Where possible, T6, G12 based ceramic metal halide sources should be used for low wattage (35-150W) applications.

Safety

- Vertical luminance should be maximized for nighttime facial recognition (use refractor/reflector optics with cut-off).
- All fixtures within public reach from the ground should be safe for human touch (for single lens metal halide fixtures, 70W or less is generally regarded as acceptable).
- Luminaires should be mounted to poles at a height of 10 feet minimum and 20 feet maximum for all pedestrian fixtures.

Sustainability

- All fixtures should be arranged and screened to reflect light away from adjacent properties.
- Glare and light trespass should be mitigated through the provision of louvers and shields.
- All outdoor fixtures should be equipped with photocells and/or astronomical time clocks.
- Methods for reducing illumination at “curfew” hours are encouraged as long as minimum lighting levels are maintained.

Maintenance

- Fixture finishes should be marine-grade for thermal, chemical, and UV resistance.
- Above-grade fixtures should be graffiti resistant.
- Measures to deter perching birds should be considered where possible.

Lighting Style Guidelines

Lighting types are divided into three different categories:

Vehicle Lighting – applies to city streets and parking areas.

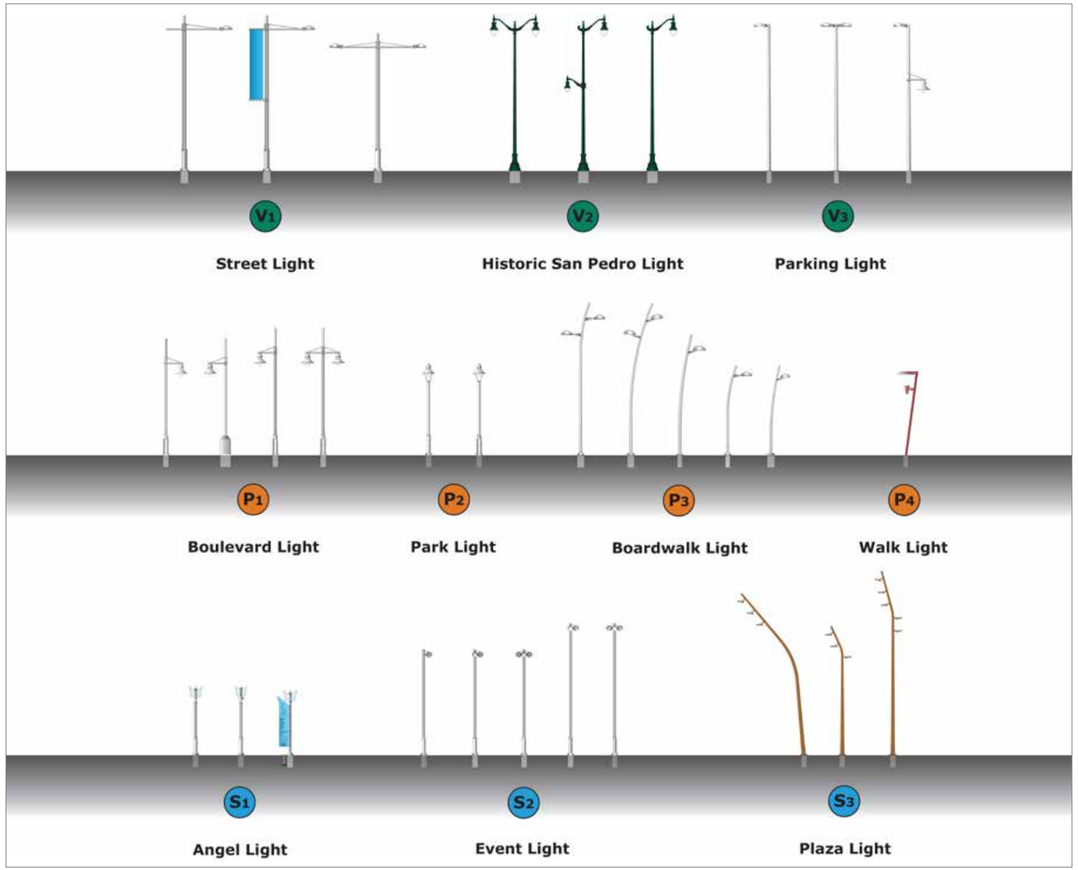
Pedestrian Lighting – applies to pathways, promenades, and park settings.

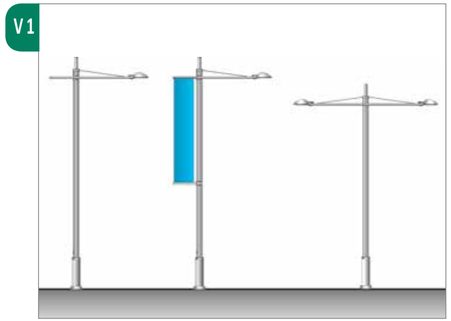
Specialty Lighting – may apply only to special areas or special types of lighting needs.

The following graphic demonstrates the families of light fixtures within each of the three lighting types. The following lighting design guidelines are organized by the three lighting types. Within each lighting type, areas are identified the type is currently used, as well as how it may be used in future areas. Detailed specifications are then presented for each fixture type. The guidelines outline the lamp type and manufacturer and catalog number for each fixture, maximum wattage, and base type. Where they exist, additional options for a fixture are described. These options include variations in height, the addition of luminaires, varying bases, and maximum wattage. The range of fixtures presented offers a broad and flexible range of potential lighting fixtures for the LA Waterfront.

The lighting types described below are recommended to maintain consistency with the high quality lighting types installed along the LA Waterfront and increase connectivity with adjacent communities.

	W1: Waterfront District	W2: Industrial District	W3: Waterfront Park	W4: Red Car Connection	SP1: Cruise Terminal	SP2: Downtown Harbor	SP3: Ports O' Call	SP4: Parks District	SP5: City Dock 1	SP6: Cabrillo Marinas	SP7: Outer Harbor	SP8: Cabrillo Beach
VEHICLE												
V1: Street Light					●	●		●		●	●	
V2: Historic San Pedro Light						●						
V3: Parking Light	●	●	●	●	●	●	●		●	●	●	●
PEDESTRIAN												
P1: Boulevard Light					●	●	●	●	●	●	●	●
P2: Park Light					●	●	●	●	●	●	●	●
P3: Boardwalk Light							●		●			
P4: Walk Light	●	●	●	●								
SPECIALITY												
S1: Angel Light	●	●	●	●	●	●	●	●	●	●	●	●
S2: Event Light					●	●	●	●	●	●		●
S3: Plaza Light	●		●		●	●						
S4: Landscape Accent Light					●	●	●		●	●	●	
S5: Tree-Mounted Ring					●	●	●		●	●	●	
S6: Festoon Light					●	●	●		●	●	●	
S7: Bollard						●						
S8: Accent Blue Light						●						
S9: 35 Watt In-Grade Uplight	●	●	●	●	●	●	●	●	●	●	●	●
S10: 12 Watt In-Grade Uplight	●	●	●	●	●	●	●	●	●	●	●	●





Street Light

Historic San Pedro Light

Vehicle Lighting

Vehicle lighting refers to all lighting fixtures adjacent to public and private roadways and in parking areas. These roads include all local and connector streets adjacent to the LA Waterfront subject to these design guidelines, subject to city permitting. Vehicle lighting ensures safe streets for vehicle traffic by increasing visibility but also provides opportunities to create a unified environment, connecting the roads of Wilmington and San Pedro. Fixtures can also provide opportunities for additional design features such as banners and pedestrian-scale lighting. The following text describes the family of vehicle lights and their specifications.

V1: Street Light

Applicable Areas

This type of lighting is found in SP1 – Cruise Terminal, SP2 – Downtown Harbor, SP4 – Parks District, SP6 – Cabrillo Marinas, and SP8 – Outer Harbor. This type of lighting should be used on all city streets or major internal project roads in the LA Waterfront. Banners can be added to the fixtures to activate the waterfront and create a unified appearance within the Port lands (see Signage Type I5: Banner and Festival Decoration).

Specifications

Full cutoff custom decorative streetlight with Sitelink T-3 pole 29’ 6” tall, lower banner bracket at 13’ 3”, custom cast base, and GFI receptacles at top and bottom oriented toward parking lot. Manufacturer and Catalog: Holophane Pole: SLT32800DKXS0094; Pole Kit: SLT3POLEKITS0094; Luminaire: P200MHXXNFAS.

Lamp Type Osram Sylvania M250/PS/U 65 CRI/3800K 12,000 Hours.

Maximum Wattage 295 Watts.

Base Type Decorative base with 17” square base plate.

Finishes Pole and base meteor gray finish. Roadway luminaire, both arms, arm brackets, and suspension pieces accented in silver finish.

Options

1. Optional 13’ 6” tall by 3’ 5” wide banner attached with cross arm and bolt attachment parallel to luminaire.

V2: Historic San Pedro Light

Applicable Areas

These types of lighting should be used primarily on side streets and parking areas in SP2 – Downtown Harbor. This lighting should only be used in areas adjacent to community areas that already use this light. The lighting style matches the lighting style of Downtown San Pedro and should be used to increase connectivity.

Specifications

Teardrop pole assembly 29’ 11” O.A.H. tapered, fluted, shaft pole with Utility Memphis Style luminaires on a single decorative West Liberty 4’ arm.

Manufacturer and Catalog Holophane: Luminaire/Arm/Base/Pole TSG000386.

Lamp Type TBD.

Maximum Wattage 100-250 Watts.

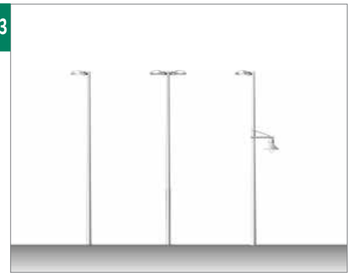
Base Type San Pedro style clamshell base.

Finishes Amershield Spring Street Green B50500CU polyester powdercoat.

Options

1. Two 4’ West Liberty decorative arm and two Utility Memphis Style luminaires Luminaire/Arm/Base/Pole TSG000386-ModDual Luminaire/Arm at 200 – 500 Watt.
2. Single 4’ West Liberty decorative arm with Utility Memphis Style luminaire and clamp-on decorative arm.

V3



Parking Light

V3: Parking Light

Applicable Areas

This lighting style should be used for parking areas for all Port properties in Wilmington and San Pedro. Other types of lighting may be considered for parking areas only upon review and approval by the Port of Los Angeles.

Specifications

Smooth, round tapered 25’ pole with single full-cutoff type III luminaire with flat lens on Holophane Lummtgarm arm.

Manufacturer and Catalog Luminaire: Holophane P250MH20FFASPR; Pole: Holophane RTA250KNMGMB9A.

Lamp Type P-15DMH-20-W-f-AS-NEMA 150 MH-PR.

Maximum Wattage 150 Watts.

Base Type Decorative collar, base plate, and bolt pattern by manufacturer with Holophane DCBasecover. Poured in place concrete pier extends 36” above finish grade. 4” x 6” handhole at base.

Finishes Meteor Gray

Options

1. Two fixtures with Type III Distribution with a maximum wattage of 300.
2. Two fixtures with Type II Distribution with a maximum wattage of 500.
3. Additional suspended, shrouded luminaire with teardrop prismatic glass refractor with Holophane Lummtgarm cantilevered arm assembly in bright silver bolted to pole.

Pedestrian Lighting

Pedestrian lights can help unify the design of the landscape while providing a distinction between areas of different activity. Complementary pedestrian fixtures create a unified appearance to the Port within the LA Waterfront. Light level and color are important in creating associations between different activities in pedestrian areas. The following describes the family of pedestrian lights and their specifications.

P1: Boulevard Light

Applicable Areas

This type of lighting should be used along promenades and pathways within Port of Los Angeles areas. It is found in SP1 – Cruise Terminal, SP2 – Downtown Harbor, SP4 – Parks District, and SP6 – Cabrillo Marinas. It is the primary pedestrian-scale light fixture and is used to visually connect all areas of the promenade. Other types of lighting may be used for promenades and pathways only upon review and approval by the Port of Los Angeles.

Specifications

Custom decorative Holophane mast light with 1 luminaire, 3’ 6” tenon cap, suspended Prague/Esplanade Glass lumiaire with 70W T6 lamping, 20’ 6” Sitelink T-2 pole , 18’ A.F.G. dual luminaire arms with stainless steel cable suspension, and 3’ 6” custom rope base with 3’ cast rope and 6” smooth shaft/rivets.

Manufacturer and Catalog Holophane: SLT22006K-0P4HTB-0306CAP-ROPE/CYLBASE-(1)PGw/PLA1.

Luminaire Type Prague luminaire and banner arm - UGPC98MDY527X.

Lamp Type CDM70/T6/830, 70 Watt T6, 81 CRI/3000K 12,000 hours, Philips Mastercolor or similar by others.

Maximum Wattage 140 Watt.

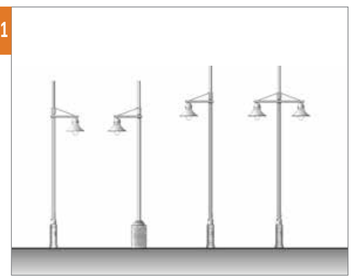
Base Type Custom cast clamshell with 13” base plate

Finishes Graphite gray Kynar paint (Meteor Gray), arms accented in silver Kynar finish (KM3C20413-C Silver TMC).

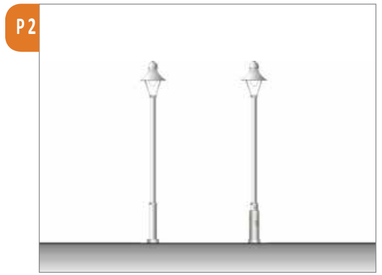
Options

1. Poured in place concrete pier extends 36” above grade, decorative collar, base plate, and base cover in Holophane DC basecover finish in Meteor Gray.
2. Varying pole heights up to 21’-6”.
3. Dual arm with two teardrop luminaires.

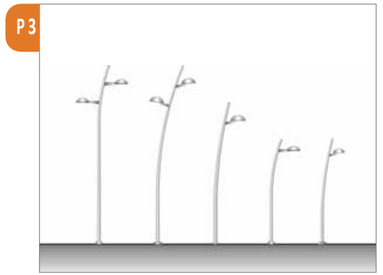
P1



Boulevard Light



Park Light



Boardwalk Light

Walk Light

P2: Park Light

Applicable Areas

This type of lighting is found in SP1 – Cruise Terminal, SP4 – Parks District, and SP6 – Cabrillo Marinas. This type of lighting applies to all park areas on Port property in all sub-areas of San Pedro.

Specifications

Suspended, shrouded metal halide luminaire with teardrop prismatic refractor in IES Type IV distribution with yoke mounting assembly mounted to 14" straight 5" pole with standard cast base. Entire assembly mounts flush to finished grade.

Manufacturer and Catalog Holophane Pole: RS-A145OGPNDAS; Luminaire: GP70CMHXXYAS94; Base: NRBECASCSBRSADX; Anchor Bolt: ABRSA1450.

Lamp Type CDM70/T6/830, 70 Watt T6, 81 CRI/3000K 12,000 hours.

Maximum Wattage 70 Watt.

Base Type Decorative coiled rope cast base.

Finishes Graphite gray Kynar paint (Meteor Gray), yoke mounting assembly in silver Kynar finish (KM3C20413-C Silver TMC).

P3: Boardwalk Light

Applicable Areas

This type of lighting is used at the overlook and fishing pier at SP5 – City Dock No.1. It may also be used in similar types of situations for overlooks and fishing piers along the water's edge in San Pedro. This style should be considered for the Port O' Call area throughout the promenade along the water's edge.

Specifications

Curved tapered pole, hot dipped and galvanized in and out with pole curvature oriented toward water like a fishing pole modified for Avia oval luminaires with roadway options mounted at 23' and 26'.

Manufacturer and Catalog Holophane/Ghisamistieri: AD40043.dwg HF-03-MD-2005-(2)AVIA250-150W ED17MH.

Lamp Type MHC150/U/M/4K/ALTO 150 Watt ED-17 MH, 85 CRI/4000K, 20,000 Hours, Phillips Mastercolor or similar by others.

Maximum Wattage 300 Watt.

Base Type 11 5/8" diameter base plate with cover.

Height Overall arching pole height not to exceed 29'.

Finishes Pole finish: Meteor Gray or similar to match.

Options

1. Single Prague luminaire mounted at 15' 2" with overall arching pole height not to exceed 17' at 70 Watt.

P4: Walk Light

Applicable Areas

This type of lighting is found in the Wilmington waterfront in the W3 - Wilmington Waterfront Park area on pathways and along streets. It can also be used in parking lots.

Specifications

Luminaire housing smoothly transitioning to inverted tapered pole, appearing as one continuous form, with an angular steel bracket extending up and suspending an aluminium roof housing a secondary reflector system producing a uniform light pattern on the ground.

Lamp Type CDM150/T6/830.

Manufacturer and Catalog Hess America Faro 960 150 Watt metal halide.

Height 16.4' mounting height.

Options

1. Faro 960NQ with slanted steel pole at 7.5 degree incline.

Angel Light

Specialty Lighting

Specialty lighting provides opportunities to emphasize unique areas, prominent features, and landscape components, as well as highlight interpretative nodes and gateways using accent and novelty lighting. Specialty lighting should be used selectively on a project-by-project basis and integrated into a larger collective intent for the Port's waterfront. The following describes the family of speciality lights and their specifications.

S1: Angel Light

Applicable Areas

Currently, the Angel Light is used in SP1 – Cruise Terminal, SP2 – Downtown Harbor, and SP5 – City Dock No. 1. This lighting style is intended to be used throughout the LA Waterfront in informal clusters at special nodes or gathering areas. They should never be used in a line or symmetrically. The Angel Light should serve as an identifying light through the entire waterfront while also functioning as a beacon to define active public spaces.

Specifications

Decorative Angel Light fixture assembly to consist of 10' A.F.G. Sitelink 10' T-2 pole with integral mounting channel, standard base, and standard and base plate cover, finished in silver Kynar paint, and fitted with custom angel fixture with a downlight reflector. Angel light luminaire consists of stainless steel body and frosted acrylic wings edgelit with two 36W T5 3000K fluorescent lamps.

Manufacturer and Catalog Cole Lighting: E1304d, Holophane: SLT21000KIP4H-DCVR-4x375TENON.

Lamp Type 36 Watt T5 82 CRI/3000 K, 12,000 Hour, Osram Sylvania or similar by others; CDM35/T6/830 70 Watt T6 MH 81 CRI/3000 K, 12,000 Hours Philips Mastercolor or similar by others.

Maximum Wattage 125 Watt.

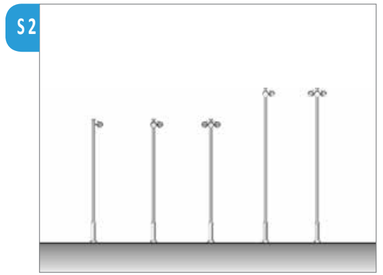
Height 10' pole height, 13' overall height.

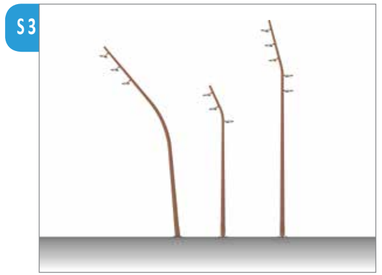
Base Type Round, smooth two-piece clamsheel base with 13" square base plate.

Finishes Aluminum pole shaft and base: AKZO Nobel Kynar paint KM3C20413C Silver TMC.

Options

1. Decorative angel light luminaire edgelit with 36W T5 3000K fluorescent lamps and downlight reflector with frosted acrylic lens and 35W T6 metal halide lamping.
2. 13" square base plate flush in grade to be used with Angel Light Stanchions (see Signage Type P3).





Event Light

Plaza Light

S2: Event Light

Applicable Areas

This type of lighting is currently used in SP1 - Cruise Terminal and SP6 – Cabrillo Marinas to light large event spaces with downward flood light fixtures. This lighting may be used in areas in San Pedro with high public night time use such as the bocce courts, and Downtown Harbor.

Specifications

Event pole consisting of 20’ A.F.G. SiteLink T-2 pole with integral mounting channels, standard base cover, and standard base plate fitted with a single adjustable yoke mounted floodlight at 19’ in standard aluminium finish.

Manufacturer and Catalog

Holophane: SLT22000K1P0H-DECVR.

Lamp Type

MHC100/U/M/3K/ALTO 100 Watt ED-17 MH 85 CRI/3000 K, 16,000 Hour Philips Mastercolor or similar by others.

Maximum Wattage N/A.

Base Type

Round, smooth clamshell base in bright silver finish with 13” square base platewith 11” bolt circle and 4 anchor bolts.

Finishes Pole: Akzo Nobel Kynar paint KM3C20413-C Silber TMC.

Options

1. Fitted with two adjustable floodlights mounted at 19” at two channels oriented 90 degrees.
2. Fitted with three adjustable floodlights mounted at 19” at two channels oriented 90 degrees.
3. Fitted with four adjustable floodlights mounted at 19” height at all four channels.
4. 25’ high event pole fitted with two adjustable floodlights mounted at 24’ at two channels oriented 90 degrees.
5. 25’ high event pole fitted with four adjustable floodlights mounted at 24’ height at all four channels.

S3: Plaza Light

Applicable Areas

This type of lighting is found along the Wilmington aterfront in W3 - Wilmington Waterfront Park and is used to light large, open areas such as plazas.

Specifications

Tapered column of galvanized steel with anchorage points for multiple luminaires providing well-distributed uniform light. The choice and angle of the reflectors ensures that light is shed vertically.

Manufacturer

Escofet Serie Ful Holophane Predator Lamp.

Maximum Wattage 150 Watt.

Height 22’ 9” mounting height.

Color Finely textured matte custom color.

Options

1. 32’ 8” height with two additional luminaires.
2. 29’ 5” with greater horizontal arm.

Landscape Accent Light

S4: Landscape Accent Light

Applicable Areas

This type of lighting is used to provide accent lighting of palm trees at SP1 – Cruise Terminal and SP2 – Downtown Harbor. This type of lighting can be used in San Pedro for landscape accent.

Specifications

Surface-mounted lightstrings at Washingtonia robusta with white LEDs, 9.85" O.C. wrapped around trunks of palm trees at 1' spacing between wraps from group to below pineapple and stapled as required to hold lightstring to tree using stainless steel staples inserted less than 1" into the trunk. Locate one driver per tree under tree grate or local in-grade hand box. As trees grow, light strings should be reinstalled to avoid maintenance issues. As LEDs dim over time, lights should be replaced.

Manufacturer and Catalog Tokistar; Lightstring: SLBK-9.85-WH-0.10-Watt/8-VDC, 100' length; Driver: #LDR8-25-277VAC.

Lamp Type (120) 5200 K white LEDs 0.10 W/8-VDC 100'-0" total length.

Maximum Wattage 0.12 Watt/ft or 12 Watt/tree; Locate driver at each uplight junction box.

S5: Tree-Mounted Ring

Applicable Areas

This type of lighting is used in SP2 – Downtown Harbor to accent palm trees at night time in areas with high pedestrian activity. It can be used in other waterfront areas in San Pedro for a similar effect.

Specifications

Tree-mounted ring with two metal halide adjustable downlights and two metal halide fixed uplights with integral ballasts.

Manufacturer and Catalog BK Lighting SS Strap with 2 fixed EV-"C" Uplights and 2 EV-"A" 360SL Downlights.

Lamp Type GE CMH39/T/U/830/G1Z 35 WATT T6 82 CRI/3000K 10,000 hours or equal.

Maximum Wattage 140 Watt; provide Corraclad MC cable by Coleman Cable to feed power up tree to fixtures; Paint Corraclad to match finish of trunk and run up trunk opposite of main public view.

Options

1. Tree-mounted ring with two metal halide fixed uplights with integral ballasts and maximum wattage of 92.

S6: Festoon Lighting

Applicable Areas

This type of lighting is used in SP2 – Downtown Harbor to accent landscape features at night time

Specifications

Cable suspended festoon lighting with warm white LEDs spaced 3" on center and white G-globes.

Manufacturer and Catalog Tokistar; Exhibitor: BK-36-WW-F; Driver: TBD.

Lamp Type Included 300K White LEDs 0.48 W.

Maximum Wattage 1.92 Watt/foot; Locate driver at each uplight junction box.

S7: Bollards

Applicable Areas

This type of lighting is used in SP2 – Downtown Harbor to illuminate paths. It may be used for 7th Street. The design of the bollard reflects various elements from historic buildings in San Pedro and uses art deco themes. While this design is unique to Downtown Harbor, similar lighted bollards may provide additional lighting along paths in other areas in Wilmington and San Pedro.

Specifications

Surface-mounted, free-standing art deco bollard with "Harbor Light" prism steplight on land side and wash light on water side installed at edge of walkway in-line with handrail. Wired for 2-circuit operations with steplights on/off at dusk/dawn and wash lights one for special events (e.g., tall ships).

Manufacturer and Catalog Penwal Industries, Inc. PEN-PB-12x15-SP.

Type CDM70/T6/830 70 Watt T6 1 CRI/3000 K 12,000 Hours Philips Mastercolor or similar by others.

Maximum Wattage 80 Watt.

Finishes Meteor Gray finish with satin aluminium accents.

S8: Accent Blue Light

Applicable Areas

This type of lighting is used in SP2 – Downtown Harbor along the water to match the Vincent Thomas Bridge and accent the setting. These lights are placed on the bulkhead along the lower promenade This type of lighting should not be used in other subareas.

Specifications

Adjustable blue LED fan-shaped accent light with adjustable locking tilt and five 1-watt blue LEDs with integral LED driver.

Manufacturer and Catalog Farlight LLC LED fan-shaped-beam-Blue-277.

Lamp Type Integral Blue LEDs.

Maximum Wattage 7.5 Watts; fixtures to be aimed with lighting designer at night.

35 Watt In-Grade Up-Light

12 Watt In-Grade Up-Light

S9: 35 Watt In-Grade Up-Light

Applicable Areas

This type of lighting provides accent lighting of major trees, other landscape elements, and signage at SP1 – Cruise Terminal and SP2 – Downtown Harbor. It can be used throughout San Pedro to accent landscape such as palm trees through up-lighting.

Specifications

Adjustable in-grade 35 Watt T6 metal halide stainless steel well-light with dual flat clear top lens, convex lamp module lens, and internal source shield for uplighting signage and landscaping.

Manufacturer and Catalog Hydrel M9420-SS-35CMT6-[VOLT]-MFL-FLC-[CONDUIT ENTRY]-ISS.

Lamp Type GE CMH39/T/U/830/G1Z/35 WATT T6 82 CRI/3000 K, 10,000 Hours or equal.

Maximum Wattage 46 Watt; fixture to be aimed within lighting designer at night.

Options

1. Well-light with narrow flood refractor.
2. Well-light with narrow-spot reflector.

S10: 12 Watt In-Grade Uplight

Applicable Areas

This type of lighting provides accent lighting of major trees and other landscape elements at SP1 – Cruise Terminal and SP2 – Downtown Harbor. It can be found throughout San Pedro to accent landscape such as palm trees through up-lighting.

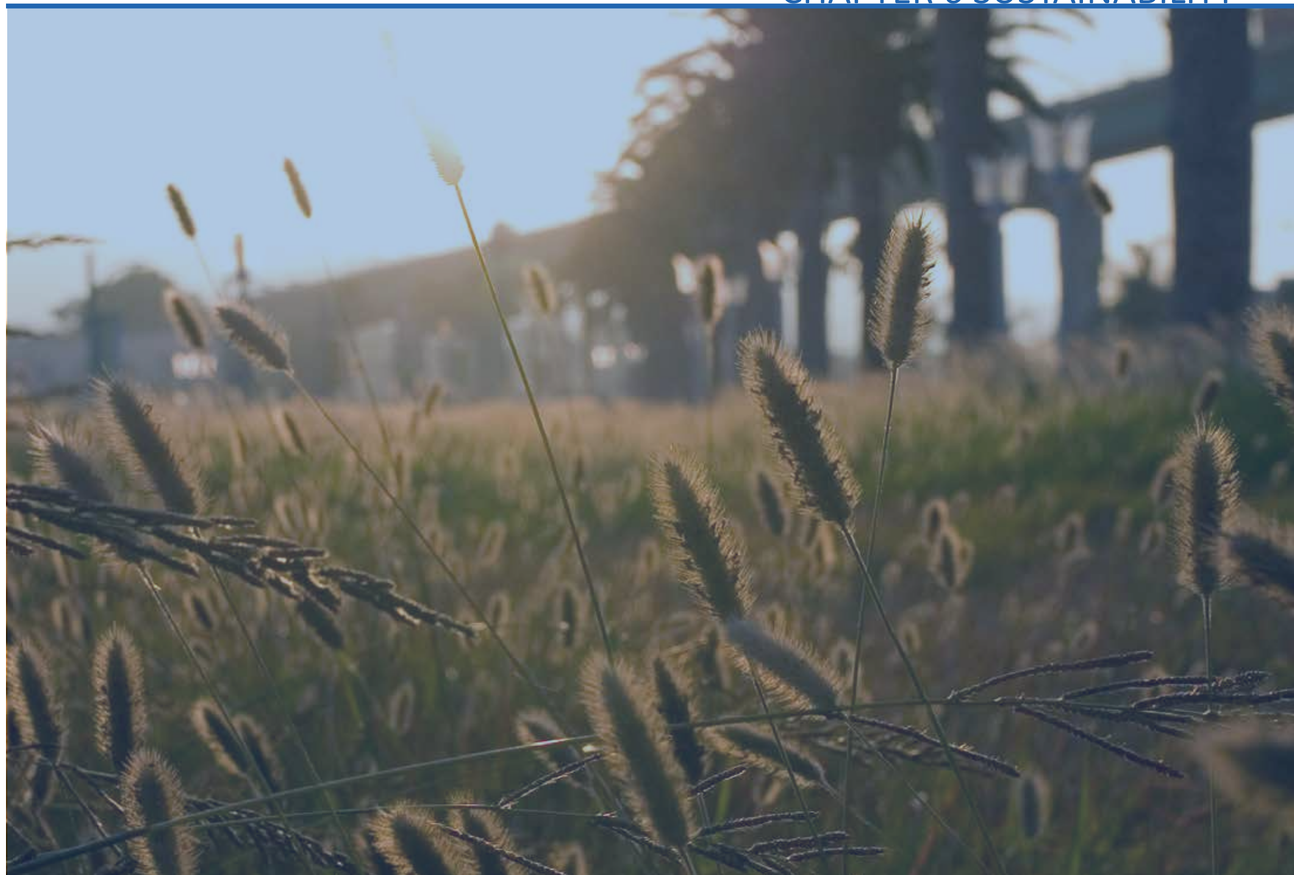
Specifications

Adjustable 9” in-grade 12 Watt LED uplight stainless steel well-light with medium flood optics and flat, clear, anti-slip lens.

Manufacturer and Catalog Hydrel M9420-SS-12LED-WMW-[208V]-MFL-FLCAS-[CONDUIT]-LP.

Lamp Type Integral 3000K White LEDS.

Maximum Wattage 15 Watt; fixture to be aimed within lighting designer at night.



6. Sustainability

The benefits of applying sustainable design principles in the early stages of planning can significantly improve the efficiency of a building or site and the quality of the environment provided for occupants and users. The application of sustainable principles in site engineering and landscape design can reduce costs associated with infrastructure construction, reduce costs for landscape maintenance, reduce building operation costs, reduce impacts on natural systems, and provide enhanced outdoor spaces for recreation and leisure uses. Sustainable design practices must be applied at the earliest phases of design, at all levels of development, and continuously from planning through occupancy. For success, sustainable principles must be developed in an integrated manner involving the design team working closely with the client who will manage the facilities.

Projects on Port property are subject to the Port of Los Angeles Engineering Design Guidelines. In addition, the following are sustainability design guidelines apply.

Sustainability Benefits

Some of the specific benefits of sustainable design include:

- Reduced water use for landscape irrigation and plumbing fixtures.
- Reduced impacts on the natural environment from sensitivity to siting of facilities.
- Reduced infrastructure construction costs.
- Increased comfort and reduced energy costs through the use of natural daylight and ventilation and localized controls.
- Improved interior air quality through the use of non-toxic materials.
- Reduced energy use and cost of mechanical systems as a result of reduced cooling and heating loads.
- Reduced energy use for outdoor fixtures.

Planning and Design Process

The early and integrated involvement of the design team in the form of charrettes or other collective analyses and design efforts is essential to developing attainable goals and solutions. Conceptual designs should be reviewed for compliance with the sustainability goals. Project design options should be prepared to evaluate benefits, costs, and trade-offs. Project documents should be reviewed at key points during their production to evaluate their compliance with the sustainability goals. Specifications for the operation and monitoring of sustainable maintenance practices should be developed to ensure the long-term success of sustainable practices.

Sustainability Guidelines

The Port of Los Angeles' world-class reputation is based on a commitment to remaining on the cutting edge of port development. The Port actively incorporates environmental measures to ensure that development is carried out in a responsible manner. To this end the Port has developed a comprehensive set of guidelines related to planning, design, and construction: the Port of Los Angeles Sustainability Guidelines for Engineering and Construction. The guidelines also identify strategies to measure and compare success in improving sustainability performance. In addition to being a planning tool, the guidelines provide a reporting and approval system whereby projects will always be evaluated and monitored to ensure that the Port is implementing all feasible sustainability provisions wherever possible.

Any new project should consider and incorporate the Port of Los Angeles Sustainability Guidelines for Engineering and Construction. As this document will continue to evolve and change in response to the development of new technologies and concepts, designers should refer back to this document. Several additional guidelines are outlined below that go above and beyond the existing Port guidelines.

Stormwater

Areas along the LA Waterfront are the last place possible to capture stormwater and treat it before it enters the harbor. Various strategies can be used including permeable paving, flow-through planters, swales, and rain gardens. Stormwater quality and quantity can also be addressed through the landscape plan and a stormwater management plan. The construction of paved areas with permeable surfaces or groundwater recharge systems will assist in groundwater recharge and reduce the need for stormwater drainage infrastructure. Capturing and treating stormwater on site will contribute to the incremental restoration of the health of the region's watersheds, protect the ocean, and build a greener more livable environment.

- Implement a stormwater management plan that reduces impervious surfaces and minimizes the concentration of contaminants and generation of concentrated stormwater runoff from the site.
- Where possible, preserve and protect existing waterways, wetlands, and vegetation. These natural drainage features define the character of a site and act as natural stormwater management measures. Rehabilitate functions and values of any streams, wetlands, or shorelines that have been artificially modified through techniques such as daylighting.
- Where possible, preserve natural drainage patterns and topography and use them to inform design.
- Develop an operations
- Use Low Impact Design (LID) to capture and treat stormwater runoff on site through decentralized site strategies that are integrated with the urban environment. Treatment facilities should not only manage stormwater but provide a visual amenity and improve the public realm. LID will reduce loads on existing stormwater infrastructure and can decrease stormwater costs for new development.
- Promote rain water catchment and reuse for irrigation or groundwater infiltration on site.
- Select native plant materials for bioswales and other stormwater cleansing based on filtration qualities, adaptability, and the context of the surrounding landscape.
- Utilize permeable paving materials to increase rainwater infiltration and reduce stormwater infrastructure needs.
- Minimize and disconnect impervious surfaces so that relatively small volumes of runoff from multiple surfaces can be treated individually as opposed to large volumes that have mobilized diverse pollutants from surfaces across the entire site.
- When attempting to infiltrate stormwater, be mindful of high water tables and maintain minimal clearance depths according to local code requirements.
- Design compact, multi-story buildings and cluster buildings to reduce the length of streets, driveways, and other impervious surfaces.
- Refer to Open Space: Landscape Elements and Plant Materials for additional sustainabilty guidelines on water conservation and native plants .

Use LID on-site as the waterfront is the last place to capture and treat stormwater runoff.

Preserve and protect existing waterways, wetlands, and vegetation.

Soft edges can control wakes and manage stormwater.

Terraced seawalls absorb and dissipate wake energy and allow people to touch the water

Rough textures can create micro-habitat.

Shoreline

Traditionally, developed shorelines have been hard edges used to keep land from eroding into the water. An alternative design that softens this edge can provide ecological and recreational benefits. A softer shoreline can provide access to the water, create shoreline habitat, provide flood storage, reduce wake, and minimize pollution from stormwater. Not only does this type of shoreline provide a healthier environment, but it is also more compatible with increased public use and recreation.

- Provide soft waterfront edges, where feasible, at strategic locations either in areas of high pedestrian traffic or areas ideally situated for habitat to facilitate water access, manage stormwater, mitigate flooding, control wakes, and provide habitat. Design solutions that allow people to touch the water.
- Design seawalls that absorb and dissipate wake energy by using porous, sloped, gentle, or terraced embankments, or a combination of horizontal and vertical surfaces.
- Create micro-habitat to encourage the formation of a crust of filter-feeding marine organisms that function as a living water filtration system. This can be accomplished with cavities or crevices that retain water during low tide; the use of rough textured and porous surfaces such as mussel, oyster, and clam shells that facilitate the attachment of organisms; and/or integrated ecosystem-enhancing treatments such as oyster baskets.
- Use concrete and steel pilings instead of wood pilings treated with petroleum to preserve the quality of the marine habitat.
- Consult with natural resource experts before and during design and construction to avoid causing damage to sensitive habitat areas and native populations of flora and fauna.
- Where erosion is an issue, use bioengineering methods such as planting a riparian buffer rather than employing hard reinforcements such as concrete as these materials may cause further erosion and undercutting.
- Docks should not bisect habitat corridors. Concrete structures should be designed with gaps, tubes, or cleavage to allow movement of animals and growth of plants in a continuum.
- Safety tips should be posted to avoid damage to local ecology as well as tidal information.

Site Construction

Sustainable concepts for site construction and landscape planting should be implemented in an integrated manner by the engineering and design team from the earliest site design phase. Site construction operations such as grading and site clearance can have negative impacts on the natural environment. Balancing soil cut and fill on site eliminates the need to transport soil off site by vehicle. This can reduce negative impacts on air quality and natural stormwater drainage patterns. It will eliminate the need for fill sites and maintain topsoil resources.

- Meet local codes concerning erosion control during and after construction.
- Prevent the loss of topsoil by stockpiling on site for future use in an area protected from erosion or wind.
- Prevent sedimentation of storm sewers or receiving streams through erosion controls such as silt fencing, sediment traps, and construction phasing.
- Develop and communicate to the construction team a soil management plan to limit disturbance, assist soil restoration efforts, and define the location and boundaries of all vegetation and soil protection zones.
- Limit the disturbance of healthy soil to protect soil horizons and maintain soil structure, existing hydrology, organic matter, and nutrients stored in soils.

Sediment traps and silt fencing can help prevent the sedimentation of storm sewers and receiving streams

Stockpile topsoil on site to prevent its loss on-site

Existing LEED Gold building at Port of Los Angeles.

Solar power should be incorporated to the maximum feasible extent.

Green roofs are one way to improve energy efficiency for buildings.

LEED Certification

The Port of Los Angeles is committed to maintaining a leadership role in the advancement of sustainable practices in buildings. The Port has established an aggressive green building program, promoting the incorporation of creative technologies and dedicating resources to innovation. The Port's program requires a minimum LEED Gold Rating and the incorporation of additional energy and water efficiency elements to newly constructed buildings. When possible, new buildings should also incorporate solar panels and the best available technology for energy and water conservation. The Port maintains a staff dedicated to the advancement and continuous refinement of its sustainable building practices.

- All buildings of new construction 7,500 sq. ft. or greater and meeting the intentions set forth by LEED NC (new construction - i.e. office buildings) without compromising the functionality of the building purpose as operational support for its marine use will be designed to a minimum standard of LEED NC Gold.
- All buildings of new construction 7,500 sq. ft. or greater and of the typology that was not the primary focus for LEED NC (i.e. marine utilitarian buildings such as building used to maintain equipment) without compromising the functionality of the building purpose as support for its marine use will be designed to a minimum standard of LEED NC Silver.
- All Port-owned existing buildings 7,500 sq. ft. or greater will be inventoried and evaluated for their applicability to the LEED EB (Existing Building) standards. The operation and maintenance procedures of the building will then be used to determine the priority for certification to LEED EB standards.
- All other buildings not encompassed above will be designed and constructed to comply or be consistent with the highest practical and applicable LEED standards or their equivalent to the extent feasible for the building's purpose.
- In addition to meeting LEEDs standards all new Port buildings will incorporate solar power to the maximum feasible extent as well as incorporate the best available technology for energy and water efficiency.

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