

# PERCIVAL LANDING MAJOR REHABILITATION

## EXECUTIVE SUMMARY



**Prepared for:**

City of Olympia

Parks, Arts and Recreation Department

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## **INTRODUCTION**

A slideshow regarding the completion of the 30 percent design work for Percival Landing is being presented to the City of Olympia City Council on October 7, 2008, by the project design team. This executive summary was prepared for use by City Council members as a support document and reference material to that audio-visual presentation. Thanks to the following City representatives for their continued interest and support for the major rehabilitation of Percival Landing:

### **Olympia City Council**

Doug Mah, Mayor

Jeff Kingsbury, Mayor Pro Tem

Joe Hyer

Joan Machlis

Karen Messmer

Craig Ottavelli

Rhenda Iris Strub

Steve Hall, City Manager

### **Parks, Arts and Recreation Project Team**

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### **Consultant Design Team**

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Peragine Design Group Architecture (Architectural Consultant)

Berger-ABAM Engineers (Structural Engineering Consultant)

Hultz, Bhu, Cross Engineers (Electrical Engineering Consultant)

WHPacific, Inc. (Surveyor)

Northwest Archeological Associates

## **PROJECT BACKGROUND**

### **Need for a Safe Public Promenade**

Percival Landing is the City of Olympia's (City's) front porch on Puget Sound and one of the City residents' most popular outdoor facilities. However, all one has to do is to take a walk along Percival Landing and they will be provided the visual impact of why a major rehabilitation of this prominent City structure is urgently needed. Portions of Percival Landing are now permanently closed due to public safety issues, having the potential to collapse under the load of public usage. The problems are especially evident at low tide when it is easy to see the deterioration of wooden support piles. In addition to structural weakness, the timber walkway is worn and uneven, the shoreline is strewn with rubble, and the facility is generally rundown. Guest moorage floats are also deteriorated and utility services to the floats could no longer be maintained and had to be disconnected.

### **Concept Plan and 30 Percent Design**

Recognizing that the City's waterfront is a focal point for the City and that Percival Landing is a primary waterfront facility, the City developed a Concept Plan to serve as the framework for the phased rehabilitation of Percival Landing. The Concept Plan, adopted by City Council in January 2006, not only called for the rehabilitation of the failing boardwalk but also established the vision for upgrades and enhancements to the entire waterfront park facility. Extensive public input helped shape the Concept Plan as it was developed and provided the foundation for the proposed 30 percent design elements presented here.

In general, the intent of the 30 percent design has been to carry forward the Concept Plan and to work to fulfill the goals and objectives it outlined. To clarify distinction between the two processes, it is important to point out that the Concept Plan is a vision document based upon general information, whereas the 30 percent design is tied to actual site conditions, property limitations, and specialized engineering elements that are in conformance with those site-specific conditions.

## PROPOSED DESIGN

### Design Overview

All elements of the proposed design are detailed in the Design Analysis Report and 30 Percent Design Drawings. The following narrative and supporting illustrations provide an “executive summary” of the design features as well as a phasing and funding strategy. This overview will allow the reader to visualize the primary design elements in the context of four distinct “nodes” – The View, City Dock, Percival Plaza, and The Landing—as intended by the Concept Plan.

The scope of the 30 percent design was to provide actual engineering to the Concept Plan; to this end, the 30 percent design included field surveys and soils testing as well as design features by civil, structural, and electrical engineers, and landscape architects.

Environmental considerations necessary for permitting were also part of the 30 percent design. The proposed improvements will provide an overall environmental benefit including the removal of nearly 600 creosote piles thereby eliminating this source of contaminants from the waterway. However, the impacts of demolition and excavation must be assessed and the new design features must be documented to provide environmental benefit. Overwater coverage restricts natural light from the water, which is undesirable for juvenile fish. The proposed boardwalk design will reduce overwater cover and allow light penetration, which is desirable for fish survival; it will also provide pockets of habitat and a more fish-friendly bottom substrate.

On January 15, 2008, the design team received early authorization from the City Council to use a 50-year design life for the facilities and to accommodate as much as possible for the forecasted sea level rise of up to 2 feet. Due to the uncertainties of the ultimate sea level rise protection strategy, it is not practical or financially prudent to incorporate permanent sea level rise solutions without the Citywide plan. Staff recommended that the rehabilitation of Percival Landing account for sea level rise and design life by including the following design parameters:

1. Make moderate adjustment to raise the fixed elements of the landing areas where it will not interfere with adjacent uses.

2. Select construction materials and natural elements that can take periodic inundation of sea water (winter daytime extremes and summer nighttime extremes).
3. Design utility chases that allow maintenance access from above.
4. Design in a manner that does not preclude future alteration to the site to accommodate sea level rise.

Facility design life considerations include a variety of factors, primarily:

1. Environmental factors – such as the corrosive sea water environment
2. Dynamic factors – such as seismic, wind and wave forces, etc. (sea level rise will impact these)
3. Functional uses – such as number and frequency of users, types of use (live load), and future community needs (changing uses)
4. Choice of materials – resistance to wear, corrosion, cost, etc.
5. Maintenance practices – assumes normal maintenance for the materials and uses

An artist's view of the proposed reconstruction of Percival Landing is provided in Figure 1.



**Figure 1**

**Percival Landing 30 Percent Illustrative Plan**

Artist's "bird's eye" view of the reconstructed Percival Landing looking north from 4th Street

**General Design Elements Common to All Areas**

***Replacement of the Boardwalk Structure***

The largest element of the project is the replacement of the over-water boardwalk structure. The existing treated-timber boardwalk will be replaced with a pre-stressed concrete structure, providing a more long-lasting waterfront promenade facility. Concrete pile piers will be spaced at approximately 50-foot intervals and support a concrete deck span. The deck will have a center strip of galvanized steel grating to allow light passage below for fish enhancement. Utilities will run under the grating to allow access from the deck for maintenance. The grating will occupy one third to one half of the over-water deck surface in most areas. Grating will be Americans with Disabilities Act (ADA)-accessible and have an opening area to meet permit agency requirements for light penetration. Concrete was selected as the primary structural material because it is the only material that can satisfy a 50-year design life criteria established by the City Council. Where over-water pile supports are not needed, the water's edge promenade will be supported by a sheet pile bulkhead or short concrete

retaining walls. In most cases where the boardwalk has been moved onto land, it will enhance the intertidal habitat. Where the new promenade is on land, the surface material will vary depending upon location to include:

- Cast-in-place concrete (basic material choice)
- Concrete pavers (gathering areas)
- Existing wood boardwalk decking (recycled)

The majority of the guardrail will be all metal and will provide pedestrian safety as needed along the new structure. In some locations, the guardrail will have a top wooden “elbow rail” at gathering locations and a top rail support member that can be used to display professionally engraved donor names for fundraising recognition. On the deck surface below and along the length of the rail will be a concrete bull rail (curb). Lighting will include deck level lights mounted in the curb to illuminate the deck from the waterward edge as well as pole-mounted lights in the gathering areas. Lighting is designed to provide safe footing and a feeling of security without affecting nighttime views.

### ***Floating Docks***

Concrete floating docks with concrete guide piles will replace all the existing floating docks that the City owns and operates. A new floating dock connection is proposed to link both sides of this section of Budd Inlet and increase pedestrian access at water level. Maintenance dredging will be done to prevent damage to floats from grounding at low tide. The floats will have new utility hookups for water and power, a new wastewater pump out facility, and new gangways for access to Percival Landing amenities. One ADA-accessible gangway is proposed.

### ***Pavilions***

These simple shelter structures are designed to be light and airy and to frame, but not interfere with, the views. They are strategically located along street ends and at the edges of view corridors creating places to gather where users can find respite from the elements and enjoy the view. The pavilions will also be designed to house future overhead art, cultural/historic, or environmental educational features to function as “living libraries.”

***Bathhouse and Restroom Buildings***

A redesigned Leadership in Energy and Environmental Design (LEED)-certified Bathhouse Building will serve boaters as well as other park users. The restroom design will have resemblance to Sam Percival's original ticket house and will include a mast/flagpole feature to capture the nautical experience. It will also have improved space for maintenance, storage, and flexible office space.

A smaller restroom will replace the present facility at the Sylvester Street end. Designed to echo the other buildings in the project, the restroom will also include a generous roof overhang, providing covered bike storage on both sides. The building is sited on one side of a new pedestrian plaza at the street end in order to open up the view corridor to the water.

***Other Upland Project Features***

Other project features include plinths at various locations along the waterfront promenade for both temporary and permanent art elements and performances. Existing permanent art features will be located in similar locations on the new structure. There will be planters, signage, and other features for improved identification of park entrances. The parking serving the Olympia Center is re-designed to provide infiltration and treatment of stormwater runoff. There are also improvements to parking and pedestrian circulation along the north end of Columbia Street. The upland enhancements also include numerous and conveniently placed covered bicycle parking locations and better wayfinding for park visitors.

***Shoreline Habitat Enhancements***

About 3.5 million juvenile salmon are released annually from the Tumwater hatchery and many can be seen hugging the shoreline. In addition to allowing light penetration through the promenade, enhancements to benefit juvenile salmon and nearshore habitat include creation of increased intertidal areas and restoration of estuarine marsh and riparian plants (see Figure 2). The 30 percent design proposes to replace existing rock and broken concrete rubble with fish friendly beach gravel (similar to the shoreline at Port Plaza to the north of Percival Landing). This material will provide a much improved habitat corridor for outmigrating juvenile salmon.



**Figure 2**

**Flyover Bridge Habitat Section**

Artist's view of newly created habitat area from the end of Olympia Avenue looking south toward the Capitol Building

***Green Building and LEED***

In addition, the goal of the new construction is to have a “green” facility, including a bathhouse facility designed to meet LEED silver certification and other “green” design features throughout new construction, including but not limited to:

- White-colored, heat-reflective roofs on pavilions
- Low-energy light fixtures and more effective controls for reduced power consumption
- Night sky protective lighting design
- Expanded bicycle storage racks
- Expanded use of reclaimed waste water for toilet flushing and irrigation
- Use of recycled materials in new construction
- Use of sustainably grown timber for wood applications

### ***Recreation Elements***

The recreation elements that will be enhanced by the project are both passive and active. Passive recreation improvements include a promenade that has pavilion shelters that will function as living libraries with art and historic features. The promenade will be widened at gathering places and will have better lighting for safety. A flyover and view pier provides an “overwater” experience, and habitat improvements should support more wildlife to view. A floating stage will provide the opportunity for concerts, and plinths set the stage for works of art or impromptu performances by street artists. The active recreation elements include new floats with utility connections for boaters and a completely redesigned playground that encourages discovery, learning, and intergenerational play.

### **Design Overview by Location**

Percival Landing is a sequence of spaces. Some are gathering spaces that give the project its character and identity. Others are flow-through spaces that serve to provide connections. The following overview focuses on the main gathering spaces that form the iconic elements of the project.

#### ***The View***

The View is the portion of the project that changed the most from the Concept Plan, due to significant new opportunities with a major adjacent landowner, and limitations on building structures crossing a Department of Natural Resources (DNR) Harbor Line. Bayview Thriftway grocery store expressed interest in partnering with Parks to create a more active area on the west side of their store where they currently have an outdoor eating area (see Figure 3). This allowed widening the waterfront promenade and moving it adjacent to the Bayview outdoor eating area, as well as creating three “bump-out” areas for seating and views. By pulling the promenade landward, over-water coverage (intertidal habitat impact) was also minimized in this area.



**Figure 3**

**The View 30 Percent Detail Plan**

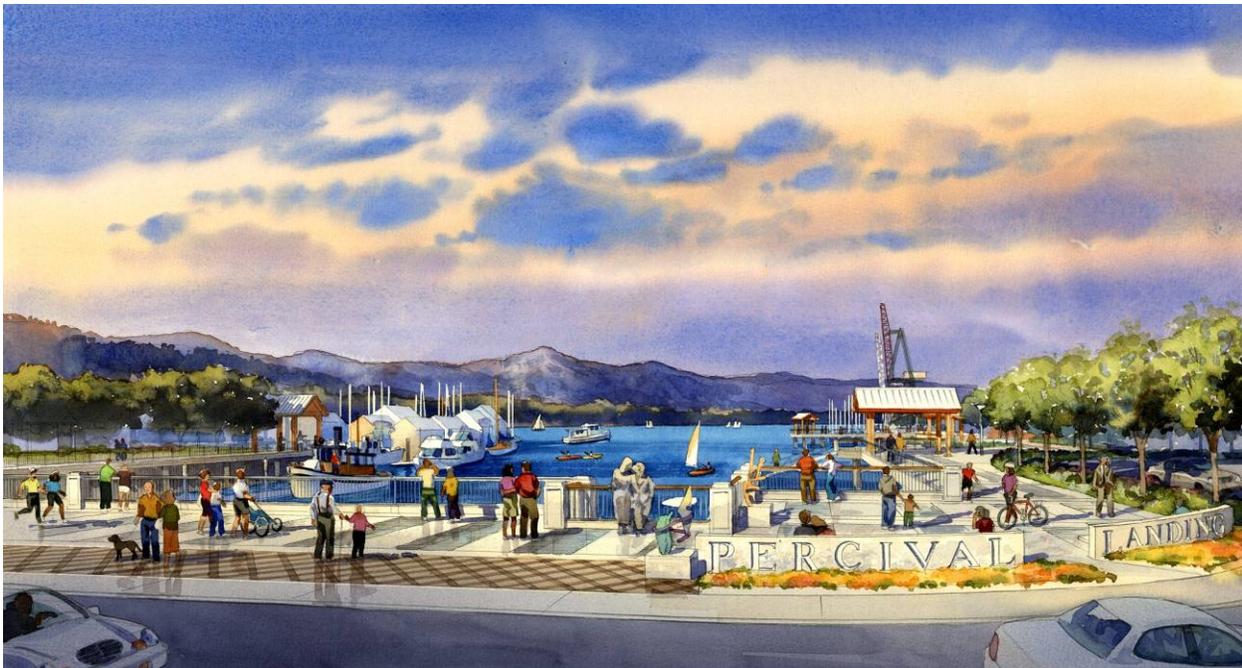
Computer-generated virtual image from the western end of the new pedestrian promenade looking north toward Bayview Thriftway

***City Dock***

Located on the spectacular view corridor that visually links the State Capitol with Budd Inlet and the Olympic Mountains, City Dock is the most public face of Percival Landing. The framework of City Dock outlined in the Concept Plan remains intact, with refinements aimed at framing the view corridor, making the space more functional for festivals and gatherings, providing stronger pedestrian connections with increased distance from vehicular traffic, and identifying this space as a major entry to the project (see Figure 4). In addition, certain DNR requirements and over-water coverage habitat issues also had to be addressed. The center of this space is the largest over-water deck in the project—adjacent to 4th Avenue and opposite Heritage Park. The deck consists of alternating bands of grating and concrete paving in a 5-foot module reminiscent of enormous piano keys (“playing the boardwalk”) and also formulates a grid for setting up 10-foot by 10-foot festival tents. A new floating dock connecting the existing moorage facilities on the east and west side of the inlet is consistent with the Concept

Plan and is allowed by DNR. Other pedestrian connections include a new promenade at the street and sidewalk level adjacent to the Oyster House restaurant. Discussions with the owner of this restaurant determined that such a connection is feasible.

Large planting beds for colorful flowers and low walls with “Percival Landing” spelled out on them also frame the view corridor and over-water deck, as well as identify this as the “front door” of the project. This portion of the project contains two existing art pieces: “South Sound Mosaic” and “The Kiss.” These two artworks will be stored during construction and subsequently relocated near their existing locations on City Dock. It will also contain several plinths for temporary and permanent art installations and small performances. Providing a link between City Dock to the south and Percival Plaza to the north is the largest restored nearshore habitat area on the project. The main promenade shifts to the land along this stretch, allowing for habitat to be restored where a low use parking lot currently exists. A light, airy flyover bridge constructed with a steel frame and steel grating to allow light penetration, gives visitors the experience of being out over water in the intertidal zone.



**Figure 4**

**City Dock 30 Percent Detail Plan**

Artist's perspective of City Dock looking north across 4th Street from Heritage Park

**Percival Plaza**

By far the largest open space within the project, Percival Plaza provides a wide range of passive and active recreation opportunities. This important space offers another major entry to the park. This entry is clearly defined by tree-lined, pedestrian-only Olympia Avenue, framed by two columns with the project name, and ending at a pavilion. The north side of this entry also includes plinths interspersed with trees and light poles. The large, multi-use, open lawn is one of few such spaces available to the public in downtown Olympia, and the only open lawn space on the waterfront.

The parking area across from the community center will have pervious paving that allows rain to pass through the pavement into the ground. It also has “rain gardens” to receive the overflow from pervious paved areas during heavy rain events. They include plants and planting soils that provide additional stormwater quality treatment. The rain gardens also include overflow storm drains for very heavy rain events to prevent flooding of the parking lot. From the parking lot area north of Olympia Avenue, the existing overwater boardwalk will be moved on land and composed of recycled wood planks from the existing boardwalk—a feature that was strongly desired by the public. The recycled planks border the west edge of the large open lawn.

Along the north side of the open lawn area is the new Bathhouse Building. The Percival Bathhouse Building is the largest building in the project. In addition to the shower and restroom facilities for boaters and park users, it will also house flexible office space, storage, and shop workspace for park staff. The waterfront side of the Bathhouse Building is shaped like a ship prow, is fronted by a mizzenmast, and has other features that will make it a prominent component of Percival Plaza.

Across the boardwalk from the Bathhouse Building is a gangway leading to three finger docks that provide visitor moorage and pump out facilities as upgrades to what now exists. On the south side of the finger, docks will be a seasonal floating stage, as identified in the Concept Plan. The viewing pier to the north of these floating docks contains a small pavilion and gives visitors a view of Budd Inlet and the Olympics to the north, and the State Capitol and City Dock to the south.

Between the lawn area and the Bathhouse Building is the new children’s play area, which is expanded east toward Columbia Street and the Tide Pool of Time artwork and fountain. The play area ends at a small tidal inlet that crosses under a short bridge on the north end of the wooden plank promenade. The play area will be designed to express natural and historic themes and to actively engage multi-generational users.



**Figure 5**  
**Percival Plaza 30 Percent Detail Plan**  
 Artist’s perspective of Percival Plaza looking north toward the “bath house” from a pavilion

### ***The Landing***

The Landing portion of the project is where the least change from current conditions and existing art will occur. Changes to the boardwalk consist primarily of replacing wood structures with either on-grade walkways or concrete and grated deck structures, with minimal changes to layout. The most noticeable changes are that the western street edge and intersections along Columbia Street are better defined to minimize driver confusion. These changes will also improve pedestrian flow and safety along and across the street and to the Farmers Market. The street edge and parking reconfiguration occurs from A Street North to Corky Street and includes the intersections of A, B, and Corky Streets.

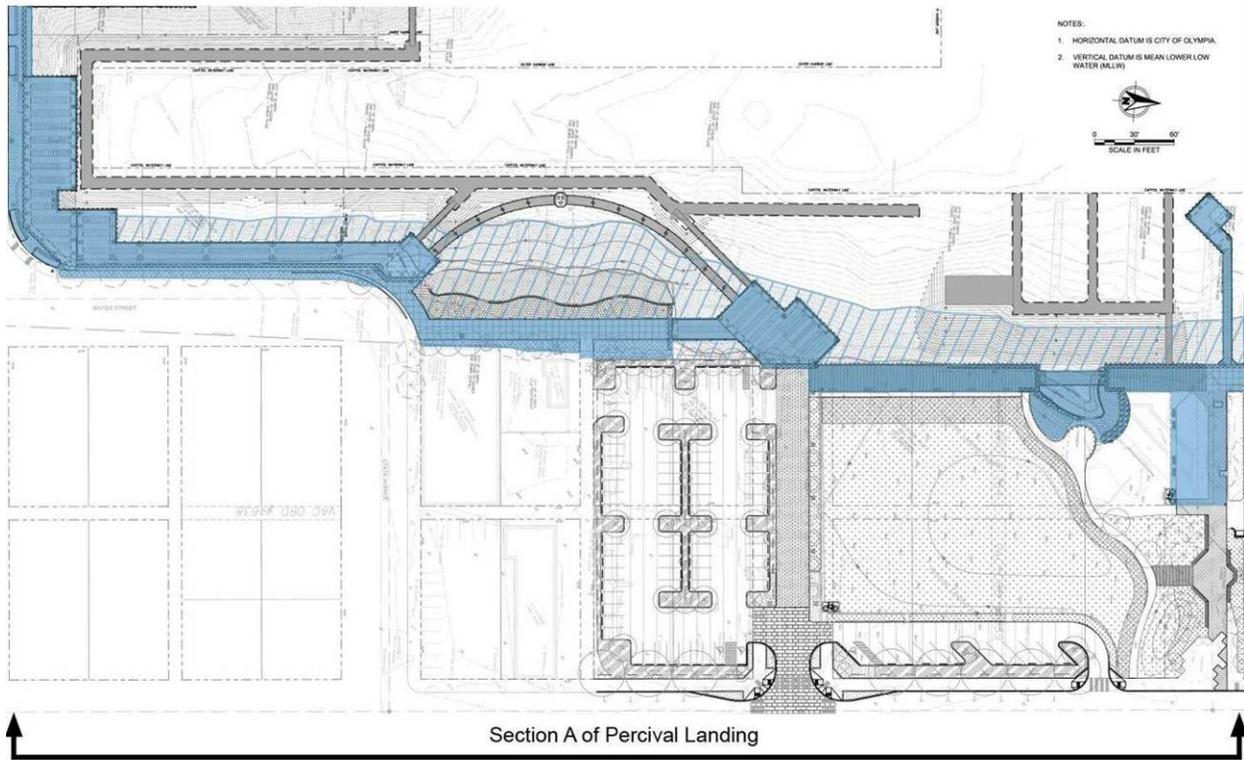
## PHASING OPTIONS

Presently, construction funding for the project has not been fully secured. Because a large single source of funding to build the project is not anticipated (e.g., Parks Bond), the project is presently planned to be constructed in several phases.

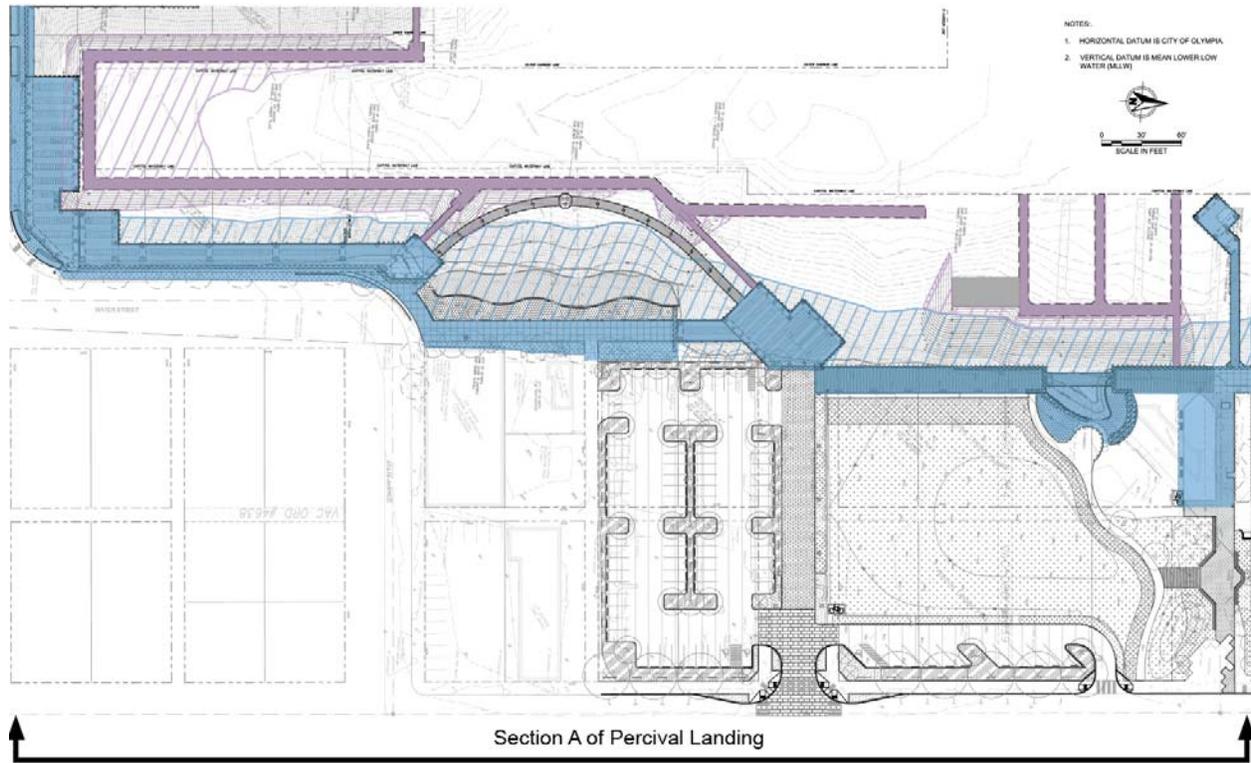
The phasing of the project will likely be shaped around two controlling factors: funding availability and project need. Funding availability is further discussed below. Project need is a subjective decision about which segments and features of the project are included in each phase and the sequence in which those segments will be constructed. The phase sequence will likely be based upon structural deterioration and related safety concerns, whereby the oldest and most deteriorated segments will be replaced first. Because the project is so linear and was previously constructed in phases, it lends itself to that type of sequential phasing and allows temporary transition from old to new.

Materials proposed for the project should be readily available for several years, so an extended phasing program should allow continuity of constructed features. However, due to industry changes in certain manufactured elements such as light fixtures, it cannot be guaranteed that consistency in style of certain elements can continue to be available over time.

On October 7, 2008, staff presented to the City Council a recommendation for Phase 1 construction. This would replace the oldest and most physically deteriorate segment of the project. That segment starts at City Dock adjacent to the Oyster House and continues north to Percival Plaza to include the restroom and view pier. Figure 6 highlights in blue the plan that features the project elements proposed for Phase 1. Although they could be considered an optional element, it is recommended that the City Council consider including the replacement moorage floats, along with the required maintenance dredging in Phase 1 as shown in Figure 7. The construction cost for this basic first phase (blue) is estimated to be \$15,140,000. Adding in the moorage floats and dredging elevates the total cost to \$20,140,000. A more detailed presentation of the proposed Phase 1 cost is provided in the design documents.



**Figure 6**  
**Phase 1 Basic Plan**



**Figure 7**  
**Phase 1 Basic Plan Plus Moorage Floats**

## FUNDING STRATEGY

To date, the City has appropriated \$4,500,000 for Percival Landing design and construction. For planning purposes, the outyears of the capital budget include \$500,000 for the next 3 years for a total of \$1,500,000. The City Council will need to approve this funding every year when it adopts the Capital Facilities Plan (CFP). The City also budgets \$100,000 per year for structural analysis and repairs in the Major Maintenance Project fund in the CFP. To date, the City has expended nearly \$1,200,000 on 30 percent design, project management, and community fundraising organizational efforts.

The focus for the next 2 years is to realize the funds to design and build Phase 1 through grants, state and federal funding, community fundraising, and City capital budget. Following approval of 30 percent design, staff, legislative liaison, and members of the City Council will meet with State Representatives and key budget staff to request \$3 million in State funding. State representatives have been continually briefed about the project's progress over the past 2 years.

For federal sources, staff submitted a funding request through our congressional representatives for \$3,000,000. Although unsuccessful this year, Senator Murray is encouraging us to resubmit a request in 2009. We have been informed that Representative Baird has included \$441,000 on his list for consideration in 2009.

The City has engaged a consulting firm (Sparrowhawk) to assist in grant preparation, as well as to explore other fundraising opportunities. Grant applications are costly to prepare and very competitive. This year, staff have already prepared and submitted three applications for the project. The Heritage Resource Grant totaling \$566,668 is ranked 5th in the state out of 48 applications. If passed in the Governor's budget, it will fund the development of three "living library" pavilions and replacement of the Bathhouse Building. An Aquatic Lands Enhancement (ALEA) grant for \$164,000 would fund shoreline restoration if awarded. It is ranked 12 out of 22 projects statewide. Unless the Governor's budget for ALEA increases over last year, Percival Landing will not be funded. A Water Access Grant was also submitted that will not get funded. In addition to the grants, staff is exploring a potential partnership with DNR for \$500,000 that is directed for creosote pile removal. Staff will continue to pursue grant opportunities pending time, financial resources, and availability of matching funds.

The goal for private fundraising is currently \$700,000 and assumes that the City moves forward in establishing a non-profit Percival Foundation. A goal of \$500,000 has been established for community fundraising as it is believed there is citizen support for the project at all levels of the community.

As previously stated, the funds (in 2008 dollars) needed to construct the basic Phase 1 is \$15,140,000. Even with the good fortune of achieving the targeted revenues from various sources of \$13,200,000, there is still a shortfall of \$1,940,000 for the basic Phase 1. The shortfall would increase \$5,000,000 by adding the moorage facilities.

## **NEXT STEPS – SCHEDULE**

The following represents the steps to be taken starting this month and extending into 2010.

A more definitive schedule will be established once the project funding is clarified.

- Public review and comment on the 30 percent design
- Squaxin Tribe presentation
- OAC/PRAC review and comment
- Share public input with City Council and reach final agreement on scope of Phase 1
- Proceed with 90 percent design and permitting materials for all of Phase 1
- Secure funding for the recommended Phase 1 construction
- Final design engineering (100 percent) and permit processing
- Start construction