

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA

Item No. 5h
Date of Meeting June 14, 2011

DATE: June 6, 2011

TO: Tay Yoshitani, Chief Executive Officer

FROM: Mike McLaughlin, Director, Cruise and Industrial Properties
Marie Fritz, Cruise Services Manager
Mark Longridge, Capital Project Manager

SUBJECT: Fender System Improvements at Terminal 91-Phase II
CIP# C800183

Amount of This Request: \$3,575,000

Source of Funds: General Fund

Est. State and Local Taxes: \$ 435,000

Est. Construction Jobs Generated: 34

Total Project Cost: \$5,700,000

ACTION REQUESTED:

Request Port Commission authorization for the Chief Executive Officer to advertise, award and construct 950 feet of replacement fender system at Pier 91 as Phase II of this fender system improvement project in the amount of \$3,575,000, for a total funding authorization of \$5,700,000.

SYNOPSIS:

This request for funding authorization relates to the second phase of the Pier 91 (P91) fender replacement project. This project is being done in two phases in order to minimize impact on terminal operations and provide the ability to address immediate concerns of failed timber piles serving the east cruise berth at Terminal 91 (T-91). Previously authorized fender replacement completed as Phase I was finished this past spring before opening the 2011 cruise season.

The business activity generated at T-91 from the fishing and cruise industries is a significant source of maritime employment and generates millions of dollars of business and state and local tax revenue. However, replacement of the current fender system at P91 is necessary to continue operations in this area. This replacement/upgrade will allow the Port to meet obligations of current lease agreements, long term preferential berthing agreement with cruise lines, arrange

COMMISSION AGENDA

Tay Yoshitani, Chief Executive Officer

June 6, 2011

Page 2 of 6

annual preferential berthing agreements with fish trawler fleet and increase utilization of this multi-use facility

The current fender systems at P91 are a mix of steel and wood timber designs. Although this pier has served a variety of large commercial vessels for many years, the fender pile system on the outer face which protects the concrete dock structure was not originally designed for docking cruise ships.

The east cruise berth at P91 is now reaching the end of its usable life, has experienced several broken pile since opening the new facility in 2009 and needs to be upgraded. The existing steel fender piles on the west berth of P91 appear to be working fine for cruise operations and are showing no signs of failure.

The Capital Development Division requests approval to construct a new fender system to replace the failing systems on P91 which will be designed to serve all cruise, fishing and industrial vessel moorage into the future.

ADDITIONAL BACKGROUND:

The former cruise berths located at the T-30 Cruise Facility were moved to T-91 as part of the Terminal 30 Cargo Reactivation and Cruise Relocation to P91 project. The new Smith Cove Cruise Terminal at T-91 was opened in April 2009.

Engineering analysis done prior to opening the new cruise terminal indicated that the Port would need to upgrade the existing fender system serving the cruise berth at some point in the future. Prior to constructing the new cruise facility on P91, it was determined that the current fender systems would be adequate for opening the facility and berthing the cruise vessels scheduled for the new terminal in 2009 with the understanding that the Port would closely monitor the performance of fender piles on P91 along with the used breasting barges throughout the initial cruise seasons.

PROJECT DESCRIPTION AND JUSTIFICATION:

The current fender system at P91 consists of steel and timber fender piles consistently spaced around the entire finger pier. The current timber system on the east side of the pier was built in 1997, and although suited for large commercial vessels, the system was not designed for use by cruise vessels.

The current steel system on the west side of the pier was built in 2005, and while it was not explicitly designed for cruise vessels, it does not require replacement as part of this project.

The east and west berths currently service fishing and industrial customers, and cruise vessels from April to October of each year.

While the existing steel fender system on the west side has been performing well, there have been a significant number of timber piles on the east side that have broken.

COMMISSION AGENDA

Tay Yoshitani, Chief Executive Officer

June 6, 2011

Page 3 of 6

Phase I Construction (Complete)

In August 2009, Port crews installed 16 temporary steel piles to supplement the existing system on the east berth necessary to complete the cruise season.

Port crews then installed an additional 15 piles in February 2011 to further strengthen the berths for this season. These steel piles will be incorporated into the permanent fender system.

Phase II Construction

Overall project scope of this request for the remaining construction phase would include the replacement of 950 linear feet of fender pile system along with the bullrail and brow at the south end of P91 with a new steel fender system to facilitate barge moorage for existing lease tenants and transitory barge traffic. As planned, existing materials and piles will be reused wherever possible.

PROJECT STATEMENT AND OBJECTIVES:

Project Statement:

Upgrade the existing fender systems at P91 to provide a continuous steel fender system with adequate capacity to service industrial, fishing and cruise customers.

Project Objectives:

Adequately protect the pier structure during all types of vessel berthing and provide safe and secure moorage for all vessel operations.

PROJECT SCOPE OF WORK AND SCHEDULE:

Overall project scope would include fender upgrade of the eastern berths including the replacement of the old and deteriorated fender pile system with a new steel fender system, replacement of the camel barge equipment, and evaluation of the existing steel fender system to ensure capacity for all users of the facility.

Construction scope under this authorization is to include advertising, award and construction of the remaining fender system to be replaced.

Tentative Project Schedule:

Initial design complete	August 2010
Permits submitted	September 2010
Phase 1 construction complete	March 2011
100% design complete, Commission request to advertise	June 2011
Major works construction advertisement	July 2011
In-water construction begins	October 2011
Construction Complete	April 2012

COMMISSION AGENDA

Tay Yoshitani, Chief Executive Officer

June 6, 2011

Page 4 of 6

FINANCIAL IMPLICATIONS:

Budget/Authorization Summary

Original Budget	\$0
Previous Authorizations	\$2,125,000
Current request for authorization	\$3,575,000
Total Authorizations, including this request	\$5,700,000
Remaining budget to be authorized	\$0
Total Estimated Project Cost	\$5,700,000

Project Cost Breakdown:

Construction (Fender Replacement, All Phases)	\$3,755,000
Equipment (Replacement Camel Barges)	\$ 900,000
Soft Costs (Design, Construction Management etc)	\$ 610,000
State & Local Taxes (estimated)	\$ 435,000
Total	\$5,700,000

Source of Funds

This project was included in the 2011 Plan of Finance under Committed CIP# C800183, P91 Fender System Upgrade, in the amount of \$5,700,000.

The project will be funded from the General Fund.

Financial Analysis Summary:

CIP Category	Renewal/Enhancement
Project Type	Renewal & Replacement
Risk adjusted Discount rate	7.0%
Key risk factors	<ul style="list-style-type: none">• Key risk factors include permitting delays and potential cost overruns due to project complexity/timeframe.• Project schedule could be delayed due to project complexity, in-water work constraints, and the need to minimize disruptions to terminal operations and existing tenant/customers.• Procurement of steel piles and other construction materials are long lead items. Delays in material delivery may adversely impact planned construction timing.
Project cost for analysis	\$5,700,000
Business Unit (BU)	Cruise Operations

COMMISSION AGENDA

Tay Yoshitani, Chief Executive Officer

June 6, 2011

Page 5 of 6

Effect on business performance	<ul style="list-style-type: none">• Fender system replacement will preserve existing revenue from Terminal 91 cruise operations.• At completion, incremental depreciation expense from the steel fender system replacement project is estimated at \$285,000/year, based on a 20 year asset life.		
IRR/NPV	No incremental revenue. NPV is present value of project cost. <table border="1"><tr><td>NPV (in \$000's)</td><td>(\$5,222)</td></tr></table>	NPV (in \$000's)	(\$5,222)
NPV (in \$000's)	(\$5,222)		

ECONOMIC IMPACTS AND BUSINESS PLAN OBJECTIVES:

Replacement of this essential protective system will allow continued operation of industrial, fishing and cruise industry activity in this area. This replacement will allow the Port to meet the obligations of current lease agreements, and the long term preferential berthing agreement with cruise lines, arrange annual preferential berthing agreements with the fish trawler fleet and achieve our objective to increase utilization of this multi-use facility.

Based on business activity data collected in 2007 and 2008 at T-91, Fisherman's Terminal and the Maritime Industrial Center, it was estimated that commercial fishing activity generated \$814,400,000 in business revenue; 5,607 direct jobs; 8,028 induced jobs; 1,337 indirect jobs; and \$167,600,000 in state and local taxes.

In 2010 the cruise industry had a record year, with 223 vessel calls, and 931,698 passengers. In 2011 the industry will bring an estimated \$393,000,000 in annual business revenue, 4,042 jobs and \$17,000,000 in state and local taxes to our region. Each time a homeport ship docks in Seattle it contributes \$1,900,000 to the local economy.

STRATEGIC OBJECTIVES

This project supports the Port's strategies to "Ensure Airport and Seaport Vitality" and "Exhibit Environmental Stewardship through our Actions", by:

- Replacing the fender system at the subject Terminal so that the Terminal can continue servicing cruise, fishing and industrial customers.
- Replacement of the fender system in this area is a renewal and replacement project for the Seaport. It will help protect revenue the Port currently receives and meet its lease and contractual obligations.

COMMISSION AGENDA

Tay Yoshitani, Chief Executive Officer

June 6, 2011

Page 6 of 6

Meet Environmental Obligations

To meet environmental obligations the project:

- Has acquired all necessary and required permits from appropriate agencies prior to start of construction;
- Will comply with all conditions stipulated by permit authorizations;
- Use best management practices to reduce water quality impacts during construction, and;
- Use vibratory pile driving techniques to reduce noise impacts to endanger species.

Develop and Maintain Community Support

This project will develop and maintain industry support by retaining longstanding tenant/customers in our harbor, with their related employment and the necessary purchase of goods and services to service, maintain, repair and upgrade the vessels while at port.

ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:

Alternative 1: Delay the remaining Phase II construction of the fender system. This alternative would rely on the continued performance of pile replacements completed in Phase I to service the cruise, fishing and industrial customers at the facility. While these piles are of adequate strength for these uses, continued damage and deterioration of the remaining timber pile system would be expected. This alternative is not recommended.

Alternative 2: Install further temporary piles to address the short term risks. Piles would likely need to be modified or removed prior to permanent solution, and would not provide a consistent fendering system for port tenants. This alternative is not recommended.

Alternative 3: Proceed with the remaining Phase II of construction, replacing all remaining timber piles with a new, uniform fender system. **This is the recommended alternative.**

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:

- Authorization of design and Phase I construction funding Aug 3, 2010
- Ratification of critical work memorandum Aug 11, 2009
- West berth steel fender replacement Berth H, I & J July 26, 2005