



**COMMISSION
AGENDA MEMORANDUM**

Item No. 8e

ACTION ITEM

Date of Meeting October 26, 2021

DATE: September 21, 2021

TO: Stephen P. Metruck, Executive Director

FROM: Marie Ellingson, Cruise Operations & Business Development Manager
Genevieve Pla-Rucki, Capital Program Leader, Waterfront Project Management

SUBJECT: Pier 66 Fenders Upgrade (CIP #C800674)

Amount of this request: \$ 550,000

Total estimated project cost: \$ 5,000,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to authorize \$550,000 to complete design and permitting for the rehabilitation of the fender system along the west apron of Pier 66, including the south apron area and north corner area. This request would increase the total project authorization to date to \$710,000 out of a total preliminary estimated project cost of \$5,000,000.

EXECUTIVE SUMMARY

The project addresses the need for asset and revenue preservation for multi-vessel use of the west apron of Pier 66. The fender system was originally installed in 1998 with a design life of 15-25 years. Over the years it has experienced deterioration due to heavy use and exposure to the elements. (26) fender panel assemblies will be taken to an off-site facility to be refurbished. Damaged elements such as timber panels, rubber energy absorbers, and steel components will be replaced or rehabilitated. Six foam-filled floating fenders and their attachment hardware will be replaced.

JUSTIFICATION

This project supports the following Century Agenda and Maritime Division priorities:

- (1) Advance this region as a leading tourism destination and business gateway
- (2) Asset Management - Develop, maintain, and operate Maritime facilities to ensure long-term viability & efficiency, to meet our customer's needs.

Fender systems are a critical element of a marine facility, designed to absorb the energy imparted on the pier by vessels during berthing. Past inspections and condition assessments have provided

Meeting Date: October 26, 2021

evidence of damage and deterioration consistent with the use and age of the assets. Moderate to severe deterioration, including section loss from marine borers, was observed on timber panels in underwater areas. The project proposes to rehabilitate the fender system, extending its useful life and allowing for continued safe, efficient, and reliable use of the berth.

Diversity in Contracting

Project team is leveraging an existing IDIQ contract that has an overall women and minority-owned business enterprise (WMBE) commitment of 10% of total amounts paid, including amendments.

DETAILS***Scope of Work***

The west apron of Pier 66, including the south apron area, measures approximately 1,540 linear feet and its fender system is comprised of modular assembly units with Ekki hardwood paneling bolted to welded steel fender frames supported by driven steel pipe piles. Each fender assembly has two steel pipe sleeves that fit over the driven piles. The fender panel assemblies are connected to the pier via energy-absorbing cylindrical rubber fenders and bolted attachment hardware. Six of the fender panels have foam-filled floating fenders attached to them with chains, fittings, and chain rollers.

The fender panels will be removed and taken to an off-site facility where they will be disassembled, high-pressure washed, inspected, and repaired prior to being reinstalled. Conditions of steel behind the timber panels is difficult to fully assess until panels have been removed. Proper contingency will need to be maintained. The project will be executed as low bid major construction contract.

Scope will include:

- (1) Replacing all timber panels with product of similar properties and compatible with structural system
- (2) Replacing six fender camels and attachment hardware
- (3) Replacing/rehabilitating damaged steel components
- (4) Replacing/rehabilitating rubber energy absorbers
- (5) Anode replacement on sleeve elements

Schedule

Coordination with cruise operations will be critical and will require that the work be performed in a narrow window outside of the cruise season. The work will be performed under the Port's existing programmatic permit for maintenance and repair. As such, work will also need to be limited to the allowable in-water work window of August 1st to February 15th, pending tribal concurrence. As a result, project is expected to be completed over two seasons, 2022-23 and 2023-24. Timber fender panels are expected to have a long procurement lead time.

Meeting Date: October 26, 2021

Activity

Commission Design Authorization	2021 Quarter 4
Design Start	2021 Quarter 4
Commission Construction Authorization	2022 Quarter 2
Construction Start	2022 Quarter 4
In-use date	2024 Quarter 1

Cost Breakdown

	This Request	Total Project
Design	\$550,000	\$710,000
Construction	0	4,290,000
Total	\$550,000	\$5,000,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Defer the scope of work identified for this project.

Cost Implications: reduces needs in the Capital Plan by \$5,000,000

Pros:

- (1) Retains Port capital for other priority projects and financial initiatives
- (2) Defers temporary construction impacts

Cons:

- (1) Continued deterioration of the fender panels
- (2) Increased risk of failure: while the risk is not imminent, over time the panels could fail under the load of a large vessel. This would prevent loading of a ship during medium to low tides. It could also cause damage to the passenger gangway on cruise ship.

This is not the recommended alternative.

Alternative 2 – Proceed with rehabilitation of the fender system as proposed.

Cost Implications: requires allocation of \$5,000,000 in the Capital Plan

Pros:

- (1) Preservation of a critical asset to support long-term use of the berth and revenue generation
- (2) Good durability to initial cost ratio
- (3) Sustainable qualities (untreated hardwood)
- (4) Compatible with existing structural system
- (5) Minimize risk of operational disruption
- (6) Maintain the capacity of the fender system to protect pier structures

Cons:

- (1) Berth will not be available during rehabilitation of the fender panels

This is the recommended alternative.

Meeting Date: October 26, 2021

FINANCIAL IMPLICATIONS

<i>Cost Estimate/Authorization Summary</i>	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$5,000,000	\$0	\$5,000,000
AUTHORIZATION			
Previous authorizations	\$160,000	0	\$160,000
Current request for authorization	\$550,000	0	\$550,000
Total authorizations, including this request	\$710,000	0	\$710,000
Remaining amount to be authorized	\$4,290,000	\$0	\$4,290,000

Annual Budget Status and Source of Funds

This project is included in the 2021 Capital Plan under CIP C800674 P66 Fender Overhaul with a total project cost of \$2,038,000. This project has been included in the draft 2022 Capital Plan with an updated project cost of \$5,364,000. The current project estimate is \$5,000,000.

This project will be funded by the General Fund.

Financial Analysis and Summary

Project cost for analysis	\$5,000,000
Business Unit (BU)	Cruise Operations
Effect on business performance (NOI after depreciation)	This project will increase annual depreciation by approximately \$250K per year.
IRR/NPV (if relevant)	NA
CPE Impact	NA

Future Revenues and Expenses (Total cost of ownership)

Implementing the project will preserve future revenue generated by the berth.

ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None