

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 4d
Date of Meeting October 27, 2015

DATE: October 20, 2015
TO: Ted Fick, Chief Executive Officer
FROM: Steve Miller, Capital Project Manager II, Seaport Project Management
Nick Milos, Manager, Corporate Facilities
SUBJECT: Pier 69 Roof Beam Rehabilitation (CIP #800698)

Amount of This Request:	\$2,694,000	Source of Funds:	Airport Development Fund, General Fund and Tax Levy
Est. Total Project Cost:	\$3,024,000		

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to advertise for bids, award, and execute a major works construction contract to repair the Pier 69 roof beams for an estimated cost of \$2,694,000, bringing the total authorization to \$3,024,000.

SYNOPSIS

The header beams that support vertical window frames within the Pier 69 sawtooth roof continue to exhibit occasional concrete spalling (small pieces breaking loose). A design has been developed to perform preventive maintenance measures, stabilize the window frames, and protect occupants from the potential hazard of future spalling.

BACKGROUND

The interior roof beam surfaces have exhibited occasional concrete spalling since the Port occupied the building in 1993. Maintenance measures have been ongoing, including visual inspections and removal of loose concrete. However, recent inspections have indicated that rebar corrosion in the 85-year-old beams will continue to pose a risk of concrete spalling with the related risk to occupants. The inspections also revealed that the clerestory window frames were improperly installed and require stabilizing.

KPFF conducted an investigation and provided a report dated May 15, 2014, summarizing their observations and outlining a preliminary list of recommended repairs. Recommendations included preventive maintenance measures to preserve the roof beam structure, the installation of new bracing to stabilize the clerestory window frames, and installation of removable metal mesh beam covers that will facilitate visual inspection of the beams while protecting occupants from potential concrete spalling.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

October 20, 2015

Page 2 of 5

Following 60% design, a hands-on inspection was performed by KPFF on April 23, 2015, to provide a further basis for repair types and quantities required for the project. Marine Maintenance performed a demonstration of the repair in the conference center lobby to test the design concept and visual appearance. A Lessons Learned meeting was held afterwards to identify key considerations to carry forward into 90% design.

The design documents are now complete and we are ready to move to the construction phase of the project.

PROJECT JUSTIFICATION AND DETAILS

This project has been approved as part of the CIP budget #C800689. On July 1, 2014, the commission authorized \$330,000 for the project design phase. The overall project estimate range determined at that time was from \$2,300,000 to \$3,300,000.

All construction activities will take place during non-office hours, and the work will be conducted in five (5) phases to reduce operational impacts to the office area. Due to the number of phases and other restrictions, the overall timeline of the project has been estimated at 300 calendar days, or approximately ten (10) months from contract execution to physical completion. The project team will keep occupants informed of operational impacts throughout construction.

Project Objectives

- Ensure continuity of operations for the Pier 69 facility.
- Protect occupants from concrete spalling.
- Provide preventive maintenance treatments for the concrete beams that will facilitate future inspections.
- Stabilize clerestory window frames.

Scope of Work

- Condition assessment of the roof beams.
- Concrete spall repairs, to include epoxy injection of concrete cracks.
- Installation of protective metal mesh covers.
- Installation of stabilizing braces for clerestory window frames.

Schedule

- Advertisement - November 2015.
- Notice to Proceed Q1 2016.
- Physical completion Q4 2016.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

October 20, 2015

Page 3 of 5

FINANCIAL IMPLICATIONS

Budget/Authorization Summary

	Capital	Expense	Total Project
Original Budget	\$70,000	\$0	\$70,000
Previous Authorizations	\$260,000	\$0	\$260,000
Current request for authorization	\$2,694,000	\$0	\$2,694,000
Total Authorizations, including this request	\$3,024,000	\$0	\$3,024,000
Remaining budget to be authorized	\$0	\$0	\$0
Total Estimated Project Cost	\$3,024,000	\$0	\$3,024,000

Project Cost Breakdown

	This Request	Total Project
Construction	\$1,955,000	\$1,955,000
Construction Management	\$196,000	\$196,000
Design	\$191,000	\$391,000
Project Management	\$165,000	\$255,000
Permitting	\$0	\$40,000
State & Local Taxes (estimated)	\$187,000	\$187,000
Total	\$2,694,000	\$3,024,000

Budget Status and Source of Funds

This project was included in the 2015 Approved Capital Budget and related Plan of Finance as Committed-Authorized CIP #C800698 in the amount of \$2,310,000. The additional funds required in the amount of \$714,000 are available due to underutilization of funds in other projects such as preliminary planning and technology projects. Since Pier 69 is the corporate headquarters for the Port, the funding for the project is allocated between the General Fund for Maritime (27.08%) and Economic Development (8.33%) and the Airport Development fund (64.58%).

Financial Analysis and Summary

CIP Category	Renewal/Enhancement
Project Type	Renewal & Replacement
Risk adjusted discount rate	n/a
Key risk factors	Costs could exceed the current estimate
Project cost for analysis	\$3,024,000
Business Unit (BU)	Aviation, Maritime, Economic Development
Effect on business performance	<ul style="list-style-type: none">• No incremental revenue from this project• Increases depreciation expense by approximately \$131,000 per year over 23 years, which is for <u>accounting</u> purposes the estimated remaining useful life of the building.
IRR/NPV	NPV is present value of project cost to the Port

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

October 20, 2015

Page 4 of 5

TRIPLE BOTTOM LINE

Economic Development

Economic benefits include the prevention of future operational interruptions and the related costs of emergency repairs, and preservation of the value of the Pier 69 facility.

Activities at Pier 69 will be minimally impacted during the project.

Environmental Responsibility

Contract provisions require the contractor to contain demolition activities and to perform regulated materials work with adequate protection in accordance with regulatory requirements. The Port will perform secondary testing in the office space during the project to ensure the Contractor's containment system is functioning properly and that indoor air quality remains safe and suitable for occupants.

Community Benefits

Performing the project in accordance with the schedule will preserve use of the building and second floor atrium for holiday and other common uses for the public and Port staff.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1) – Do not perform repairs.

PROS

- A \$2,694,000 short-term cost savings.

CONS:

- Increased risk of injury to building occupants due to concrete spalling.
- Increased hands-on inspections by Marine Maintenance at regular intervals to mitigate risks.
- Access for maintenance and inspection will remain difficult and will likely need to be contracted, generating significant costs.
- Temporary relocation of staff may be necessary if spalling occurs.
- Clerestory windows will remain unbraced at many locations. Without installation of bracing, frames will continue to deflect during high winds resulting in window breakage.
- Decreased value of the Pier 69 facility.

Alternative 2) – Perform proposed repairs to protect occupants and ensure continued use of the Pier 69 facility.

PROS

- Risks of occupant injury will be reduced.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

October 20, 2015

Page 5 of 5

- Clerestory window frames will be properly braced and risks of future window breakage will be reduced.
- The value of the Pier 69 facility will be preserved.

CONS

- The expense of \$2,694,000 and the related increase in depreciation.
- Construction related activities, include scaffolding, will be an inconvenience to some occupants.

This is the recommended alternative.

ATTACHMENTS TO THIS REQUEST

- PowerPoint Presentation.

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- July 1, 2014 – Commission authorized funds to prepare construction documents in the amount of \$260,000 for a total not to exceed amount of \$330,000.