

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 4d
Date of Meeting September 13, 2016

DATE: September 6, 2016
TO: Ted Fick, Chief Executive Officer
FROM: Melinda Miller, Director, Portfolio & Asset Management
Economic Development Division
Lily Ninburg, Property Manager
Rod Jackson, Capital Project Manager, Seaport Project Management
SUBJECT: Terminal 91 - Building C-173 Roof Overlay (CIP #C800829)

Amount of This Request: \$185,000 **Source of Funds:** Tax Levy
Est. Total Project Cost: \$1,561,000

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to complete design documents for the Terminal 91 Building C-173 Roof Overlay Project for an estimated cost of \$185,000, bringing the current authorization to \$250,000 for an estimated project cost of \$1,561,000.

SYNOPSIS

The Terminal 91 C-173 Building's roof is at the end of its service life and needs a new roofing system. This memo requests authorization to proceed with the final design phase of the development process. This project team will also analyze the feasibility of adding a roof downspout storm water treatment system and evaluate the possibility of packaging construction work together with the Fishermen's Terminal Net Sheds 3, 4, 5, and 6 Roof Replacement Project in a single bid package to increase small business opportunities. Combining construction projects may allow the Port to achieve higher small business requirements, for example at 30-40%, than if the construction projects are separate with single digit small business percentages.

The building is 100% occupied, primarily as warehouse and storage space leased to maritime-related customers American Seafood, Kami Steel, and Marel Seafood Seattle. In accordance with the terms of the leases, the Port has responsibility for the replacement of the 50,000 square foot roof.

Waterproof Storage at Terminal 91 is one of the amenities that helps retain tenants and is part of the critical service infrastructure that will be required to double the economic value of the maritime sectors, as envisioned by the Century Agenda. This project was included in the 2016 Plan of Finance.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

September 6, 2016

Page 2 of 8

BACKGROUND

Construction of the Terminal 91 C-173 Buildings took place in 1987. A roof inspection was performed on the building in November 2015 recommending replacement or overlaying. The consultant report indicated the building is currently at structural capacity and the roof is showing signs of deterioration with rusted construction scratches, kinks in the metal roof panels, rust spots, deficient sheet metal repairs, roosting birds, and uplift during strong winds. The condition report was updated in March 2016 to verify the findings. The updated report states a roof replacement or overlay should occur soon. The project will install a new roofing overlay system over the existing corrugated roof that will provide a 30-year life with good maintenance. Preliminary design is complete. The feasibility of adding solar panels to C-173 was considered and rejected as the extra structural upgrade costs needed to support the panels on the roof were deemed prohibitive. Approximately \$5.53 million (structural upgrades of \$3 million, solar panel costs of \$2 million, and approximately \$530,000 in infrastructure upgrades) would be required to incorporate solar power.

PROJECT JUSTIFICATION AND DETAILS

The proposed project would preserve important building assets and revenues associated with the leased warehouse space, extend the life of the building structure, and minimize the Port's liability. Deferring or foregoing this work will result in continued deterioration of the roof system components. Proactive asset stewardship is the key to reducing the total cost of ownership to the Port over time.

In addition to the design to replace the roofing system, the project provides an opportunity to investigate and implement environmentally sustainable practices and processes as part of the new roof overlay. As the design develops, environmentally sustainable options will be evaluated utilizing criteria identified in EX-15, that include total cost of ownership, environmentally-sustainable development and conservation of resources as a method of determining which sustainable elements will be included in the final project. Potential sustainable elements may include rainwater harvesting and reduction in roof heat absorption.

The Port is also assessing opportunities to increase small business participation in the construction contract. We will update the Commission on this analysis when we return to Commission for authority to advertise and execute a construction contract.

Project Objectives

- Provide a new Roofing System that will extend the useful life of Terminal 91 C-173 Building.
- Complete the project safely on schedule and on budget.
- Minimize impacts on the environment.
- Minimize disruptions to the Port tenants, operations, and the facility.
- Include environmentally sustainable components and construction methods as appropriate.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

September 6, 2016

Page 3 of 8

- Preserve the structural integrity of the building.
- Preserve future revenues from the building.
- Increase safety with the installation of fall protection.
- Evaluate the possibility of combining construction with other nearby roofing projects to save project costs and increase small business opportunities.

Scope of Work

The scope of work for the Terminal 91 Building C-173 Roof includes the evaluation and design for the:

- New durable roofing membrane overlay system for the building;
- Overlay the building with approximately 50,000 square feet of roof membrane and associated roof appurtenances.
- Install a bird deterrent system;
- Installation of security access ladders to the roof;
- Fall protection and attachments to the roof;
- Determine the feasibility of a bio-filtration and stormwater treatment system for rooftop runoff.
- Utilizing environmentally sustainable components and construction methods as appropriate.

Schedule

The design and permitting phase is expected to be completed by December, 2016 and the construction phase expected to begin in 2017 and be fully complete by November 2017.

FINANCIAL IMPLICATIONS

Budget/Authorization Summary

	Capital	Expense	Total Project
Original Budget	\$0	\$0	\$0
Previous Authorizations	\$65,000	\$0	\$65,000
Current request for authorization	\$185,000	\$0	\$185,000
Total Authorizations, including this request	\$250,000	\$0	\$250,000
Remaining budget to be authorized	\$1,311,000	\$0	\$1,311,000
Total Estimated Project Cost	\$1,561,000	\$0	\$1,561,000

Project Cost Breakdown

	This Request	Total Project
Construction	\$0	\$1,056,000
Construction Management	\$40,000	\$148,000
Design	\$90,000	\$156,000
Project Management	\$34,000	\$84,000
Permitting	\$16,000	\$16,000
State & Local Taxes (estimated)	\$0	\$101,000
Total	\$185,000	\$1,561,000*

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

September 6, 2016

Page 4 of 8

** The current C-173 Roof Overlay's total estimated project cost of \$1,561,000 is an increase from the \$1,309,000 total estimated project costs shown in the 2016 plan of finance. The increase is because the requested delay which has created minor increases in labor and material costs to complete the work.*

Budget Status and Source of Funds

This project was included in the 2016 plan of finance combined under CIP #C800829, Terminal 91 Building C-173 Roof Overlay in the amount of \$1,561,000.

This project will be funded by the Tax Levy.

Financial Analysis and Summary

CIP Category	Renewal/Enhancement
Project Type	Renewal & Replacement
Risk adjusted discount rate	N/A
Key risk factors	<ul style="list-style-type: none">• Actual costs could exceed the current estimates.• Future revenues from the building could be less than currently expected.
Project cost for analysis	\$1,561,000
Business Unit (BU)	Maritime Portfolio Management
Effect on business performance	<p>This project is a renewal & replacement project and preserves current annual net operating income (NOI) of approximately \$580,000 excluding major maintenance/compliance expenses. This project will retain key fishing industry tenants.</p> <p>This project will increase depreciation expense by \$62,440 per year.</p>
IRR/NPV	The NPV of this project is the present value of the project cost.
CPE Impact	N/A

Lifecycle Cost and Savings

Preliminary lifecycle cost analyses have been developed for the project and will continue to identify the lowest total cost of ownership to determine which of the roof design options will be appropriate for the new roofing system and the facility. Annual Operating and Maintenance costs for the roof system are forecasted to decrease for the C-173 Building Roof because of the Overlay and installation of this new roof system. The design for Building C-173 Roof Overlay will use the desired analysis design option as the project design is developed.

STRATEGIES AND OBJECTIVES

This project enhances Seaport vitality by maintaining the building integrity and storage infrastructure which serves the tenant and is utilized by the Port's seafood and container industries. This project also supports the Port's Century Agenda strategy to "position the Puget

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

September 6, 2016

Page 5 of 8

Sound region as a premier international logistics hub” by doubling the economic value of the fishing and maritime cluster and be the greenest and most energy efficient port in North America by:

- Investing in and preserving a valuable Port asset.
- Continuing to provide storage space, in close proximity to their vessels and business, for their gear/materials.
- Maintaining the long-term revenue generating capability of C-173.
- Fulfilling lease commitments and obligations to the Port’s tenants.
- Create opportunities for small business participation.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1) – Maintain Status Quo and delay replacement of the C-173 Roof Overlay. Maintenance costs of \$9,814.10 annually (averaged over nine months) will continue.

Cost Implications: \$1,561,000 of project funding will not be needed.

Pros:

- No additional major capital funding would be required.
- Allows port to reallocate capital investment dollars to other high priority needs with potentially higher rates of return or to other maritime cost recovery type projects.

Cons:

- Increases the chances that the interior of the facility will be damaged due to water infiltration.
- Foregoes opportunity to remove the dilapidated roofing systems and to alleviate the potential for failure while progressing toward the port century agenda goal to double the economic value of the fishing and maritime cluster industries.
- Increase of probable construction costs in the future while emergency repair costs continue to increase.
- The cost of a future roofing project in the event of roof failure would be the full cost of replacement (\$1.56 million) plus escalation and the cumulative on going expense costs. Risk cost of lost tenant space due to emergency repairs – unknown but high.
- Safety of the tenant could be compromised due to the slip hazard from leaks to tenant and employees.
- The risk of significant or catastrophic failure increases over time with the further breakdown of roof system materials.
- Increased maintenance cost will continue.

This is not the recommended alternative.

Alternative 2) – Coat the entire existing roof with a 10 year life roof roll-on coating system while installing a new security ladder, gutter and fall protection system.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

September 6, 2016

Page 6 of 8

Cost Implications: Total project costs would be more than the anticipated budget with the installation of the 10 year coating system because the roof will require recoating after 10 years. This cost differential is for the coating material and labor. \$2,349,000 in project funding would be needed.

Pros:

- An entirely new 10 year roof roll-on coating and gutter system investment will protect our assets and have a 10 year life span.
- In Increase safety with the installation of fall protection.
- This alternative furthers the port century agenda to double the economic value of the fishing and maritime cluster industries.
- Helps to assure a stronger positive tenant experience and avoids potential safety hazards.
- Provides protection of port assets.

Cons:

- Additional cost for the Roof Coating is higher than the PVC roofing system (Alternative 3). Due to the added material and handling cost, this is the most expensive alternative.
- This alternative uses \$2.35 million of capital that might otherwise be made available for other uses on other projects.

This is not the recommended alternative.

Alternative 3) – Replace the entire existing roofing system with a PVC Membrane Overlay that has a 30 year life while installing a new security ladder, gutter and fall protection system including solar and structural upgrades to 100% of the building.

Cost Implications: An additional \$5.53 million (which will consist of Structural upgrades of \$3 million, solar panel costs of \$2 million, and approximately \$530,000 in infrastructure upgrades) is required to complete structural upgrades and include solar panels. This cost is above and beyond the base cost of \$1.56 million for Alternative 4's investment.

Pros:

- This Photovoltaic (PV) installation could potentially provide and generate approximately 300,000 kWh of power per year with the current usage being 291,800 kWh per year.
- This PV installation could potentially save approximately \$23,008.00 per year.
- This PV installation could potentially provide the ability for grant reimbursement and possible incentives.
- Replacing grid produced electrical energy with a renewable energy reduces Greenhouse Gas Emissions by ~ 7,680 lbs. of CO₂/year.
- Providing renewable power systems meet three Century Agenda goals: Reduces Greenhouse gas emissions, increases renewable energy use, and conserves energy use to

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

September 6, 2016

Page 7 of 8

meet overall energy demand. Plays a role in building clean infrastructure and demonstrates Port's leadership in competing globally to produce clean energy using Washington-based industries.

- Matching installation of a new PVC Roofing and gutter system with the solar PV system will harmonize life cycle of both systems.
- To be eligible for grants, solar panels are manufactured in Washington and provide support for a growing industry.
- Replacing the roof, security ladder, gutters and fall protection systems during construction will provide the lowest Life Cycle Cost.
- This project would provide for a warranted roof that will minimize the cost of roof repairs going forward.

Cons:

- This alternative uses an additional \$5.53 million to include Solar and Structural upgrade or \$7.09 million of capital in aggregate that might otherwise be made available for other uses on other projects.
- The increased cost of this solar installation does not meet normally accepted project financial criteria for new capital projects.

This is not the recommended alternative.

Alternative 4) – Replace the entire existing roofing system with a PVC Membrane Overlay that has a 30 year life while installing a new security ladder, gutter, and fall protection system.

Cost Implications: A cost of \$1,561,000 of project funding is needed to implement the project.

Pros:

- Install entirely new PVC Membrane Overlay Roofing and gutter system that will protect our assets and have a 30 year life span and serve the Port and the tenants well.
- Overlaying the roof, and replacing the security ladder, gutters, and fall protection System including all required penetrations during construction will provide the largest return on investment.
- This alternative furthers the port century agenda to double the economic value of the fishing and maritime cluster industries.
- Helps to assure a stronger positive tenant experience and avoids potential safety hazards.
- Provides protection of port assets.
- Increase safety with the installation of fall protection.
- Provides for the viability of the facility for the foreseeable future.
- This project would provide for a warranted roof that will minimize the cost of roof repairs going forward for the foreseeable life of the roof.
- Provides protection of port assets. This option does the best job of supporting the goal of managing Port assets to minimize the long term total cost of ownership.

COMMISSION AGENDA

Ted Fick, Chief Executive Officer

September 6, 2016

Page 8 of 8

Cons:

- This alternative uses \$1.56 million of capital that might otherwise be made available for other uses on other projects.

This is the recommended alternative

ATTACHMENTS TO THIS REQUEST

- Slide presentation.

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- None