

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA

Item No. 5e

Date of Meeting July 26, 2011

DATE: July 18, 2011

TO: Tay Yoshitani, Chief Executive Officer

FROM: Joan Knutson, Seaport Property Manager
Curtis Stahlecker, Capital Project Manager

SUBJECT: Terminal 91, C-175 Building Roof Replacement - Design
(CIP# C800430)

Amount of This Request: \$190,000

Source of Funds: General Fund

Total Estimated Project Cost: \$2,445,000

ACTION REQUESTED:

Request authorization for the Chief Executive Officer to proceed with executing service agreements, preparations of construction documents, project management and permitting tasks for the design phase of Terminal 91, C-175 Building Roof Replacement Project. The amount of this request is \$190,000, bringing the current authorization for the project to \$240,000 for a total estimated project cost of \$2,445,000.

SYNOPSIS:

CityIce Cold Storage, LLC, (CityIce), is the tenant of the C-175 Building at Pier 90 and operates a cold storage operation in the building. The building lease with CityIce expires in 2039 and has options for two additional 10 year extensions. In accordance with the terms of the lease, the Port has responsibility for the replacement of the 90,000 square foot roof. The building was built in the early 1990's and is in good condition. The roof is approximately 18 years old, has performed well during this time period and is currently not leaking but is nearing the end of its 20 year design life.

Two roof inspections have been performed on the building. The first in November 2009 was sponsored by the tenant and the second inspection in February 2010 was sponsored by the Port. Both the reports from the inspections have similar findings. The reports indicate the roof is beginning to show signs of deterioration with membrane shrinkage, tenting, and uplift during strong winds. Both reports recommend replacement of the roof. The tenant sponsored report states replacement should occur in two to three years (2011 to 2013) and the time frame in the Port-sponsored report is two to four (2012 to 2014).

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BACKGROUND:

While minor leaks can be repaired with increased maintenance, the major concern is if large sections of the roof membrane are damaged during wind storms. Should this occur, the building and contents would be exposed to the elements disrupting tenant operations and requiring emergency repairs. As the roof ages, the roof membrane will continue to deteriorate increasing the likelihood of a major failure. With the building located on a pier, the risk of damage due to higher open-water wind exposure also increases.

Additionally, the white coating applied to the black membrane has failed in many areas on the roof. While the failure of the coating does not affect the waterproof integrity of the system, it does increase the thermal adsorption of the building. Replacing the reflective coating with a new roofing system will restore the building to the initial energy efficiency.

This project will remove and replace the existing roof membrane and related roofing elements. This authorization request of \$190,000 is for the design development phase of the project. The design is scheduled to be completed in March 2012. During the design phase, different roofing system alternatives will be evaluated to determine which system has lowest cost of ownership. The roofing alternatives include: membrane, built-up and metal with design lives ranging from 20 to upwards of 45 years.

The planning level estimated cost range of the project, including future construction authorizations is between \$1,864,000 and \$ 2,445,000. The total estimated cost of the project has increased from the \$1.2 million shown in the 2011 Plan of Finance for the following three reasons. Costs of \$340,000 have been included to investigate and incorporate environmentally sustainable processes and practices components. These costs were identified for this project in the 2011 Committed CIP #C800160. Secondly, a more detailed cost estimating process was utilized increasing the direct and indirect construction costs by roughly \$300,000. Thirdly, the initial estimate was for a roof system with a 20 year design life, an additional \$600,000 has been included in the estimate range for roofing systems with a longer design life that more closely matches the length of the lease. Additional analysis will be performed during the design process to determine if the longer design life will provide the lowest cost of ownership to the Port. Ultimately the roofing system with the lowest total cost of ownership will be selected.

In addition to the removal and replacement of the roofing system, the project provides an opportunity to investigate and implement environmentally sustainable practices and processes as part of the new roof systems. 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, conservation of resources and possible grant reimbursement as a method of determining which sustainable elements will be included in the final project. Potential sustainable elements may include; rainwater harvesting, passive solar system, reduction in roof heat adsorption, and wind generation.

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Port staff will consult with the Office of Social Responsibility to determine what opportunities exist for small business on the project. Where opportunities exist, small business participation will be encouraged.

PROJECT JUSTIFICATION:

As the roof membrane is near the end of its service life, replacing the roofing system now will avoid costs for future repairs and potential water damage to the building insulation, structural elements and tenant operations. The lease agreement between the Port and CityIce has the maintenance and repair of the roof as an obligation of the Port.

PROJECT STATEMENT AND OBJECTIVES:

Project Statement:

Remove and replace the roofing system on the C-175 Building by the fall of 2012.

Project Objectives:

- Install a new roofing system on a Port-owned asset.
- Minimize disruption to the tenant and tenant operations.
- Investigate environmentally sustainable practices during the design and incorporate into the project where practical.
- Complete project on time and within budget.

PROJECT SCOPE OF WORK AND SCHEDULE:

Scope of Work:

The project consists of the following components:

- Design a new roof system on an existing building.
- Remove and replace the 90,000 square foot roof membrane and associated roof appurtenances.
- Install the new roof system.
- Include environmentally sustainable components and construction methods as appropriate.

Schedule:

The anticipated schedule for the project will have the installation of the new roof occurring during the summer of 2012. The following table contains the major schedule elements.

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	<u>Start</u>	<u>Finish</u>
Commission Authorization for Design	July 2011	July 2011
Consultant Procurement and Design Process	July 2011	March 2012
Commission Authorization for Construction	March 2012	March 2012
Advertise and Award	April 2012	June 2012
Construction	July 2012	October 2012

FINANCIAL IMPLICATIONS:

Budget/Authorization Summary

Previous Authorizations (<i>Under Preliminary Planning CIP# C001785</i>)	\$50,000
Current request for authorization	\$190,000
Total Authorizations, including this request	\$240,000
Remaining budget to be authorized (<i>estimated construction cost</i>)	\$2,205,000
Total Estimated Project Cost (<i>pending final design</i>)	\$2,445,000

Project Cost Breakdown

Construction	\$1,985,000
Construction Management	\$58,000
Design	\$145,000
Project Management	\$58,000
Permitting	\$18,000
State & Local Taxes (estimated)	\$181,000
Total	\$2,445,000

Source of Funds

This project was included in the 2011 Plan of Finance under Business Plan Prospective CIP # C800430 P90 C175 Roof Replacement in the amount of \$1,200,000. Additional funding, to investigate and include environmentally sustainable construction projects, was included under the Committed CIP #C800160 Green Port Initiative in the amount of \$340,000. The additional \$905,000 which is required to fund this project is available due to lower than anticipated costs on other 2011 Plan of Finance Committed projects such as the T5 Crane Cable Reels.

This project will be funded from the General Fund.

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Financial Analysis Summary:

CIP Category	Renewal/Enhancement																								
Project Type	Renewal & Replacement																								
Risk adjusted Discount rate	N/A																								
Key risk factors	<ul style="list-style-type: none">• Construction costs may increase if design results in a larger scope than anticipated or if there is unforeseen damage under the roof membrane or insulation.• Material costs, such as petroleum based roofing membrane, are subject to price fluctuations.• Project schedule could be delayed due to project complexity, weather, or the need to minimize tenant disruptions.																								
Project cost for analysis	\$2,445,000																								
Business Unit (BU)	Seaport Industrial Properties																								
Effect on business performance	<p>This project will not generate any incremental revenue.</p> <p>Total depreciation expense from this project is estimated at \$81,500/year, based on a thirty year useful life. The allocation of actual project costs to specific assets will be finalized near the end of the project. Net Operating Income after Depreciation for this facility will decrease by the associated depreciation expense from this project.</p> <table border="1"><thead><tr><th>NOI (in \$000's)</th><th>2012</th><th>2013</th><th>2014</th><th>2015</th><th>2016</th></tr></thead><tbody><tr><td>NOI</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td></tr><tr><td>Depreciation</td><td>(\$14)</td><td>(\$82)</td><td>(\$82)</td><td>(\$82)</td><td>(\$82)</td></tr><tr><td>NOI After Depreciation</td><td>(\$14)</td><td>(\$82)</td><td>(\$82)</td><td>(\$82)</td><td>(\$82)</td></tr></tbody></table>	NOI (in \$000's)	2012	2013	2014	2015	2016	NOI	\$0	\$0	\$0	\$0	\$0	Depreciation	(\$14)	(\$82)	(\$82)	(\$82)	(\$82)	NOI After Depreciation	(\$14)	(\$82)	(\$82)	(\$82)	(\$82)
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IRR/NPV	<table border="1"><thead><tr><th>NPV (in \$000's)</th><th>IRR (%)</th></tr></thead><tbody><tr><td>(\$2,445)</td><td>N/A</td></tr></tbody></table>	NPV (in \$000's)	IRR (%)	(\$2,445)	N/A																				
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ECONOMIC IMPACTS AND BUSINESS PLAN OBJECTIVES:

Proceeding with this project meets the lease obligation the Port has with the tenant to maintain and repair the building roof.

STRATEGIC OBJECTIVES:

This project enhances Seaport vitality by maintaining the building integrity thereby preserving cold storage infrastructure which serves the tenant and is utilized by the Port's seafood and container industries.

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ENVIRONMENTAL SUSTAINABILITY AND COMMUNITY BENEFITS:

- No negative environmental impact is anticipated as a result of this project. However, the roofing project does provide an opportunity to investigate and include environmentally-sustainable construction practices and processes and has funding from the Green Port Initiative budgeted for this purpose.
- The initiative money will be used to investigate and implement environmentally sustainable components and/or processes that are above and beyond what would be considered standard construction practices and processes and in compliance with EX-15 and CPO-2.
- The development and analysis of viable options will occur during the design process and may include; rainwater harvesting, passive solar system, reduction in roof heat adsorption, and wind generation.

TRIPLE BOTTOM LINE:

Replacing the roof maintains a Port facility supports the commercial fishing industry at Pier 90. The project will not have any adverse impacts not the environment and will incorporate environmentally-sustainable building practices and processes where feasible.

ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:

Alternative 1: Do nothing. The roof is currently functioning; replace the roof system after it leaks or fails. The risk of waiting until the roof leaks or fails is that emergency repairs would need to be performed during the period when the new roofing system is being designed and bid, potentially increasing the costs. Damage to the insulation and roof support structure could also occur increasing the replacement cost as well as having the potential of disrupting the tenant operations.

Alternative 2: Proceed with the design and complete it by the spring of 2012. Delay the replacement for one to two years to extend the existing service. During this time period, perform additional monitoring and spot repairs as needed. The risk of selecting this alternative is twofold. The first is the combination of increased costs for inspection and maintenance and unknown escalation costs of construction may exceed the savings gained by the extended service life of the existing roof. The second risk is design may no longer be valid and would need to be redone in part to address any potential changes in the building code or materials.

Alternative 3: Proceeding with the design and replacement of the roof system now will reduce future risks of a major roofing system failure, restore the energy efficiency of the roof and reduce the risk of emergency repair costs. **This is the recommended alternative.**

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:

None