

**PORT OF SEATTLE**  
**MEMORANDUM**

**COMMISSION AGENDA**

**Item No.** 5b

**ACTION ITEM**

**Date of Meeting** November 6, 2012

**DATE:** October 29, 2012

**TO:** Tay Yoshitani, Chief Executive Officer

**FROM:** Mike McLaughlin, Director, Cruise & Maritime Operations  
Nick Milos, Pier 69 Facility Manager  
Fred Chou, Project Manager, Seaport Project Management  
Catherine Chu, Project Manager, Seaport Project Management

**SUBJECT:** Authorization for Construction - Pier 66 Apron Pile-Wrap Project (CIP #C800516) and P69 North Apron Corrosion Control Project (CIP #C800313)

	<b>Pier 66</b>	<b>Pier 69</b>
<b>Amount of This Request:</b>	\$2,843,000	\$4,800,000
<b>Source of Funds</b>	General Fund	Tax Levy
<b>Estimated State and Local Taxes</b>	\$182,000	\$386,000
<b>Estimated Jobs Created</b>	28	48
<b>Estimated Total Project Cost</b>	\$3,010,000	\$5,100,000

**ACTION REQUESTED:**

Request Port Commission authorization for the Chief Executive Officer to: (1) advertise for construction bids, execute construction contracts, and fund the construction phase to complete the Pier 66 Apron Pile-Wrap Project in an amount not to exceed \$2,843,000 of a total estimated project cost of \$3,010,000; and (2) advertise for construction bids, execute construction contracts, and fund the construction phase to complete the Pier 69 North Apron Corrosion Control Project in an amount not to exceed \$4,800,000 of a total estimated project cost of \$5,100,000. The total amount requested for both projects is \$7,643,000 and the total cost of both projects is \$8,110,000.

**SYNOPSIS:**

This request combines construction for two separate but similar construction projects into one construction contract to reduce total construction costs to the Port. One project is at Pier 69 while the other project is located nearby, at Pier 66. The projects have previously been managed and authorized separately. Pier 69 was constructed in 1991; this project involves corrosion protection of its steel piling and related structures on the north apron. Pier 66/Bell Harbor was built in 1995 as part of the Central Waterfront Project; this project also involves corrosion

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protection of steel piling and related structures. Recent inspections revealed the protective coatings have reached the end of their service lives and oxidation/rusting of varying degrees is clearly visible. If left alone, continued corrosion will distress the structures resulting in more costly structural repairs or replacements in the future.

On February 28, 2012, the Port Commission in separate actions, authorized funding for design and permitting of \$300,000 for the Pier 69 Corrosion Control Project and \$167,000 for the Pier 66 Apron Pile-Wrap Project. During the design phases, staff determined that, due to the close proximity of the sites and similar nature of work, cost savings could be achieved by combining the construction efforts into a single construction contract. Although construction will be bid and managed under one competitively bid contract, the work at each facility will be treated as separate projects.

With the final design complete and permits in hand, staff requests Commission approval to proceed with the construction phase of the projects. This includes advertising for construction bids, execution of a major construction contract, and other work necessary to complete the projects. The funds requested reflect the information gathered during the final design phase of the project.

### **PROJECT JUSTIFICATION:**

The proposed projects would preserve important assets at Pier 66 and Pier 69. Authorization to proceed with these projects will extend the lives of the pier structures. Deferring or foregoing this work would allow continued corrosion of these structural steel components. Eventually, this would lead to increased risk of failure, detrimental impacts to operations, and the need for more costly replacements. Maintaining proactive asset stewardship is key to reducing the total cost of ownership to the Port over time.

#### ***Project Objectives:***

- Preserve the structural integrity of the pier structures
- Complete project on time and within budget
- Protect the environment while performing the work
- Minimize disruptions to facility operations

### **PROJECT SCOPE OF WORK AND SCHEDULE:**

#### ***Scope of Work:***

The scope of work for Pier 66 Apron Pile-Wrap Project at the Seaport's Pier 66/Bell Harbor cruise facility includes:

- Construction of a pile-wrap system for the section of steel piling between inter-tidal elevations and the top of piling, and
- Replacement of a protective epoxy coating at the connections on top of the steel piles.

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The scope of work for the Pier 69 North Apron Corrosion Control Project includes:

- Installation of a cathodic protection system for the submerged portions of the steel piling;
- Construction of a pile wrap system for the section of steel piling between inter-tidal elevations and the top of piling; and
- Application of a protective epoxy coating system for the pile caps, steel beams, and other steel structure above the inter-tidal elevations.

### *Schedule:*

The two projects will be closely coordinated and bid out as one major construction contract. The current project schedules are as follows:

Commission Approval for Design	February 2012
Permit/Design Complete	October 2012
Commission Approval for Construction	November 2012
Advertise for Bids	November 2012
Construction	Pier 66 work: March 2013 – March 2014 Pier 69 work: March 2013 – Dec 2013

## FINANCIAL IMPLICATIONS:

### *Budget/Authorization Summary:*

	<b>Pier 66</b>	<b>Pier 69</b>
Previous Authorizations	\$167,000	\$300,000
Current request for authorization	\$2,843,000	\$4,800,000
Total Authorizations, including this request	\$3,010,000	\$5,100,000
Remaining budget to be authorized	\$0	\$0
<b>Total Estimated Project Cost</b>	<b>\$3,010,000</b>	<b>\$5,100,000</b>

### *Project Cost Breakdown:*

	<b>Pier 66</b>	<b>Pier 69</b>
Construction	\$2,395,000	\$4,063,000
Construction Management	\$138,000	\$244,000
Design	\$161,000	\$223,000
Project Management	\$70,000	\$103,000
Permitting	\$24,000	\$81,000
State & Local Taxes	\$222,000	\$386,000
<b>Total</b>	<b>\$3,010,000*</b>	<b>\$5,100,000*</b>

\*The current \$3,010,000 and \$5,100,000 total project costs have increased from the \$2,378,000 and \$3,966,000 total estimated project costs at the time of design funding authorization request (February 28, 2012). The main cause is that during design, it was determined that to fully protect the piles, the pile-

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wraps need to be extended further down in the inter-tidal zone which requires additional materials and working in more challenging conditions. At Pier 69 north apron, there is also increased cost related to coating of steel pile caps and beams.

### ***Budget Status and Source of Funds:***

#### **Pier 66 Apron Pile-Wrap Project**

This project was included in the 2012 Plan of Finance under CIP #C800516, Pier 66 Apron Pile-Wrap Project in the amount of 2,378,000. This project is currently included in the proposed 2013 Plan of Finance in the amount of \$2,950,000. This project will be funded by the general fund.

#### **P69 North Apron Corrosion Control Project**

This project was included in the 2012 Plan of Finance under CIP #C800313, P69 North Apron Corrosion Control Project. This project is currently included in the proposed 2013 Plan of Finance in the amount of \$6,429,000. This project will be funded by the tax levy.

### ***Financial Analysis and Summary:***

#### **Applies to both Pier 66 Apron Pile-Wrap and the P69 North Apron Corrosion Control projects:**

<b>CIP Category</b>	Renewal/Enhancement
<b>Project Type</b>	Renewal/Replacement
<b>Risk adjusted discount rate</b>	N/A
<b>Key risk factors</b>	Key risk factors include permitting delays and potential cost overruns due to project complexity/timeframe. <ul style="list-style-type: none"><li>• The work window available to the contractor will be greatly influenced by tides. Production rates could vary significantly due to perception of risks and available crew size.</li><li>• Installation of pile wraps at the -2 elevation may involve use of divers. Bids may vary if contractors have different interpretation on how much diver involvement is required.</li></ul>

<b><u>Pier 66 Apron Pile-Wrap Project</u></b>	
<b>Project cost for analysis</b>	\$3,010,000 for Pier 66
<b>Business Unit (BU)</b>	Seaport - Cruise Services

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<b>Effect on business performance – Seaport Division</b>	<p>This project will not generate any incremental revenue.</p> <p>Incremental depreciation expense from this project is estimated to be \$200,666/year, based on a fifteen-year asset life. The allocation of actual project costs to specific assets will be finalized near the end of the project, estimated to be March 2014. Net Operating Income after Depreciation for the Pier 66 facility will decrease by the associated incremental depreciation from this project.</p> <table border="1"><thead><tr><th><b>NOI (in \$000's)</b></th><th><b>2013</b></th><th><b>2014</b></th><th><b>2015</b></th><th><b>2016</b></th><th><b>2017</b></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>\$0</td><td>(\$151)</td><td>(\$201)</td><td>(\$201)</td><td>(\$201)</td></tr><tr><td>NOI After Depreciation</td><td>\$0</td><td>(\$151)</td><td>(\$201)</td><td>(\$201)</td><td>(\$201)</td></tr></tbody></table>	<b>NOI (in \$000's)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	NOI	\$0	\$0	\$0	\$0	\$0	Depreciation	\$0	(\$151)	(\$201)	(\$201)	(\$201)	NOI After Depreciation	\$0	(\$151)	(\$201)	(\$201)	(\$201)
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<b>IRR/NPV</b>	N/A																								

<b><u>P69 North Apron Corrosion Control Project</u></b>																									
<b>Project cost for analysis</b>	\$5,100,000 for Pier 69																								
<b>Business Unit (BU)</b>	Real Estate – Pier 69 Facilities Management																								
<b>Effect on business performance – Real Estate Division</b>	<p>This project will not generate any incremental revenue.</p> <p>Incremental depreciation expense from this project is estimated to be \$340,000/year, based on a fifteen-year asset life. The allocation of actual project costs to specific assets will be finalized near the end of the project, estimated to be December 2013. Net Operating Income after Depreciation for the Pier 69 facility will decrease by the associated incremental depreciation from this project.</p> <table border="1"><thead><tr><th><b>NOI (in \$000's)</b></th><th><b>2013</b></th><th><b>2014</b></th><th><b>2015</b></th><th><b>2016</b></th><th><b>2017</b></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>\$0</td><td>(\$340)</td><td>(\$340)</td><td>(\$340)</td><td>(\$340)</td></tr><tr><td>NOI After Depreciation</td><td>\$0</td><td>(\$340)</td><td>(\$340)</td><td>(\$340)</td><td>(\$340)</td></tr></tbody></table>	<b>NOI (in \$000's)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	NOI	\$0	\$0	\$0	\$0	\$0	Depreciation	\$0	(\$340)	(\$340)	(\$340)	(\$340)	NOI After Depreciation	\$0	(\$340)	(\$340)	(\$340)	(\$340)
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<b>IRR/NPV</b>	N/A																								

### ***Lifecycle Cost and Savings:***

Annual Operating and Maintenance costs are forecasted to decrease for the P66 Apron Pile-Wrap Project but will remain approximately the same for the P69 North Apron Corrosion Protection Project.

### **STRATEGIC OBJECTIVES:**

The proposed projects support the Port's strategy to "Ensure Airport and Seaport Vitality" by maintaining and preserving vital assets.

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### **ENVIRONMENTAL SUSTAINABILITY:**

Construction implementation will include practices to avoid and minimize potential negative environmental effects. The projects have identified construction and maintenance methods, materials, and practices for effective under-pier work while avoiding release of deleterious materials to the environment and reducing the potential for adverse effects on aquatic area natural resource values. Timely asset preservation extends the service life of existing infrastructure, as an alternative for avoiding more environmentally disruptive and resource/materials consumptive large scale structure replacement actions.

### **BUSINESS PLAN OBJECTIVES:**

Proceeding with the projects will help preserve the integrity of the Pier 66 and Pier 69 structures and allow continued operations at these facilities.

### **TRIPLE BOTTOM LINE SUMMARY:**

Preserving existing assets defers high-impact and high-cost asset replacement, and therefore reduces environmental impact and supports the economic vitality by reducing Port costs and generating construction jobs. The proposed construction methods will have minimal noise and traffic impact to the surrounding communities.

### **ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:**

Alternative 1: Do nothing. This alternative would allow corrosion to spread, causing distress to critical structural support systems resulting in more costly work in the future. Once corrosion begins to occur, structural capacity could deteriorate quickly to the point that replacement would be required. Replacement of critical steel piling, pile caps, and beams for the Pier 66 and Pier 69 north apron structures could cost tens of millions of dollars, and cause significant environmental and operational impact. This alternative is not recommended.

Alternative 2: Install a new epoxy-based coating system at Pier 66 and Pier 69. Recoating coated piling in the tidal zone is not recommended since the work is not done in a controlled environment, which reduces effectiveness and durability. This alternative is not recommended.

Alternative 3: Proceed with the two discrete projects as described at Piers 66 and 69 to minimize total cost of ownership to the Port. **This alternative is recommended for implementation.**

### **OTHER DOCUMENTS ASSOCIATED WITH THIS REQUEST:**

PowerPoint Slides

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### **PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:**

On February 28, 2012, the Port Commission approved \$200,000 design and permitting phase funding for the Pier 69 North Apron Corrosion Control Project (CIP #C800313) for a total authorization of \$300,000.

On February 28, 2012, the Port Commission approved \$135,000 design and permitting phase funding for the Pier 66 Apron Pile Wrap Project (CIP #C800516) for total authorization of \$167,000.