PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA

Item No. 5d
Date of Meeting September 28, 2010

DATE: August 30, 2010

TO: Tay Yoshitani, Chief Executive Officer

FROM: Mike McLaughlin, Director, Cruise and Industrial Properties
Fred Chou, Capital Project Manager, Capital Development

SUBJECT: Terminal 91 Roadway Pavement Project.
CIP #C800343

Amount of This Request: $757,000 **Source of Funds:** General Operating Fund

State and Local Taxes Paid: $ 32,000 **Est. Workers Employed:** 7

Total Project Cost: $895,000

ACTION REQUESTED:

Request commission authorization for the Chief Executive Officer to (1) advertise and award construction contracts; (2) authorize Port Construction Services to perform work for the Terminal 91 Roadway Pavement Project in the amount of $757,000, bringing the total authorized amount of this project to $895,000.

SYNOPSIS:

With the engineering design phase complete for the Terminal 91 Roadway Pavement Project, staff requests approval for the construction funding to repave two key roadway intersections/segments at the Terminal 91 facility that have exceeded their service life and are at risk of additional failure. The total project cost is now estimated at $895,000, a $395,000 increase from the amount originally shown in the 2010 Draft Plan of Finance. As part of the design phase investigation, staff discovered that the condition of several large underground utility structures--the source of some pavement failures--were worse than originally assumed and would require significant more work to address the problem. This discovery along with identifying some additional pavement areas needing replacement and underground utilities needing re-route has increased the project cost estimate.

This project will be funded by the general operating fund and has been coordinated with terminal operations and tenants.

BACKGROUND AND JUSTIFICATIONS:

Roadway pavement at Terminal 91 adjacent to the east and west main terminal entrances and main traffic intersections are in poor condition with a significant amount of surface breakage, settlement, cracks and areas of pavement failure. This in turn has created issues such as surface water ponding and roadway operation/safety concerns. The pavement needs to be replaced before additional pavement failures occur and to enhance terminal roadway operation and safety.

Staff obtained design funding approval from commission on December 15, 2009 and proceeded with the design phase of the project. The design effort was placed on hold in the spring to allow the further design of Terminal 91 Water Main Replacement Project to progress in order to determine joint-work opportunities and to ensure the new pavement surfaces would not be disturbed by underground utility work in the future.

As part of the design phase site investigation staff discovered that the poor condition of several large underground utility structures--the source of some pavement failures--were worse than originally assumed and would require significant more work to address the problem. This discovery along with identifying some additional pavement areas needing replacement and underground utilities needing reroute has increased the project cost estimate.

PROJECT SCOPE OF WORK AND SCHEDULE:

Project Statement:

This project will replace the pavement at two Terminal 91 intersection areas before the set-up start of the 2011 cruise season.

Project Objectives:

- Minimize disruptions to terminal/tenant operations during construction.
- Minimize future maintenance & repair work.
- Project will be on budget and at minimum cost.
- Project will be delivered on-time to meet schedule milestones.
- Project will be environmentally sound and will utilize sustainable environmental elements.

Scope of Work:

The overall project scope will include demolition and removal of deteriorated pavement; preparation of base materials; repair/replace underground utility vaults; re-route underground utilities; place new utility stubs; place full depth asphalt and concrete

pavement; and apply asphalt pavement overlay. Work will be completed by a combination of Port Construction Services and small works contractors.

Schedule:

	Start	**Finish**
Pre–Design	January 2010	March 2010
Design	March 2010	September 2010
Construction	October 2010	April 2011

FINANCIAL IMPLICATIONS:

Budget/Authorization Summary

Original Budget	$ 0
Previous Authorizations	$138,000
Current request for authorization	$757,000
Total Authorizations, including this request	$895,000
Remaining budget to be authorized	$ 0
Total Estimated Project Cost	$895,000

Project Cost Breakdown

Construction	$689,000
Soft Costs	$178,000
State & Local Taxes (estimated)	$ 28,000
Total	$895,000

Source of Funds

This project was included in the 2010 Plan of Finance under Committed CIP# C800343, T91 Roadway Pave Entry & Guard Shack, in the amount of $500,000. The additional $395,000 which is required to fund this project is available due to project deferrals or timing delays on other 2010 Plan of Finance Committed projects, such as the Terminal 18 Pile Cap Improvements Project. This project will be funded from the general fund.

Financial Analysis Summary:

CIP Category	Renewal/Enhancement
Project Type	Renewal/Enhancement
Risk adjusted Discount rate	7.0%

Key risk factors	• Asphalt work is highly weather dependent. Adverse weather may delay the planned construction schedule • Traffic impacts during construction to tenants and terminal operations, will be minimized as much as possible
Project cost for analysis	$895,000
Business Unit (BU)	Seaport Industrial Properties
Effect on business performance	No incremental revenue or operating expense is anticipated to be generated as a result of this Project. Incremental depreciation expense from the T-91 Roadway Pavement Project is estimated to be $77,000/yr for the next 10 years, based on the specific assets identified in the preliminary asset plan, and will then reduce to $5,000/yr as the assets with longer useful lives continue to depreciate.
IRR/NPV	No incremental revenue or operating expense. NPV is present value of project costs. **NPV** (in $000's) **($860)**

STRATEGIC OBJECTIVES:

This project supports the Port's strategy to "Ensure Airport and Seaport Vitality" through renewing and replacing vital seaport infrastructure to continue Port of Seattle waterfront operations.

Best management practices will be deployed in the selection of materials, work practices and ongoing total cost of ownership.

ENVIRONMENTAL SUSTAINABILITY AND COMMUNITY BENEFITS:

No impact to the environment is anticipated as a result of this project. Existing pavement and gravel base materials will be recycled for re-use. New pavement will be constructed with materials that have demonstrated long life and durability.

TRIPLE BOTTOM LINE:

This project is aligned with the business plan objectives to maintain safe facilities and assets while providing customers with compelling value. This is a renewal and replacement project to rebuild the roadway surface pavement systems and underground utility infrastructure located within the two primary intersection areas which provide common area access to the businesses at Terminal 91.

ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:

Alternative 1: Do nothing. Without the pavement improvement work, the existing asphalt surface and failing underground structures located within the intersections will continue to deteriorate which will negatively affect traffic flow circulations, impacting both tenant and terminal operations. For this reason, Alternative 1 is not recommended.

Alternative 2: Grind and patch the existing asphalt and concrete pavement (without full depth replacement) and overlay the areas with new asphalt. This is not recommended because unless the pavement base problem in the badly deteriorated pavement segments is corrected and the existing pavement replaced with full depth pavement, the problems will not be fully resolved and would reappear in a relatively short period of time. For this reason and considering the high volume of heavy truck traffic that occurs through these primary roadway intersections. Alternative 2 is not recommended.

Alternative 3: The recommended alternative is to complete full depth asphalt replacements in +/-5,000 square feet of failed roadway intersection areas, correct pavement problems caused by failing underground utility vaults, replace underground utility structures, reroute underground utilities and apply asphalt overlay in other problem areas. Staff recommends this alternative as it will alleviate the pavement structural/base problem and restore the major intersections to their full beneficial use in the primary roadway intersections serving both tenant and Port terminal operations. Alternative 3 is the recommended alternative.

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:

On December 15, 2009 Commission approved design funding for the T-91 Roadway Pavement Project.