

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA

Item No. 4g

ACTION ITEM

Date of Meeting July 1, 2014

DATE: June 24, 2014

TO: Tay Yoshitani, Chief Executive Officer

FROM: Michael Ehl, Director, Airport Operations
Wayne Grotheer, Director, Aviation Project Management Group

SUBJECT: 2014 Airfield Improvement Project (CIP #C102573)

Amount of This Request: \$0

Source of Funds: Airport Development
Fund and future revenue bonds

Est. Total Project Cost: \$1,500,000

Est. State and Local Taxes: \$80,000

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to reject all bids for the previously advertised contract for the Airfield Apron Pavement Replacement (CIP #102573) and NSAT-STC Ceiling Leak Long Term Repair (CIP #C800609) and to re-advertise and execute a construction contract for a revised Airfield Apron Pavement Replacement project (CIP #C102573).

SYNOPSIS

On April 1, 2014, the Commission authorized the CEO to advertise and execute a single construction contract for three projects consisting of two CIPs and one expense project to be constructed on the airfield in 2014. A single bid was received for the contract, which was 29.45% over the Engineer's Estimate. The single bid was deemed to be irregular and subsequently rejected. The requested authorization is to re-advertise a subset of the previous contract in order to address the most critical items that could impact airport operations. The revised contract will include:

- Distressed concrete pavement on Runway 16C/34C.
- Distressed concrete pavement in three areas surrounding the North Satellite.

No additional fund authorization is being requested. The estimated total cost of the revised project is \$1,500,000.

BACKGROUND

The 2014 Airfield Improvement Project is part of an ongoing pavement management program to replace aged and distressed concrete pavement and joint sealant in non-runway areas.

Concrete pavement panels and joint sealant typically have respective design lives of 20 and 10 years. Currently, there is a significant amount of airfield pavement and joint sealant that have far exceeded their expected service lives. Concrete debris resulting from the deteriorating pavement can

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become a hazard for aircraft and personnel. The replacement of the distressed panels is necessary for the safe operation of aircraft.

The revised 2014 Airfield Improvement Project will replace approximately 12 deteriorated panels surrounding the North Satellite and approximately 15 deteriorated panels located on Runway 16C/34C.

Replacement of pavement joint seal on portions of Taxiways B and W and the North Satellite – Satellite Transit System (STS) Ceiling Leak Long-Term Repair will be deferred. Taxiways B and W are located west of the North Satellite and their joint seal replacement is a component of CIP #C102573. The North Satellite – STS ceiling repair to eliminate leaks is a component of CIP #C800609. Performing work for these items is weather-sensitive and the schedule for the re-advertised project would likely affect the ability to perform the work. The interior of the STS lobby would be exposed to weather during replacement of exterior components.

Replacement of the distressed panels on Runway 16C/34C will be paid for using \$300,000 of expense funds because they will not meet the longevity requirements for capitalization with the scheduled reconstruction of the runway in 2015. The 2014 operating budget includes \$160,000 for the Runway 16C/34C maintenance.

The Commission previously authorized use of a project labor agreement for this project.

PROJECT JUSTIFICATION AND DETAILS

Project Objectives

- Provide structurally sound pavements for current and future customers.
- Provide reliable and appropriate-sized infrastructure systems.
- Minimize total lifecycle cost (capital and expense).
- Minimize operational impacts.

Scope of Work

This request includes the following elements:

- Apron panel replacement of approximately twelve panels.
- Runway panel replacement (for RW 16C/34C) of approximately fifteen panels.

Schedule

Commission Authorization to Advertise and Execute a Contract	July 2014
Advertisement	July 2014
Notice to Proceed	September 2014
Begin Construction	September 2014
Construction Complete	October 2014

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FINANCIAL IMPLICATIONS

CIP C102573 Budget/Authorization Summary Capital Expense Total Project

Original Budget	\$30,800,000	\$0	\$30,800,000
Budget Decrease	\$903,505	\$0	\$903,505
Revised Budget	\$29,896,495	\$0	\$29,896,495
Previous Authorizations	\$27,679,495	\$0	\$27,679,495
Current request for authorization	\$0	\$0	\$0
Total Authorizations, including this request	\$0	\$0	\$0
Remaining budget to be authorized	\$2,217,000	\$0	\$2,217,000
Total Estimated Project Cost	\$29,896,495	\$0	\$29,896,495

Project Cost Breakdown

This Request

Total Project

Construction	\$0	\$950,000
Construction Management	\$0	\$190,000
Design	\$0	\$100,000
Project Management	\$0	\$60,000
Central Procurement Office	\$0	\$50,000
Administration	\$0	\$40,000
Environmental & Permitting	\$0	\$30,000
State & Local Taxes (estimated)	\$0	\$80,000
Total	\$0	\$1,500,000

The total Project cost includes expense cost of \$300,000.

Budget Status and Source of Funds

CIP C102573 is included in the 2014 – 2018 capital budget and plan of finance. The Runway 16C/34C expense work was included in the 2014 operating budget for \$160,000. The Airport will seek to absorb the increase through savings or use of contingency. The funding sources for these projects include the Airport Development Fund and future bonds. The Port plans to issue bonds in 2014 to fund a number of projects.

Financial Analysis and Summary

CIP Category	Renewal/Enhancement
Project Type	Renewal & Replacement
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	\$1,500,000
Business Unit (BU)	Airfield Movement Area and Airfield Apron Area
Effect on business performance	NOI after depreciation will increase
IRR/NPV	N/A
CPE Impact	\$.02 in 2014 due to expense work, \$.02 in 2015 and beyond due to capital costs.

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Lifecycle Cost and Savings

The replacement of concrete panels will result in cost avoidance for maintaining them. Geometric constraints limit the depth of the pavement that can be constructed at the North Satellite and may reduce the life of those particular concrete panels.

STRATEGIES AND OBJECTIVES

This project supports the Port's Century Agenda objective of meeting the region's air transportation needs at Seattle-Tacoma International Airport for the next 25 years. Ensuring safe and secure operations and managing assets to minimize the long-term total cost of ownership assist in meeting this objective.

TRIPLE BOTTOM LINE

Economic Development

Generally, there are no economic impacts related to renewal/enhancement projects since they are primarily related to preservation of existing business activity.

Environmental Responsibility

The project contains appropriate environmental controls to prevent sediments from entering stormwater systems. Removed concrete panels are anticipated to be crushed and recycled as has occurred on previous, similar projects.

Community Benefits

Maintaining runway and airfield apron pavement benefits both our airline customers and travelers.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

1) Do nothing: This alternative would result in an increasing risk of aircraft ingesting concrete debris into aircraft engines from distressed pavement, adversely affecting Airport operations. This is not the recommended alternative.

2) Replace the deteriorated and aged pavement panels on runway and non-runway areas during the 2014 construction season. This allows for the programmatic replacement of aged and distressed pavement and avoids operational risk from panels with known distress. **This is the recommended alternative.**

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

2014 Airfield Improvement Project:

- On April 1, 2014, Commission authorized the Chief Executive Officer to advertise and execute a contract which included pavement and joint seal replacement in the amount of \$2,500,000 combined with another CIP and a total project cost of \$4,470,000.
- On August 6, 2013, the Commission authorized the use of a project labor agreement for the project.

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- On April 2, 2013, the Commission authorized \$300,000 and for the Chief Executive Officer to complete the design and perform any advance preparatory work for the 2014 Airfield Apron Pavement Replacement project.
- On March 26, 2013, the Commission authorized for the Chief Executive Officer to advertise and execute a single construction contract comprised of Airfield Panel Replacement and Joint Seal Replacement (CIP #102573) and Runway 16C/34C Panel Replacement. This authorization request is for \$8,967,000, and the estimated total cost of the complete project is \$9,377,000.
- On July 24, 2012, the Commission authorized \$200,000 and for the Chief Executive Officer to complete the design and perform any advance preparatory work for the 2013 Airfield Apron Pavement Replacement project.
- On April 10, 2012, the Commission authorized an additional \$1,467,000 because the bids exceeded the Engineer's Estimate by greater than 10 percent; and authorized the Chief Executive Officer to execute a contract in the amount of \$6,553,964 with the low responsive and responsible bidder for the 2012 Exterior Gates and Airfield Improvement Projects. This authorization increased the budget by \$1,467,000 due to the higher than expected bids, for a total project cost of \$10,500,000.
- On January 24, 2012, the Commission authorized \$4,707,000 and for the Chief Executive Officer to advertise and execute a construction contract that included Apron Pavement Replacement, Exterior Gate Improvements, Runway 16C/34C Panel Replacement, and South Snow Dump Pavement Expansion
- On July 26, 2011, the Commission authorized \$465,000 and for the Chief Executive Officer to complete the design and perform any advance work in support of the 2012 Pavement and Joint Replacement and Sealant Project for non-runway concrete pavement panels, joint seal replacement, spall repair, and associated or temporary facilities, such as striping, lighting, etc., on the Aircraft Operations Area.
- On March 1, 2011, the Commission authorized \$6,235,000 and for the Chief Executive Officer to advertise and execute a construction contract that included slot drain, pavement, and joint seal replacement at the South Satellite and perform installation of temporary facilities in concourses.
- On August 10, 2010, the Commission authorized \$394,000 and for the Chief Executive Officer to direct staff to: 1) proceed with project management, design, environmental support, and preparation of 100 percent design level construction documents for the replacement of slot drains, pavement and joint seal at the South Satellite at Seattle-Tacoma International Airport; 2) execute and award outside professional service agreements; 3) pre-purchase common-use gate equipment; and 4) allow Port Construction Services to self-perform, advertise for bids, and execute and award small works construction contracts for common use equipment installation.
- On February 9, 2010, the Commission authorized \$5,650,000 for the design, advertisement, and award of a construction contract for the 2010 Airfield Improvement Projects – Contract 1, consisting of panel replacements on Runway 16C/34C.
- On September 22, 2009, senior Aviation staff briefed the Commission on Seattle-Tacoma International Airport Facility Functionality and Readiness.

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- On February 26, 2008, the Commission authorized \$450,000 for joint seal replacement on Runway 16C/34C (CIP 800112).
Note: On October 30, 2003, Runway 16 Right/34 Left (16R/34L) was renamed runway 16C/34C, in preparation for the Third Runway to assume the runway 16R/34L designation.
- On January 14, 2003, the Commission authorized \$5,000,000 for a multi-year program of panel replacement on Runway 16R/34L (CIP 102037).
- On November 26, 1996, the Commission authorized \$2,000,000 for a multi-year program of panel replacement on Runway 6R/34L (CIP 100663).
- On June 13, 1993, the Commission authorized \$10,422,000 for Runway 16R/34L rehabilitation and other airfield improvements (CIP 100663).