

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA

Item No. 6h

Date of Meeting May 4, 2010

DATE: April 8, 2010

TO: Tay Yoshitani, Chief Executive Officer

FROM: Michael Ehl, Director, Airport Operations
Wayne Grotheer, Director, Aviation Capital Improvement Program

SUBJECT: Airport runway 16 Center/34 Center (16C/34C) sixty-percent reconstruction design – CIP C800406.

Amount of This Request: \$669,000

Source of Funds: Airport Development Fund

ACTION REQUESTED:

Request Port Commission to authorize the Chief Executive Officer to direct staff to proceed with project management, design, and preparation of 60% level construction documents for the future replacement of runway 16 center/34 center (16C/34C) at Seattle-Tacoma International Airport (Airport). Pre-construction project costs to accomplish the 60% design are estimated at \$669,000.

SYNOPSIS:

This project will produce the 60% design for the runway 16C/34C reconstruction. The design will include utilities, runway status lights, and other scope items related to the project. The 60% design will be completed in 2010, followed by the remaining 40% design in 2015. Port staff will return to the Commission in late 2014 or early 2015 to request funds for the final 40% design.

BACKGROUND:

Runway 16C/34C was constructed of concrete in 1969, with a 20-year design life. The Airport began a Runway Improvement Program in 1993, which was designed to rehabilitate and extend the useful life of the runway. The runway rehabilitation continues through this summer. More than 600 of the approximately 4,300 concrete panels will have been replaced since the beginning of the program.

In September 2009, Airport staff decided, in an effort to defer costs, that runway 16C/34C should be reconstructed in 2016, but that the design of the reconstruction would begin in 2010. Taking the project to 60% design will allow staff to proceed expeditiously to full design and construction in the event that 16C/34C fails prior to 2016. Should 16C/34C suffer a premature

COMMISSION AGENDA

Tay Yoshitani, Chief Executive Officer

April 8, 2010

Page 2 of 5

failure, without 60% design completed, the runway may have to be shut down for up to two years until design and construction could be completed. Under this approach, the work could be completed in one year.

PROJECT DESCRIPTION/SCOPE OF WORK:

Project Statement:

Perform the runway 16C/34C 60% reconstruction design in 2010, for a cost of approximately \$669,000.

Project Objectives:

Have the 60% runway reconstruction design available, if the runway fails and requires reconstruction, prior to 2016.

Scope of Work:

Produce the 60% design for the runway 16C/34C reconstruction. The design will include utilities, runway status lights, and other scope items related to the project. The 60% design will be completed in 2010, followed by the remaining 40% design in 2015 (under a separate future authorization). Other scope items included in the 60% design are: taxiway N redesign (between runway 16C/34C and runway 16 left/34 right (16L/34R), taxiway C redesign (between runway 16C/34C and runway 16L/34R), joint seal design for all other cross taxiways to the runway hold lines, and re-grading design north of runway 16C/34C.

STRATEGIC OBJECTIVES:

This project supports the Port's strategy to "Ensure Airport Vitality" by maintaining a safe operating environment as well as maximizing asset utilization.

FINANCIAL IMPLICATIONS:

Budget/Authorization Summary

Original Budget	\$669,000
Revised Budget	\$669,000
Previous Authorizations	\$0
Current Request for Authorizations	\$669,000
Total Authorizations, Including This Request	\$669,000
Remaining Budget to be Authorized	\$0

COMMISSION AGENDA

Tay Yoshitani, Chief Executive Officer

April 8, 2010

Page 3 of 5

Project Cost Breakdown

Design (in-house engineering)	\$320,000
Project Management	\$224,000
Survey	\$70,000
Internal POS Reviewers	\$30,000
Outside Professional Services	\$25,000
Total	\$669,000

Source of Funds

This project is included in the 2010-14 capital budget and plan of finance as a business plan prospective project within CIP C800406. The funding source will be the Airport Development Fund.

Financial Analysis Summary

CIP Category	Renewal/Enhancement
Project Type	Renewal & Replacement
Risk adjusted Discount Rate	N/A
Key risk factors	N/A
Project cost for analysis	\$669,000
Business Unit (BU)	Operations, Airfield
Effect on Business Performance	NOI after depreciation will increase
IRR/NPV	N/A
CPE Impact	CPE impacts will be reflected in airfield rate base when the reconstruction project is completed in 2016.

As a cost recovery project, traditional financial analysis measures such as net present value (NPV) and internal rate of return (IRR) are not meaningful.

ECONOMIC IMPACTS:

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

COMMISSION AGENDA

Tay Yoshitani, Chief Executive Officer

April 8, 2010

Page 4 of 5

ENVIRONMENTAL SUSTAINABILITY AND COMMUNITY BENEFITS:

Various sustainability practices will be considered during the runway redesign. These practices include, but are not limited to, performing a life cycle analysis of materials used to ensure that resources being used and/or recycled are environmentally and economically practical; utilizing onsite water for dust control and irrigation; the reuse of materials such as concrete, asphalt, and soil; and employing low emission construction equipment.

TRIPLE BOTTOM LINE SUMMARY:

This project is a financially responsible way to design the runway, for reconstruction in 2016, while allowing for a quicker reconstruction; should the runway fail prior to 2016. Maintaining an operating runway benefits both our airline customers and travelers.

PROJECT SCHEDULE:

15% Design Review	July 2010
30% Design Review	September 2010
60% Design Review	December 2010

ALTERNATIVES CONSIDERED/RECOMMENDED ACTION:

- 1) Do nothing: This alternative would not provide a runway reconstruction design, resulting in no reconstruction. This would result in runway 16C/34C becoming a potentially unsafe surface, which would require closure of the runway. This is not the recommended alternative.
- 2) Complete 100% reconstruction design in 2010: This alternative increases the risk for additional costs in 2015 and 2016. The design team in 2010 may not be the same team as in 2015. The new team will have to review the 2010 work; which would be a cost to the project. Other issues that may result in having to redesign the 100% design include a change in projected runway use between 2010 and 2015, as well as changes to FAA runway design standards. This is not the preferred alternative.
- 3) Complete 100% reconstruction design in 2015: This alternative has the benefit of deferring costs, but increases the reconstruction duration should an immediate reconstruction be required. Runway 16C/34C will be 47 years old in 2016, nearly three times its design life. This is not the preferred alternative.
- 4) Complete the project as described: This alternative completes the 60% runway reconstruction design in 2010. Although additional re-start costs will occur in 2015, this alternative will better prepare the Airport for a timely reconstruction. This is the preferred alternative.

COMMISSION AGENDA

Tay Yoshitani, Chief Executive Officer

April 8, 2010

Page 5 of 5

PREVIOUS COMMISSION ACTION:

None.

DOCUMENTS ASSOCIATED WITH THIS REQUEST:

None.