

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

**COMMISSION AGENDA**

**Item No.** 6e

**Date of Meeting** November 23, 2010

**DATE:** November 17, 2010

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

**FROM:** Wayne Grotheer, Director, Aviation Project Management Group  
Ralph Graves, Managing Director, Capital Development

**SUBJECT:** Ratification of Project Cost Increase - Security Checkpoint Optimization Project at STIA

**AMOUNT OF THIS REQUEST:** \$270,000

**SOURCE OF FUNDS:** Airport  
Development Fund (ADF)

**ACTION REQUESTED:**

Request Commission ratification of budget increase for the Security Checkpoint Optimization Project from \$160,000 to \$430,000.

**SYNOPSIS:**

The Security Checkpoint Optimization Project is a project of the US Transportation Security Administration (TSA) which was originally budgeted and approved as a \$160,000 small capital project for the Port's expenses associated with the project. Due to federal security mandates and last minute changes in project scope and approach by TSA, the costs of this project to the Port are now estimated at \$430, 000, expected to be a combination of capital and expense funds. As noted in the attached letter from TSA, the changes in project scope and schedule also caused TSA to significantly exceed its project budget.

As detailed below, this project was mandated by TSA to meet federal airport security requirements. As such, failure to do this project would have caused significant adverse consequences to public safety per Section 4.2.3.7 of Resolution 3605. Furthermore, any delay on the Port's part would have resulted in significant adverse schedule impacts and potentially cost increases to the TSA. Finally, prior Commission authorization was not obtained as the project evolution and associated budget increases were not understood until this work was essentially physically complete, due to the fast track schedule. The details are further described below.

## **BACKGROUND:**

The Security Checkpoint Optimization Project (WP104118) was initially funded to support the US Transportation Security Administration (TSA) initiative to introduce new technology, increase efficiency of passenger processing at Seattle Tacoma International Airport (STIA), improve electrical infrastructure, and make associated ADA improvements at the airport passenger checkpoints. This project was changed by TSA to include Advanced Imaging Technology (AIT) systems (whole body imaging scanners). The original project budget was developed based on the Port's previous experience with Checkpoint Optimization work in 2009. At that time, the project manager performed the combined roles of project manager, construction management oversight, and access control for all contractor personnel for the duration of the work. However, that work was smaller in scope; this project included a much greater infrastructure component, which was not anticipated until late in project implementation.

The schedule for this project from TSA changed significantly from June through September 2010. On June 8, 2010, the TSA Federal Security Director (FSD) informed STIA that 1<sup>st</sup> AIT would be deployed beginning August 23, 2010 with a total of 12 AITs to be installed within 14 weeks. On July 28, 2010, the local TSA Federal Security Director (FSD) informed the Port that Checkpoint 4 would be included in 2010 deployment (now total of 14 AITs). On August 13, 2010, TSA informed the Port that its new schedule was to begin construction at Checkpoint 1 on September 13, with AIT installation starting September 27<sup>th</sup> and Checkpoint 4 closed starting October 17 for 2 weeks to complete AIT installation and reconfiguration. On September 22, 2010, TSA's implementation consultant announced that the construction would commence on September 27 and be complete in 5 weeks, by October 31. Essentially, the plan was to install all (14) AITs while greatly shortening the schedule and increasing resources and funding.

On June 29, 2010, Port staff began weekly telephone conference calls with TSA's HQ deployment project team. Port staff worked with TSA to review project details as detailed designs arrived in pieces and scope changed. The Port did not receive final design submittals from TSA's consultants until September 20, 2010.

The initial construction contract was awarded by TSA on September 10<sup>th</sup> and only included work at Checkpoints #1, #2 and #3. On September 16, 2010, the Port agreed to provide security escorts until TSA's contractor personnel were badged. On September 27, 2010, TSA contractors commenced work on Checkpoints 1-3, working 2 shifts, 6-7 days/week. On October 7, 2010, all work for Checkpoint #4 was added by change order, and TSA's contractor began installation of the first 1<sup>st</sup> AIT at Checkpoint 1. The plan for Checkpoint 4 included 3 shifts, 7 days per week construction to meet the 2 week (10/17 to 10/31) construction schedule. Checkpoint 4 opened on November 1, 2010.

The accelerated schedule forced the Port to provide an extraordinary level of support. This included having Maintenance personnel (electricians and electronic technicians, on an overtime basis) provide access to Port electrical power and communication distribution systems, provide escort services to contractor personnel as security badge applications were processed for 37 new contract personnel. As the contractor was working in up to 8 separate locations simultaneously, additional access control (X-ray personnel) were called in and assigned to provide the needed

access/security oversight to maintain the construction schedule. These were significant and unbudgeted project costs.

Monitoring of the project expenditures was performed on a monthly basis with our cost control engineer per our standard practice. Estimates to complete were projected to be within the approved project funds. However, once the decision was made to accelerate and compress the schedule, as well as to provide Port maintenance personnel and x-ray support, the costs to complete rapidly increased. Unfortunately, prior monthly estimates to complete did not account for these added personnel resources. By the time these added costs were realized, the construction was well underway and could not be slowed down or extended. In retrospect, staff should have increased the frequency of monitoring and forecasting of project expenditures once the schedule acceleration/compression and increased Port role became clear.

The TSA's initial project estimate was approximately \$300,000; the accelerated and compressed schedule increased the TSA's project cost by an additional \$280,000 (both figures are hard costs only). At the same time, the Port's project budget, which was set at \$160,000, experienced project cost overruns primarily as a result of supporting the TSA's extremely aggressive execution and implementation schedule. Support from Maintenance to provide access to electrical infrastructure power locations, ET support for disabling 33 and reinstalling 32 duress alarms, as well as assigning access control (X ray personnel) to escort unbadged contractor personnel were not anticipated nor budgeted. The new project cost is now estimated to be approximately \$430,000 as a result.

TSA's contractor is currently working at Checkpoint 5 (South Satellite/Federal Inspection Service) where the work only includes electrical infrastructure work for future equipment installations.

### **FINANCIAL IMPLICATIONS:**

#### **Previous Estimate (May 2009):**

\$66,000 - PCS Construction  
\$38,000 – Construction, Risk “unknown” Contingencies  
\$22,000 – Const. Mgmt., Overhead  
\$25,000 – Project Mgmt., Overhead  
\$5,000 - Maintenance Support  
\$4,000 - Airport Administration, Permitting, Overhead  
**\$160,000 Previous Project Total**

#### **New Estimate (November 2010):**

\$50,000 – PCS Construction  
\$54,723 – Const. Mgmt., Overhead  
\$15,726 – Design, Overhead  
\$76,606 – Project Mgmt, Overhead  
\$60,382 - Airport Administration & Permitting, Overhead  
\$172,563 - Access Control& Maintenance Support  
**\$430,000 New Project Total Estimate**

### **Source of Funds**

The security checkpoint optimization project (WP104118) was included in the Aviation small capital projects budget for 2010 at \$160,000. The funding source is the Airport Development Fund.

Attachment - TSA letter