

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

**COMMISSION AGENDA**  
**ACTION ITEM**

<b>Item No.</b>	4f
<b>Date of Meeting</b>	May 17, 2016

**DATE:** May 10, 2016  
**TO:** Ted Fick, Chief Executive Officer  
**FROM:** Ralph Graves, Senior Director, Capital Development  
Janice Zahn, Assistant Director of Engineering, Construction Services

**SUBJECT:** 2014 Cargo Hardstand Improvement Projects  
Cargo 2 Hardstand Expansion (CIP #C800247)  
Cargo 5 Hardstand Construction (CIP #C800254)  
Cargo 6 Hardstand Improvements (CIP #C800390)  
Airfield Pavement Replacement – Cargo 6 Apron (CIP #C102573)

**ACTION REQUESTED**

Request Commission authorization for the Chief Executive Officer to execute Change Order 23 for Contract MC-0317700, Cargo Hardstand Improvements Project, at Seattle-Tacoma International Airport in the amount of \$265,000 and to extend the contract duration by 192 calendar days for a new contract completion date of September 22, 2015.

**SYNOPSIS**

The Cargo Hardstand Improvement Project (Project) promotes air freight and regional economic vitality by allowing large freighter aircraft to operate efficiently at Cargo 2 and 6 hardstands and provide additional remain-over-night (RON) parking positions at Cargo 5 that are critical to meeting capacity demand and operational efficiency and safety requirements at Seattle-Tacoma International Airport (Airport). Replacement of distressed pavement at Cargo 6 also occurred in support of meeting these needs. The Cargo 5 hardstand supports the Port's Century Agenda strategy to meet the region's air transportation needs at the Airport for the next 25 years.

Each of the cargo and other hardstand areas include electrical ground-power units that eliminate the need for aircraft to use their auxiliary power. The underground fuel hydrant system was extended to Cargo 6. These features assist the Port in its commitment to reduce the emission of greenhouse gasses and other pollutants. A new security access facility at Cargo 5 and a replacement guard shelter at Cargo 2 were also included in the project.

On January 28, 2014, the Port executed a construction contract with Gary Merlino Construction Company for the Project for the amount of \$32,812,060 and a contract completion date of March 14, 2015. All contracted work was completed in 2015 and staff has now completed negotiations for this final change order to be executed. We are seeking authorization to issue Change Order

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#23 to extend the contract duration by 192 days to reflect the actual contract completion date as well as the final cost settlement of \$265,000 that resolves all outstanding contractor claims.

No additional funds are needed for the execution of this change order.

### **BACKGROUND**

The Cargo 2 and Cargo 6 hardstands were of insufficient depth to accommodate simultaneous straight-in parking for large freighter nose-load operations common to international freighter use. This project provided additional concrete apron space that will provide better maneuverability, increased operational area for all users and will allow the best utilization of these facilities.

Without sufficient available RON hardstands, the Airport could not meet the demands of the airline customers. To accommodate anticipated future growth in RON demand within the very limited space available, the Airport converted underutilized airfield assets to hardstands.

This change order, in addition to reconciling the contract completion dates, is an agreed settlement concluding formal negotiations that resolves \$582,101 in outstanding contractor change requests and claims. Included are costs related to the contractor and subcontractor extended field office overhead due to Port-caused delays and disputes related to the Aggregate Source Management Plan and the associated pay adjustments. The included amount also includes consideration from the contractor in lieu of Liquidated Damages due to their own unexcused delay which also contributed to the length of time needed to achieve contract completion.

The Port issued Change Orders 2 & 7 totaling \$199,683.63 directing the contractor to provide surge suppressors for the fuel system at Cargo 6 which were required to complete the fuel system, but omitted from the design. The surge suppressors are a required safety system which eliminates hydraulic pressure and surge damage to the fuel system. The lead time for these components added 12-13 weeks of impact to the completion of the work related to the fueling system.

The Port later issued Change Order 6 for \$180,875.56 directing the contractor to provide motor operated control valves and control system for a fuel bypass system within the fuel vaults at Cargo 6. Failure to remedy this issue would cause system wide shut down of the fuel system while conducting routine testing which would prevent efficient fueling of aircraft. This was also not reflected in the contract documents. The work required to implement this change was difficult as the vaults were already installed.

Lastly the Port issued Change Order 21 for \$48,694.90 directing the contractor to make revisions to the electrical duct bank at Cargo 6. During construction, it was found that the existing duct bank did not have the needed capacity to provide all the power for Cargo 6 and a new duct bank

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was required to supply power for Cargo 6. This required a redesign of the system which resulted in a 4 ½ month impact to completion of activities related to the electrical system at Cargo 6.

These change orders (2, 6, 7 & 21) compensated the contractor for direct costs, but did not address time or indirect expenses due to the extended period of performance. Due to the complexity of the work, staff was not able to determine nor was the contractor willing to provide a reasonable cost or contract duration impact caused to these changes.

As a result of these impacts, the project experienced a total delay of 192 calendar days due to the required time to complete activities beyond the completion of the work to the fuel and electrical systems (Backfill and paving, striping, etc.).

This CO and related costs account for 2% of cost growth associated with this project. The project has otherwise experienced limited cost growth, with a total Change Order rate of 2.38% inclusive of this Change Order.

## **PROJECT JUSTIFICATION AND DETAILS**

This project is dedicated to improving efficiency in the use and utilization of off-gate ramp space, meeting the demands of our airline customers, upgrading and improving airfield access and security, and proactively reducing the emission of greenhouse gasses and other pollutants.

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

- Expand the Cargo 2-West hardstand in order to accommodate the increased size and frequency of wide body cargo aircraft at the Airport
- Allow for the simultaneous use of the Cargo 6 off-gate hardstand by two wide-body nose-loading freighter aircraft
- Provide additional RON parking positions through the creation of Hardstand 5 in order to meet the expected demand and to provide flexibility to accommodate irregular schedules of passenger aircraft. Improve overall air cargo efficiency
- Support cargo volume growth
- Provide fuel and power systems that will result in airline cost savings, increased efficiency and less environmental impact
- Replace old pavement and joint sealant as part of the pavement management program that allows aircraft operations to safely occur.

### ***Schedule***

Construction Complete

September 2015

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## **FINANCIAL IMPLICATIONS**

### **Combined Project**

<i>Contract Cost Breakdown</i>	<i>Total</i>
Original Contract Amount	\$32,812,060.00
Executed Change Order Amount	\$771,176.00
New Contract Amount	\$33,583,236.00
Remaining Contract Contingency	\$1,917,061.26

The combined project consists of four capital improvement programs with a total authorized budget of \$94,560,035. The combined project has previously returned \$13,900,862 as savings. There are sufficient funds remaining in the budget to cover the final cost settlement of \$265,000 for the construction contract. Additional savings will be returned following processing of the final cost settlement.

## **STRATEGIES AND OBJECTIVES**

This project supports the Port's Century Agenda of tripling air cargo volume over 25 years.

Providing and maintaining critical airfield assets also support the Port's Century Agenda objective to meet the region's air transportation needs at Sea-Tac. Modern and efficient air cargo facilities are fundamental to the creation of an international logistics hub. Secure access points to the airfield that operate in all weather conditions and minimize potential conflicts with aircraft is a safety objective. Ground power and the extension of the fuel system assist the Port in reducing greenhouse gas emissions.

## **ALTERNATIVES AND IMPLICATIONS CONSIDERED**

**Alternative 1)** – Do not authorize the issuance of the change order. A formal dispute with the contractor would most likely result and the Port would have to spend additional resources to defend the claim. This is not the recommended alternative.

**Alternative 2)** – Authorize the issuance of a change order for 192 additional days to reconcile the contract date with the actual date of completion. This full and final change order also includes \$265,000 cost settlement which resolves all the contractor's remaining claims totaling \$582,101. **This is the recommended alternative.**

## **ATTACHMENTS TO THIS REQUEST**

- None

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

- On October 8, 2013, the Commission authorized the Chief Executive Officer to (1) advertise and execute a single construction contract comprised of Cargo 2 Hardstand Expansion (CIP #C800247), Cargo 5 Hardstand Construction (CIP #C800254), Cargo 6 Hardstand Improvements (CIP #C800390), and Airfield Pavement Replacement-Cargo 6 Apron (CIP #C102583); (2) execute contracts for 400 Hz ground power units, fire extinguishers, and furniture; and (3) to authorize port crews to perform advance work associated with project delivery.

#### **Cargo 2 Hardstand Enhancements**

- On September 24, 2013, the Commission authorized the amendment of the lease for AMB/AFCO Cargo SEA LLC to reduce the lease area. This allows for a building demolition needed for expansion of the cargo hardstand.
- On August 6, 2013, The Commission authorized the execution of Project Labor Agreements for seven projects, including the Cargo 2 Hardstand Enhancements.
- August 6, 2013, the Commission authorized (1) for the Chief Executive Officer to execute a contract with the Federal Aviation Administration (FAA) for relocation of the Airport Surface Detection Equipment Model X Remote Unite Number 7 (ASDE-X RU No. 7) antenna at the Airport, at a cost not to exceed \$600,000 and (2) for an additional \$300,000 in expense funds.
- December 4, 2012, the Commission authorized the Chief Executive Officer to execute one or more contracts with the Federal Aviation Administration (FAA) for relocation of the Airport Surface Detection Equipment Model X Remote Unite Number 7 (ASDE-X RU No. 7) antenna at the Airport, at a cost not to exceed \$300,000. The total estimated project cost is \$12,130,000.
- September 25, 2012, the Commission authorization for the Chief Executive Officer to (1) design and prepare construction documents for the demolition of a cargo building (Building 2) and for the enlargement of the hardstand in the Cargo 2-West area in the amount of \$830,000; and (2) terminate the lease, containing two cargo buildings in the Cargo 1 and Cargo 2 areas currently owned by ProLogis (formerly AMB) at Seattle-Tacoma International Airport, at a cost not to exceed \$1,580,000.

#### **Cargo 5 Hardstand Construction**

- On August 6, 2013, The Commission authorized the execution of Project Labor Agreements for seven projects, including the Cargo 5 Hardstand Construction.
- March 20, 2012, the Port Commission authorization for the Chief Executive Officer to prepare 100% design for the Cargo 5 Hardstand at Seattle-Tacoma International Airport (THE AIRPORT) to provide additional parking for aircraft remaining overnight at the Airport. The amount of this request is \$3,230,000. The estimated total cost of the project is \$45,906,000.
- July 26, 2011, the Port Commission authorized the Chief Executive Officer to advertise and execute a construction contract for the USPS Building Demolition. The estimate for

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construction work is \$5,536,000 and for Port Construction Services (PCS) to self-perform the work in conjunction with small works contractors and issue small works contracts in support of the USPS Demolition Project at Seattle-Tacoma International Airport (Airport). The estimate for the PCS construction work was \$67,000.

- On August 26, 2008, the Port Commission authorized the Chief Executive Office to direct staff to amend the USPS lease to develop a cell phone lot, prepare 100% demolition design of the USPS Air Mail Center Facility at Seattle-Tacoma International Airport, 15% design of RON aircraft parking positions and terminate USPS building lease. The amount authorized was \$6,226,213.

### **Cargo 6 Hardstand Improvements**

- On August 6, 2013, The Commission authorized the execution of Project Labor Agreements for seven projects, including the Cargo 6 Hardstand Improvements.
- September 18, 2012, the Port Commission authorization for the Chief Executive Officer to design and prepare construction documents for the Cargo 6 Enhancements at Seattle-Tacoma International Airport. The amount of this request is \$480,000. The total estimated cost of the project is \$6,478,000.

### **Cargo 6 Pavement Replacement**

- On August 6, 2013, The Commission authorized the execution of Project Labor Agreements for seven projects, including the Cargo 6 Pavement Replacement.
- On March 26, 2013, the Commission authorized the Chief Executive Officer to design, prepare construction documents, and perform advanced preparatory work to replace distressed concrete pavement panels and joint sealant for the 2014 Airfield Apron Pavement Replacement project at Seattle-Tacoma International Airport in the amount of \$300,000. The total estimated project cost in 2014 is \$6,500,000.
- 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.

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- 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.