

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 4e
Date of Meeting February 23, 2016

DATE: February 16, 2016
TO: Ted Fick, Chief Executive Officer
FROM: Tina Soike, Director, Engineering Services
Wayne Grotheer, Director, Aviation Project Management Group

SUBJECT: Construction Logistics Facilities Expansion (CIP #C800688)

Amount of This Request:	\$2,685,000	Source of Funds:	Airport Development Funds
Est. Total Project Cost:	\$9,600,000		
Est. State and Local Taxes:	\$502,000		

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to advertise and award two major public works contracts for the (1) renovation of Port-owned field offices, and (2) construction of bus stops with off-airport security facilities in the contractor parking lot as part of the Construction Logistics Expansion project at Seattle-Tacoma International Airport for an additional \$2,685,000.

SYNOPSIS

With the increasing capital construction program at the Airport, the existing construction logistics facilities need to be reconfigured. These facilities currently provide space for contractor parking, temporary construction trailers, and the delivery and storage of materials and equipment for both Port and tenant projects. In addition, the Port owned field offices need to be improved to keep them in operation in support of the capital construction program. In September 2015, the Transportation Security Administration (TSA) issued a security directive that requires the full inspection (including examination of backpacks, tool bags, etc.) of anyone accessing the secure areas of the Airport. In order to meet this requirement, avoid significant impacts to Airport operations, and reduce Port project costs, bus stops with off-airport security facilities will be constructed in the contractor parking lot.

This is the third and final Commission request for this project. The Commission previously authorized \$6,915,000 in two actions for the design and construction of the contractor parking relocation, the design and construction of the construction laydown reconfiguration, and the design of the field offices renovation. This request is to construct the field offices renovation and add bus stops with off-airport security facilities in the contractor parking lot under two separate major works contracts. This request requires a \$2,383,748 capital budget increase to cover

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additional scope for unknown conditions for the field office renovation (\$550,000), the addition of the bus stops with off-airport security facilities in the contractor parking lot (\$2,180,000), and less project savings for the completed work and work under contract.

BACKGROUND

The construction logistics facilities were originally constructed in 2001 at the Logistics site (see Attachment A) located near 28th Avenue South and South 192nd Street. It included a 560-stall contractor parking lot, and six construction laydown areas providing 12 acres of support space. The logistics facilities have been used by contractors working on both Port and tenant construction contracts. The contractor parking lot is used for construction worker parking and loading workers onto buses for transport to construction sites. The construction laydown areas provide contractor space for both temporary construction trailers (remote field offices) and the delivery and storage of materials and equipment. Typically, 2-3% of the contractor's bid costs are associated with providing construction logistics for a project. By providing these nearby facilities, these costs are reduced to 1-2%. Based upon the committed Aviation capital program, 1% of the anticipated contractor bid costs is estimated at \$13 million.

In 2010, the Bus Maintenance Facility was constructed in a portion of the Logistics site, reducing the available construction laydown area from 12 to 7.7 acres. With the expansion of the Aviation capital program, the construction logistics facilities require reconfiguration to provide 900 parking stalls and a total of 9.6 acres of construction laydown space.

The Port's logistics facilities also include field offices at the Water Tower, West Side, and Logistics sites (see Attachment B). The Central Procurement Office, Construction Management, Survey, and Construction Safety currently have office space at each of these field office locations. These facilities consist of trailers that are more than ten years old and require renovations in order to remain usable for an additional 10 years in support of the Aviation capital program.

This project is being completed as four separate efforts as described below:

1. Contractor Parking (Complete)

The relocation of the contractor parking area from the current logistics site to the closed South Employee Parking Lot (SEPL) located just north of the existing facility was completed using a combination of Port crews and small works contractors. This work was completed under budget for \$370,000.

2. Construction Laydown (Complete/Under Contract)

The existing construction laydown facilities at the Logistics site need to be reconfigured in order to maximize the available usable space to support the Aviation capital program. In addition, the SEPL storm water management facilities require upgrading to meet current permit requirements. This work was split into two phases to support the anticipated Aviation capital program construction schedules. Phase one (the reconfiguration of Lots 1 and 2) is complete using a

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combination of Port crews and small works contracts. Phase two (remaining scope) is under contract to be completed in 2016. The total forecasted cost for both phases is under budget at \$5,050,000.

3. Field Offices (Current Request)

The renovation of these facilities was originally estimated at a total cost of \$1,450,000 before design started. Design of these improvements was previously authorized by the Commission on October 28, 2014, and is now 90% complete. The total estimated cost of the renovation has increased from \$1,450,000 to \$2,000,000 due to the knowledge of previously unknown condition of the heating and ventilation systems, the need to replace the access ramps at the Logistics (a previously defined risk due to their poor condition) and West Side field offices (regulatory access requirement), and the addition of fall protection on the field office roofs to meet current safety requirements. This authorization request includes the construction of these improvements.

4. Contractor Parking Bus Stops with Off-Airport Security Facilities (Current Request)

In September 2015, the TSA issued a security directive requiring full inspection of everyone accessing the secure Airport operations areas, including examination of backpacks, tool bags, etc. Based upon the current Aviation capital program, staff forecasts 300 to 400 construction workers will be transported each day by bus between the contractor parking lot and project sites within the secure areas of the Airport. To efficiently and effectively accommodate these new requirements, and to avoid significant impacts to Airport operations if construction workers were to be inspected at the airfield access gates, staff recommends adding off-airport security facilities at bus stops for the full inspection of construction workers. The total estimated cost for constructing these added improvements is \$2,180,000. This investment enables saving an estimated \$2.3 million in operational delay costs at the airfield access gates caused by the forecast contractor busing activity over the next eight years. The completed facilities also represent less of a bid cost risk to the Aviation capital program due to the new inspection requirements and associated construction labor work hour implications.

Sustainable Airport Master Plan

The Aviation Division is underway with the Sustainable Airport Master Plan (SAMP) and alternatives have been identified that may displace all or portions of the Construction Logistics facilities in approximately ten to fifteen years. The development of alternative Port-owned property for construction logistics facilities was explored during the planning phase of this capital project. The other sites evaluated have the same risk of displacement by future SAMP development, but costs were substantially higher (estimated at \$10 million – \$15 million depending upon the site). Staff recommends proceeding with the current reconfiguration as the best lowest cost approach.

PROJECT JUSTIFICATION AND DETAILS

The existing construction logistics facilities at Seattle-Tacoma International Airport will be heavily utilized during the construction of the Aviation capital program in order to limit impacts

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to on-going Airport operations. With the increase in the Aviation capital program over the next 10 years the existing construction logistics facilities need to be reconfigured to include a 900-stall contractor parking lot and 9.6 acres of flexible construction laydown space. In addition, the field offices that house up to 140 Port staff in support of the Aviation capital program are over 10 years old and need to be renovated in order to keep them in operation for the next 10 years.

Project Objectives

- Provide sufficient construction laydown and contractor parking facilities to support the anticipated Aviation capital program for the next ten years.
- Upgrade the existing SEPL storm water management facilities to meet current permit requirements with no impact to the existing streams, wetlands, and associated buffers.
- Maintain existing field offices to provide an effective work environment for Port staff.
- Minimize investment in facilities that may be displaced by future project actions.
- Minimize the impact to airport operations.
- Minimize the impact of security requirements to airport construction projects.

Scope of Work

The project includes the reconfiguration of the construction logistics facilities, the re-use of SEPL as a contractor parking lot, the upgrade of the SEPL storm water management facilities, the renewal of the remote field offices used by Port staff, and the construction of bus stops with off-airport security facilities in the contractor parking lot. The key elements include the following:

- Contractor Parking (Complete): SEPL was originally constructed in the late 1980s and has not been in use for several years. In order to get the facility back into operation to support contractor parking, the lot needed to be cleaned, restriped, signed, existing potholes and damaged curb sections repaired, and the access control system replaced.
- Construction Laydown (Complete/Under Contract): The Logistics site needs to be reconfigured in order to maximize the use of the space and support a larger number of temporary construction trailers. The redevelopment of the construction laydown facilities includes utilities (power, communications, water, and sewer), trenching, pavement patching, striping, lighting and bollards.
- SEPL Storm Water Management Facilities (Under Contract): SEPL includes two storm detention ponds and a bio filtration swale that were constructed as part of the original facility in the late 1980's. The bio filtration swale needs to be upgraded to meet current permit requirements for water quality.
- Field Offices (Current Request): Improvements differ by location but generally include the replacement of the heating and ventilation systems, hot water heaters, roof ladders, and access ramps, roof membrane upgrades, addition of fall protection, and exterior repair and repainting. There are two vacant facilities at the West Side location that will be demolished as part of this effort.

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- Contractor Parking Bus Stops (Current Request): Up to five new bus stops with off-airport security facilities (see Attachment C), which includes the upgrade of power and communication infrastructure to support it.

Schedule

Construction Complete – Construction Logistics/Storm Water (Phase Two): Q3 2016

Construction Complete – Field Office Renovation Q4 2016

Construction Complete – Contractor Parking Bus Stops Q4 2016

FINANCIAL IMPLICATIONS

Budget/Authorization Summary

	Capital	Expense	Total Project
Original Budget	\$6,122,000	\$1,278,000	\$7,400,000
Previous Budget Increase/Decrease	\$425,392	(\$25,392)	\$400,000
2016-2020 Budget	\$6,547,392	\$1,252,608	\$7,800,000
Current Budget Increase/Decrease	\$2,383,748	(\$583,748)	\$1,800,000
Revised Budget	\$8,931,140	\$668,860	\$9,600,000
Previous Authorizations	\$5,840,000	\$1,075,000	\$6,915,000
Authorization Adjustments	\$406,140	(\$406,140)	\$0
Current request for authorization	\$2,685,000	\$0	\$2,685,000
Total Authorizations, including this request	\$8,931,140	\$668,860	\$9,600,000
Remaining budget to be authorized	\$0	\$0	\$0
Total Estimated Project Cost	\$8,931,140	\$668,860	\$9,600,000

Project Cost Breakdown

	This Request	Total Project
Design Phase	\$411,000	\$1,970,000
Construction Phase	\$2,143,000	\$7,128,000
State & Local Taxes (estimated)	\$131,000	\$502,000
Total	\$2,685,000	\$9,600,000

Budget Status and Source of Funds

The Construction Logistics Expansion Project (CIP #C800688) was included in the 2016-2020 capital budget and plan of finance as a committed project with a total capital budget of \$6,547,392. Additional budget of \$2,383,748 was transferred from the Aeronautical Allowance (#C800404) to provide a total capital budget of \$8,931,140 to support the completion of the construction laydown improvements. The funding source for this project is the Airport Development Fund.

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Financial Analysis and Summary

CIP Category	Renewal/Enhancement
Project Type	Renewal and Replacement
Risk adjusted discount rate	N/A
Key risk factors	Future airport development may need this space. Consequently, improvement may be depreciated over ten years.
Project cost for analysis	\$9,600,000
Business Unit (BU)	Admin: costs will be allocated to all business units.
Effect on business performance	NOI after depreciation will decrease by about \$200,000 per year.
IRR/NPV	N/A
CPE Impact	\$0.02 in 2016 due to expense items, then \$0.02 beginning in 2017 for capital costs

Lifecycle Cost and Savings

Port staff does not anticipate a significant change in the on-going operation and maintenance costs associated with the construction logistics facilities and remote field offices. These costs have ranged from \$40,000 to \$55,000 annually and will continue to be incorporated into the Aviation capital program costs through allocated overhead. The additional operating costs for security inspections will be paid by the capital projects utilizing the bus stops in the contractor parking lot.

STRATEGIES AND OBJECTIVES

This project supports the Century Agenda's strategic objective to advance this region as a leading tourism destination and business gateway since this project supports the Aviation capital program, which in turn provides the facilities necessary to meet the region's air transportation needs at the Airport.

This project also supports the Aviation Business Plan strategies to operate a world-class international airport by anticipating and meeting the needs of our tenants, passengers and the region's economy, and to reduce airline costs as far as possible without compromising operational and capital needs. This project supports the Aviation capital program, which in turn provides the facilities necessary to support Airport operations. This project also focused on re-utilizing existing facility assets in order to minimize the overall cost impact.

TRIPLE BOTTOM LINE

Economic Development

The Construction Logistics Expansion project supports the Aviation capital program, which represents an investment in our current facilities and supports the long-term vitality of the Airport and its tenants.

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Environmental Responsibility

The Construction Logistics Expansion project will upgrade existing storm water management facilities to meet current permit requirements. In addition, the field office renovation will upgrade existing heating and ventilation units with high efficiency units using a chlorine-free refrigerant.

Community Benefits

The Construction Logistics Expansion project will provide construction logistics facilities for the Aviation capital program, which will reduce the impact to existing Airport operations, and provide an increased level of service for passengers and the traveling public. In addition, staff will work with the Office of Social Responsibility to determine small business participation opportunities, in accordance with Resolution No. 3618.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

This Commission authorization request includes two separate efforts and the alternatives are grouped by each effort. The following alternatives were considered for the renovation of the field offices.

Alternative 1) – No Field Office Improvements

Under this alternative the reconfiguration of the construction logistics facilities (including the storm water management facilities) are completed but the field offices are not improved. The existing facilities would remain in use in their current condition. The total estimated cost for this alternative is \$565,000 and represents the design costs to date and anticipated closeout costs. This is not the recommended alternative.

Pros:

- This is the lowest project cost alternative.

Cons:

- The field offices would not be renovated and the facilities would continue to degrade making them eventually uninhabitable for work. The heating and ventilation system has already failed at one field office location and the roof system is leaking at two field office locations.

Alternative 2) – Complete the Field Office Renovation

Under this alternative the existing field offices are renovated. The total estimated cost for this alternative is \$2,000,000 and would be completed by Q4 2016. **This is the recommended alternative.**

Pros:

- The field offices would be renovated in order to extend their useful life

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Cons:

- Port staff remains unconsolidated in three locations.

Alternative 3) – Relocate the Field Offices Off-Site

Under this alternative the existing field offices would be demolished and staff would be relocated off-site into leased office space. The total estimated cost for this alternative is \$5,438,000 and would be completed by Q4 2016. This is not the recommended alternative.

Pros:

- Port staff currently located in the field offices would be centralized in one location.

Cons:

- This alternative represents the highest project cost (all expense) for the field offices and includes the demolition of the field offices, buildout of the office space, and one year's lease (estimated at \$874,000) for the office space.

The following alternatives were considered for the meeting the construction worker security inspection requirements.

Alternative 4) – Construction Worker Inspection at Airfield Access Gates

Under this alternative the reconfiguration of the construction logistics facilities (including the storm water management facilities) are completed and additional facilities are not provided to support the new security requirements. The total estimated cost for this alternative is \$50,000 and represents the design costs to date and anticipated closeout costs. This is not the recommended alternative.

Pros:

- This is the lowest project cost alternative.

Cons:

- Construction workers would be inspected at the airfield access gates creating significant operational impacts (estimated delay costs of \$2.3 million), and require additional staff (estimated at \$150,000 annually) to support gate operations.
- The additional security requirements represent a bid cost risk to the Aviation capital program of \$7.3M for this alternative.

Alternative 5) – Widen 28th Avenue South

Under this alternative 28th Avenue South would be widened to provide a left-turn lane for vehicles entering the airfield at Gate E-45. The widening is intended to allow the contractor buses to bypass the general airfield gate traffic, and enter at their own designated gate. The total estimated cost for this alternative is \$1,880,000 and would be completed by Q1 2018. This is not the recommended alternative.

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Pros:

- This is a lower project cost alternative.

Cons:

- The widening of 28th Avenue South would not be completed until Q1 2018, which would not support the Aviation capital program. Current schedules show the startup of contractor busing in Q4 2016. Gate operations would be significantly impacted (estimated delay costs of \$0.6M) until the improvements are complete.
- The dedication of one of the entrance gates at Gate E-45 for the contractor buses requires additional staff (estimated at \$150,000 annually) to support gate operations.
- The additional security requirements represent a bid cost risk to the Aviation capital program of \$7.3M for this alternative.

Alternative 6) - Complete the Bus Stops with Off-Airport Security Facilities

Under this alternative the bus stops in the contractor parking lot are completed and include security facilities. The total estimated cost for this alternative is \$2,180,000 and would be completed by Q4 2016. **This is the recommended alternative.**

Pros:

- The bus stops are constructed in the contractor parking lot to support the inspection of construction workers to meet security requirements and minimize the impact to Airport operations
- This alternative minimizes the bid cost risk to the Aviation capital program due to the additional security requirements.

Cons:

- This is a highest project cost alternative.

Alternative 7) – Complete the Bus Stops using Mobile Security Application

Under this alternative the bus stops in the contractor parking lot are completed. However, under this alternative, the communication infrastructure is not included in the bus stop scope of work and a mobile security application is used to check badge requirements. The total estimated cost for this alternative is \$1,520,000 and would be completed by Q4 2016. This is not the recommended alternative.

Pros:

- This is a lower project cost alternative.
- The bus stops are constructed in the contractor parking lot to support the inspection of construction workers to meet security requirements and minimize the impact to Airport operations.
- This alternative minimizes the bid cost risk to the Aviation capital program due to the additional security requirements.

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Cons:

- The removal of the communication infrastructure from the bus stop scope of work removes the access control equipment and cameras and reduces the project cost by \$660,000. The new mobile security application can be used to check badge requirements; however, compliance with the Airport security plan and Port employee safety cannot be monitored.
- Under this alternative there is risk that the TSA will not approve the required amendment to the Airport security plan to implement the remote inspections without the cameras since these facilities will be in use for more than three to five years.

ATTACHMENTS TO THIS REQUEST

- Attachment A – Logistics Site Map
- Attachment B – Field Office Locations Map
- Attachment C – Contractor Parking Lot Bus Stops Concept

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- July 15, 2015 - The Commission authorized the Chief Executive Officer to utilize Port crews and advertise, award, and execute a major public works contract for reconfiguration of the construction laydown facilities as part of the Construction Logistics Expansion project at Seattle-Tacoma International Airport for an additional \$4,447,000.
- October 28, 2014 – The Commission authorized the Chief Executive Officer to prepare design and construction bid documents, execute utility agreements, execute a small works construction contract, and utilize Port crews for the Construction Logistics Expansion project at Seattle-Tacoma International Airport for an estimated \$2,468,000.