PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 4g

Date of Meeting September 13, 2016

DATE: September 6, 2016

TO: Ted Fick, Chief Executive Officer

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

SUBJECT: 2017 Fuel System Modifications (CIP #C800692)

Amount of This Request:	$9,800,000	**Source of Funds:**	Airport Development Fund
Est. Total Project Cost:	$14,480,000		

ACTION REQUESTED

Request Commission authorization for (1) the Chief Executive Officer to design and prepare construction documents, advertise, and execute a construction contract to construct fuel system modifications in support of gate operations at Seattle-Tacoma International Airport in an amount not to exceed $9,800,000; (2) use of Port crews in support of the project and for removal of regulated materials; (3) increase of the project scope for additional fuel system modifications; (4) execution of a contract for long-lead items such as fuel pits and surge suppressors; and (5) approval to use a project labor agreement (PLA) for the project.

SYNOPSIS

This 2017 Fuel Systems Modifications project will add fuel pits to support aircraft gate operations and remote aircraft parking for hardstand operations. The use of the hydrant fueling system to fuel aircraft, rather than fueling by truck, improves safety, reduces air pollutant emissions, and improves efficiency by reducing fueling time.

The total value of this authorization request is $9,800,000 of an estimated total program cost of $14,480,000. This project, with a budget of $4,680,000, was approved by the airlines through a majority-in-interest (MII) vote in early 2016. The additional scope and cost will require another MII vote. Port staff briefed the airlines at the Airline Airport Affairs Committee (AAAC) meeting in August and their response was supportive of the additional fuel pits. This project will not raise the airport's cost per enplaned passenger because an airline consortium has agreed to pay capital and operating costs in order to benefit their aircraft fueling operation.

Port staff recommends entering into a PLA for the project to ensure labor force continuity and stability and facilitate the timely and efficient completion of the construction project.

BACKGROUND

The Commission previously authorized a 2016 project to construct fuel system modifications in support of aircraft gate operations. Four fuel pits were originally planned to be constructed but five additional pits were identified as being needed during the design and included in the authorization. The 2016 project is currently under contract.

The need for additional fuel system modifications to support aircraft gate operations and address capacity constraints has continued. This project will add fuel pits where needed in 2017. Ten fuel pits have been identified for installation by this project. In order to construct the fuel pits when they will be needed in early 2017, the project will use expedited means of delivery and employ measures that will avoid potential delays. Port staff plans to use a pre-advertisement meeting and short advertisement period, potential advertisement using the 90 percent design documents, and self-procurement of long-lead items such as the fuel pits and surge suppressor, so that construction may begin early.

Five fuel pits have been identified as needed for the reconfiguration of Gates B3 through B9 at Concourse B. These four gates will be modified to create six gates for narrow body aircraft that will still accommodate wide body aircraft. The reconfiguration will include two new gate doors, five new passenger loading bridges and associated components, preconditioned air and 400 Hz electrical power for the new gates, and fuel pits. Port Legal has reviewed relevant agreements with the airlines, and the hydrant fuel lessee Seatac Fuels, LLC, and determined that modifications to the fuel system must be managed by the Port. Port staff will be requesting Commission authorization for the other work associated with the reconfiguration at a subsequent meeting and for a Tenant Reimbursement Agreement (TRA) with Delta Air Lines, Inc., for the work they will perform for the reconfiguration at Gates B3 through B9. The authorization requested for the fuel pits is in advance of the other work to facilitate procurement of long-lead items and provide the opportunity for the installation of the fuel pits to occur early and in coordination with the other work. Port staff will coordinate with the airlines so that potential impacts can be avoided or minimized. Should the Tenant Reimbursement Agreement with Delta Air Lines, Inc. for the reconfiguration of Gates B3 through B9 not be approved by Commission at a subsequent meeting, the five fuel pits needed to support that reconfiguration will be deleted from the scope of this project.

Five fuel pits are also needed to support hardstand operations at Hardstand 7. Due to the gate capacity constraints the airlines are encountering at the Airport, hardstand operations will be a reality for the foreseeable future. In anticipation of this, Commission has approved several projects to prepare the airport for these operations. Passenger processing equipment and ADA-compliant vertical circulation was recently installed at gate S1a, providing access for both domestic and international passengers. Passenger hold room space, processing equipment and vertical circulation has been designed and is scheduled to be constructed by May 2017 at Gate D6. Ramp level hold space, passenger processing equipment as well as a covered walkway has been designed and is scheduled to be constructed on Concourse B by May 2017.

One of the areas that hardstand arrivals and departures will utilize is Hardstand 7. In particular, wide-body international aircraft will frequently park at Hardstand 7 for remote hardstand loading and unloading. Wide-body international aircraft regularly require 30,000-40,000 gallons of fuel prior to departure. As each of the airport's largest fuel trucks holds 10,000 gallons, this means that each wide-body flight requires up to 4 trips of a fuel tanker from the south side of the airport to the fueling station or fuel rack located north of the North Satellite, transiting some of the congested portions of the airport. Fuel hydrant installation will decrease the volume of tanker traffic as well as expedite fuel uplift by providing a continuous fueling operation for each fuel uplift. The additional time required to fuel from multiple tankers would likely increase scheduled turn times or require departure delays to complete fueling. Another concern is that current fueling operators don't maintain a sufficient quantity of large fuel tankers to provide tanker fueling at Hardstand 7 for the current forecast demand. Therefore, five fuel pits have been identified as needed at Hardstand 7 for remote parking and use by fuel trucks. These fuel pits, located at the south end of the airport, will reduce the distance and travel time that would otherwise occur from fueling trucks at the fuel rack located north of the North Satellite. The availability of the fuel pits at Hardstand 7 is especially important as multiple gate outages occur due to major construction projects, which will also temporarily reduce the number of available fuel pits at various gate locations.

Current airline growth is pushing gate operations to its capacity requiring revision of aircraft parking layouts to improve flexibility and maximizing the range of aircraft types accommodated at individual gates. To avoid interference with other vehicles servicing the aircraft, the desired distance from the fuel pit to the aircraft is not more than 25 feet. Revised gate layouts require modification of the existing fuel system by adding new fuel hydrants to continue hydrant fueling of aircraft.

Port Construction Services (PCS) may be utilized to support regulated material management (RMM) of potential asbestos items encountered during construction.

The use of a Project Labor Agreement (PLA) is recommended for the fuel pits contract to avoid potential delays to the installation and operational impacts, but the project is on an expedited timeline. If a PLA can be negotiated in time for scheduled contract advertisement, then one will be employed. If not, then the project will proceed without a PLA.

PROJECT JUSTIFICATION AND DETAILS

This project is necessary to meet the Aviation Division's goals of ensuring safe and secure operations, avoiding increased air pollutant emissions from fuel trucks, and anticipating and meeting the needs of airlines in support of activity growth. The Port of Seattle and airlines made a decision in the past to install a hydrant fueling system and discontinue truck fueling whenever possible in order to improve safety and reduce emissions on the airfield. Hydrant fueling also reduces the fueling time and traffic on the ramp area.

Project Objectives

Project objectives are as follows:

Installation of fuel system modifications to improve gate and hardstand operations and to mitigate impacts from the temporary reduction of fuel pits that will occur during major construction projects

Scope of Work

This scope of work is associated with fuel system modifications to support aircraft gate operations. The work includes installation of approximately 10 new fuel pits including 5 fuel pits at Concourse B and 5 fuel pits at Hardstand 7 to accommodate aircraft parking and improve gate flexibility.

Schedule

Commission Authorization	September	2016
Execute Construction Contract	1st Quarter	2017
Construction Completion	4th Quarter	2017

FINANCIAL IMPLICATIONS

Budget/Authorization Summary	Capital	Expense	Total Project
Original budget	$1,100,000	$0	$1,100,000
Previous budget increase	$3,580,000	$0	$3,580,000
Current budget increase	$9,800,000	$0	$9,800,000
Revised budget	$14,480,000	$0	$14,480,000
Previous authorizations	$4,680,000	$0	$4,680,000
Current request for authorization	$9,800,000	$0	$9,800,000
Total authorizations, including this request	$14,480,000	$0	$14,480,000
Remaining budget to be authorized	$0	$0	$0
Total estimated project cost	$14,480,000	$0	$14,480,000

Project Cost Breakdown	This Request	Total Project
Construction	$8,630,000	$12,502,000
Design	$424,000	$895,000
State & Local Taxes (estimated)	$746,000	$1,083,000
Total	$9,800,000	$14,480,000

Budget Status and Source of Funds

The 2017 capital budget included $4,000,000 for fuel pits in CIP C800772. These funds will be transferred to this project, C800692. A budget increase of $5,800,000 will be needed in addition to the transfer of funds. The budget increase will be transferred from the Aeronautical

Allowance CIP (C800753) resulting in no net change to the Airport's capital program. The funding sources will be the Airport Development Fund.

Financial Analysis and Summary

CIP Category	New/Enhancement
Project Type	Renewal/Replacement
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	$14,480,000
Business Unit (BU)	Apron Area Cost Center
Effect on business performance	NOI after depreciation will increase
IRR/NPV	N/A
CPE Impact	There is no CPE impact as the capital costs will be recovered directly from the airline fuel consortium.

The fuel system at Seattle-Tacoma International Airport is leased to and operated by SEATAC Fuel Facilities, LLC, and an airline consortium. The Port will negotiate an amendment to the lease to add these new fuel pits to the lease as it has with other fuel pits added in the past. If successful, the consortium would pay for the operating and maintenance costs of these new pits and would pay additional rent to the Port equivalent to the annual amortization of the capital costs. Thus, under such a lease amendment, there would be no impact to passenger airline CPE.

Lifecycle Cost and Savings

The fuel pits will be leased to and operated by SEATAC Fuel Facilities, LLC, an airline consortium.

STRATEGIES AND OBJECTIVES

The 2017 Fuel System Modifications project supports the Century Agenda goal to advance this region as a leading tourism destination and business gateway by meeting the region's air transportation needs and encouraging the cost-effective expansion of domestic and international passenger service. This project also supports the Aviation Division's strategic goals of operating a world-class international airport, providing extraordinary customer service, and being a model of environmental innovation for the region and industry.

One of the Century Agenda goals is to use the Port's influence as an institution to promote small business growth and workforce development. Although some of this work may be specialized, Port staff will coordinate with Economic Development Division's Small Business Group to identify potential opportunities within the scope of work for small business utilization.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1) Do not add hydrants, increase truck fueling over time as gate layouts are modified.

Cost: $0
Pros:

- Under this option there is no capital investment for the Airport

Cons:

- The airlines and fuel service providers would need to purchase additional fuel tanker trucks.
- Aircraft turn times (time between landing, servicing and then departing) would be impacted by slower fueling rates and impacts of fuel tankers on other vehicles and equipment servicing aircraft.
- Traffic on the ramp would increase, especially between the South Satellite and the current fuel rack north of the North Satellite.
- The airport would need to identify ramp storage areas (already in high demand) for fuel trucks and maintenance facilities. These trucks also have significant parking restrictions with respect to proximity to buildings and aircraft when not in use, making location of them exceedingly difficult within the Airport's relatively small site size.
- Increase in air emissions as a result of fuel trucks deliveries.

This is not the recommended alternative.

Alternative 2) Install new fuel hydrant pits at gates and hardstand by a change order to the 2016 Fuel System Modification contract.
Cost: $9,450,000
Pros:

- Hydrant fueling increases safety on the airport ramp.
- Hydrant fueling is more efficient than other fueling methods.
- The cost of adding new fuel hydrant pits is fully recovered through the fuel consortium lease.
- Minimize air emissions by avoiding fuel truck deliveries.
- Likely quickest means to provide additional fuel pits.

Cons:

- Would likely result in an audit finding of failure to comply with competitive bidding requirements.

This is not the recommended alternative.

Alternative 3) Install new fuel hydrant pits at gates and hardstand by a separate contract.

Cost: $9,800,000

Pros:

- Complies with competitive bidding requirements.
- Hydrant fueling increases safety on the airport ramp.
- Hydrant fueling is more efficient than other fueling methods.
- The cost of adding new fuel hydrant pits is fully recovered through the fuel consortium lease.
- Minimize air emissions by avoiding fuel truck deliveries.

Cons:

- More coordination required than Alternative 2
- Some portions of the schedule are dependent upon contractor responsiveness.

This is the recommended alternative.

ATTACHMENTS TO THIS REQUEST

- Vicinity Map
- PowerPoint slides showing vicinity map and layouts at Concourse B and Hardstand 7

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- April 12, 2016 – The Commission authorized the award of a construction contract for the 2016 Fuel System Modification, notwithstanding with the lowest responsible bidder was exceeded the engineer's estimate by more than 10 percent.
- November 10, 2015 – The Commission authorized construction funds to construct fuel system modifications. Total estimated cost was $4,680,000.
- November 11, 2014 – The Commission authorized the Chief Executive Officer to design and prepare construction documents for the 2015 fuel system modifications in the amount of $188,000. At that time, the total estimated project cost was $2,069,000.