

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

**COMMISSION AGENDA**

**Item No.** 6d

**ACTION ITEM**

**Date of Meeting** October 11, 2016

**DATE:** October 4, 2016  
**TO:** Ted Fick, Chief Executive Officer  
**FROM:** Michael Ehl, Director, Airport Operations  
Wayne Grotheer, Director, Aviation Project Management Group  
**SUBJECT:** Flight Corridor Safety Program – Phase I

**Amount of this request:** \$0  
**Total estimated project cost:** \$2,731,000

**ACTION REQUESTED**

Request Commission authorization for the Chief Executive Officer to award and execute a major public works construction contract for the Flight Corridor Safety Program Phase I project with the lowest responsible bidder, notwithstanding the low bid exceeding the engineer's estimate by more than 10 percent.

**SYNOPSIS**

The Commission authorized advertisement for bids for the Flight Corridor Safety Program Phase I on August 9, 2016. Four contractor bids were received and opened on October 3, 2016. The lowest responsible bid exceeded the engineer's estimate by 28%. This represents a bid irregularity requiring further Commission action prior to contract award in accordance with the Port's General Delegation of Authority, Section 4.2.3.4. Port staff has reviewed the bids and the engineer's estimate and recommends award of the construction contract to the lowest responsible bidder. The authorized funds are sufficient for the project and no additional funds are required.

**PROJECT JUSTIFICATION AND DETAILS**

This program is necessary to meet the Aviation Division's goals of ensuring safe and secure aircraft operations. The Port must remove obstructions to navigable airspace to meet regulatory requirements and continue operating a world class airport.

Justification for this program falls under the following categories:

1. Federal Aviation Administration Requirements for Airport Operators to Control Obstructions
  - a. Federal Aviation Regulation (FAR) Part 139, Certification of Airports
  - b. Advisory Circular (AC) AC 150/5300.13A change 1, Maintenance of obstacle clearance surfaces
  - c. Grant Assurance 20 "Hazard Removal and Mitigation"
  - d. Grant Assurance 21 "Compatible Land Use"
2. State Requirement for Airport Operators to Control Obstructions

## **COMMISSION AGENDA**

Ted Fick, Chief Executive Officer

October 4, 2016

Page 2 of 5

- a. RCW 14.12.020 “Airport hazards contrary to public interest”
3. Airport’s Strategic Goals and Objectives
  - a. Strategic Goal No. 1, Operate a world-class international airport by: Ensuring safe and secure operations

### ***Project Objectives***

Program objectives are as follows:

- Remove obstructions to facilitate safe aircraft operations
- Communicate with transparency to the surrounding communities
- Comply with local, state, and federal regulatory requirements
- Revegetate with low-growth vegetation and re-plant trees in appropriate locations
- Prevent any net loss of vegetation

### ***Scope of Work***

Scope of work for Phase I of the program includes removing trees/vegetation on and around the Airport. This scope also includes environmental review and permitting in compliance with applicable federal, state, and local requirements. The work includes installation of temporary erosion and sediment control devices, removal of trees/vegetation, grading, revegetation, and restoration.

### ***Schedule***

Execute Construction Contract	4 <sup>th</sup> Quarter	2016
Construction Completion	1 <sup>st</sup> Quarter	2017

### ***Activity***

Commission design authorization	2016 Quarter 1
Design start	2016 Quarter 2
Commission construction authorization	2016 Quarter 3
Commission authorization to award irregular bid	2016 Quarter 4
Construction start	2016 Quarter 4
In-use date	N/A

### ***Cost Breakdown***

	This Request	Total Project
Design	\$0	\$558,000
Construction	\$0	\$2,173,000
Total	\$0	\$2,731,000

## **COMMISSION AGENDA**

Ted Fick, Chief Executive Officer

October 4, 2016

Page 3 of 5

## **FINANCIAL IMPLICATIONS**

<i>Budget/Authorization Summary</i>	Capital	Expense	Total
Original budget	\$0	\$2,731,000	\$2,731,000
Previous authorizations	\$0	\$2,731,000	\$2,731,000
Current request for authorization	\$0	\$0	\$0
Total authorizations, including this request	\$0	\$2,731,000	\$2,731,000
Remaining budget to be authorized	\$0	\$0	\$0

### ***Budget Status and Source of Funds***

The Flight Corridor Safety Program costs are expense costs. \$150,000 was budgeted in 2015 to develop environmental documents to support the program. \$750,000 was included in the Aviation Division's budget for 2016. The additional funds needed in 2016 are available from within the Capital Development Departments' expense budgets. Future annual budgets will include provision for the rest of the program. This authorization request completes the authorization for Phase I of a three phase program that will be completed in 2019.

The full cost of the program will be included in the Airfield Movement Area cost center in the year the costs are incurred and recovered from the airlines through increased landing fees. As such, all costs will be paid for out of the Airport Development Fund. If all costs were incurred in 2016, the incremental impact on the airline cost per enplaned passenger would be approximately \$0.12. However, as discussed above, some of the costs will be spread into 2017.

## **ALTERNATIVES AND IMPLICATIONS CONSIDERED**

**Alternative 1** – Do not award the project.

Cost Implications: Cost from Planned Budget deferred: ~\$2,173,000

### Pros:

- (1) Under this option there is no near-term use of 2016 expense funds.

### Cons:

- (1) Phase I work would be accomplished in 2017.
- (2) FAA could consider the Airport to be non-compliant with Federal rules and regulations. The FAA would have a number of options on how to address the non-compliance. The FAA's options would include:
  - (a) Consider approach and/or departure procedures to be unsafe, and limit their use;
  - (b) Consider approach and/or departure procedures to be unsafe, and turn them off;
  - (c) Limit or eliminate FAA grant funding until the obstructions are removed. FAA entitlement grant funding is estimated to be ~\$6.6 Million in 2016 and up to ~\$7.1 Million in 2021.

## **COMMISSION AGENDA**

Ted Fick, Chief Executive Officer

October 4, 2016

Page 4 of 5

- (3) Port would not be in compliance with Federal and State safety requirements regarding obstructions to navigable airspace.
- (4) Airlines may be required to take weight penalties and/or not serve certain markets, as aircraft would have to be lighter to take-off over the obstructions.
- (5) Does not meet the Airport's strategic goal of ensuring safe and secure operations.

This is not the recommended alternative.

### **Alternative 2 – Re-bid the Phase I in 2017**

Cost Implications: Estimated \$150,000 minimum of additional costs from escalation and administrative time

#### Pros:

- (1) Demonstrates the Port's commitment to removing obstructions.

#### Cons:

- (1) Phase I work would be accomplished in 2017
- (2) FAA could consider the Airport to be non-compliant with Federal rules and regulations. The FAA would have a number of options on how to address the non-compliance. The FAA's options would include:
  - (a) Consider approach and/or departure procedures to be unsafe, and limit their use;
  - (b) Consider approach and/or departure procedures to be unsafe, and turn them off;
  - (c) Limit or eliminate FAA grant funding until the obstructions are removed. FAA entitlement funding is estimated to be ~\$6.6 Million in 2016 and up to ~\$7.1 Million in 2021.
- (3) Port would not be in compliance with Federal and State safety requirements regarding obstructions to navigable airspace.
- (4) Airlines may be required to take weight penalties and/or not serve certain markets, as aircraft would have to be lighter to take-off over the obstructions.
- (5) Does not meet the Airport's strategic goal of ensuring safe and secure operations.

This is not the recommended alternative.

**Alternative 3 – Award the major works construction contract to the lowest responsive and responsible bidder. This alternative delivers the project when needed.**

Cost Implications: None accomplished within existing budget.

#### Pros:

- (1) No additional costs or delays for re-bid
- (2) Maintains project schedule to begin removal of obstructions in 2016

## **COMMISSION AGENDA**

Ted Fick, Chief Executive Officer

October 4, 2016

Page 5 of 5

### Cons:

- (1) None

*This is the recommended alternative.*

## **ADDITIONAL BACKGROUND**

Obstructions are any objects penetrating FAA-designated approach and departure paths at or around an airport. Obstruction studies and the related publication of obstruction charts were completed every ten years by the FAA until approximately 1994. In preparing for the activation of the Third Runway, the FAA performed an obstruction analysis in 2005 that led to the removal of trees in 2006-2008. An aerial obstruction analysis was conducted by the Port in 2015 that identified approximately 1,600 obstructions consisting of trees and other vegetation.

The Port has developed a comprehensive Flight Corridor Safety Program that will address the removal of obstructions in several phases and span multiple years:

- Phase I: 2016/2017 - Port-Owned property
- Phase II: 2017/2018 – Public agency-owned properties including Highline Public School District, Washington State Department of Transportation, Seattle Public Utilities and public right of way within the cities of Burien, Des Moines and SeaTac; and commercial properties
- Phase III: 2018/2019 - Residential properties

The Port may change scope elements of this contract and/or introduce into subsequent contracts changes based on input from the surrounding airport communities.

## **ATTACHMENTS TO THIS REQUEST**

None

## **PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

- August 9, 2016 – Commission authorized to advertise and execute a major works construction contract in the amount of \$1,831,000 for a total project cost of \$2,731,000
- February 9, 2016 – Commission authorized to design, advertise and execute a major works construction contract in the amount of \$750,000 for a total estimate project cost of \$900,000.
- November 24, 2015 – Commission briefed on the Flight Corridor Safety Obstruction Management program. The briefing provided an overview of state and federal laws/requirements, and staff’s recommendation of a phased delivery approach to complete the program.