10a. Memo from Regular Meeting held Jul 26, 2022 12:00pm at SEA



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COMMISSION AGENDA MEMORANDUM Item No. 10a ACTION ITEM Date of Meeting July 26, 2022

DATE: July 15, 2022

TO: Stephen P. Metruck, Executive Director FROM: Laurel Dunphy, Director, Airport Operations Eileen Francisco, Director, Aviation Project Management

Clare Gallagher, Director, Capital Project Delivery/External Relations

SUBJECT: Flight Corridor Safety Program 2024

Amount of this request: \$500,000
Total estimated project cost: \$9,700,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to (1) advertise and execute a Flight Corridor Safety Program 2024 professional Service Agreement for technical expertise and support; (2) complete aerial obstruction data collection, field verification, and obstruction data analysis to identify obstructions at and around Seattle-Tacoma International Airport (Airport) for program scope refinement; (3) conduct environmental review, and (4) execute agreements with public agencies as needed for purposes of obstruction management. The estimated cost of this program planning, data collection work and environmental review is \$500,000. EXECUTIVE SUMMARY

Flight Corridor Safety Program 2024 is intended to identify and, remove existing and anticipated obstructions consisting of trees around the Airport; replant trees of compatible species, in appropriate locations; acquire property rights as needed to perform obstruction management and prevent establishment of future obstructions. This program is on-going, necessary to ensure the airport's compliance with Federal Aviation Administration regulations, state laws regarding prevention of hazards to navigable airspace, and the airport's operating certificate requiring airport operators to protect safe flight operations into and out of the airport. Successful program completion requires a high level of technical expertise and support in the following areas: aerial obstruction data collection, flight surfaces analysis and data analysis, field verification, real estate/properties appraisal and identification, permitting, design and specifications, and forestry sciences.

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Aerial obstruction data collection will be conducted in 2023. Data analysis and field verification will follow. The environmental review process (e.g. State Environmental Policy Act [SEPA]) will begin once the obstructions are identified. Program staff plans to return to Commission in 2024 to share the data collection and request authorization for the development of environmental, design and contract documents; advertisement and execution of construction contracts; payment to public agencies for them to perform replanting for certain obstructions removed from their properties; and acquisition of those property rights reasonably necessary for obstruction management and preventing future creation or establishment of airport hazards. JUSTIFICATION

There are several federal and state regulations and requirements that provide justification for obstruction removal. These regulations and requirements include the following:

- 1. Federal Requirements for Airport Operators to Control Obstructions
- a. Federal Aviation Regulation (FAR) Part 77, "Safe, Efficient Use, and Preservation of the Navigable Airspace"
- b. FAR Part 139, "Certification of Airports"
- c. Advisory Circular (AC) AC 150/5300.13B, "Object Clearing".
- d. Grant Assurance 20, "Hazard Removal and Mitigation"
- e. Grant Assurance 21, "Compatible Land Use"
- 2. State Requirements for Airport Operators to Control Obstructions
- a. RCW 14.12.020, "Airport hazards contrary to public interest"
- b. RCW 14.08.030, "Acquisition of property and easements—Eminent domain—Encroachments prohibited"

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Diversity in Contracting

Program staff will coordinate with the Diversity in Contracting Department to identify appropriate women- and minority-owned business enterprise (WMBE) aspirational goals during procurement development for the program specific professional service.

BACKGROUND

Flight Corridor Safety Program is a continuous program that, approximately every five years, evaluates and mitigates obstructions in the vicinity of the airport. This program commenced in 2014 with a Port-commissioned aerial obstruction analysis to compare tree heights to surfaces commonly used by the FAA to determine obstructions to navigation. The Port completed a follow-up aerial obstruction analysis in 2018 to update the number of obstructions. In response to community feedback, Commission guidance and in consultation with the FAA, the Port used revised criteria in 2018 to identify obstructions that had the most direct impacts to safe and efficient aircraft operations. Once all obstructions were verified by site visits, the removal and replanting work began in 2020. All removal work was completed in Quarter 1, 2022. Replanting work is ongoing.

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In total, 978 trees were removed. The majority were on Port property (789) with the remaining on Washington Department of Transportation (WSDOT) right-of-way (102), other public properties (47) and private properties (40).

On Port property, the Port revegetated all sites where trees were removed with native shrubs and trees at a four to one ratio. For other public properties, the Port contributed to each entity's tree replanting fund at the ratio specified by the entity. For private properties, the Port offered to replant onsite or replant on Port property up to a four to one ratio. Approximately 12,148 trees have been or will be planted to compensate for the 978 trees that were removed. The Port coordinated directly with all public and private property owners on scopes of work specific to their properties and on permanent easements on the properties where there is potential that additional trees may require removal in the future. The value of each easement or property interest was site specific, as determined by an appraiser in accordance with applicable standards for determining fair market value.

Environmental best management practices are an integral part of the Flight Safety Corridor Program's overall design and included avoiding tree removal work during the bird nesting period, leaving vegetation barriers near building and streets, planting low-growing native varietals that won't become future obstructions, removing and controlling invasive species onsite and, specific to Port property, planting a tall-growing native forest on off-site Port property to compensate for the mature native trees that were removed.

The Port developed and implemented a comprehensive outreach and communication plan. The plan includes targeted communication and collaboration with the cities of SeaTac, Burien, and Des Moines; Highline Public Schools; WSDOT; and individual outreach to affected property owners. The outreach efforts also included coordination meetings with public agencies, community input sessions, information in the Port's community newsletter, door to door neighborhood canvassing, a project-specific online open house and regular email communications to relevant port listservs.

The Flight Corridor Safety Program is an on-going program. Staff expects to conduct obstruction surveys approximately every five years to ensure flight safety and to meet federal and state regulations and requirements. The next obstruction survey will take place in 2023. The structure and design of the work that began in 2014 will serve as the basis for the program going forward.

Scope of Work

Scope of work for this authorization includes:

- (1) advertisement and execution of a program specific professional Service Agreement for technical expertise and support;
- (2) aerial obstruction data collection, field verification, and obstruction data analysis to identify obstructions:

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(4) execute agreements with public agencies as needed for purposes of obstruction management.

Following the above planning scope, Program staff plans to return to Commission to request authorization for the design and contract documents in 2024. The full Flight Corridor Safety Program 2024 scope of work includes removing trees identified as obstructions on Port, other public agency, and private properties, and replanting trees in appropriate locations. This scope also includes payment to public agencies for them to perform replanting for certain obstructions removed from their properties, executing agreements with private property owners as needed to perform obstruction management and obtaining easements or similar property interests as the permanent approach for obstruction management.

Schedule

Activity

Advertisement for professional Service Agreement 2022 Quarter 3

Aerial obstruction data collection 2023 Quarter 3

Commission design and construction authorization 2024 Quarter 3

Design start 2024 Quarter 3

Construction start 2024 Quarter 4

Construction completion 2025 Quarter 4 to 2026 Quarter 4

Cost Breakdown This Request Total Project

Planning \$500,000 \$600,000

Design 0 \$2,620,000

Construction 0 6,480,000

Total \$500,000 \$9,700,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Do not authorize funds for program planning, data collection work and environmental review.

Cost Implications: \$0

Pros:

(1) No expenditure required

Cons

- (1) FAA could consider the Airport to be non-compliant with Federal rules and regulations.
- (2) Does not follow the state laws regarding prevention of airport hazards.
- (3) Does not meet the Airport's operating certificate requirements for airport operators to protect safe flight operations into and out of the airport.

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(4) Does not meet the Airport's strategic goals and objectives, such as improving the operational efficiency and customer experience at SEA.

This is not the recommended alternative.

Alternative 2 – Authorization to complete program planning, data collection work and conduct environmental review.

Cost Implications: \$500,000

Pros:

- (1) Complies with FAA and State regulations to manage identified obstructions in a timely
- (2) Meet the Airport's operating certificate requirements for airport operators to protect safe flight operations into and out of the airport.
- (3) Meets the Airport's strategic goals and objectives, such as improving the operational efficiency and customer experience at SEA.
- (4) Provides time for public engagement and outreach with the local communities.
- (5) Provides a manageable program to meet the FAA and state regulations to remove identified obstructions. The FAA concurs with this approach.

Cons:

(1) Expenditure in 2022, 2023 and 2024.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary Total

COST ESTIMATE

Original estimate \$9,700,000

Port ______

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AUTHORIZATION

Previous authorizations 100,000 Current request for authorization 500,000 Total authorizations, including this request 600,000 Remaining amount to be authorized \$9,100,000 Annual Budget Status and Source of Funds

The expenditures will be included in the division's annual operating budget. The cost for removal and replanting on Port property is an operating expense and the expenditures on non-Port property is categorized as non-operating Public Expense. The 2022 operating budget includes \$60,000. The funding source will be Airport Development Fund (ADF).

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Financial Analysis and Summary
Project cost for analysis \$9,700,000
Business Unit (BU) Airfield Movement Area
Effect on business performance NOI after depreciation will increase due to inclusion of
(NOI after depreciation) capital (and operating) costs in airline rate base
IRR/NPV (if relevant) N/A
CPE Impact \$.01 in 2022-2023, \$.05 in 2024, \$.17 in 2025, \$.10 in
2026

ATTACHMENTS TO THIS REQUEST

(1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

April 29, 2022 – The Commission Aviation Committee was briefed on the Flight Corridor Safety Program Overview; 2019 program accomplishments and status; and upcoming request for Commission authorization for 2024 program in June 2022.

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