



**COMMISSION
AGENDA MEMORANDUM**

Item No. 8d

ACTION ITEM

Date of Meeting April 16, 2024

DATE: April 2, 2024

TO: Stephen P. Metruck, Executive Director

FROM: Keri Stephens, Director, Aviation Facilities and Capital Programs
Eileen Francisco, Director, Aviation Project Management

SUBJECT: Airport Terminal Solid Waste Project (CIP #800945)

Amount of this request: \$4,500,000
Total estimated project cost: \$19,180,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to: (1) increase the project scope and associated budget for the Airport Terminal Solid Waste project in the amount of \$4,500,000; (2) advertise, bid, and execute a major works construction contract, execute related project change orders, amendments, work authorizations, purchases, contracts, and take other actions necessary to support and deliver the Airport Terminal Solid Waste Project; and (3) authorize the use of Port of Seattle crews to support the design and construction activities. Total authorization is \$19,180,000.

EXECUTIVE SUMMARY

Solid Waste throughput and capacity are essential for Airport operations, passenger comfort, worker safety, and overall sanitation. The Airport’s Terminal Solid Waste project addresses current shortfalls and expands capacity to meet future demands of trash, recycling, and composting waste streams. In addition, the project installs sanitation stations at waste collection areas across the Airport to address regulatory findings. This project directly supports the Airport’s Environmental Landfill Diversion Strategy. The project is currently in construction.

This request is for additional funding to lower the roofline of the North Solid Waste Building which will enhance the Central Terminal experience and strengthen tenant relationships. The Central Terminal Window Wall is the gathering space where passengers eat, relax, and enjoy the views of the airfield and the Olympic Mountains. The Terminal Solid Waste North Building conflicts with the view from our northern Airport Dining and Retail tenants. Though vetted in design, communication of this new building was not thoroughly presented to the tenants. This request rectifies that situation by lowering the height of the North Solid Waste addition and provides the Airport the opportunity to install and test a green roof system. The green roof system provides multiple advantages to the airport including reducing solar gain through to the iconic window wall and provides a secondary stormwater benefit.

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The current project budget is \$14,680,000. The new budget estimate is \$19,180,000, an increase of \$4,500,000. This budget increase includes design changes, change order costs, unforeseen cost additions and associated soft costs necessary to accommodate the project.

JUSTIFICATION

The Central Terminal core solid waste refuse collection and processing areas were constructed in 2003. The space provided two-stream operations for garbage and recycling only. Composting operations began in 2006 and are handled by movable bins. The limited space in the current facility limits the ability for operational solutions to manage solid waste levels, which results in overflow of solid waste and unsanitary conditions. Overflowing waste is often blown onto the ramp creating foreign object debris, a serious safety hazard to aircraft engines. Additionally, when solid waste compactors are full, tenants are more likely to incorrectly throw waste in other containers, contaminating them and eliminating their ability to be properly recycled. This project will build the required additional space and infrastructure to meet future demands for solid waste, including recycling and composting, while remaining compliant with federal code and sanitation guidelines.

The reduction in height of the terminal solid waste roof ensures the airfield views from the public area and restaurants in the Central Terminal remain clear but will introduce the view of a nondescript roof membrane. The relatively small footprint of exposed roof provides a great opportunity to pilot an extensive green roof system at SEA. Multiple airports around the world have introduced green roofs both for their building performance and aesthetic features. Extensive green roofs are shallow and require minimal maintenance, extend the lifecycle of the roof membrane, provide secondary stormwater benefits, and add a biophilic element that ties back to the Northwest Sense of Place. The roof will be easy to access from the Central Terminal for maintenance and cameras will be installed to allow Wildlife department to track and remove any potential gull nests.

This project directly supports the Port's Century Agenda goal to be the greenest and most energy efficient Port in North America by expanding compost and recycling capacity, which enables the airport to meet its solid waste diversion goals. The Airport's composting and food donation programs help fight climate change by reducing greenhouse gas emissions associated with food waste. Project improvements will help ensure the Airport can properly manage increasing amounts of food waste and compostable packaging sorted by our passengers and tenants so it can be sent to local composting facilities. In addition to supporting the Port's 60% waste diversion goal, upgrading the Airport's compost capacity helps our facilities support Washington State and National Environmental Protection Agency food waste reduction goals (50% reduction by 2030). New, high-capacity compactors and access-control and monitoring systems in this project will improve operational efficiency while reducing cross-contamination of waste streams and improving measuring and monitoring of waste data.

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Diversity in Contracting

For the design phase, the consultant committed to a 20% Woman and Minority Business Enterprise (WMBE) utilization and is currently achieving 34.6%. The construction phase of the project has a WMBE aspirational goal of 12%, the construction contractor committed to a 13% WMBE utilization rate and is currently achieving 14%.

DETAILS

The Terminal Solid Waste project is essential work to right-size the facility infrastructure to accommodate the growth in the Airport and subsequent increase in solid waste volumes. The project accommodates passenger and terminal growth through 2036, aligns with Century Agenda and Environmental diversion goals and satisfies numerous regulatory requirements.

Scope of Work

This request lowers the roof line of the North Solid Waste Central Terminal Addition to improve views within the terminal. In addition, it takes advantage of the new roof to install a pilot green roof system.

Schedule

Activity

Design	2024 Quarter 2
Construction Re-Start	2024 Quarter 4
In-use date	2025 Quarter 2

Cost Breakdown

	This Request	Total Project
Total	\$4,500,000	\$19,180,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Leave the project scope as is and fund an additional \$450,000 to cover unforeseen conditions found during construction.

Cost Implications: \$15,130,000

Pros:

- (1) Completes construction.

Cons:

- (1) Customer experience in Central Terminal Window Wall area degraded.

This is not the recommended alternative.

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Alternative 2 – Enhance the Central Terminal Window Wall views to include lowering the North building roof and inclusion of a pilot green roof. \$450,000 is included for previously encountered unforeseen conditions.

Cost Implications: \$19,180,000

Pros:

- (1) Improved Customer experience
- (2) Green Roof Pilot opportunity with secondary storm water benefits
- (3) Tenant / Airport Dining and Retail Relationship

Cons:

- (1) Cost increase

This is the recommended alternative.

FINANCIAL IMPLICATIONS

<i>Cost Estimate/Authorization Summary</i>	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$6,200,000	\$200,000	\$6,400,000
Previous changes – net	\$8,280,000	\$0	\$8,280,000
Current change	\$4,500,000	\$0	\$0
Revised estimate	\$18,980,000	\$200,000	\$19,180,000
AUTHORIZATION			
Previous authorizations	\$14,480,000	\$200,000	\$14,680,000
Current request for authorization	\$4,500,000	\$0	\$4,500,000
Total authorizations, including this request	\$18,980,000	\$200,000	\$19,180,000
Remaining amount to be authorized	\$0	\$0	\$0

Annual Budget Status and Source of Funds

This project, CIP C800945, was included in the 2023-2028 capital budget and plan of finance with a budget of \$14,480,000. A budget increase of \$4,500,000 was transferred from the Aeronautical Reserve CIP (C800753) resulting in zero net change to the Aviation capital budget. The funding source will be the Airport Development Fund (ADF), existing revenue bonds and future revenue bonds. The project received Majority in Interest (MII) approval on January 9, 2023. The budget increase will trigger the MII provision. Port Management elected the use of Signatory Lease Agreement (SLOA) MII Management Reserve. This provision with SLOA allows the Port to proceed with previously approved projects when there are budget increases without another MII vote.

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Financial Analysis and Summary

Project cost for analysis	
Business Unit (BU)	Terminal Building
Effect on business performance (NOI after depreciation)	NOI after depreciation will increase due to inclusion of capital (and operating) costs in airline rate base
IRR/NPV (if relevant)	N/A
CPE Impact	\$0.05 in 2026

Future Revenues and Expenses (Total cost of ownership)

The recommended solution is expected to yield a 10-year cost avoidance of \$9,600,000 to the solid waste program. Avoidance is based on reduced tipping fees and costs to mitigate waste overages. Additional green roof and compactor equipment operations and maintenance costs will be \$90,000 annually.

ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

January 10, 2023 – The Commission authorized the award of an irregular bid. At that time the total Cost of the project was \$14,680,000.

April 12, 2022 – The Commission authorized the Executive Director advertise and award a major public works contract. At that time the total estimated project Cost was \$12,576,000.

April 14, 2020 – The Commission authorized the Executive Director to advertise and execute a project specific design contract. Staff anticipated a project cost increase.

October 8, 2019 – The Commission authorized the Executive Director to design and prepare construction documents for Terminals Solid Waste Project. At that time the total estimated project cost was \$6,400,000.