#### PORT OF SEATTLE MEMORANDUM

#### **COMMISSION AGENDA** Item No. 5c **ACTION ITEM** Date of Meeting March 18, 2014 DATE: March 10, 2014 TO: Tay Yoshitani, Chief Executive Officer FROM: Wayne Grotheer, Director, Aviation Project Management Group David Soike, Director, Aviation Facilities and Infrastructure **SUBJECT:** Grease Interceptor Augmentation 2013 (CIP C#800551) **Amount of This Request:** \$1,304,700 Source of Funds: Airport Development Fund **Est. Total Project Cost:** \$1,559,200 **Est. State and Local Taxes:** \$93,280

#### **ACTION REQUESTED**

Request Commission authorization for the Chief Executive Officer to advertise, award, execute, and construct a major works construction contract for the Grease Interceptor Augmentation Project (CIP #C800551) at Concourse C and the South Satellite at the Seattle-Tacoma International Airport in the amount of \$1,304,700.

### **SYNOPSIS**

This request is to install two underground 9,000-gallon grease interceptors to serve the South Satellite, supplementing the Airport-wide system of grease interceptors. The Concourse C locations will be served using the existing north CTE 9,000 interceptor. These new interceptors will collect grease waste from existing and planned food/beverage units not currently served, significantly reducing the risk of clogged sewer lines in the project areas. These new interceptors and connections will also bring the Airport into compliance with the Uniform Plumbing Code and the Midway Sewer District for release of grease waste. This project was included in the 2014 - 2018 capital budget.

#### BACKGROUND

Grease interceptors are underground holding tanks that remove grease from waste water before the water is discharged into the sanitary sewer system. Greasy water moves from food service units through drains via gravity. For waste water to drain to a grease interceptor, a continual downhill slope must be maintained. Grease interceptors must be placed in appropriate locations for food service units to have the proper unobstructed slope required for drainage. The lack of grease interceptors increases the risk of sewer line clogs that could significantly impact tenants and Airport operations.

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This project anticipated installing one interceptor on Concourse C to serve existing and future food beverage locations. During design the engineers found that there is not a good location on the north side of Concourse C to place an interceptor and be able to get the slope needed to serve any food beverage on the eastern portion of Concourse C. The engineering team looked for the next option and found that they could achieve the slope needed to serve Beecher's and a future food/beverage in the same area as Beecher's by going to the north CTE interceptor. This project will provide the stainless steel piping from Beecher's (usable by the additional food beverage) to the north CTE interceptor. It was also determined during design that sufficient slope could not be reached at the south satellite to serve all underserved food beverage locations by installing only one interceptor therefore two interceptors will be installed on the South Satellite.

In the early 2000s, the Airport began a comprehensive program to install grease interceptors at various locations around the Airport to serve existing and future food service concessions. Due to budgetary constraints, the program was only partially completed. Since that time, the Airport has installed new food service units not served by grease interceptors.

# PROJECT JUSTIFICATION AND DETAILS

The expansion of food service units at the Airport has resulted in a lack of grease interceptor coverage in certain areas, leaving the Airport at risk for interruptions to tenant and Airport operations from sewer line clogs, as well as the resultant maintenance costs. Further, the current arrangements of unserved food beverage units results in the Port being non-compliant with the national Uniform Plumbing Code and the requirements of the Midway Sewer District, which serves the Airport, for release of grease water waste. These conditions, coupled with plans for future food/beverage units in areas not serviced by existing interceptors, require that the Port install the proposed grease interceptors. The 9,000-gallon grease interceptors will have capacity for current and future nearby uses. The units will be placed underground to avoid impact on aircraft operations.

# **Project Objectives**

- Provide for the hook-up to accessible grease interceptors for unserved existing as well as future food/beverage locations at the Airport.
- Reduce the risk of sewer line clogs from grease water waste released into the sewer lines, causing disruption to tenants and Airport operations as well as increased maintenance costs.
- Make the Airport compliant with grease water waste discharge requirements of the National Uniform Plumbing Code and the Midway Sewer District.
- Reduce the incidence of high levels of biological oxygen demand (BOD) in the sanitary sewer system discharging to Midway Sewer District.

### Scope of Work

The project will install two underground 9,000-gallon grease interceptors to serve unserved areas South Satellite supplementing the Airport-wide system of grease interceptors. This project will

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install piping from the underserved food beverage locations on Concourse C to the existing north CTE interceptor.

### Schedule

Commission Authorization for Design	May 2013
Request Commission Authorization to Advertise, Execute and Construct	March 2014
Construction Start	September 2014
Project Complete	December 2014

### **FINANCIAL IMPLICATIONS**

Budget/Authorization Summary	Capital	Expense	Total Project
Original Budget	\$1,559,200	\$0	\$1,559,200
Previous Authorizations	\$353,500	\$0	\$353,500
Current request for authorization	\$1,205,700	\$0	\$1,205,700
Total Authorizations, including this request	\$1,559,200	\$0	\$1,559,200
Remaining budget to be authorized	\$0	\$0	\$0
Total Estimated Project Cost	\$1,559,200	\$0	\$1,559,200

Project Cost Breakdown	This Request	Total Project
Construction	\$928,910	\$928,910
Construction Management	\$108,500	\$108,500
Design	\$0	\$254,500
Project Management	\$60,010	\$159,010
Permitting	\$15,000	\$15,000
State & Local Taxes (estimated)	\$93,280	\$93,280
Total	\$1,205,700	\$1,559,200

### Budget Status and Source of Funds

This project was included in the 2014 - 2018 capital budget and plan of finance within CIP #C800551. The funding source will be the Airport Development Fund. This project is categorized as a non-aeronautical project as it exclusively supports the concessions business.

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CIP Category	Compliance
Project Type	Terminal Infrastructure
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	\$1,559,200
<b>Business Unit (BU)</b>	Terminal – Non-aeronautical
Effect on business performance	NOI after depreciation will decrease
IRR/NPV	N/A
CPE Impact	None.

#### Financial Analysis and Summary

#### Lifecycle Cost and Savings

There will be annual operating and maintenance cost increases of approximately \$7,500 to regularly pump the new interceptors out. However, these costs may be partially offset by the reduction of sewer district surcharges currently being assessed due to high BOD. Further, the new interceptors will significantly reduce the risk of emergency expenses for cleaning sewer line clogs.

### STRATEGIES AND OBJECTIVES

This project contributes to the Port's Century Agenda objective of meeting the region's air transportation needs at the Airport for the next 25 years. The project increases the capacity and flexibility of tenant spaces. Allowing for additional food/beverage locations throughout the Airport will better serve passengers and enhance customer service. The project demonstrates the Port's commitment to being a good environmental steward for our partner the Midway Sewer District by removing grease before waste water leaves the Airport.

#### **TRIPLE BOTTOM LINE**

#### Economic Development

This project supports the growth of the Airport's food and beverage concessions business.

#### Environmental Responsibility

Installing interceptors will capture the grease that would otherwise be routed to a treatment plant. The grease pumped from interceptors will be trucked to a materials recycling facility and processed for use as a biofuel. Over the lifecycle, capital costs are at least partially offset by savings in surcharges and maintenance of clogged sanitary sewers. This project demonstrates environmental sustainability by improving existing Port assets and looking at the total cost of ownership. The project aligns with the Port's goal of improving the long-term sustainability of its facilities and operations.

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### Community Benefits

This project supports the Airport's strategic goal of operating a world-class international airport by anticipating and meeting the needs of our tenants, and passengers; and managing our assets to minimize long-term total cost of ownership. Installing grease interceptors will protect the Port's sanitary sewer lines from the harmful effects of grease, anticipate future need, and decrease surcharge fees. The project manager and Central Procurement Office will coordinate with the Office of Social Responsibility to determine opportunities for small business participation in support of Resolution No. 3618.

# ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1) – Install individual grease traps in food preparation area drain lines. Grease traps capture a small amount of the grease that passes through them. Significant time and expense for frequent cleaning is required to ensure that the traps are free from clogs and work effectively. This is not the recommended alternative.

Alternative 2) – Do nothing. The result of doing nothing would be grease build up in sewers leading to blockages and increasing maintenance costs and increased surcharges by the local sewer district. This is not the recommended alternative.

Alternative 3) – Install grease interceptors and connections to existing grease interceptors at locations where there are food service units not connected to grease interceptors to fully serve the current and anticipated concessions footprint. This is the recommended alternative.

# ATTACHMENTS TO THIS REQUEST

• Grease Interceptor Map

# PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

• On May 28, 2013, Commission authorized design funds for the Grease Interceptor Augmentation Project.