



**COMMISSION
AGENDA MEMORANDUM**

Item No. 6a

ACTION ITEM

Date of Meeting August 8, 2017

DATE: July 31, 2017

TO: Dave Soike, Interim Executive Director

FROM: Jeffrey Brown, Director, Aviation Facilities and Capital Programs
Mike Tasker, Senior Manager, Aviation Facilities and Infrastructure
Wayne Grotheer, Director, Aviation Project Management Group

SUBJECT: South Satellite Structural Improvements (CIP #C800818)

Amount of this request: \$550,000

Total estimated project cost: \$4,150,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to (1) authorize an additional \$550,000 for the South Satellite Structural Improvements project at Seattle-Tacoma International Airport for a total estimated project cost of \$4,150,000, (2) advertise and execute a major works construction contract, and (3) utilize Port crews to assist with the project.

EXECUTIVE SUMMARY

This project will address existing structural overload conditions at the South Satellite (SSAT) building. The SSAT was built in 1970 and expanded in 1984. Recent structural analyses have shown that the existing building dead load (i.e., weight of the built facilities) and live load (i.e., weight of the people in the building) exceed the capacity of the existing SSAT structure per current building codes. The project has experienced some cost growth due to the construction market, additional costs to address unknown utilities and systems, and a scope increase to support another project in the SSAT building.

JUSTIFICATION

This project addresses a structural overload condition in the SSAT building as identified by current building codes. This project contributes to the Port's Century Agenda strategic objective to advance this region as a leading tourism destination and business gateway. The fifteen international gates at the SSAT are fundamental to the Port's goals to double the number of international flights and destinations and meet the region's air transportation need at Seattle-Tacoma International Airport (STIA) for the next 25 years.

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DETAILS

The SSAT Structural Improvements project will address the existing dead and live load structural overload conditions in the SSAT building by completing a number of structural improvements to columns and beams on the concourse, international corridor, and ramp levels of the building. The project will not address lateral load (i.e., wind and seismic) structural requirements.

In November 2016, the Commission authorized a total of \$3,600,000 for the design and construction of the project. At that time, two significant risks were identified and additional project contingency was included in the estimated project cost for these risks. The two risks were the existing construction market and the need to relocate unknown utilities and systems to support the work.

On August 8, 2017 the Commission will also be requested to authorize the construction of the South Satellite Heating Venting and Air Conditioning (HVAC) Upgrade project. That project will replace key components of the SSAT HVAC system including the air handlers and distribution boxes serving the concourse level. In order to support the construction phasing required to maintain existing building operations, temporary HVAC units need to be brought in for several months and placed on the roof of the SSAT building. This additional equipment on the roof will increase the dead load of the building. The two project teams coordinated on the location of the units and as a result only one additional column location on the concourse level needs to be strengthened to support the temporary HVAC units. Given the nature of the construction work involved, this additional structural upgrade is most efficiently accomplished by this SSAT Structural Improvements project.

The estimated project cost has increased by \$550,000 to \$4,150,000 which is attributed to three issues: 1) the existing construction market, 2) relocation of unknown utilities and systems to support the work, and 3) a scope increase. Activity in the construction market continues to rise and subcontractors to support the work are in limited supply. The market impact has increased beyond staff expectations and represents 64% of the project cost increase. As the project team began identifying the unknown utilities and systems to be relocated, it became apparent that the impacted HVAC systems were more complex than anticipated. These costs have increased beyond the original identified project contingency and represent 9% of the project cost increase. The additional column strengthening to support the temporary HVAC units represents the remaining 27% of the project cost increase.

Scope of Work

The scope of work includes beam to column strengthening at 26 locations, column strengthening at 13 locations, and haunch to column strengthening at four locations. A number of other systems will need to be relocated to support the construction effort and include Wi-Fi antennas, conveyer controls, tug charging stations, door optical sensors, 400Hz electrical power conduits, mechanical piping, heating and ventilation ductwork, and other electrical and communication conduits. Asbestos abatement will also be required in

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support of the work. The majority of the work will be completed through a major works construction contract. The portion of work on the concourse level will be completed by Port Construction Services (PCS) and small works contracts since this work needs to be coordinated with the Airport Dining and Retail tenant construction effort.

In June, Port PM staff, along with the Small Business Group , and the Central Procurement Office, had conducted an outreach and training effort through PortGen. This early effort was to maximize small business knowledge and the promotion of those potential opportunities within the scope of work. Additional outreach efforts will be conducted to continue small business interest and preparation in anticipation of this project.

Schedule

Due to the increase in project costs, the project now requires approval from the airlines through the majority-in-interest vote. This effort is currently underway and assuming approval by the airlines, the anticipated schedule is summarized below.

Activity

Construction start	2018 Quarter 1
Construction complete	2018 Quarter 3

Cost Breakdown

	This Request	Total Project
Design	\$0	\$795,000
Construction	\$550,000	\$3,355,000
Total	\$550,000	\$4,150,000

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary

	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$1,000,000	\$0	\$1,000,000
Previous changes – net	\$1,880,000	\$720,000	\$2,600,000
Current change	\$720,000	(\$170,000)	\$550,000
Revised estimate	\$3,600,000	\$550,000	\$4,150,000
AUTHORIZATION			
Previous authorizations	\$3,050,000	\$550,000	\$3,600,000
Current request for authorization	\$550,000	\$0	\$550,000
Total authorizations, including this request	\$3,600,000	\$550,000	\$4,150,000
Remaining amount to be authorized	\$0	\$0	\$0

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Annual Budget Status and Source of Funds

The SSAT Structural Improvements project (CIP #C800818) was included in the 2017-2021 capital budget and plan of finance with a total capital budget of \$2,880,000. The cost increase is attributed to continued growth in activity in the construction market, additional costs for the relocation of unknown utilities and systems, and additional column strengthening scope. Additional capital budget of \$720,000 was transferred from the Aeronautical Allowance (CIP #C800753), resulting in no net change to the capital budget. The expense budget savings of \$170,000 is attributed to the reduction in asbestos abatement scope and is considered an environmental remediation liability. Both the capital and expense portions of this project will be funded by the Airport Development Fund.

Financial Analysis and Summary

Project cost for analysis	\$4,150,000
Business Unit (BU)	Terminal Building
Effect on business performance (NOI after depreciation)	NOI after depreciation will increase
IRR/NPV (if relevant)	N/A
CPE Impact	\$0.03 in 2018 (RMM) and \$0.01 in 2019

Future Revenues and Expenses (Total cost of ownership)

No future revenues or expenses are anticipated as a result of the completion of this project.

ADDITIONAL BACKGROUND

The SSAT Renovations project is currently exploring alternatives for the complete renovation of the SSAT building to meet long-range capacity and customer experience goals. The SSAT Renovation project will also address the lateral load structural requirements since they are integral to the renovated building structure. There is limited risk that the structural improvements completed by the SSAT Structural Improvements project would be demolished by this future renovation effort.

Airport Dining and Retail has completed the competitive solicitation process for units in the SSAT. This includes unit SS-7 an upscale bar with food, unit SS-2A a gourmet coffee unit, units SS-2B and SS-2C quick service restaurants, food court seating, and optional food services in the SSAT. The structural improvements on the concourse level that are the subject of this request are located within three of the dining units (SS-2A, SS-2B, and SS-2C) and adjacent to the public restrooms. This work is planned to be completed by PCS and small works contractors and will be coordinated with the planned tenant build-out of these areas to minimize disruption to public areas. These structural improvements are anticipated to be complete by second quarter 2018.

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ATTACHMENTS TO THIS REQUEST

None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

November 8, 2016 – The Commission authorized the Chief Executive Officer to (1) prepare design and construction bid documents for the South Satellite Structural Improvements project at Seattle-Tacoma International Airport, (2) advertise and execute a major works construction contract, and (3) utilize Port crews for an estimated \$3,450,000