



**COMMISSION
AGENDA MEMORANDUM**

Item No. 8b

ACTION ITEM

Date of Meeting July 27, 2021

DATE: July 16, 2021

TO: Stephen P. Metruck, Executive Director

FROM: Eileen Francisco, Acting Director, AV Facilities & Capital Programs
Wayne Grotheer, Director, Aviation Project Management

SUBJECT: Departures Drive Drainage (C801036)

Amount of this request: \$500,000

Total estimated project cost: \$1,880,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to complete design on the Departures Drive Drainage project at Seattle-Tacoma International Airport (SEA). This authorization is for \$500,000 for a total estimated project cost of \$1,880,000.

EXECUTIVE SUMMARY

This project rehabilitates a portion of the departures drive storm drainage system and existing bridge expansion joints. The storm drainage system has failed along the south end of the departures drive. An existing catch basin and associated drainage pipe is plugged and has been paved over. Stormwater currently ponds at this location, leaks through the structure and discharges onto rental car customers waiting on the arrivals curbside below. The project will replace the existing storm drainage facilities and expansion joints, and complete minor paving.

JUSTIFICATION

This project will support the Century Agenda goal to advance this region as a leading tourism destination and business gateway by meeting the region's air transportation needs through improving vital facilities and infrastructure in a sustainable and cost-effective manner. This project will improve customer service for rental car customers and reduce ongoing maintenance due to stormwater leaking from the departures drive onto the arrivals curbside.

Diversity in Contracting

Design will be completed utilizing an existing Indefinite Delivery Indefinite Quantity (IDIQ) contract that has a commitment for 10% WMBE participation. It is anticipated that Port Construction Services (PCS) will complete all construction and will work with the Diversity in Contracting department to identify potential contract opportunities during this phase.

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DETAILS

The project is located at the south end of the departures drive. However, construction will impact both the arrivals and departures drives.

The new storm drainage facilities are planned to connect into the existing facilities along the arrivals drive. However, there is risk that existing power and communication infrastructure may prohibit that connection or require modification at significant additional cost in order to connect into that system. Utility potholing during design will determine the extent and impact of these constraints.

Scope of Work

This project will correct a failure of the existing storm drainage facilities at the south end of the departures drive.

- (1) Remove and replace an existing catch basin on the departures drive.
- (2) Install new storm drainage piping under the departures drive, down an existing column and across the arrivals drive to an existing catch basin.
- (3) Replace three existing expansion joints on departures drive.
- (4) Repave the existing departures drive shoulder and reseal the structure joint to direct stormwater flow into the new catch basin.

Schedule

Design start	2021 Quarter 4
Commission construction authorization	2022 Quarter 3
Construction start	2023 Quarter 1
In-use date	2023 Quarter 2

Cost Breakdown

	This Request	Total Project
Design	\$500,000	\$500,000
Construction	\$0	\$1,380,000
Total	\$500,000	\$1,880,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 - Do not complete improvements.

Cost Implications: \$0

Pros:

- (1) Least costly alternative.

Cons:

- (1) Rental car customers will continue to experience poor customer service.
- (2) Water intrusion will continue to deteriorate the departure drive structure.

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This is not the recommended alternative.

Alternative 2 – Remove and replace all concrete traffic barriers (spandrels) and reconstruct the existing stormwater drainage system to replicate the existing system that is integral to the structure. This option includes replacing three local expansion joints.

Cost Implications: \$7,710,000

Pros:

- (1) Provides long-term repair of inoperable stormwater drainage system.
- (2) Improves customer safety and satisfaction.

Cons:

- (1) Most costly alternative.
- (2) New stormwater drainage system will continue to be integral to the drive structure which is difficult to access and maintain.
- (3) Construction will result in significant impacts to both departures and arrivals curbsides.

This is not the recommended alternative.

Alternative 3 – Install new storm drainage infrastructure that is external to the departures drive, replace existing expansion joints, and repave the departures drive shoulder and reseal the structure joint.

Cost Implications: \$1,880,000

Pros:

- (1) Provides long-term repair of inoperable stormwater drainage system.
- (2) Improves rental car customer safety and satisfaction.

Cons:

- (1) The existing stormwater drainage system is integrated into the departures drive bridge deck. However, the new stormwater drainage system will be external and attached underneath the bridge deck.
- (2) Connection point is also an unknown project risk to be evaluated during design.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary

Capital

Total

COST ESTIMATE		
Original estimate	\$600,000	\$600,000
Current change	\$1,280,000	\$1,280,000
Revised Total	\$1,880,000	\$1,880,000*

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AUTHORIZATION		
Previous authorizations	\$50,000	\$50,000
Current request for authorization	\$500,000	\$500,000
Total authorizations, including this request	\$550,000	\$550,000
Remaining amount to be authorized	\$1,330,000	\$1,330,000

*Project alternatives were analyzed during status I, however the estimates from those alternatives inadvertently were mixed up. The effect was the correct alternative, but the wrong budget was approved. This revision reflects the budget for the approved alternative.

Annual Budget Status and Source of Funds

This project, CIP C801036, was included in the 2021-2025 capital budget and plan of finance with a budget of \$600,000. A budget of \$1,280,000 was transferred from the Aeronautical Reserve CIP (C800753) resulting in zero net change to the Aviation capital budget. The funding source will be 2021 revenue bond and the Airport Development Fund (ADF).

Financial Analysis and Summary

Project cost for analysis	\$1,880,000
Business Unit (BU)	Roadways
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	less than \$.01 in 2024

Future Revenues and Expenses (Total cost of ownership)

This project will not have a significant impact on Aviation Maintenance annual operating and maintenance (O&M) costs. The storm drain will replace an existing system that is no longer functioning.

ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None