Airfield Utility Improvements (AUI)x

Michelle Carioto – AVPMG C801177 August 10, 2021

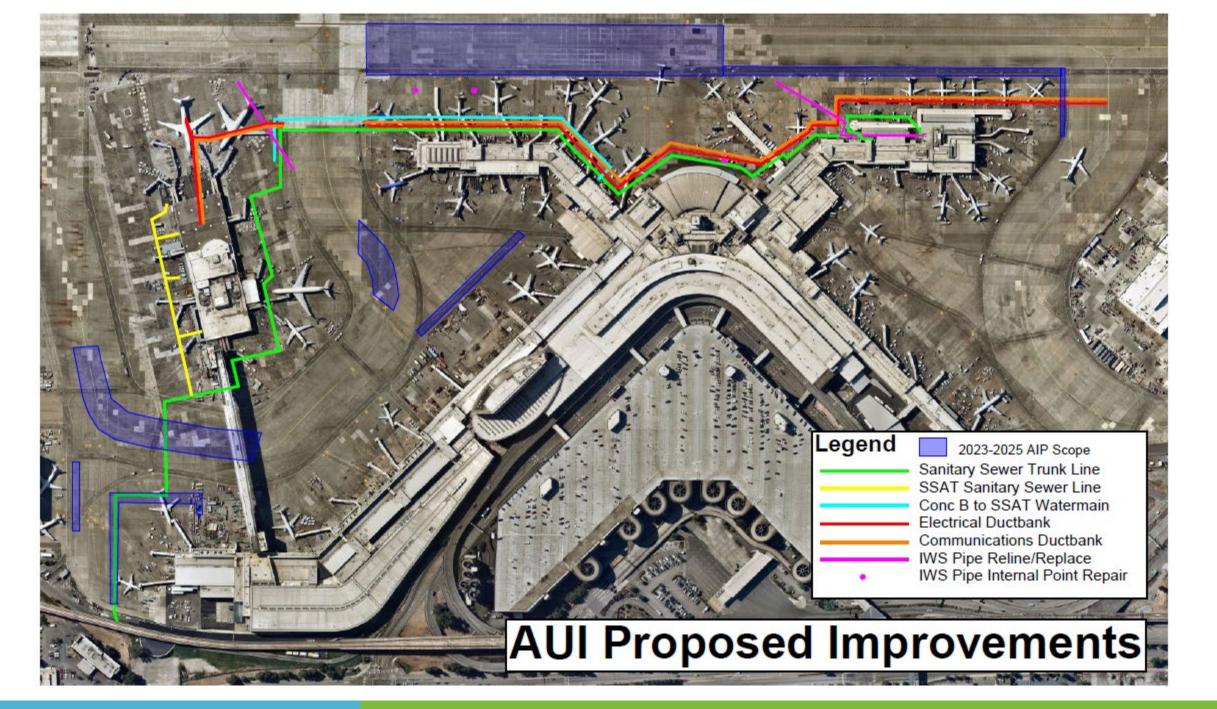


Action Requested

Request Commission authorization for the Executive Director to (1) complete design and prepare construction documents for the Airfield Utilities Infrastructure (AUI) project (CIP C801177) at Seattle-Tacoma International Airport (SEA) and (2) enter into reimbursable agreements with the Federal Aviation Administration. This design authorization is for an amount of \$6,300,000 out of a total estimated project cost of \$46,200,000.

Project Purpose

- This Airfield project replaces the 50+ years old, failing and undersized Sanitary Sewer, Watermain, and Industrial Waste System (IWS) infrastructure that allow the Main Terminal and South Satellite to operate. It also adds Power and Communications pathways to increase resiliency of the Satellites.
- The work will be phased with planned operation outages of the existing Airfield Pavement Program for years 2023 to 2025.
- The work also supports and is critical path for the C1 Building Expansion and South Satellite Renovation Projects.



Project Elements

- Sewer: Replace 60-years old, deteriorating, undersized, Sanitary Sewer trunkline serving Main Terminal and South Satellite. Also supports both the C1 Building Expansion and the SSAT Renovation Projects.
- *Water*: 50-years old watermain serving Concourse B has portions located under terminal and high risk of failure will cause significant outage to Concourse B operations. This project will reroute a new watermain concurrent to above sewer.
- Industrial Waste System (IWS): Deteriorating IWS pipe will be replaced or repaired where the locations overlap with above sewer and water work.
- *Power & Communications Ductbank*: Add power and communications conduits along same alignment of water and sewer installations to allow for future Utility Master Plan resiliency pathways between South and North Satellites.

Schedule

- Commission Authorization for Design: Q3 2021
- Design Start: Q3 2021
- Commission Authorization for Construction:
- Phase 1 Q4 2022; Phase 2 Q4 2023; Phase 3 Q4 2024
- Issue Notice to Proceed:
- Phase 1 Q1 2023; Phase 2 Q1 2024; Phase 3 Q1 2025
- Construction Complete: Q4 2023; Q4 2024; Q4 2025

Budget

Budget	Project Budget
Design	\$6,300,000
Construction	\$39,900,000
Total	\$46,200,000

Authorizations	Project Budget
Previous authorization	\$295,200
This request	\$6,300,000
Total authorized amount (including this request)	\$6,595,200
Remaining to be authorized	\$39,604,800

Project Risks

RISKS	DESCRIPTION	PROBABILITY	ΙΜΡΑϹΤ	MITIGATION
MII vote	A "No-Vote" will delay this project and could impact C1 Building Expansion project.	Low 🌑	High 🛑	Communicate the schedule linkage between AUI and C1 Building Expansion project. Continuous coordination with project and stakeholders.
Multiple concurrent projects	Gate closures, operational impacts and safety risks increased by competing projects in the same area.	High 🔴	Med 😑	Combining with the Airfield Pavement & Infrastructure Replacement Program would decrease the number of contractors.
Weather delays	Seasonality of allowable construction window does not allow much float time for weather delays.	Med <mark>-</mark>	Med –	Schedule construction to start in March and continue while the weather holds out. Contingency dollars will be used for targeted acceleration when weather is favorable.
Utility conflicts	Unforeseen utility crossings could delay the schedule.	Low	High 🛑	Conduct robust survey investigations during design. Require contractor to utilize nondestructive construction methods.

AUI Project Opportunities

- •Opportunity to move Utility Master Plan forward where it aligns with existing programs
- •Opportunity to integrate/support other program scopes and schedules:
 - ➢Airfield Pavement and Supporting Infrastructure Replacement Program
 - South Satellite Renovation
 - ≻C1 Building

•Opportunity to reduce operational impacts and safety risks by bundling

Questions?