



**COMMISSION  
AGENDA MEMORANDUM**

**Item No.** 10b

**ACTION ITEM**

**Date of Meeting** February 8, 2022

**DATE:** January 28, 2022

**TO:** Stephen P. Metruck, Executive Director

**FROM:** Eileen Francisco, Interim Director, Aviation Facilities and Capital Programs  
Wayne Grotheer, Director, Aviation Project Management

**SUBJECT: Telecommunication Meet Me Room (CIP# C800762)**

**Amount of this request:** \$7,725,000

**Total estimated project cost:** \$19,700,000

**ACTION REQUESTED**

Request Commission authorization for the Executive Director to (1) increase the project budget for the Telecommunication Meet Me Room (MMR) in the amount of \$14,550,000; (2) prepare, advertise, and award a design build major works contract to construct the MMR building; (3) prepare design and construction bid documents for the MMR fiber; (4) utilize Port of Seattle crews to support design and construction activities. This request is for \$7,725,000 for a revised total estimated project cost of \$19,700,000.

**EXECUTIVE SUMMARY**

The MMR project will establish a new secure connection point for the telecommunication entering and exiting Airport. This project will construct a new building and install the fiber connections to link service providers to the Airport. These new connections will be integrated with the existing Communication Infrastructure Backbone System (CIBS). This was one of the projects selected to be put on hold during the COVID-19 workplace disruption, February 2020. To regain some of the hold time, the project will be conducted as two separate work projects to deliver the building and new fiber connection on an accelerated timeline.

Previous commission authorizations (September 2017) authorized \$3.978M for the design and construction of the MMR building. The MMR was advertised in July of 2019 and resulted in an irregular bid. The additional budget of \$2.55M is required for construction of the MMR building. An additional budget of \$12M is required to install and integrate into the existing CIBS. This new scope will include the fiber connections needed to connect the providers to the Airport, dual pathways of fiber connecting the MMR to CIBS for data redundancy, and spare capacity for new services and or new providers.

Meeting Date: February 8, 2022

This request is for the authorization of additional funds to complete the building scope of the project and to initiate the design of the fiber scope. The team will return to commission for authorization to construct the fiber scope. The MMR project has been briefed to the Majority-In-Interest (MII) partners on December 9<sup>th</sup> and received a positive vote in favor of the project.

**JUSTIFICATION**

The MMR building and new connection will serve as the gateway for the Airport to communicate to the outside world with internet, telephone, and data systems. Some of the data systems include airline check-in system, baggage handling systems, departure control system, and mobile applications.

The project will construct the facility on the south end of the airport that is near existing connection points for our service providers and the Airport infrastructure. The building will have secure spaces for the Port and Service Providers to house their equipment. A network of high-speed fiber will connect the service providers' equipment to the Port equipment and from there be transferred onto the Port's existing CIBS. This project will provide a space for the legacy service provider to relocate their equipment to a more serviceable and secure area outside of the Airport's baggage operation area and to negotiate a new lease agreement. The vacated area can be modified to accommodate the planned future expansions.

This project will relocate and upgrade the legacy connections from a copper to high-speed fiber and install two pathways to connect the MMR to the Main Distribution Rooms (MDR). The second pathway is not existing in the current system configuration. The second pathway will provide data redundancy and resiliency to the existing connections. The pathways established will have spare capacity for future fiber expansions as the data needs grow at the Airport.

***Diversity in Contracting***

There are multiple elements within the scope of this project that will provide WMBE business opportunities. The Design Build effort will have a goal of 12% WMBE participation rate. The fiber design effort will utilize an existing IDIQ contract which has an aspirational goal of 16% that will apply to this work.

**DETAILS**

This project will include two separate work projects; one will include the design and construction of the MMR and the second will be the design and construction of the fiber required to connect the MMR to the rest of the Airport.

***Scope of Work***

The Telecommunication Meet Me Room project will consist of:

- (1) Design and construct a 1,000 square foot (approx.) single story structure.

Meeting Date: February 8, 2022

- (2) Enhanced on-site security to ensure secure operations without requiring service providers to access the Security Identification Display Area (SIDA). Building location is outside of the SIDA.
- (3) Install underground structures, and conduit pathways to intercept the International Arrivals Facility (IAF) Duct bank system.
- (4) Install underground structures, and conduit pathways for service providers to access from International Boulevard.
- (5) Connect the MMR building to the existing Airport utility connections.
- (6) Install landscaping, and secure and controlled gate access around the facility.
- (7) Design the MMR building to have separate Port and service provider spaces to house equipment.
- (8) Design and install cable trays to support internal to MMR fiber interconnections.
- (9) Design primary and secondary fiber pathways from the MMR facility to each Main Distribution Room (MDR).
- (10) Install passive and active equipment needed to transport services from the providers to the airport end users.

**Schedule**

The scope will be completed using two individual work projects. The building will be completed as a Design-Build (DB) project, and the fiber will be a Design, Bid, Build (DBB). The projects will be run concurrently as some information from the building is required to complete the fiber design.

*Activity*

Commission Authorization (Building DB, Fiber Design)	
<b>Building</b>	
Design Build Procurement Start	2022 Quarter 2
Construction Start – Building	2023 Quarter 2
In Use Date – Building	2024 Quarter 1
<b>Fiber</b>	
Design Start	2022 Quarter 2
Commission Construction Authorization	2023 Quarter 2
Construction Start	2023 Quarter 4
In Use Date	2025 Quarter 1

Meeting Date: February 8, 2022

<b>Cost Breakdown</b>	<b>This Request</b>	<b>Total Project</b>
Design	\$3,747,000	\$3,822,000
Construction	\$3,978,000	\$15,878,000
Total	\$7,725,000	\$19,700,000

**ALTERNATIVES AND IMPLICATIONS CONSIDERED**

**Alternative 1 – Defer the project**

Cost Implications: Approximately \$750,000 would need to be expensed.

Pros:

- (1) No capital investment.

Cons:

- (1) No new facility is constructed.
- (2) A future project will be needed to relocate legacy connections to a permanent location.
- (3) Additional scope, schedule, and cost would be required by future projects for temporary connections. This could result in significant disruptions of service.
- (4) No new space available for new providers to bring services to the Airport.
- (5) Without leverage to require a move, legacy provider remains in place.
- (6) No new connections available for new services.
- (7) No new fiber connections would be available for use.

This is not the recommended alternative.

**Alternative 2 – Construct the MMR building and install only the primary pathway (Reduced connections).**

Cost Implications: \$15,000,000

Pros:

- (1) Constructs a secure building for the telecommunication interconnections.
- (2) Relocates legacy connections to a permanent location.
- (3) Provides a space for providers to bring in new services.
- (4) Provides the opportunity to negotiate a lease agreement with the legacy provider and any new providers.
- (5) Upgrades copper connections to high-speed fiber.

Cons:

- (1) No secondary pathway is installed. There is a potential for longer outages in the event of a disruption (No connection redundancy).
- (2) A separate project would be needed to add interconnections within the Airport to transfer services to some remote offices or tenants.
- (3) Loss of additional capacity space with no alternative pathway. Primary pathway will be reaching capacity with future fiber installations to add more connections.

Meeting Date: February 8, 2022

- (4) Limited available connections for new providers to bring services to the Airport.
- (5) A future project would be needed to establish an alternative pathway to add more fiber connections.

This is not the recommended alternative.

**Alternative 3** – Construct the MMR Building and install both fiber pathways (Primary and Secondary).

Cost Implications: \$19,700,000

Pros:

- (1) Construct a secure building for telecommunication interconnections.
- (2) Relocate legacy connections to a permanent location.
- (3) Provides space for new service providers to access the Airport infrastructure.
- (4) Creates leverage for a lease agreement with the legacy provider.
- (5) Upgrades copper connections to high-speed fiber.
- (6) Installs a secondary pathway to connect the MMR to each MDR. This will add additional connections and provide data redundancy.
- (7) Installs a new tray pathway for future fiber expansions.

Cons:

- (1) Highest capital investment.

***This is the recommended alternative.***

**FINANCIAL IMPLICATIONS**

***Cost Estimate/Authorization Summary***

	Capital	Expense	Total
<b>COST ESTIMATE</b>			
Original estimate	\$5,100,000	\$50,000	\$5,150,000
Current change	\$14,249,000	\$301,000	\$14,550,000
Revised estimate	\$19,349,000	\$351,000	\$19,700,000
<b>AUTHORIZATION</b>			
Previous authorizations	\$3,928,000	\$50,000	\$3,978,000
Current request for authorization	\$7,424,000	\$301,000	\$7,725,000
Total authorizations, including this request	\$11,352,000	\$351,000	\$11,703,000
Remaining amount to be authorized	\$7,997,000	\$0	\$7,997,000

***Annual Budget Status and Source of Funds***

This project, CIP C800762, was included in the 2022-2026 capital budget and plan of finance with a budget of \$5,100,000. A budget increase of \$14,249,000 was transferred from the Aeronautical Reserve CIP C800753 resulting in zero net change to the Aviation capital budget. The increase in budget was driven in large part by expanding the scope to connect to all three MDRs, the addition

Meeting Date: February 8, 2022

of the secondary pathway, including fiber to support existing fiber connections, and some increase was a result of escalation from the project deferment. This project received airline Majority in Interest approval.

***Financial Analysis and Summary***

Project cost for analysis	\$19,700,000
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	\$.06 in 2025

***Future Revenues and Expenses (Total cost of ownership)***

This MMR facility will be monitored 24/7 with backup power. The maintenance cost is estimated at \$10,000 year.

**ADDITIONAL BACKGROUND**

The MMR project has been in discussion and design with the initial commission action in 2017. The scope only included connection to one of the main distribution rooms (MDR3) with new connections being established through this pathway and for legacy connections to be moved later.

The project team underwent a detailed review of the various locations available to house these connections. The location at the south end of the airport is near existing connection points for both the Airport and Service Providers. The fiber connections were limited at this stage and being considered for inclusion in other telecommunication work.

In July 2019, the project team advertised a design build package that included the construction of the building and the connection to the existing Airport infrastructure. That bid resulted in one bid with a cost greater than 35% over the engineers estimate. The bid was reviewed, with some line items removed, while the team began the process of returning to commission for additional funding when the project was put on hold and the deferred project list during the COVID-19 workplace disruption.

In September 2021 the project efforts were restarted, and scope increased to be fully functional by including the fiber required to connect to each MDR (3 in total), sufficient circuits to migrate the legacy connections, and to establish the connection infrastructure within the MMR facility for future growth from existing or new suppliers. Through the restarted efforts the secondary leg was identified and included to improve the Airport’s data redundancy.

Meeting Date: February 8, 2022

**ATTACHMENTS TO THIS REQUEST**

- (1) Presentation

**PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

September 26, 2017 – The Commission authorized \$3,978,000 for design and construction.