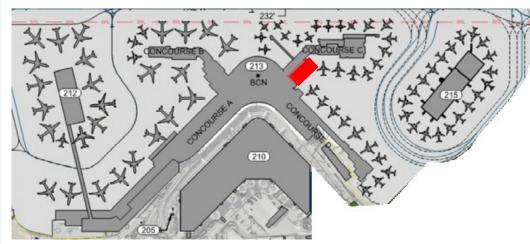
C1 Building Expansion Project

Commission Meeting March 10, 2020

Item No. <u>9a Supp</u>

Meeting Date: March 10, 2020

C1 Building Location



Area of work in red



New Concept

Existing

C1 Building Project Drivers

Highest and Best Use of Existing Facilities

- Currently housing centralized screening for C1 system and TSA operational and leased space (not public facing)
- Only substantial location at SEA to build "up" not "out"

Meet Current Customer and Tenant Demand

- Meet Airport Dining and Retail food and beverage deficiency
- Provides space for pent-up premium lounge demand
- · Provides office space capacity for existing tenant pent-up demand

Increase Non-Aeronautical Revenue

Increased Small Business Jobs and Employment

- Airport Dining and Retail Kiosks
- A/E Consultants
- Construction

C1 Building Project Drivers (Cont.)

Customer Service Improvements

- Improved Airport Dining and Retail (ADR) options
- Added Premium Lounge Capacity
- Opportunity to Reflect New SEA Brand

Operational Improvements

- Passenger congestion and lack of seating near Horizon gates
- Loading Dock/Track/Recycling
- Maintain efficient baggage system connections

Amenities

- Flexibility for All Gender Restrooms
- Second Post-Security Meditation Room
- Mothers Nursing Suites

C1 Project Scope

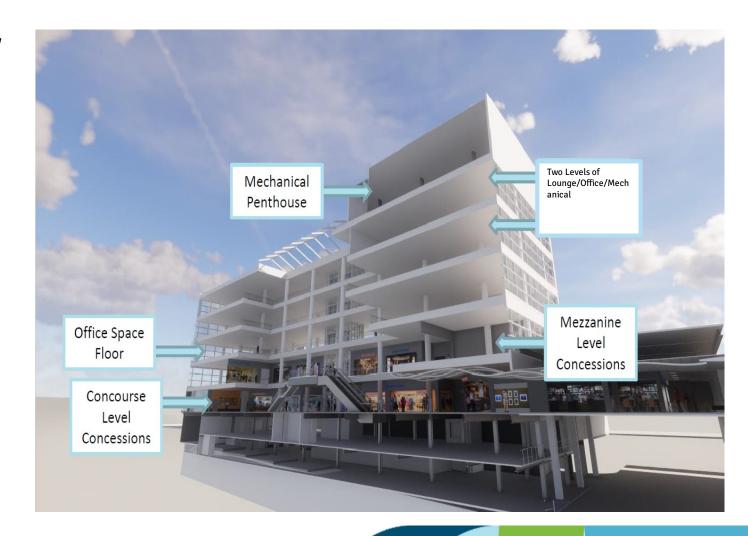
The C1 project provides for the re-use and redevelopment of the existing three floor building (redeveloping the concourse level and first expanded floor) into publicly accessible space to accommodate new dining and retail spaces.

The project expands up four additional floors to provide office and lounge space. It creates a rooftop mechanical penthouse, an additional expansion of the C3 hold room (additional gate seating) and adds a loading dock.

There will be **no** added **gates** nor **additional airplane operations** as a result of the C1 project.

C1 Building Overview

- Four additional floors on top of existing twostory C1 Building
- 70K sf of incremental office/lounge/ space.
- 25K sf of additional ADR space (30K+ sf deficiency based on 2016 ADR study)
- Additional public space consisting of more seating in the congested C3 gate area, new public restrooms and additional public amenities, including 670 SF of nursing mother's space and 722 SF of meditation space.



Airport Dining and Retail Deficiency

TABLE 5C

VARIANCE SUPPORTABLE SPACE BY ZONE SUMMARY (SQ. FT.)

Seattle-Tacoma International Airport Concession Master Plan Demand Analysis

		Retail	Specialty Retail	Retail	Total Airport
Concourse C	(8,985)	(966)	1,050	(1,479)	(10,381)
Concourse D	(13,619)	(1,649)		-	(19,353)

Sustainable Project Framework

- C1 is the Airport's first Tier 3 project
- SPARC (Sustainability Project Assessment and Review Collaboration)
 - Identified key project analyses
- Sustainable Design Approach
 - Requires designers to conduct range of sustainability and cost analyses
- Port staff will review results and develop recommendations in Sustainable Design Strategy
- Consult with Commission's E&S Committee at 30% design

C1 Sustainable Design Approach (SDA)

Category	Design Analyses	AV Environment
Energy and Carbon	 Total energy use (electricity, liquid fuel, natural gas) Options to reduce energy by 5%, 10%, and 20% below Washington State Energy Code Capital and total cost of ownership (TCO) for each proposed option 	 Estimate carbon emission and reduction from proposed options.
Materials	 Provide technical specifications and amounts of concrete, steel, and gypsum Develop options to reduce embodied carbon for those materials 	 Estimate carbon reductions from lowest embodied level

C1 Sustainable Design Approach (SDA-Cont)

Category	Design Analyses	AV Environment
Water conservation	 Water use and cost of options to reduce water use by 10% and 20% below Uniform Plumbing Code 2015 and Washington State Amendments Proposed options must meet the Port's existing design standards 	Review
Transportation	 Options to support employees that commute via active transportation, public transportation, or other non-drive alone modes Cost estimates (TCO) 	Review
Innovation	 Additional options that could be considered innovative techniques Provide evidence of past precedent within the last three years and corresponding performance data for Port review 	Review

C1 - Diversity in Contracting

Diversity in Contracting (WMBE) Aspirational Goal Range for C1:

Design 9%-15%

Construction 8%-15%

A final goal will be established before we advertise.

The Port-Gen C1 Project informational meeting on February 26 had over 120 guests.

Design Approach

Design Status and Strategy

- Project Definition Document created (PDD)
- Utilities and structure have been reviewed by engineers
- Designer will be required to have experience "designing to budget"
- Port design reviews will be limited to key personnel

Design Success

- Designing to budget
- Using architectural elements to draw passengers to 2nd floor ADR spaces
- Creating an open and well-lit environment

Project Delivery

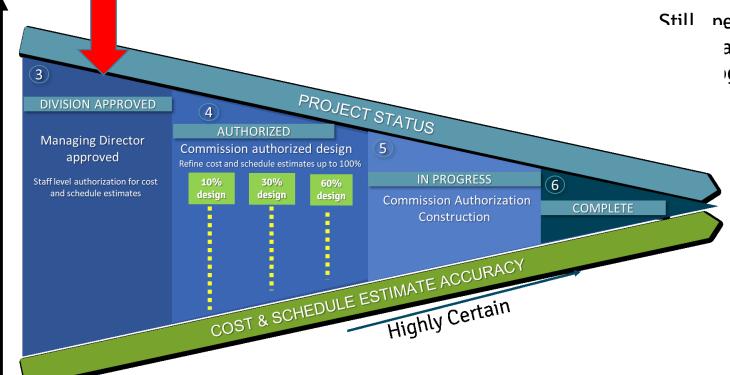
- General Contractor / Construction Manager (GCCM)
 - The GCCM will provide and extensive survey of existing conditions in the C1 Building
 - Provide a construction estimate at each major design milestone. This approach will assist with the project team's goal of scope and budget control.
 - The GCCM will provide essential input on project phasing.

Project Status

We are here

The C1 PDD was approved by the Managing Director of the Airport on January 17, 2020.

Still pending in Status 3, is Airline al, scheduled for prior to GC/CM gram Management request.



Passage of time

Project Estimate

Association of the Advancement of Cost Engineering (AACE) – AACE International Recommended Practice 18-R 97. 2005

Class	Level of Project Definition	Purpose	\$ Accuracy Range
Class 4	1 to 15%	Study of Feasibility	L: -15% to -30% / H: +20% to +50%

Low (L), High (H)

Project Estimate (Cont.)

C1 has a Class 4 estimate that is based on a project definition of between 1 and 15 percent complete, and the range of accuracy is 15-30% on the low side and up to 20-50% on the high side.*

C1 Class 4
Program Estimate
\$340M

C1 Class 4, Hard construction est. 1 \$189.2M

C1 Class 4, Hard construction est. 2 \$207.1M

Association of the Advancement of Cost Engineering (AACE) – AACE International Recommended Practice 18-R 97

Look Ahead

1. Comm. Briefing and Introduction

- March 10, 2020

2. Comm. Auth to Advertise for Design

- March 24, 2020

3. Comm. Auth. GC/CM and Program Management

- Q2, 2020

4. Issue Design Notice To Proceed

- Q3, 2020



C1 Building Expansion Project

END

C1 Space program

Presentation Appendix

SPACE PROGRAM - AS SHOWN IN PREFERRED OPTION

Baggage (Storage)
Bridge (Office)
Concourse Level
Mezzanine
Level 1 (Office)
Level 2 (Lounge 1)
Level 3 (Lounge 2)
Level 4 (Penthouse)
Penthouse Roof
Total

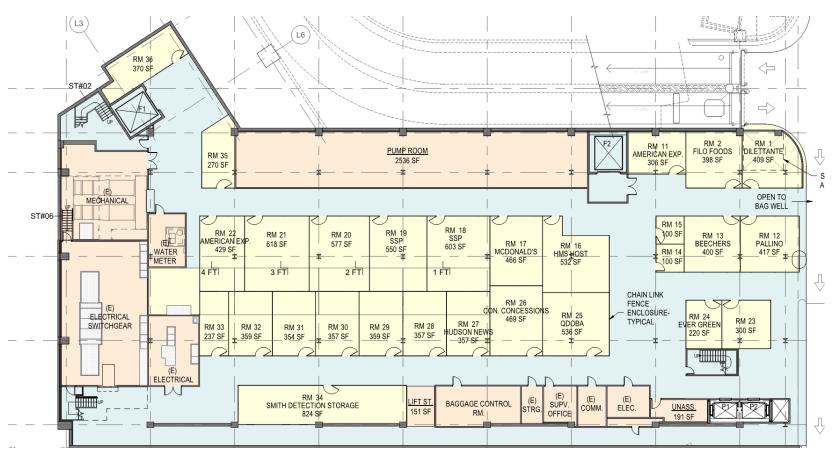
SPACE PROC	INMINI - MUL	STIC TYTE III		DOFFICH									
		ADR	Loading			Utilities		Nursing					Floor
Circulation	ADR	Storage	Dock	Restrooms	Seating	M-E-C-P	Meditation	Mothers	Office	VIP 1	VIP 2	BHS	Totals
12,036		11,669				7,288							30,993
7,423		3,363	2,286			250			14,558			1,557	29,43
14,996	12,957			1,075	2,561	621	-						32,210
8,182	11,079			1,099	2,754	829	722	670					25,335
2,922				584		1,108			18,313			,	22,92
2,080				772		1,024			7,016	14,735			25,627
2,006						8,355					15,124		25,489
374						9,946							10,320
441						238							679
50,460	24,036	15,032	2,286	3,530	5,315	29,659	722	670	39,887	14,735	15,124		203,013

Note: Bridge Level Utilities square footage excludes upper portions of mechanical and electrical rooms

Existing C1	·	98,880
C1 Preferred Concept		203,026
	Δ=	104,146
Existing C1 Footprint		30.085

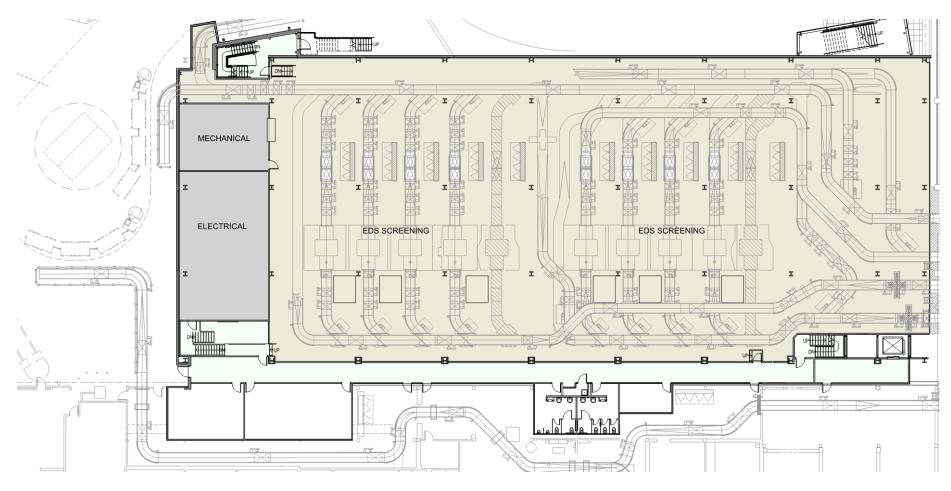
C1 Existing Baggage Level **Presentation Appendix** MECHANICAL WATER METER ETD SCREENING ELECTRICAL SWITCHGEAR ELECTRICAL ELECTRICAL COMMUNICATIONS BAGGAGE CONTORL RM. Baggage level

C1 Proposed Baggage Level



Baggage level

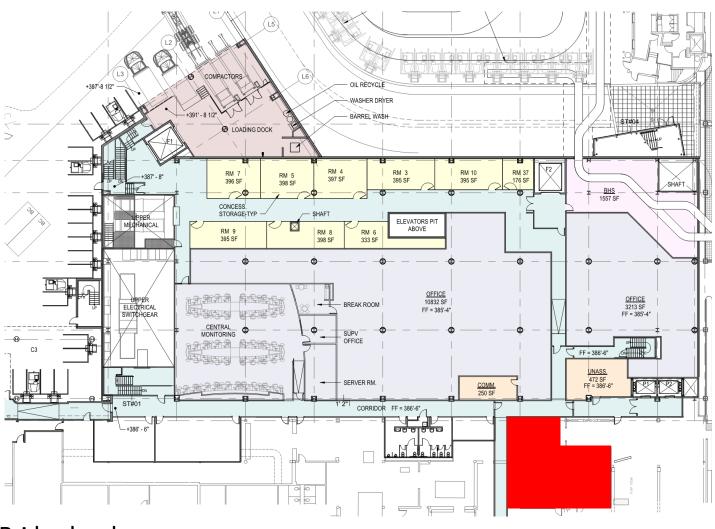
C1 Existing Bridge Level



Bridge level

C1 Proposed Bridge Level

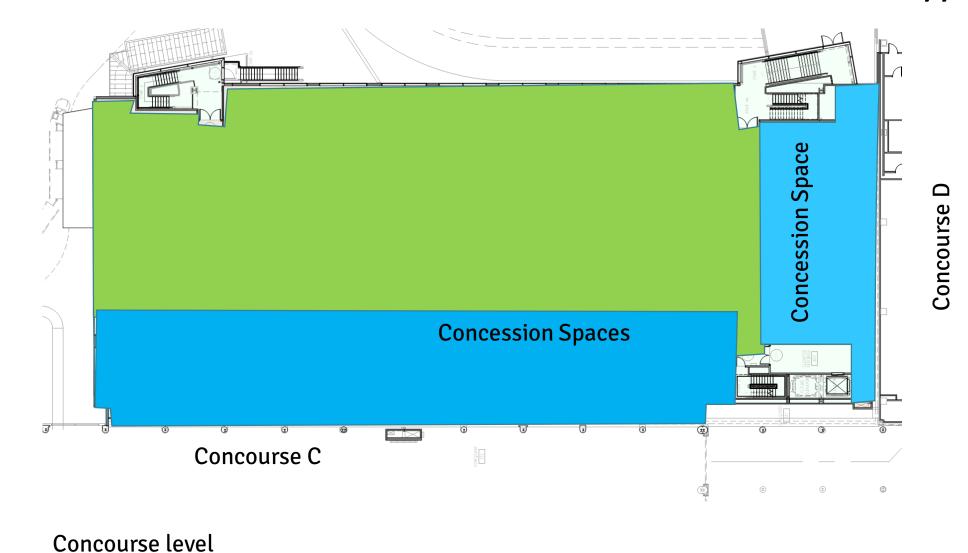
Presentation Appendix



Bridge level

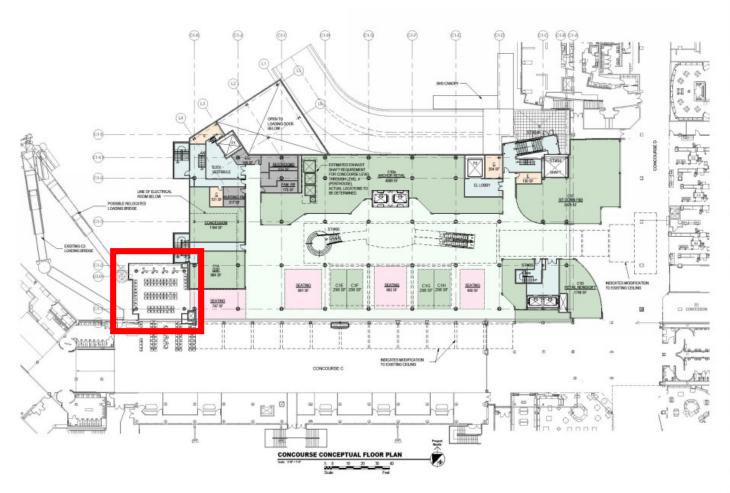
C1 Existing Concourse Level

Presentation Appendix



25

C1 Proposed – Concourse Level



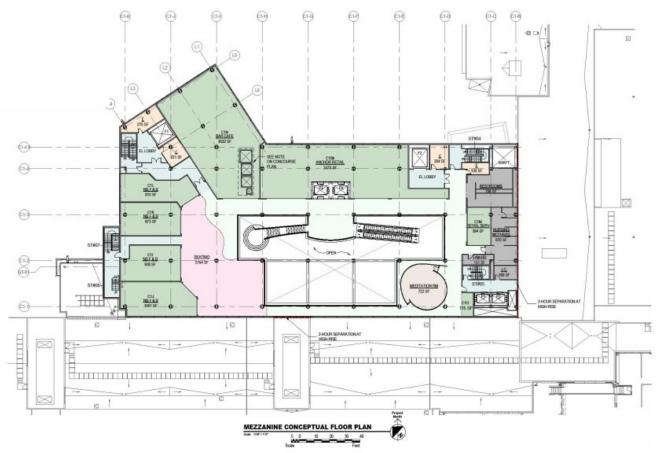


Atrium View to West



Atrium View to East

C1 Proposed – Mezzanine Level



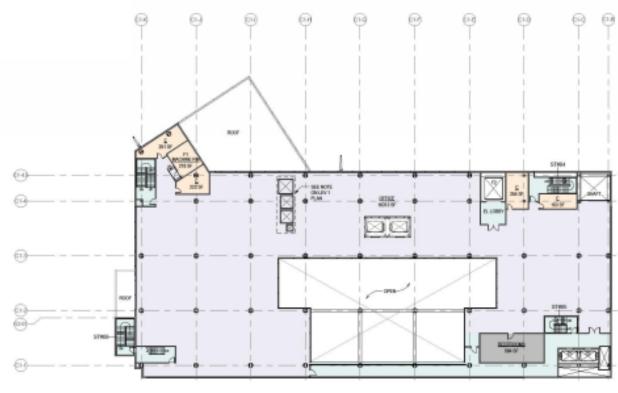


Level 2 Atrium View



Level 2 Atrium View

C1 Proposed – Level 1, Office / Lounge





C1 Proposed – Level 2, Office / Lounge





C1 Proposed – Level 3, Office / Lounge

