LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

VERSION 3

MAY 16, 2018

THIS DOCUMENT TO BE USED IN CONJUNCTION WITH THE FOLLOWING:
1. DESIGN CONSTRUCTION HANDBOOK (DCH)
2. BIM STANDARDS, INCLUDING LAWA SURVEY (INCORPORATED INTO THE DCH)

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

CONTENTS

GENERAL NOTES:

1. THE INFORMATION IN THIS VERSION SUPERSEDES PREVIOUS VERSIONS
2. CONTRACTOR / ARCHITECT TO VERIFY FINISH FLOOR LEVEL ELEVATION
3. REFERENCE EXAMPLE DRAWINGS ARE OF TERMINAL 1.5
4. SMOKE EVACUATION SYSTEMS TO BE COORDINATED
5. WATERPROOFING SYSTEMS TO BE COORDINATED

INFORMATION NOT INCLUDED IN VERSION 3:

- STRUCTURAL ENGINEERING
- MECHANICAL ENGINEERING
- BAGGAGE HANDLING SYSTEMS

CHAPTER 1

OVERVIEW

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

OVERVIEW

INTRODUCTION

This document provides design intent, criteria, direction and guidance to Project Development Teams responsible for the design, engineering and construction of Terminal Cores and Facades at Los Angeles International Airport (LAX). It is intended for use as a reference tool for architects, engineers, and contractors in the design, manufacture and installation of the exterior enclosure systems of terminal buildings. The over arching objective of this document is to provide the information and guidance necessary so that the combined result of the various terminal modernization programs and renovation projects is a unified, cohesive Central Terminal Area (CTA) building aesthetic.

The Terminal Core and Facade Design Requirements are complimentary to and derived from the principles established in the LAX Design Guidelines which seek to:

- Create a Unified Airport Campus
- Enhance the User Experience

The LAX Design Guidelines were adopted by the Board of Airport Commissioners (BOAC) on March 2, 2017 as part of their approval of the LAX Landside Access Modernization Program EIR and amendments to the LAX Specific Plan. On March 23, 2017, the City Planning Commission (CPC) and the BOAC, at a joint hearing, adopted modified LAX Design Guidelines as part of the approvals of amendments to the LAX Specific Plan. These amendments, including the LAX Design Guidelines, were recommended by CPC for full City Council approval. The Cultural Affairs Commission approved the LAX Design Guidelines in April 2017. Both the Innovation, Grants, Technology, Commerce and Trade (IGTCT) and Planning and Land Use Management (PLUM) Committees unanimously voted to recommend adoption of the amendments to the LAX Specific Plan, including the LAX Design Guidelines, on May 16, 2017. City Council adopted the amendments to the LAX Specific Plan, including the LAX Design Guidelines, on June 7, 2017.

This document was prepared with the understanding and acknowledgement that terminal core and facade improvements will be designed and constructed in phases over a multi-year period of time. Each project may have different sponsors, program managers, design and engineering teams and contractors, etc. Some projects will be applying these guidelines to the design of new or replacement structures, while others will be adapting aspects of these guidelines as necessary to accommodate the renovation of existing structures.

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

OVERVIEW

NON-PROPRIETARY APPROACH

Strict adherence to the design intent of these requirements will maximize the collective potential of individual projects to achieve the objectives described above. Maximizing visual coherence and cohesion is not intended to come at the expense of open-source competitive bidding. To that end, a non-proprietary approach has been used in developing these requirements. Where specific product references occur, they are intended to communicate one or more desirable aesthetic characteristics such as material, color, finish, texture, etc. and are not intended to communicate a strict preference or requirement for the use of one manufacturer over another.

APM SYSTEM BRANDING & IDENTITY

The Automated People Mover (APM) system will have a unique identity. It will be seen as the primary passenger, airline and airport employee access mode, distinct from those historically available. The APM brand will be physically identifiable through the use of identity graphics, color, finishes, materials, and repetitive architectural elements which will work in concert to create a physical environment where the APM system is easily recognized and intuitively navigated. At the terminal, this means Elements of Continuity uniquely associated with the APM brand will be repeated within each APM Core in order to visually communicate that this terminal location is an APM system access point.

ELEMENTS OF CONTINUITY

The information contained in this document includes “Elements of Continuity.” Elements of Continuity shall be incorporated into the design in a manner that when constructed it shall match exactly the applicable requirements contained in this document. An example of an element of continuity would be the façade glazing. The qualities and characteristics of the glass such as color, reflectance, shading co-efficient, STC rating, etc. as well as the pattern language of the fenestration have been carefully studied, reviewed and approved and are applicable to the design of all cores and terminal facades. In this case, LAWA will review and approve the Terminal Core and Facade designs for strict adherence to the requirements contained in this document. Failure to comply with these requirements will result in non-approval.

Table 1: Elements of Continuity

Mullions:	Color
	Shape and Profile
	Vertical and Horizontal Spacing
Glass:	Color
	Reflectance
	Shading Coefficiency
	Transparency
Doors:	Automatic Sliding
Height:	Maximum Facade Height
APM Brand:	To Be Determined

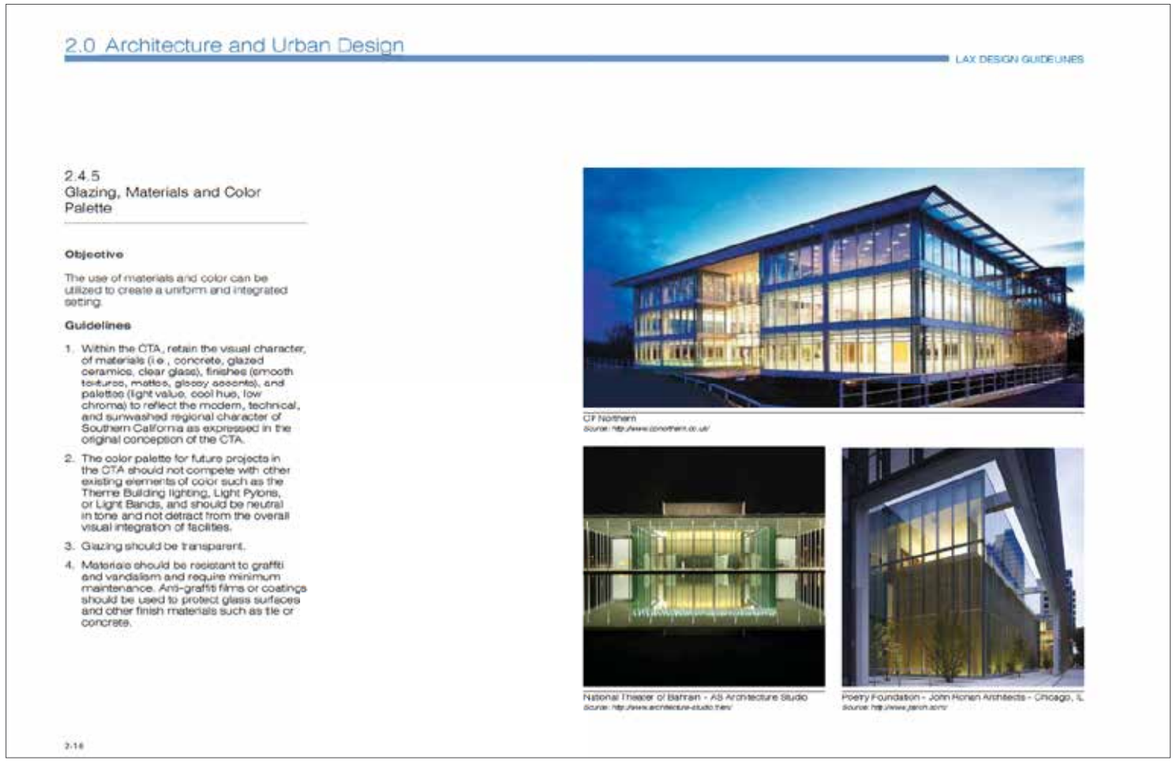
LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

REFERENCE LAX DESIGN GUIDELINES

LAX DESIGN GUIDELINES

Project teams are expected to familiarize themselves with the purpose, vision and goals contained in the LAX Design Guidelines which are applicable to the Terminal Core and Facades Projects. The Design Guidelines communicate the airport's values regarding the built environment and describe project requirements organized in the following categories: Architecture and Urban Design; Streetscape, Landscape, and Public Realm; Sustainability; and the Planning and Implementation Process.

The information contained in this document builds upon the principals contained in the LAX Design Guidelines and further details the specific requirements for projects where Cores and Terminal Facades are included in the Scope of Work. LAWA has the sole authority to interpret the application and meaning of these documents.



LAX DESIGN GUIDELINES SAMPLE PAGES

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

CURRENT DESIGN CONCEPT

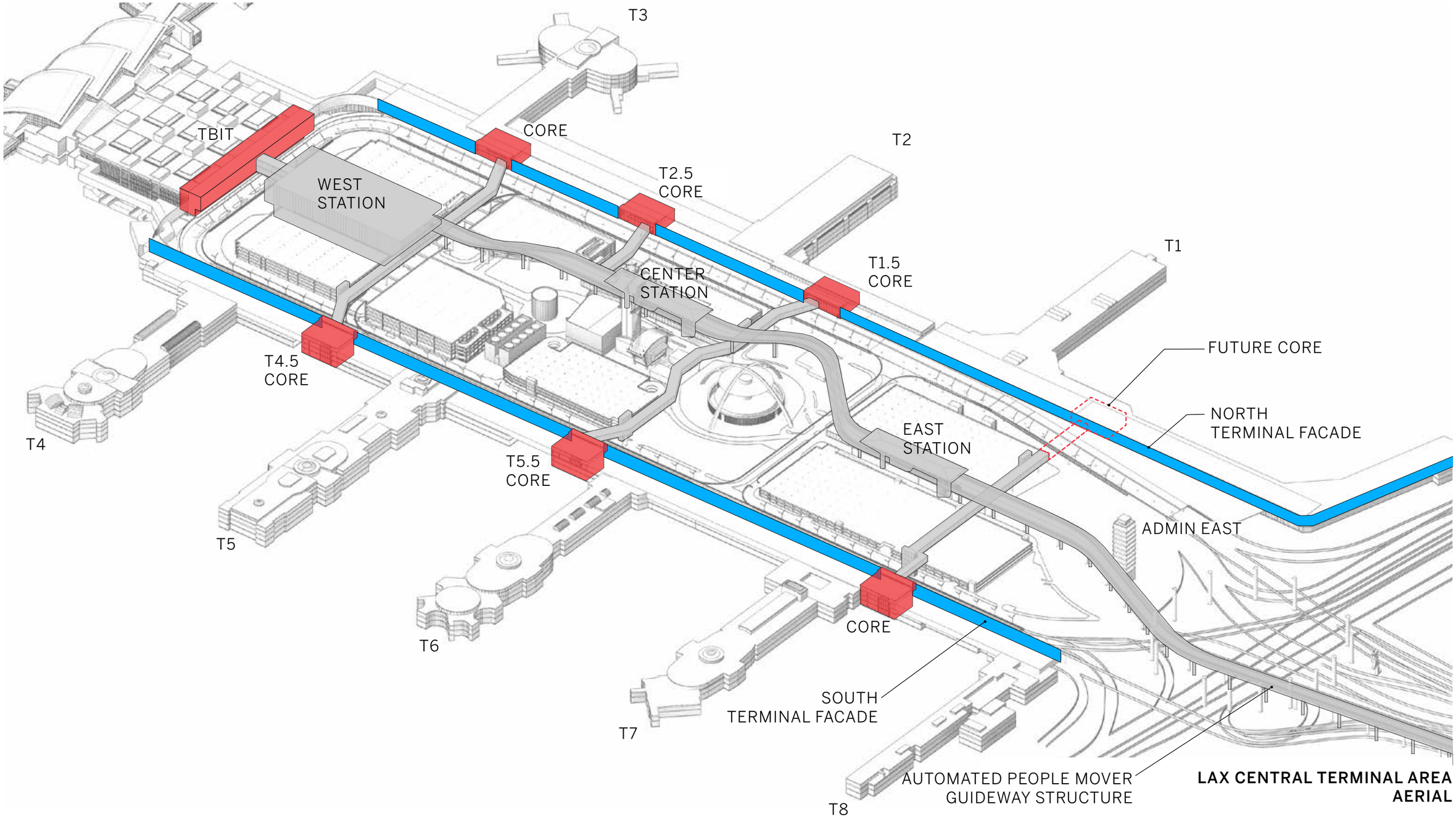
TERMINAL FACADES
CURRENT DESIGN CONCEPT

NOTES:
IMAGE DEPICTS SOUTH FACING FACADE

VERSION 3

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

FUTURE CTA DEVELOPMENT



LAX CENTRAL TERMINAL AREA AERIAL

CHAPTER 2

TERMINAL CORE AND FACADE CODE COMPLIANCE REQUIREMENTS

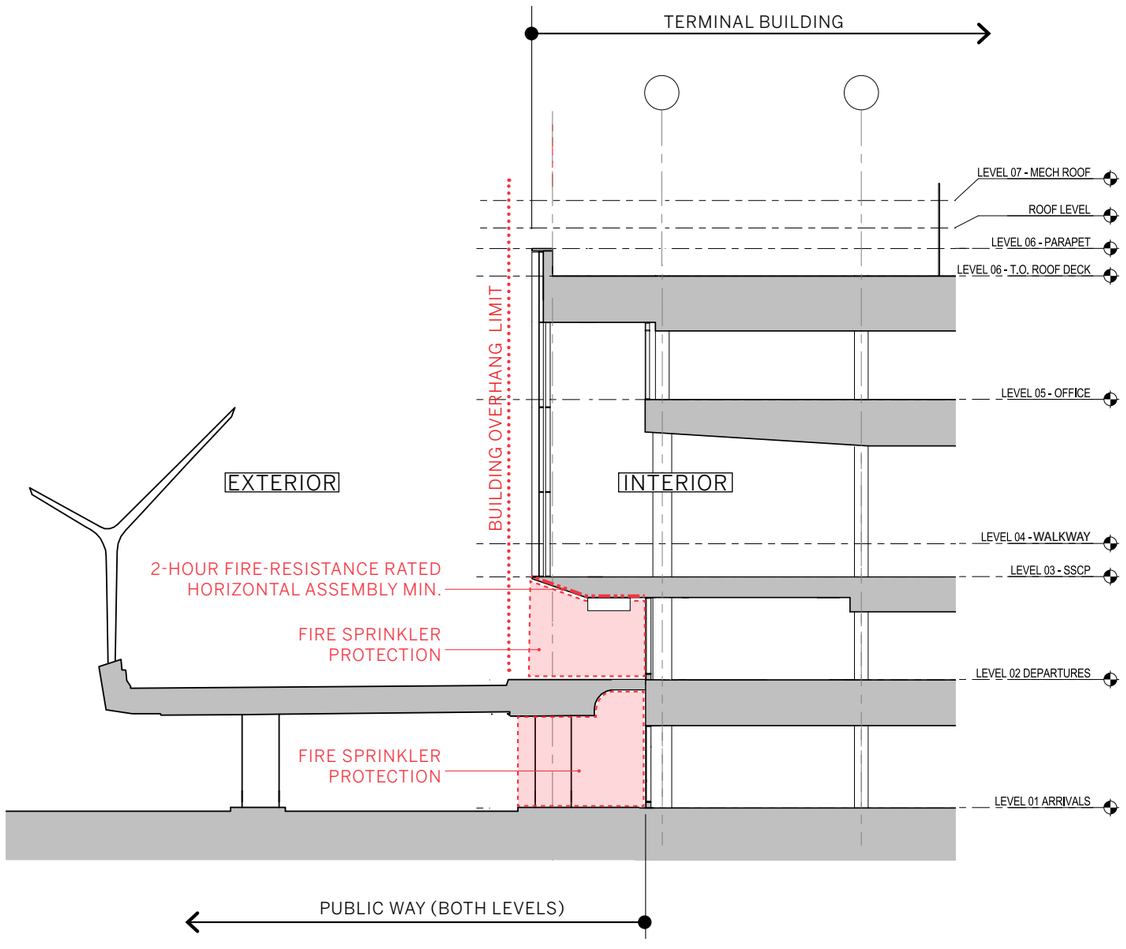


FIGURE 2.1
TYPICAL SECTION AT BUILDING CANTILEVER

CODE REQUIREMENTS PERTAINING TO PEDESTRIAN WALKWAYS CAN BE FOUND IN CHAPTER 3 IN THE *BASIS OF DESIGN FOR TERMINAL CORE AND PEDESTRIAN WALKWAY INTERFACES DOCUMENT*.

TERMINAL BUILDING/CTA ROADWAY OVERHANG REQUIREMENTS

The Central Terminal Area (CTA) is currently undergoing a significant upgrade as part of the LAX Landside Access Modernization Program and Terminal Development Program. To accommodate the future Automated People Mover (APM) Guideway and allow for passenger travel to each of the Terminals, Pedestrian Walkways will be designed and constructed, terminating at new Terminal Core structures to be developed around the CTA. The Terminal Cores will create a building cross-section that cantilevers above the existing upper level roadway, thus redefining the interior façade location around the CTA.

The intent of this section is to document the required design approach for the new building cantilever sections on the CTA-side only and is based on discussions between Los Angeles World Airports (LAWA) and the Los Angeles Department of Building and Safety (LADBS), and the feedback LADBS received from internal discussions with the Los Angeles Fire Department (LAFD). Where Terminal Buildings cantilever over the CTA roadway, the following provisoins apply:

Design Requirements and Limitations

A. The building overhang cannot extend horizontally beyond the edge of the upper level roadway sidewalk. At no point can the building overhang extend over a portion of the upper level roadway utilized by motor vehicles.

B. The floor of the building overhang will be constructed as a fire-resistance rated horizontal assembly. The floor assembly's fire-resistance rating must be commensurate with the building's construction type. At a minimum, the horizontal assembly and its supporting structure must provide a 2-hour fire-resistance rating.

C. Automatic fire sprinkler protection will be provided below the building overhang.

D. Automatic fire sprinkler protection will be provided at the arrivals level. The extent of fire sprinkler protection coverage shall be equal to, and below, the building overhang referred to in section C above.

E. The floor/sidewalk area below the building overhang on the upper level roadway must be accounted for in the Gross Building Area as defined in the Los Angeles Building Code, and be designated as part of the connected terminal building. The building area increase will be applicable to the floor level adjacent to the upper level roadway only.

F. The floor/sidewalk area below the building overhang must be open to the roadway. Permanent uses or occupancies below the overhang (e.g., concession kiosks, enclosed office areas) will not be permitted unless specifically approved by LADBS/LAFD. This provision in no way prohibits curb-side baggage check-in and skycap services.

G. The upper and lower level roadway's will maintain their designation as a Public Way.

CHAPTER 3

TERMINAL CORE TO WALKWAY INTERFACE

TERMINAL CORE & PEDESTRIAN WALKWAY STRUCTURE

One of the more challenging interfaces associated with the Work is that which occurs between the vertical circulation core and the pedestrian walkway which connects the terminals to the APM. The objective is to achieve the seamless integration of core and walkway.

Two Teams/Two Timelines: The Core, designed by one team, is intended to structurally support the pedestrian walkway designed by another. The interface is further complicated by the timing of design and construction. In most cases, the APM core will be designed and constructed before the walkway structure is designed and installed. Appropriate accommodations must be made to accept and support the future walkway structure which may include, but are not necessarily limited to the following:

- Structural capacity to accommodate bearing of the pedestrian walkway structure at identified locations
- Expansion joint(s) sized to accommodate normal building movement, as well as anticipated seismic activity of the Core and Walkway
- Knock-out panels allowing a portion of the exterior enclosure to be easily removed for pedestrian walkway installation

In some cases, the Core project also requires interface and coordination with separate terminal modernization programs and renovation projects. For example, the T5.5 Core is bounded to the west by Terminal 5 and on the east by Terminal 6. Both terminals are the subject of potential airline sponsored modernization programs which are on differing timelines.

The work of project teams occurring on both sides of any interface boundary with a concurrent or planned project should anticipate and include necessary collaboration and coordination efforts to ensure seamless integration between projects is achieved.

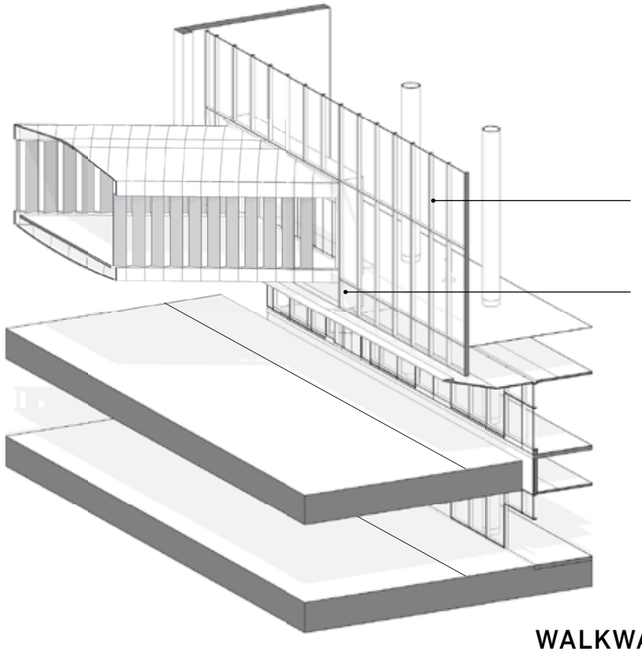
A document entitled “Basis of Design for Terminal Core and Pedestrian Walkway Interfaces” has been developed to communicate general obligations, as well as more specific requirements related to core locations, architectural approach, building systems, building code and other requirements. Detailed information is provided to Core and Pedestrian Walkway Designers regarding the approach to structural support and loading.

For convenience, the basis of design is included as a part of this section and is of critical importance to the interface objective. There is an expectation that lessons will be learned from the design and construction of each core which may cause the Basis of Design to be revised. Project teams should verify they are using the most recently published edition of the document.

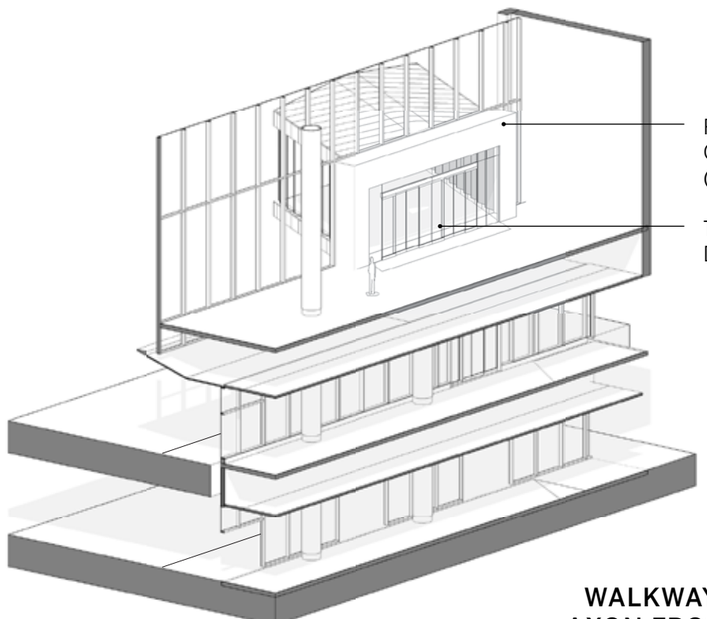
The plan diagrams shown in this section are diagrammatic in nature and are intended to show the general organization and arrangement of core elements, as well as minimum circulation requirements.

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

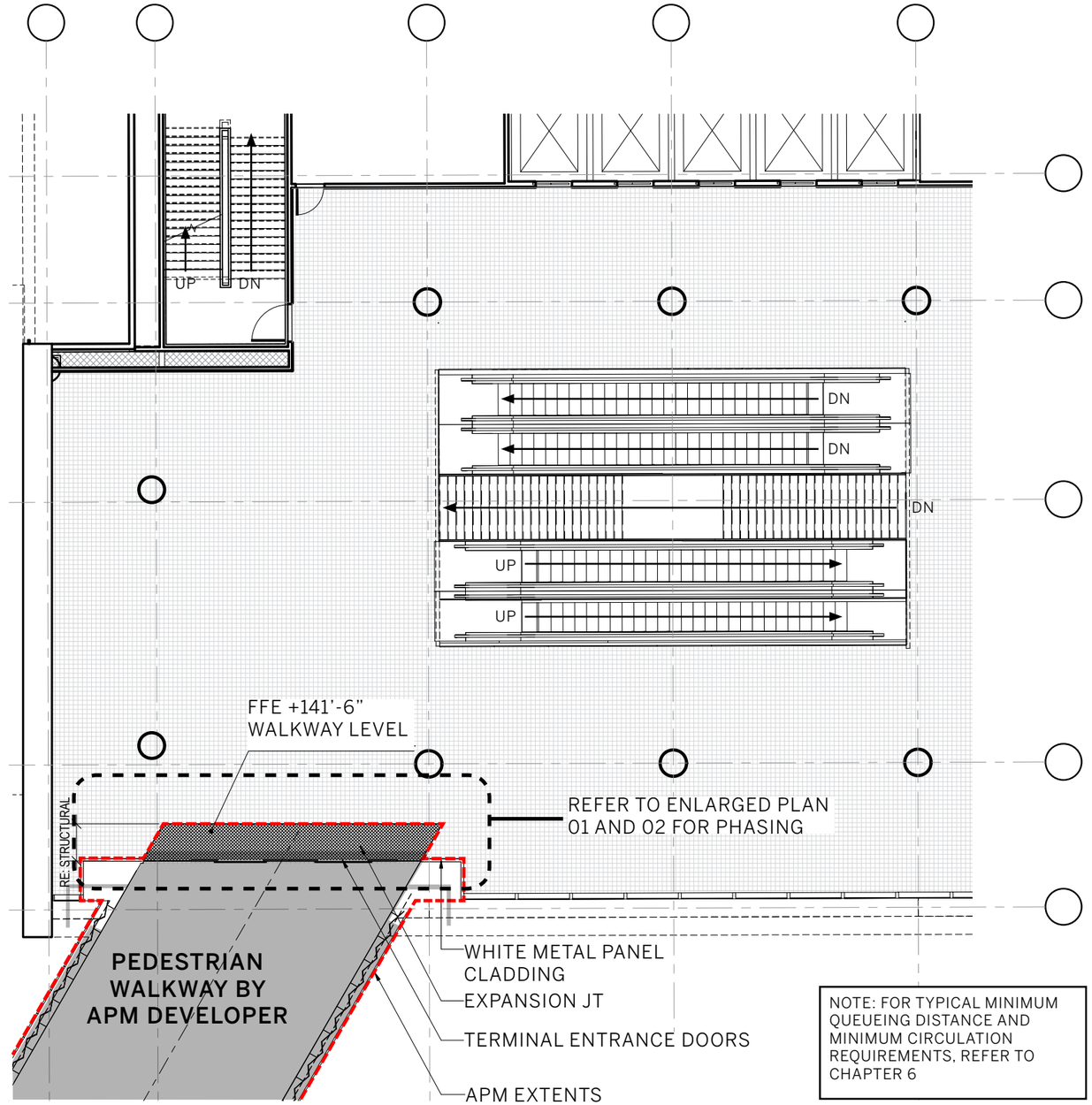
TERMINAL CORE TO WALKWAY INTERFACE



WALKWAY INTERFACE AXON FROM LANDSIDE



WALKWAY INTERFACE AXON FROM TERMINAL

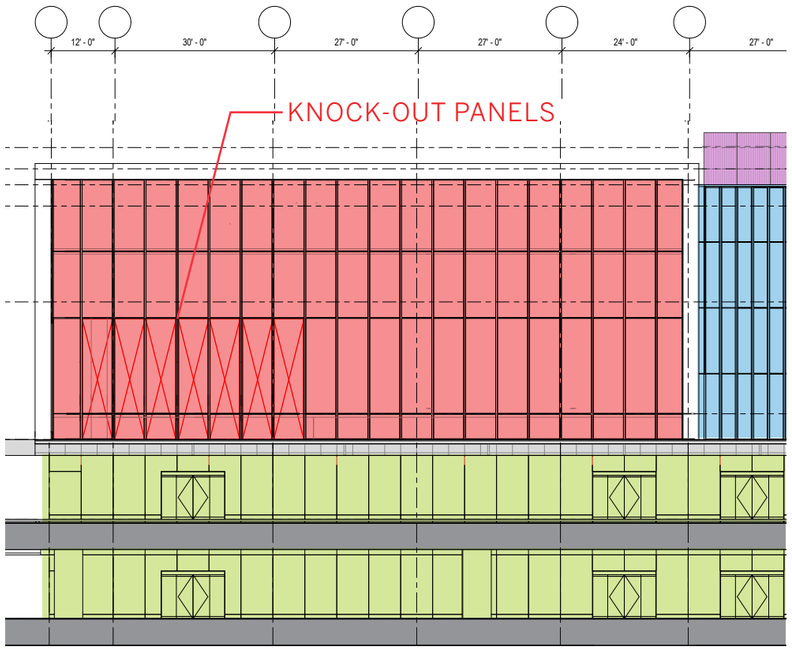


WALKWAY INTERFACE PLAN

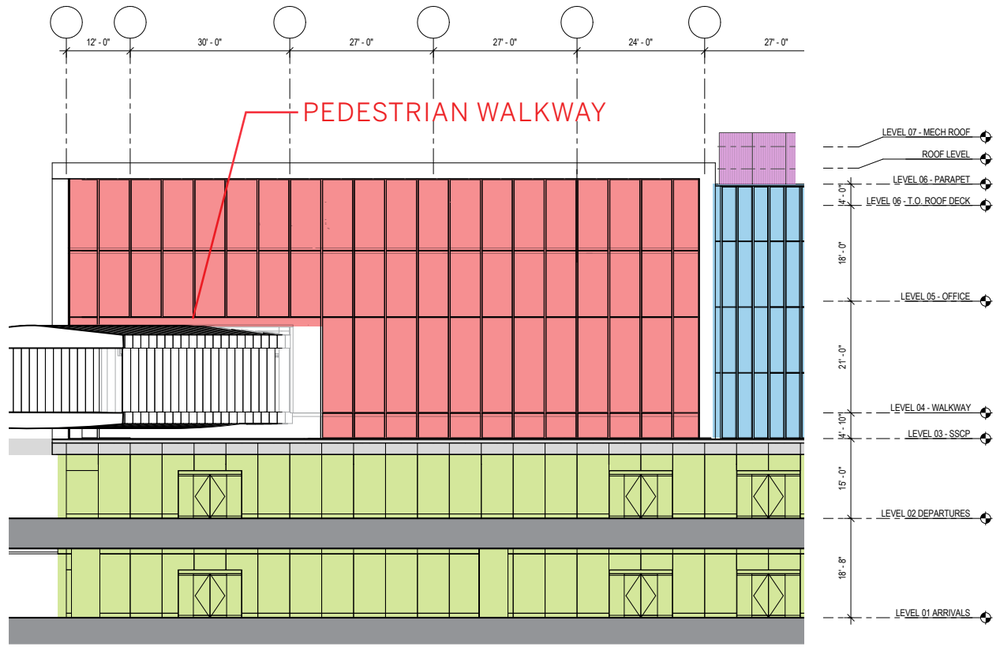
TERMINAL CORE INTERFACE
CHAPTER 3

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

TERMINAL ELEVATION



01 TERMINAL ELEVATION
BEFORE APM



02 TERMINAL ELEVATION
AFTER APM

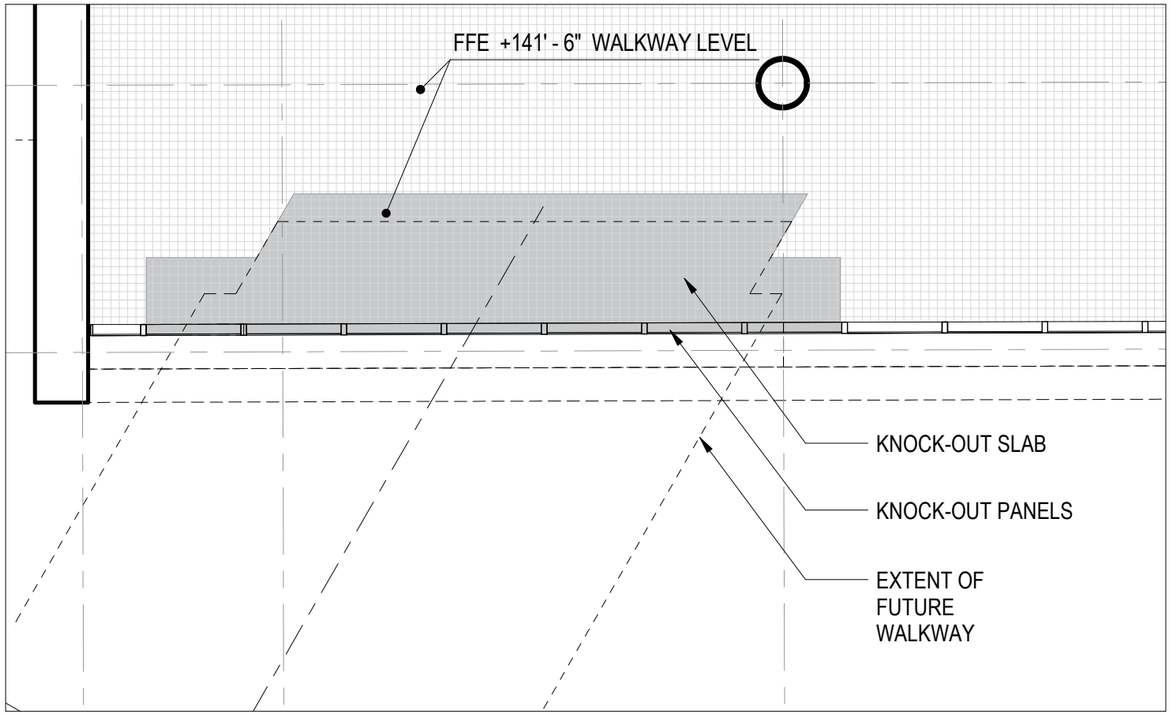
REFER TO DETAIL SHEET FOR TYPICAL CURTAIN WALL DETAILS

1. CONFIRM EXTENT OF “FRAMED OPENING” - LOCATION VARIES PER CORE
2. KNOCK-OUT PANEL LOCATIONS VARY PER CORE FOR PEDESTRIAN WALKWAY CONNECTION
3. TERMINAL ELEVATION 01 AND 02 ILLUSTRATE THE REQUIRED FACADE CONDITION PRIOR TO AND AFTER PEDESTRIAN WALKWAY INSTALLATION.

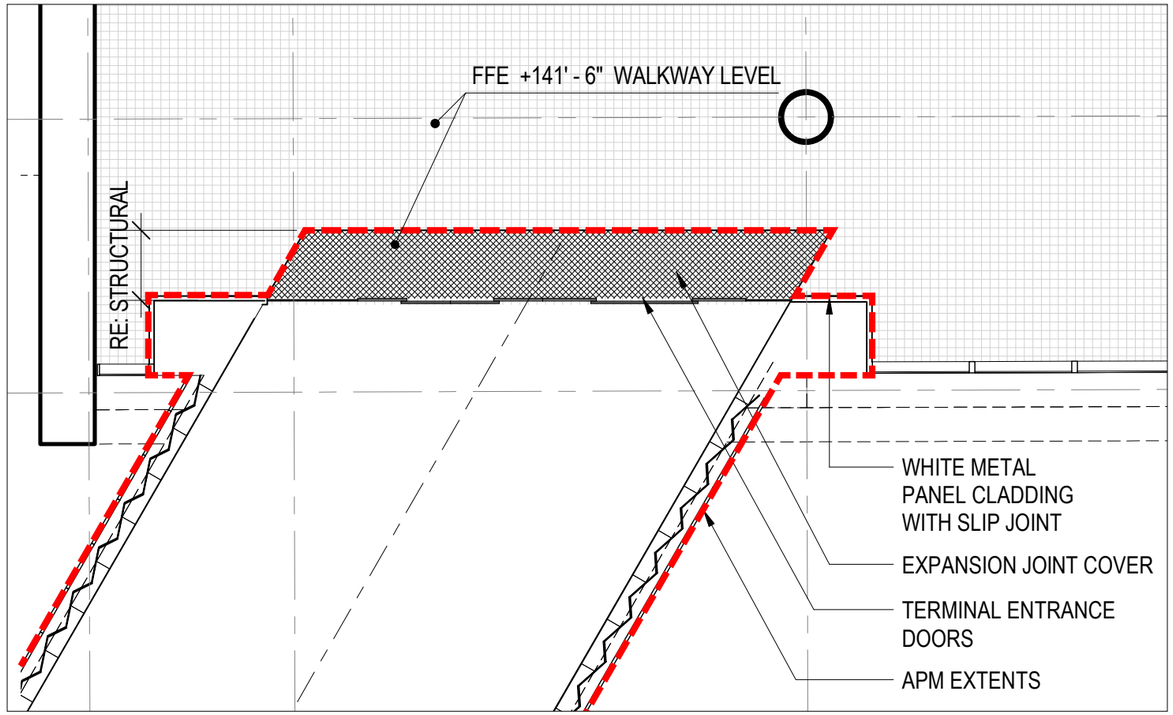
FACADE TYPE I	GL-01
FACADE TYPE II	GL-02
FACADE TYPE III	GL-03
FACADE TYPE IV	MS-01
FACADE TYPE V	MT-01

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

CORE TO WALKWAY INTERFACE - ENLARGED PLAN DETAIL



02 ENLARGED PLAN
BEFORE APM



01 ENLARGED PLAN
COMPLETED APM

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

BASIS OF DESIGN FOR TERMINAL CORE AND PEDESTRIAN WALKWAY INTERFACES

The **Basis of Design for Terminal Core and Pedestrian Walkway Interfaces** document has been developed to facilitate coordination between the APM Developer and Terminal Core Team. The APM RFP contains a 'mirror' document titled **Exhibit 10C: Interface Obligation Exhibit**. Both documents contain the same information. For Terminal Core projects, the **Basis of Design for Terminal Core and Pedestrian Walkway Interfaces** document shall be utilized.

This document to be used in conjunction with the following:

1. Design Construction Handbook (DCH)
2. BIM Standards, including LAWA survey (incorporated into the DCH)

A. GENERAL

1. Terminal core teams will be responsible for the design and construction of the terminal cores.
2. Terminal cores will be available to the APM Developer to install the Pedestrian Walkway no later than December 31, 2021.
3. APM Developer will be responsible for the design and construction of the pedestrian walkways.
4. The Pedestrian Walkway will be supported on the Terminal Core. There will be no columns on the Terminal sidewalk.

B. TERMINAL CORE LOCATIONS

1. The Terminal Core finish floor elevation at each Pedestrian Walkway interface is nominally 141'-6" amsl, other than at the TBIT interface which is anticipated to be nominally 144'-1" amsl.
2. Geospatial coordinates for the Terminal Core work points, shown in Figure 1 and Figure 2 below will be determined by LAWA and provided to the APM Developer prior to December 31, 2021. The Geospatial coordinates will be tied to the CTA Survey Control Network as outlined in the LAWA Design and Construction Handbook BIM Standards.

C. ARCHITECTURAL APPROACH

1. The curtain wall at the Terminal Cores will be designed so that a portion of the system can be disassembled and replaced by the APM Developer when the Pedestrian Walkway is constructed. The APM Developer will design and construct the replacement curtain wall to match the appearance, materiality, fit, form and function of the Terminal Core curtain wall.
2. The Terminal Cores will provide a knock-out for the Pedestrian Walkway expansion joint. The expansion joint and joint covers will be provided by the APM Developer.
3. The APM Developer will provide automatic sliding glass doors at the Terminal Core interface, but within the Pedestrian Walkway. All power, security, etc. shall be supplied from the Pedestrian Walkway by the APM Developer.
4. The APM Developer will be responsible to repair or replace any finishes impacted by the installation of the Pedestrian Walkway.
5. The APM Party shall remove and replace the fire protection of the APM support beams in a manner that restores the required fire protection and allows the free movement of the APM Pedestrian Walkway.

D. BUILDING SYSTEMS APPROACH

1. All building systems that serve the Pedestrian Walkway are to be designed and constructed by the APM Developer and will be fed from a source other than the Terminal Core (ie. APM station).

E. CODE APPROACH TO ENSURE CODE COMPATIBILITY BETWEEN PEDESTRIAN WALKWAYS AND TERMINAL CORES

1. The Pedestrian Walkway will be classified by code as a Pedestrian Walkway as defined by LABC. Requirements include, but are not limited to:

   a. The maximum exterior width of the Pedestrian Walkway will be no greater than 30'-0".

   b. 50% of the Pedestrian Walkway vertical exterior cladding is required to be open.

   c. Sprinklers are required within the Pedestrian Walkways.

   d. Sprinklers are required below the Pedestrian Walkways.

   e. Maximum travel distance to exit is limited to 400 feet if items b & c are met.

   f. Exit occupant load to be 1 person per 100 sq. ft.

2. The Terminal Core will provide egress capacity for 120 occupants from the Pedestrian Walkway. The balance of the egress required for the Pedestrian Walkway will be accommodated by the APM Developer. Egress stairs from the Pedestrian Walkway are prohibited along the terminal sidewalk.
3. All other components of the APM system are self-exiting and do not impose egress loads onto the Terminal Core. The APM station will not egress into the Pedestrian Walkways.
4. The pedestrian walkway shall be rated 1-B per LABC.
5. If a 2-hr fire barrier at the interface of the Terminal Core and Pedestrian Walkway is required, the enclosure shall be provided by the APM Developer. The APM Developer shall design the enclosure to maintain the Terminal Core top of parapet elevation and be compatible with the Terminal Core curtain wall in terms of material, finish and detailing as approved by LAWA at their sole discretion.
6. NFPA 130 (Standard for Fixed Guideway Transit and Passenger Rail Systems) is designated to be used for the APM guideway and stations. The Terminal Cores and Pedestrian Walkways are outside of NFPA 130's scope. (Other NFPA sections apply to the terminals and Pedestrian Walkways.)
7. AASHTO criteria are not applicable to the Pedestrian Walkways. As such, vehicular access of design vehicle H5 and above shall be prohibited on the Pedestrian Walkways.

F. OTHER REQUIREMENTS

1. The required minimum clear dimension from the upper level roadway to the underside of the Pedestrian Walkways is 15'.

TERMINAL CORE STRUCTURAL SUPPORT AND LOADING APPROACH

1. The Terminal Cores will be designed to accommodate both a Pedestrian Walkway whose longitudinal axis is perpendicular (orthogonal) to the face of the Terminal Core as well as a Pedestrian Walkway whose longitudinal axis has a maximum skew of 30 degrees to the face of the Terminal Core.
2. Terminal Cores will include one Pedestrian Walkway bottom support ledge beam at the Pedestrian Walkway interface location that will allow longitudinal free movement of the Pedestrian Walkway while also allowing the Pedestrian Walkway's vertical loads and transverse loads to be supported by the terminal building. The support ledge beam shall be capable of fully supporting the Pedestrian Walkway to the maximum loads indicated in Figure 2 below.

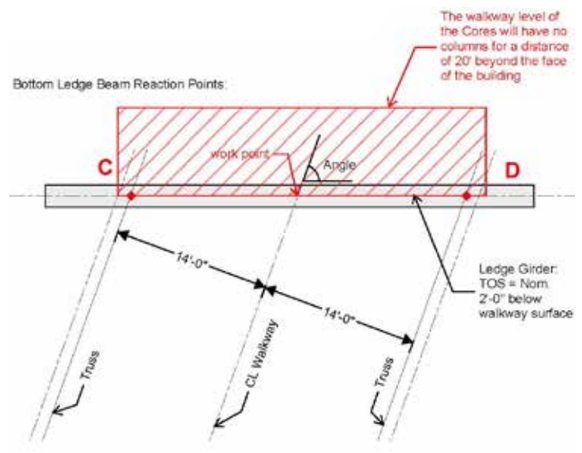


FIGURE 1
BOTTOM SUPPORT LEDGE PEDESTRIAN WALKWAY PLAN

3. The Pedestrian Walkway level will not have columns within the 30' width of the Pedestrian Walkway at the terminal interface. No columns will be located within a 20'-0" depth from this interface point.
4. The APM Developer will design and construct elastomeric bearing pads on the support ledge beams for the Pedestrian Walkway; Teflon or similar slider pad to minimize friction (friction coefficient = 0.10 or less); shims as required; seismic snubbers; and ultimate restraint mechanism.
5. The top of steel for the bottom ledge beam will nominally be 2'0" below the Pedestrian Walkway finish floor elevation. The centerline of the bearings shall be located 14'-0" from the centerline of the Pedestrian Walkway, measured perpendicular to the Pedestrian Walkway centerline. Where the Pedestrian Walkway is at an angle to the terminal, the APM Pedestrian Walkway end will be shaped such that loads are transferred to the centerline of the ledge beams, as shown in Figure 1.
6. The bottom ledge beam will be designed based on the assumption that the Pedestrian Walkway will be entirely supported at the bottom. The maximum and minimum structural loads and the maximum longitudinal movement at the Terminal Core bottom supports shall be within the ranges set forth in Figure 2.

Diagonal Condition: Pedestrian Walkways at maximum 30-degree skew to the Terminal Core (TVC), maximum 140' span

	Bottom Loaded Force (per bearing)						Ped Walkway Long Displ. (in)
	Vertical (kips)		Transverse (kips)		Longitudinal (kips)		
Bottom Support Point	C	D	C	D	C	D	
Dead Load D	320	240	85	65	30	25	N/A
Live Load L	160	120	50	40	20	15	N/A
Earthquake Ex (±)	91	114	212	159	10	10	Max 0.02H
Earthquake Ey (±)	76	120	212	159	10	10	Note 8

Perpendicular Condition: Pedestrian Walkways are orthogonal to the Terminal Core (TVC), maximum 172' span

	Bottom Loaded Force (per bearing)						Ped Walkway Long Displ. (in)
	Vertical (kips)		Transverse (kips)		Longitudinal (kips)		
Bottom Support Point	C	D	C	D	C	D	
Dead Load D	350	350	15	15	35	35	N/A
Live Load L	175	175	5	5	20	20	N/A
Earthquake Ex (±)	128	128	231	231	10	10	Max 0.02H
Earthquake Ey (±)	168	168	231	231	15	15	Note 8

FIGURE 2
STRUCTURAL LOAD TABLES

Notes:

1. APM Pedestrian Walkway reactions are based on seismic loading per ASCE 7-10, Eq. 12.8-1, with C_s as defined by section 15.4.1, R=2 and I=1.25.
2. Terminal Cores (TVCs) shall have the capacity to support the stated reactions. Overall seismic systems shall be designed per ASCE 7-10 Section 15.3.1.
3. Negative vertical load is up.
4. EQ loading direction is referenced to the Pedestrian Walkway primary axis, all EQ loads are +/-.
5. For vertical earthquake loads, consider opposite orientation occurs simultaneously on support bearings.
6. Longitudinal displacement is along main Pedestrian Walkway axis and only includes walkway displacement, building displacements shall be added to these displacements to determine movement at the joint.
7. Load combinations are considered per ASCE 7-10, ACI 318 and AISC SPSSB.
8. In transverse direction, Pedestrian Walkway shall be supported by the Terminal Core (TVC) and must accommodate anticipated Terminal Core (TVC) seismic drift (2% drift in the 475-year EQ).
9. The APM pedestrian walkway shall be seismically designed and detailed as a single simple span between the TVC and pier. Please refer to Figure 3: APM Pedestrian Walkway Seismic Support Concept.

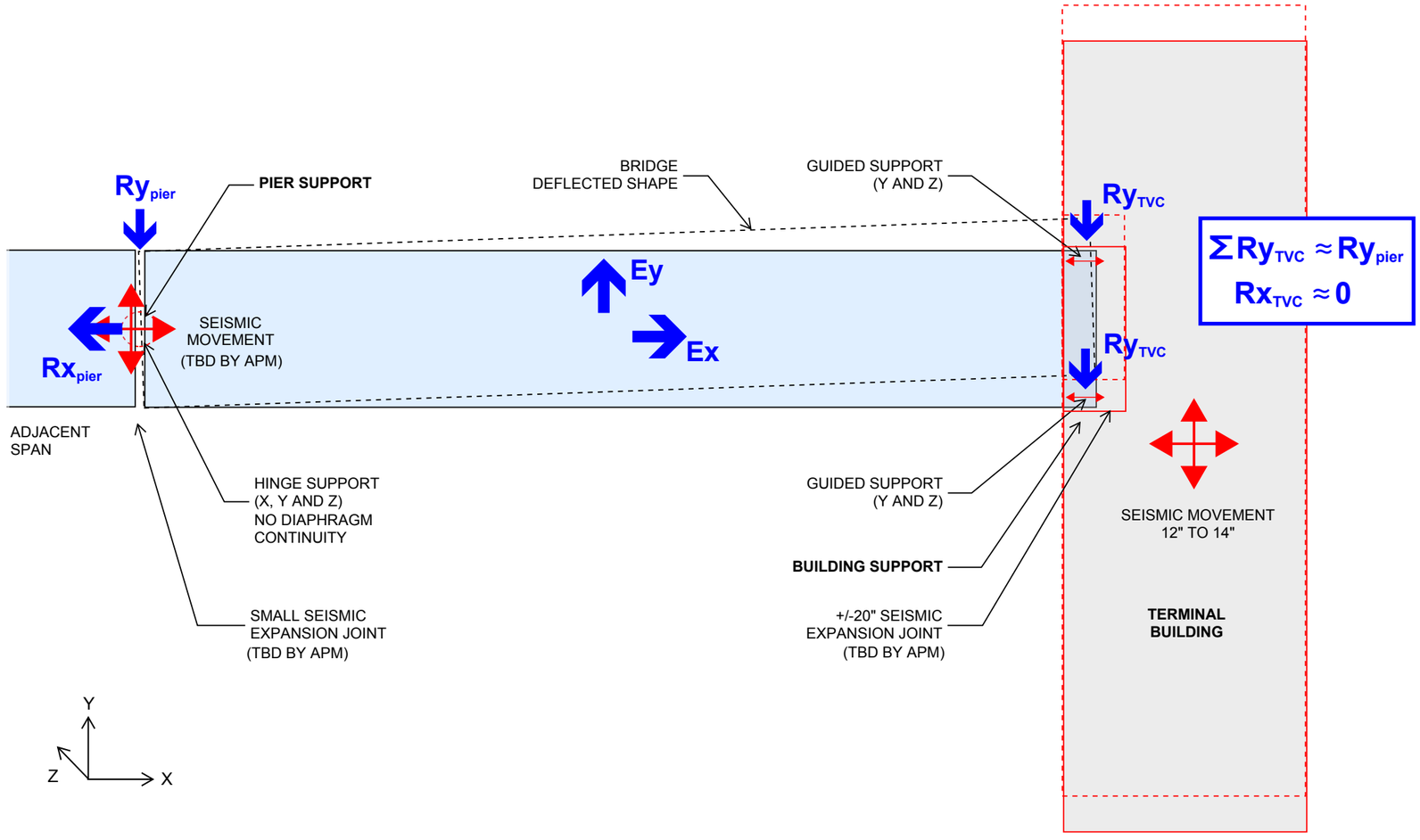
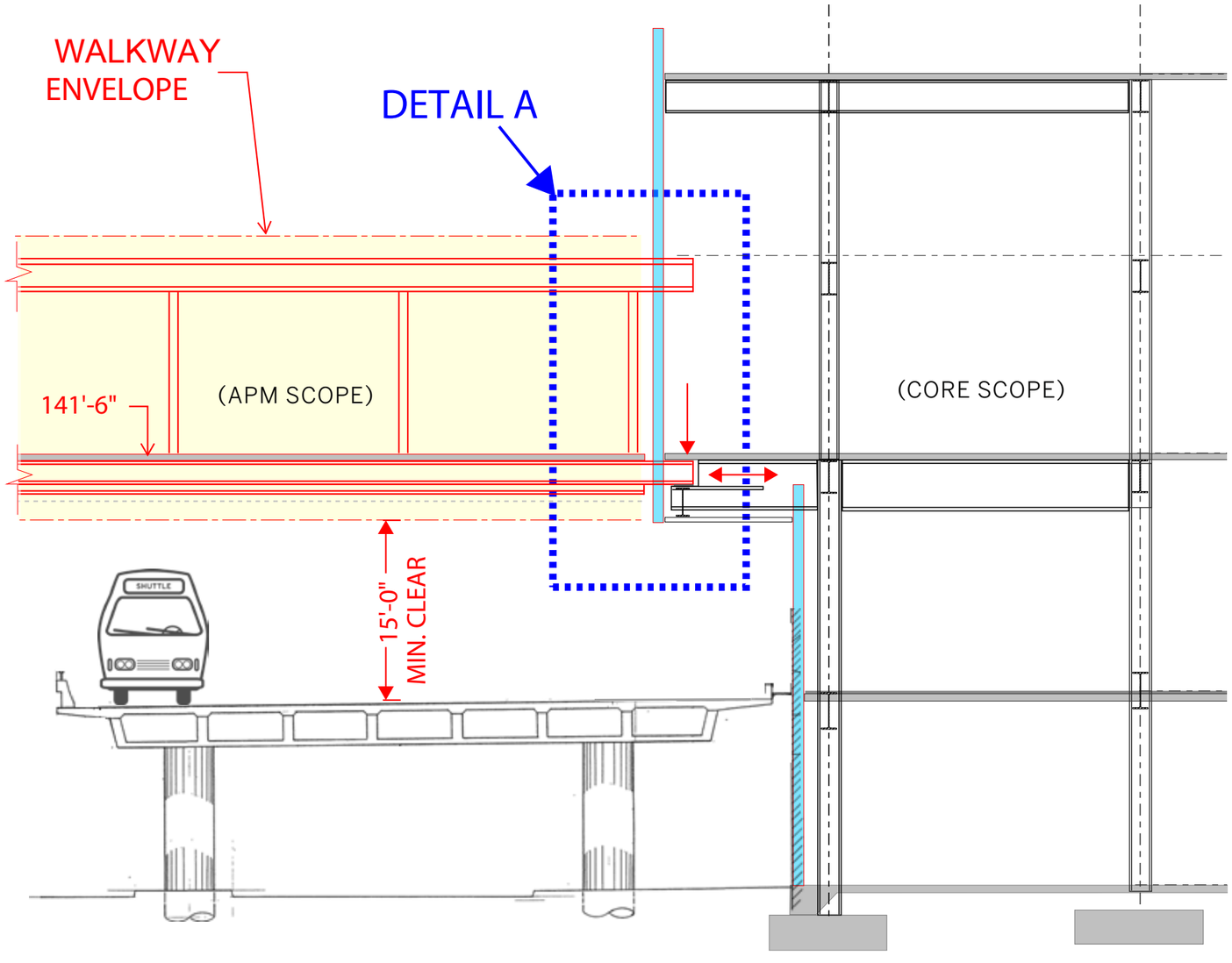


FIGURE 3
APM PEDESTRIAN WALKWAY SEISMIC SUPPORT CONCEPT PLAN

NOTES:
1. TERMINAL VERTICAL CORE STRUCTURES SHALL BE DESIGNED TO PROVIDE VERTICAL AND TRANSVERSE SEISMIC SUPPORT FOR THE PEDESTRIAN WALKWAYS.
2. THE APM PEDESTRIAN WALKWAYS MUST BE DESIGNED AS SIMPLY SUPPORTED SPANS BETWEEN THE TERMINAL VERTICAL CORE AND SUPPORT PIERS AS SHOWN.
3. HINGE SUPPORT TRANSFERS ALL IN-PLANE (X) SEISMIC LOAD TO WALKWAY PIER.
4. BUILDING SIDE SEISMIC JOINT IS SUPPORTED ON LEDGE BEAM ON CORBELS.
5. SLIDER SUPPORTS FREE IN X DIRECTION TO RELIEVE SEISMIC AND THERMAL STRESS.
6. ULTIMATE STOP MECHANISM MUST BE PROVIDED AT FREE END.
7. GUIDED SUPPORTS MUST RESIST PERPENDICULAR WIND LOADS WITH NO MOVEMENT.

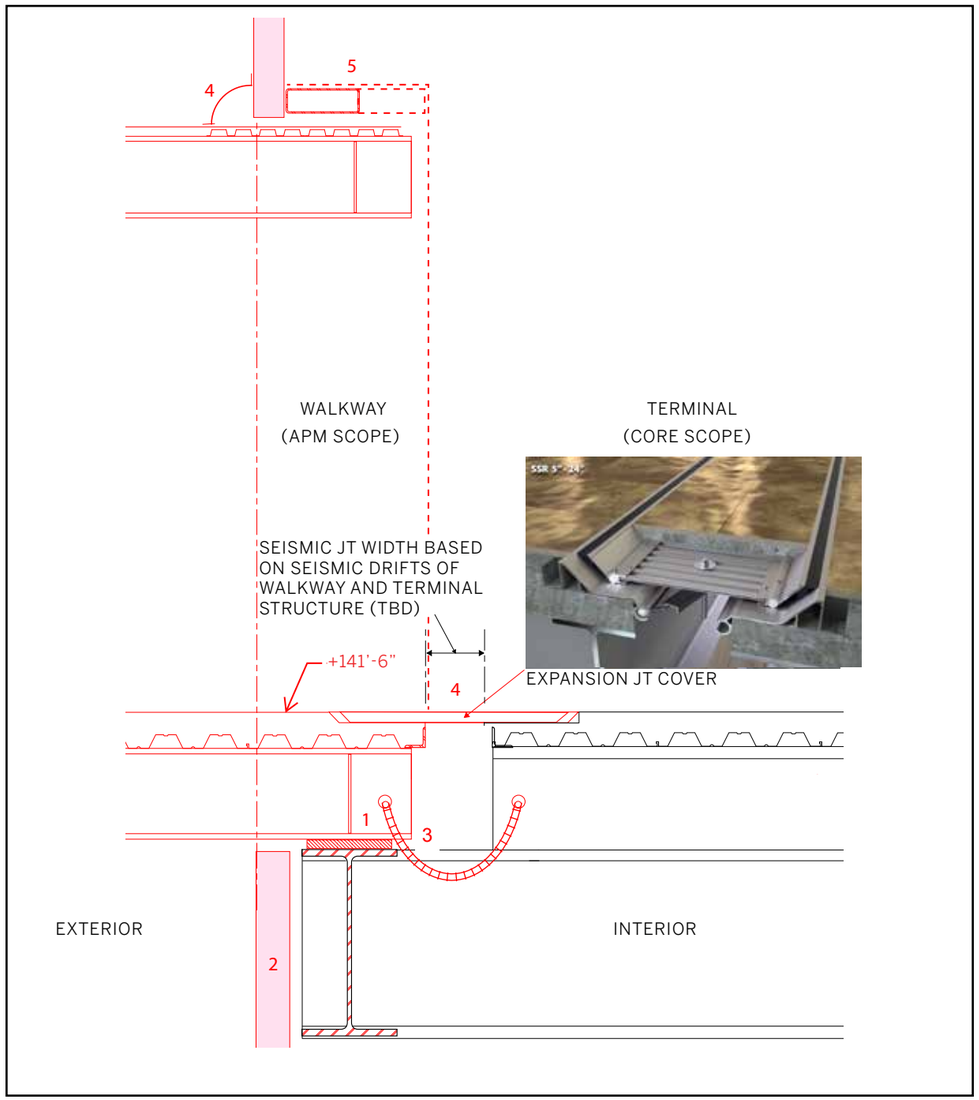
LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

WALKWAY SUPPORT CONCEPT

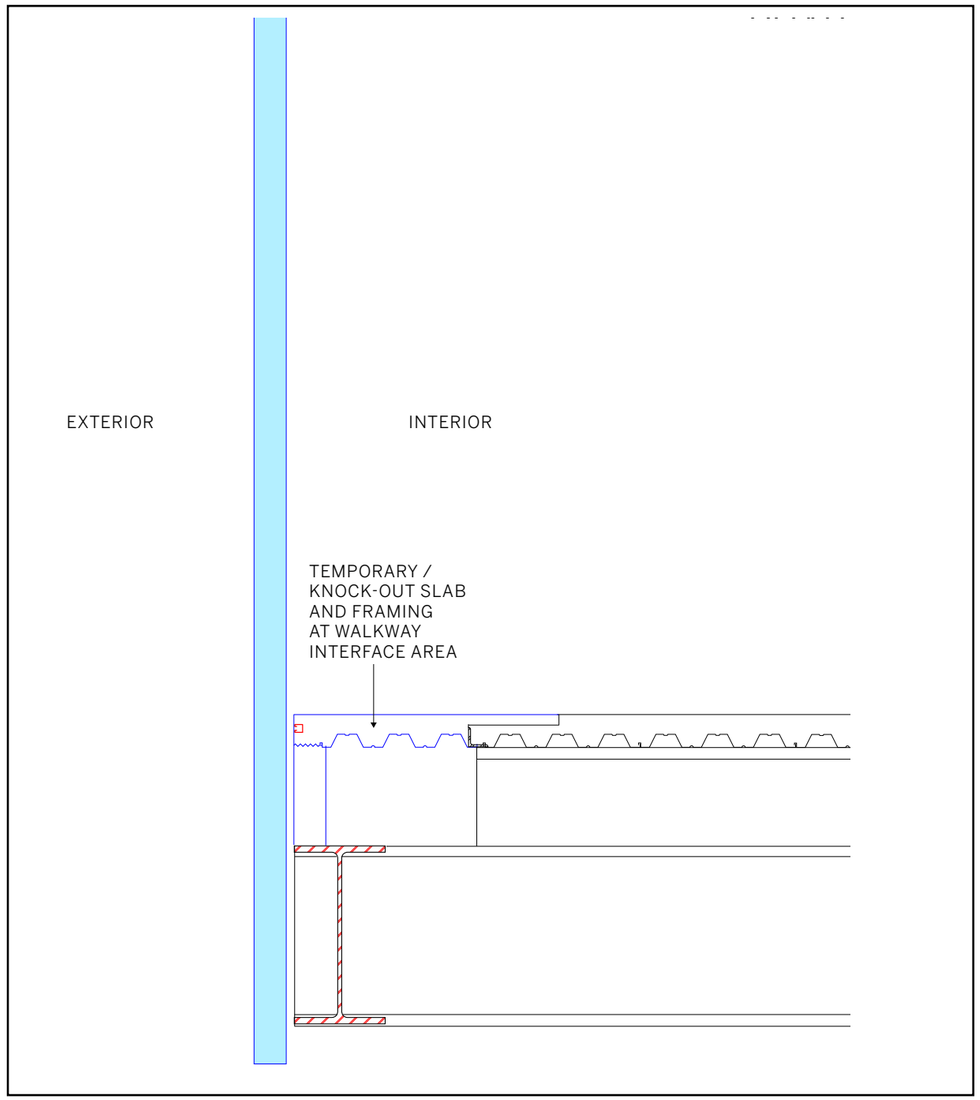


LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

DETAIL A / PHASING STRATEGY



PHASE 2



PHASE 1

ELEMENTS PROVIDED BY APM TEAM:

1. SUPPORT ASSEMBLY
2. ENCLOSURE MODIFICATIONS AS REQUIRED
3. PATCH AND REPAIR OF TERMINAL FIREPROOFING
4. EXPANSION JOINT COVER
5. CURTAIN WALL SUPPORTING FRAME

CHAPTER 4

TERMINAL FACADES

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

FACADE TYPES

In order to create a unifying Central Terminal Area (CTA) environment a minimal number of façade types has been developed for use in composing CTA exterior elevation designs. The components of each type combine to produce a cohesive visual effect for a more positive user experience. The location prescribed for each type plays an important part in intuitively communicating to airport users terminal building function and supports passenger orientation and wayfinding.

Façade Treatments fall into five (5) distinct categories:

Facade Type I:	Curtain Wall With Vertical Fins
Facade Type II:	Curtain Wall
Facade Type III:	Storefront
Facade Type IV:	Mechanical Screens
Facade Type V:	Metal Panel

Type I is applied continuously to upper levels of Terminal building facades, only interrupted by Type II which visually indicates the location of a Vertical Circulation Core, which terminal users have landside access to all levels of the terminal. The Type III façade treatment runs continuously along the terminal face at both Departures and Arrivals Levels. The maximum transparency associated with this façade type optimizes views of terminal activity from curbside, such as passenger check-in, baggage claim, etc.

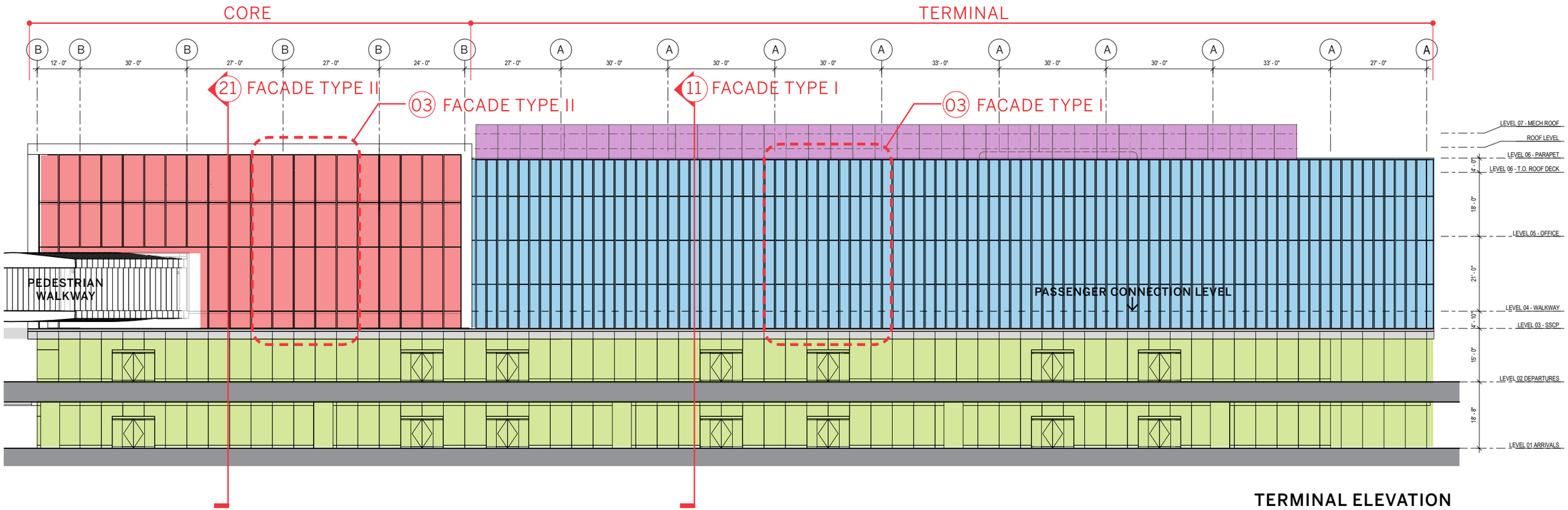
Type IV is used to screen all rooftop equipment from public view – a priority of increasing importance given the high elevation above grade at which the APM alignment traverses the CTA which makes much more of this equipment visible to arriving and departing passengers. Type V is used for soffits, canopy, and building side enclosures and areas of transition.

The distinct features and designated areas to which each treatment type is to be applied is described in this section. The mullion system of each Façade Treatment Type shall respond to and align with the building's structural grid. The mullion spacing illustrated in this design criteria document assumes a 30 feet column-to-column centerline grid spacing which accommodates a 3' and 6' mullion spacing for Type I and Type II respectively. Where new building structures are a part of the scope, the designer and structural engineer will work to this grid module wherever possible. Where site constraints prohibit this arrangement, the façade module may be modified within reason in order to be aligned with the building's structural grid.

Where terminal renovations require the accommodation of the existing building's structural grid, the designer will adapt the module in order that mullion spacing aligns with the existing structure in a manner consistent with aesthetic effect described herein. LAWA has the sole authority to determine compliance with design criteria requirements.

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

LANDSIDE FACADE TYPES



TERMINAL ELEVATION
COMPLETED APM

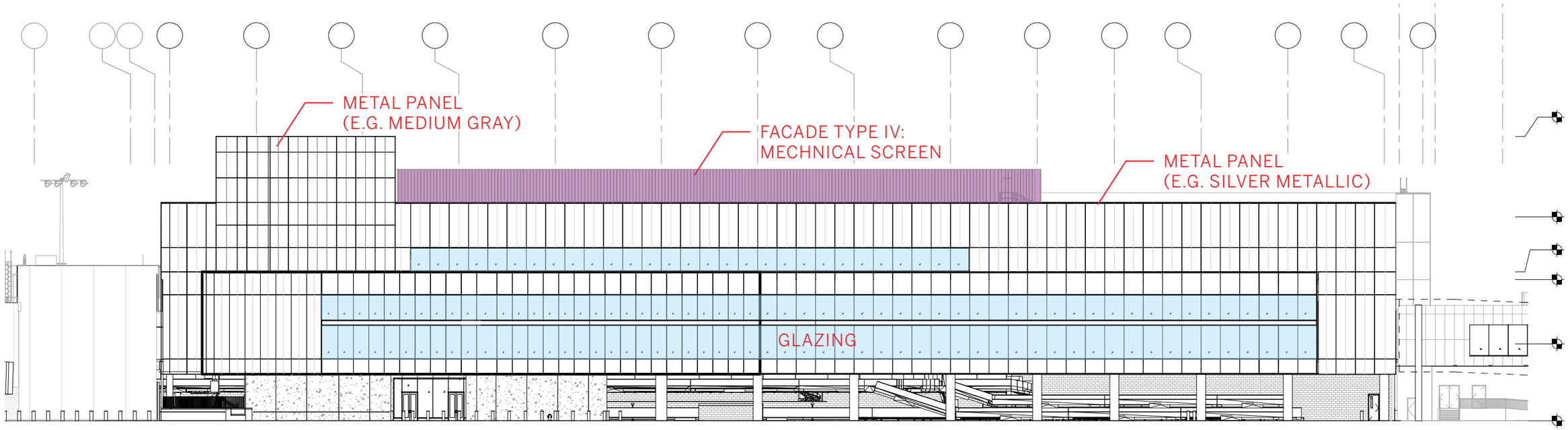
NOTES:

1. ALIGN CONCOURSE VERTICAL MULLIONS WITH MULLIONS BELOW
2. EXTERIOR LIGHTING - ILLUMINATION OF FACADE SHALL BE FROM INTERIOR ONLY.
3. TERMINAL FACADE WINDOW WASHING - METHOD MUST BE DETERMINED IN COORDINATION WITH OSHA AND LAWA FACILITIES AND TECHNICAL SERVICES DIVISION (FTSD). USE OF A LIFT ON THE SECOND LEVEL ROADWAY TO WASH TERMINAL CORE FAÇADE IS PROHIBITED. DAVIT AND SWING STAGE SYSTEM MAY BE USED ON NON-TERMINAL CORE FAÇADE AT DISCRETION OF OSHA AND LAWA FTSD.
4. EXTERIOR SIGNAGE / WAYFINDING SHALL BE COORDINATED WITH THE LAWA SIGNAGE AND GRAPHICS TEAM DURING DESIGN, PRODUCTION AND INSTALLATION. AIRPORT TERMINAL EXTERIORS SHALL CONSIST OF AIRPORT BRANDING (I.E., ADDRESS, NUMBERED, OR NAMED). SUBJECT TO LAWA APPROVAL. INTERIOR CORES SHALL BE AIRPORT BRANDED. DIGITAL DIRECTORIES WILL BE THE SOURCE FOR AIRLINE NAMES AND LOCATIONS, SHOPS, DINING AND ALL OTHER AMENITIES.

FACADE TYPE I	GL-01
FACADE TYPE II	GL-02
FACADE TYPE III	GL-03
FACADE TYPE IV	MS-01
FACADE TYPE V	MT-01

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

AIRSIDE FACADE TYPES



AIRSIDE TERMINAL ELEVATION

NOTES:

1. AIRSIDE TERMINAL FACADES SHOULD UTILIZE A 'CALM COLOR PALETTE' THAT IS NEUTRAL IN TONE CONSISTING OF METALLIC GRAY AND SILVER EXTERIOR MATERIALS AND GLAZING.
2. THE COLOR PALETTE SHOULD BE RESPONSIVE TO AND NOT DETRACT FROM THE CTA'S OVERALL COHESIVENESS.
3. SAMPLE ELEVATION FROM T1.5 PROJECT, COLOR PALETTE INDICATED FOR REFERENCE ONLY.

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

FACADE TYPES

GL-01
TYPICAL

1/4” OPTIWHITE HS
VRE-65 #2
1/2” AIR SPACE
1/4” CRYSTALGRAY HS
0.060 CLEAR INTERLAYER
1/4” OPTIWHITE HS

PRELIMINARY PERFORMANCE DATA:

VLT:	44%
R OUT:	28%
WINTER U:	0.29
SUMMER U:	0.26
SHGC:	0.38
LSG:	1.16

GL-02
ENTRY / CORE

1/4” OPTIWHITE HS
VRE-65 #2
1/2” AIR SPACE
1/4” OPTIWHITE HS
0.060 CLEAR INTERLAYER
1/4” OPTIWHITE HS

PRELIMINARY PERFORMANCE DATA:

VLT:	62%
R OUT:	29%
WINTER U:	0.29
SUMMER U:	0.26
SHGC:	0.40
LSG:	1.55

GL-03
ARRIVAL / DEPARTURE

1/4” OPTIWHITE HS

1/2” AIR SPACE
1/4” OPTIWHITE HS
0.060 CLEAR INTERLAYER
1/4” OPTIWHITE HS

PRELIMINARY PERFORMANCE DATA:

VLT:	82%
R OUT:	15%
WINTER U:	0.45
SUMMER U:	0.47
SHGC:	0.79
LSG:	1.04

MS-01
MECH SCREEN

2” DEEP VERTICAL TUBE BLADE
8” SPACING
5% OPENNESS
MATTE LIGHT GREY FINISH

NOTE:
FOR ENCLOSED ROOFTOP MECHANICAL ROOMS, PROVIDE MS-01 IN FRONT OF EXTERIOR ENCOSURE.

MT-01
METAL PANEL

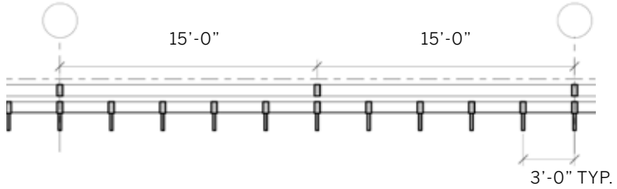
DURANAR BRIGHT WHITE (UC55026)

NOTE :
GLASS PERFORMANCE VALUES MAY CHANGE AS REQUIRED BY ENERGY MODEL

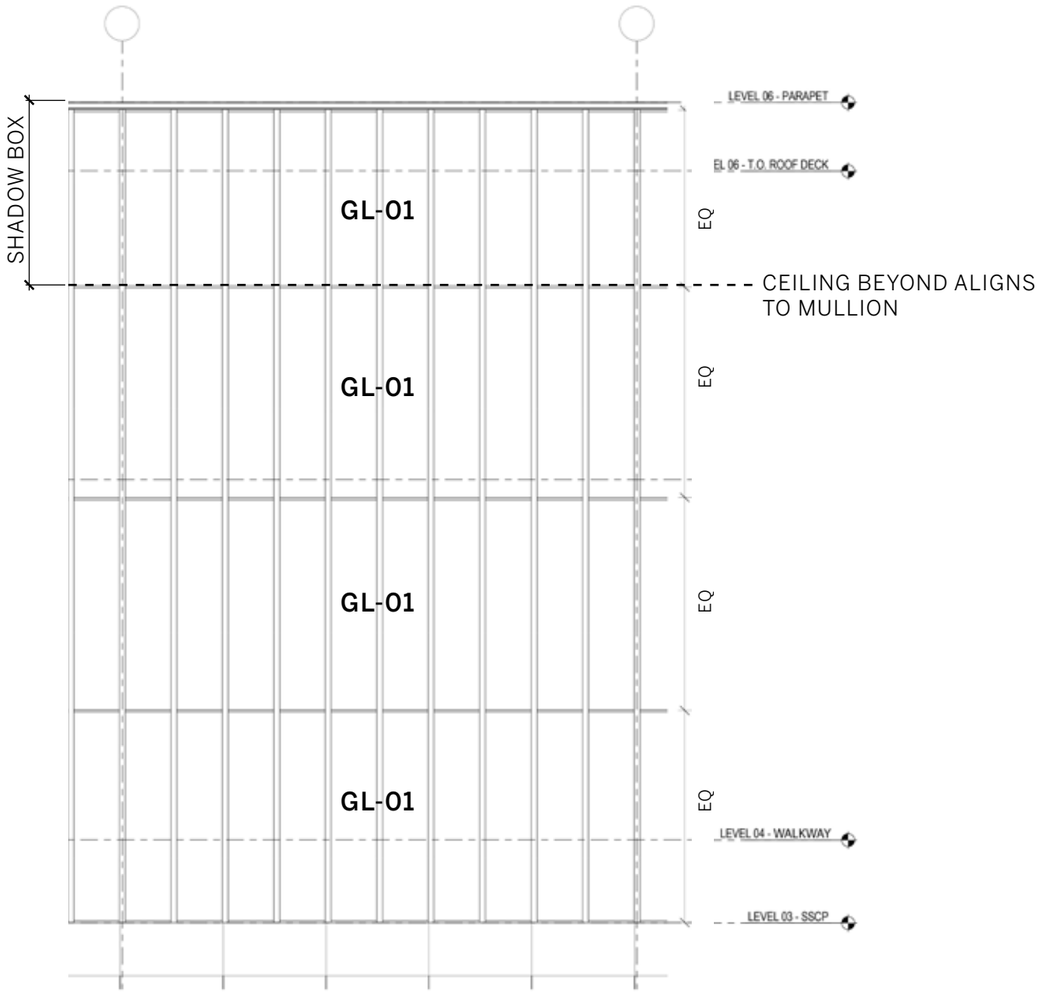
VERSION 3

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

FACADE TYPE I (TERMINAL)



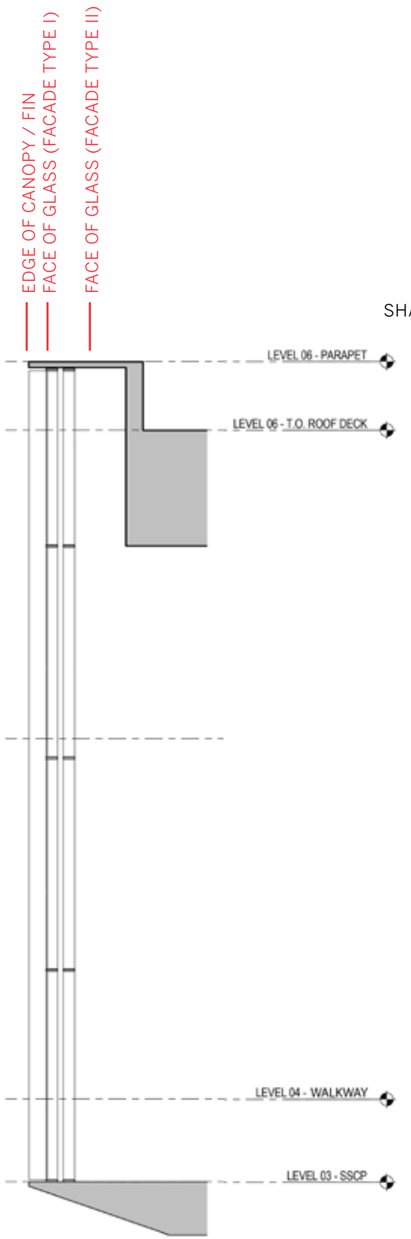
04 PLAN



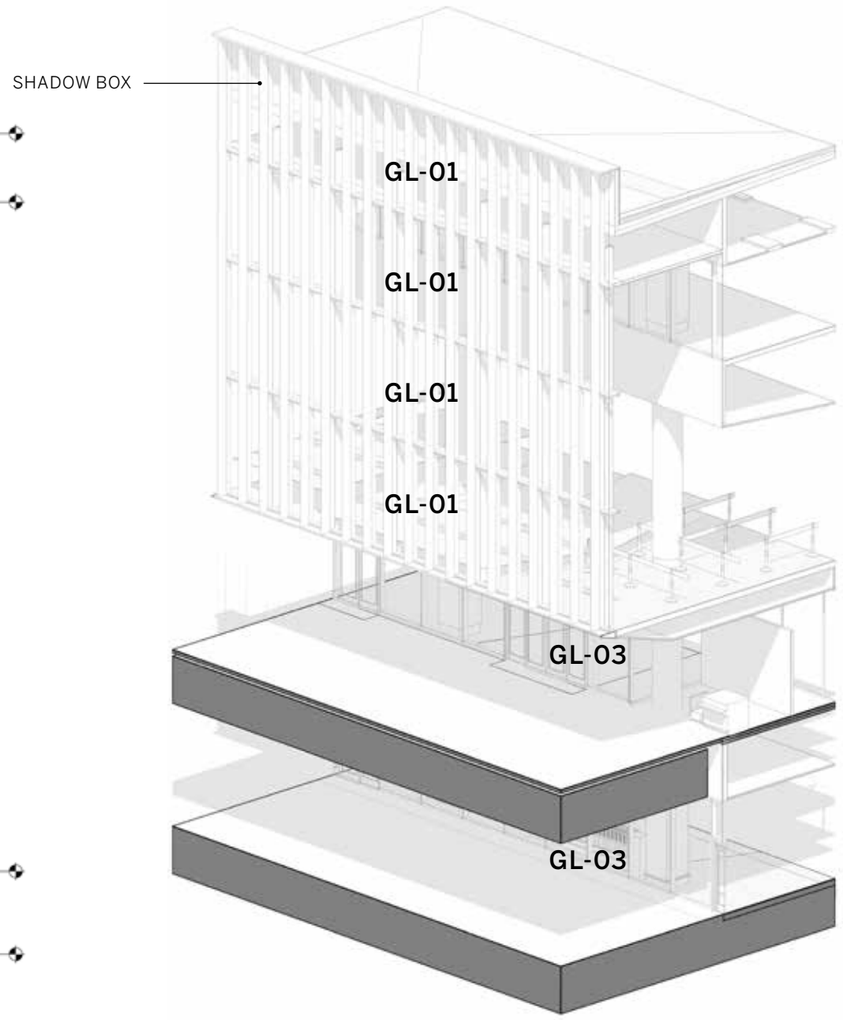
NOTE :

1. USE SHADOW BOX DETAIL (SEE FACADE TYPE II ELEVATION) WHERE NO FLOOR ELEVATION CHANGE OCCURS BETWEEN CORE AND ADJACENT HEADHOUSE

03 ELEVATION



02 SECTION

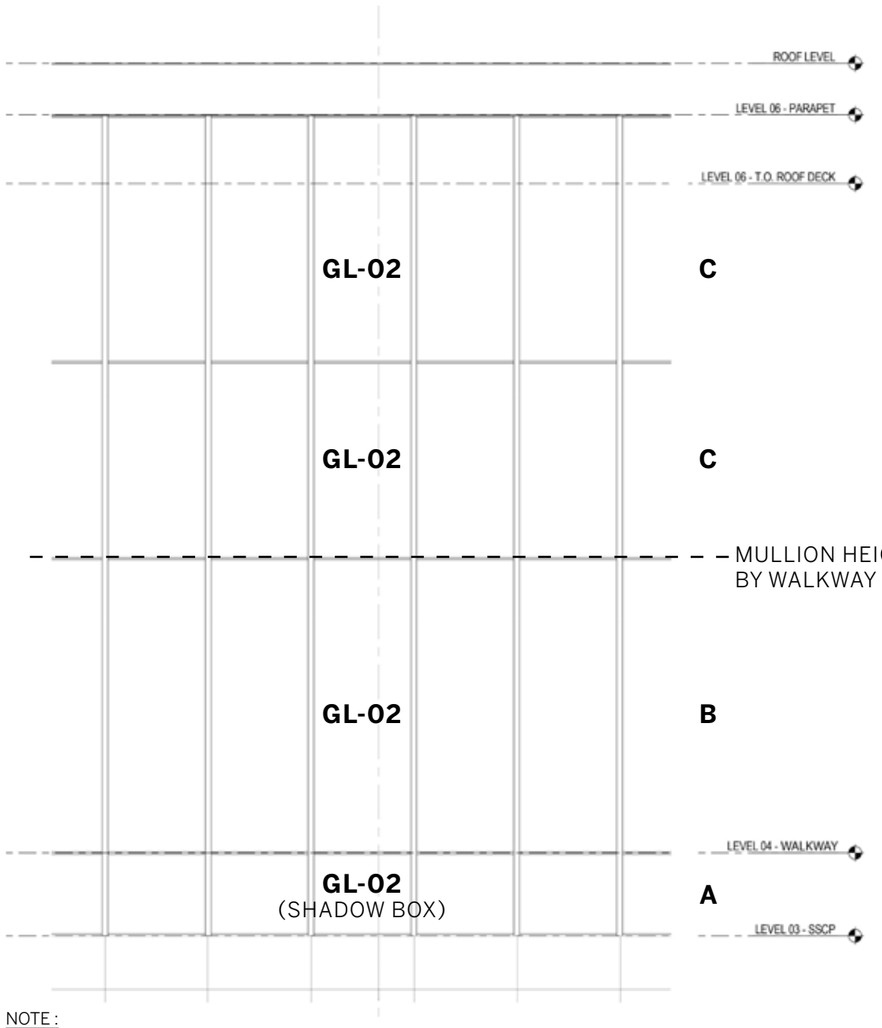


01 AXON

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

FACADE TYPE II (ENTRY / CORE)

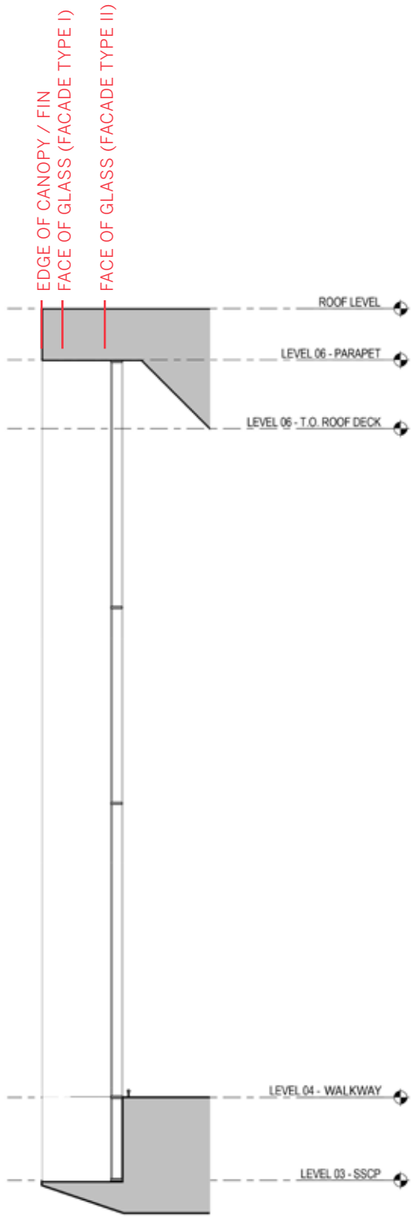
04 PLAN



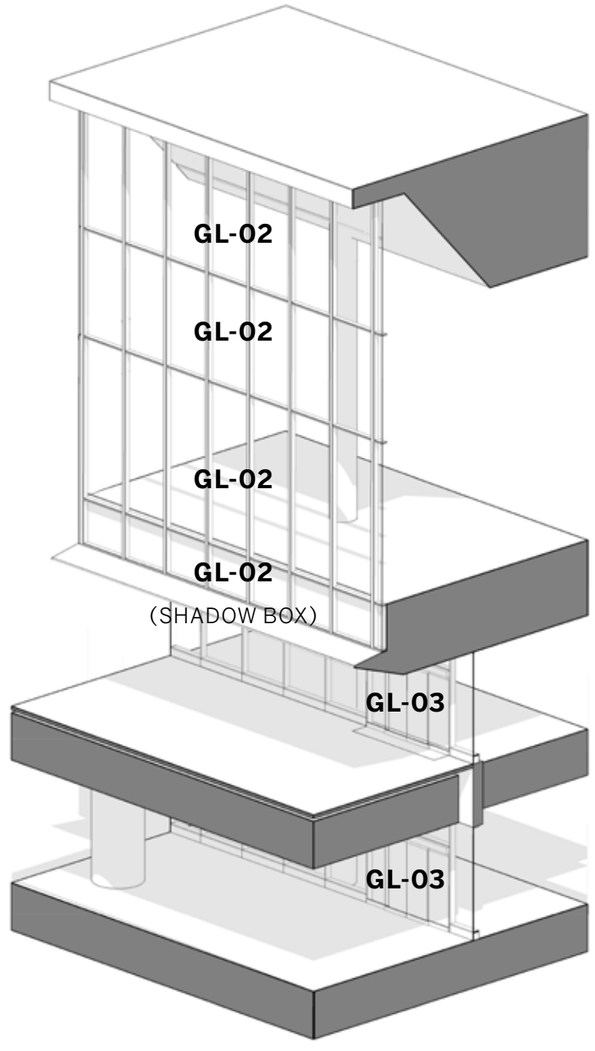
NOTE :

1. "**B**" DIMENSION IS DETERMINED BY WALKWAY ROOF ELEVATION
2. USE SHADOW BOX DETAIL WHERE NO FLOOR ELEVATION CHANGE OCCURS BETWEEN CORE AND ADJACENT HEADHOUSE

03 ELEVATION



02 SECTION

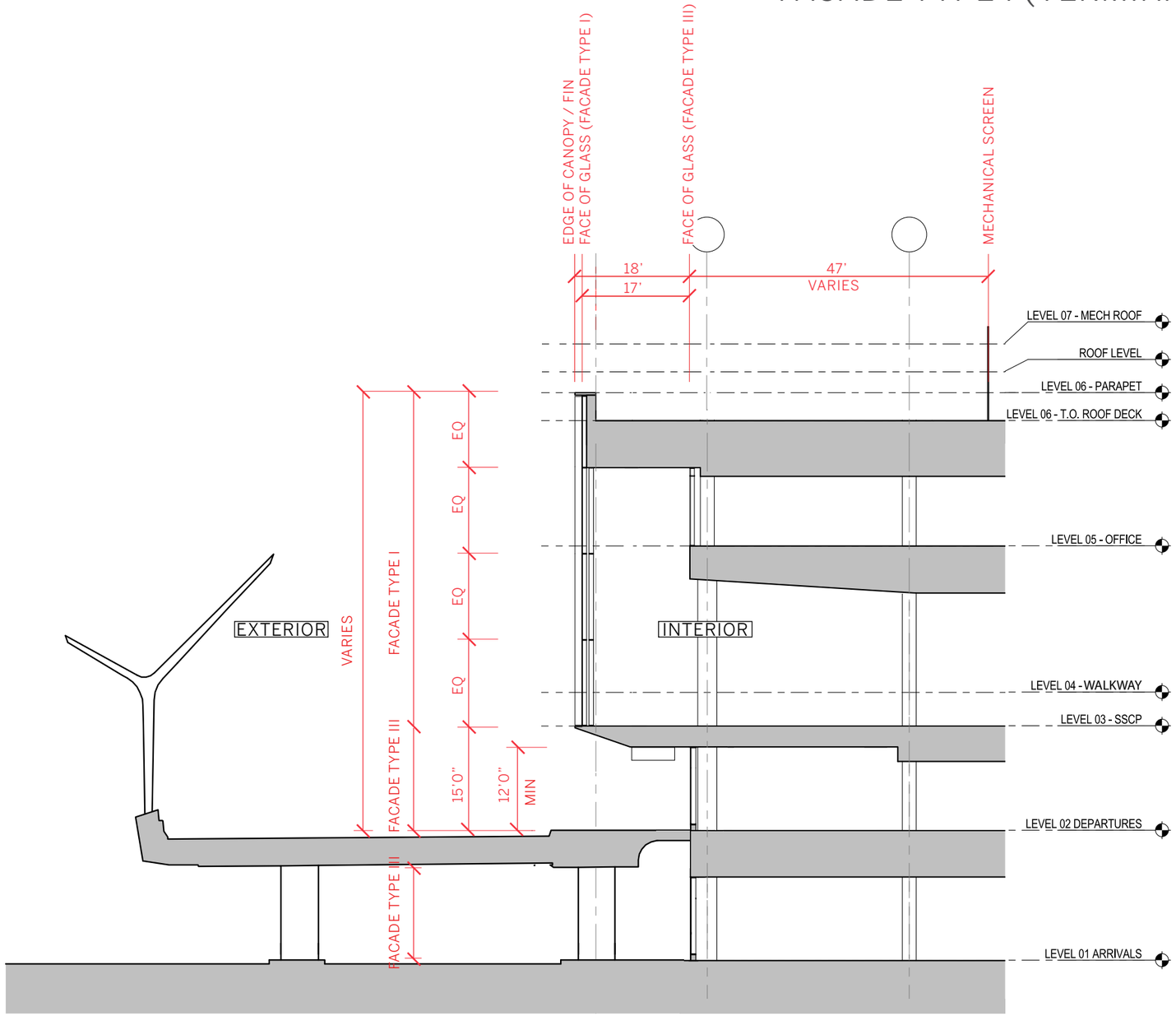


01 AXON

VERSION 3

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

FACADE TYPE I (TERMINAL)

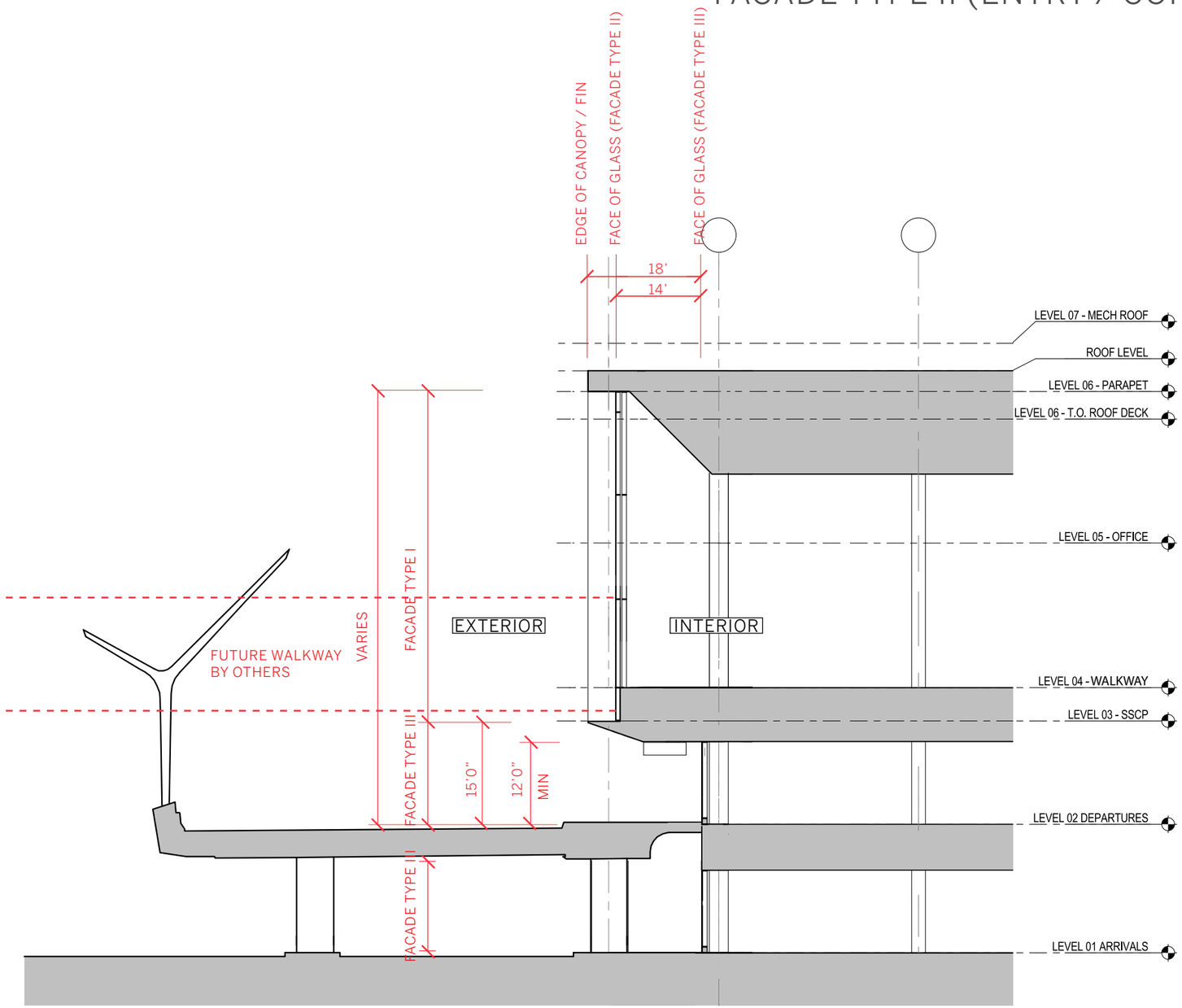


11 SECTION
FACADE TYPE I

TERMINAL FACADES
CHAPTER 4

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

FACADE TYPE II (ENTRY / CORE)

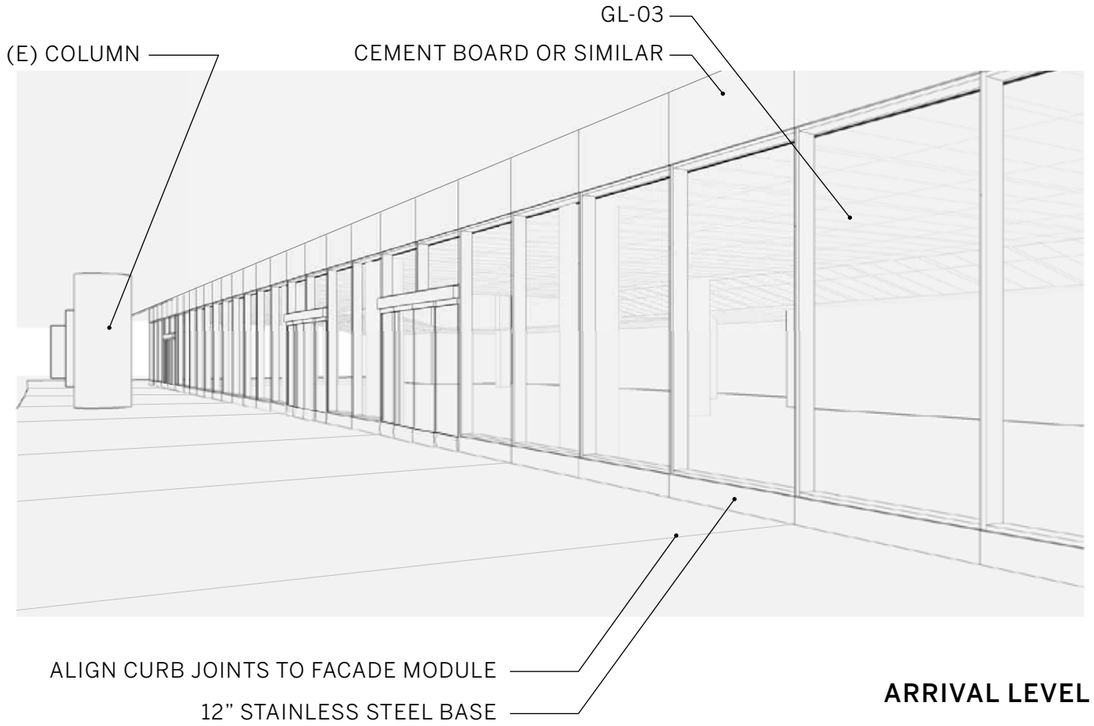


21 SECTION
FACADE TYPE II

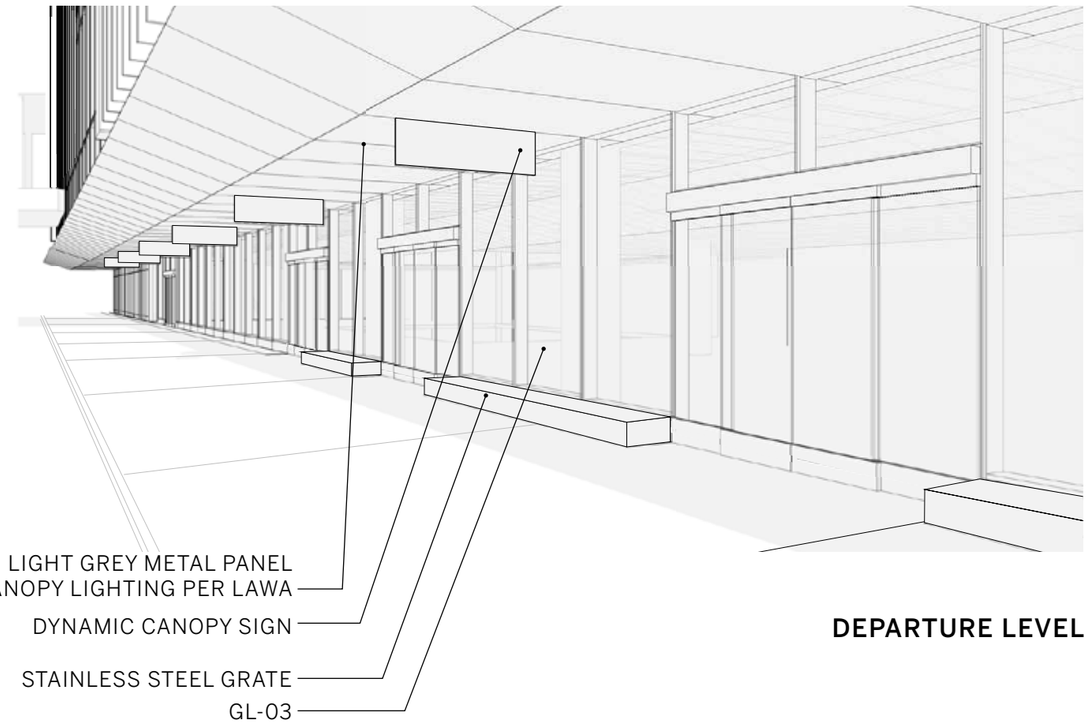
TERMINAL FACADES
CHAPTER 4

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

DEPARTURES LEVEL ROADWAY

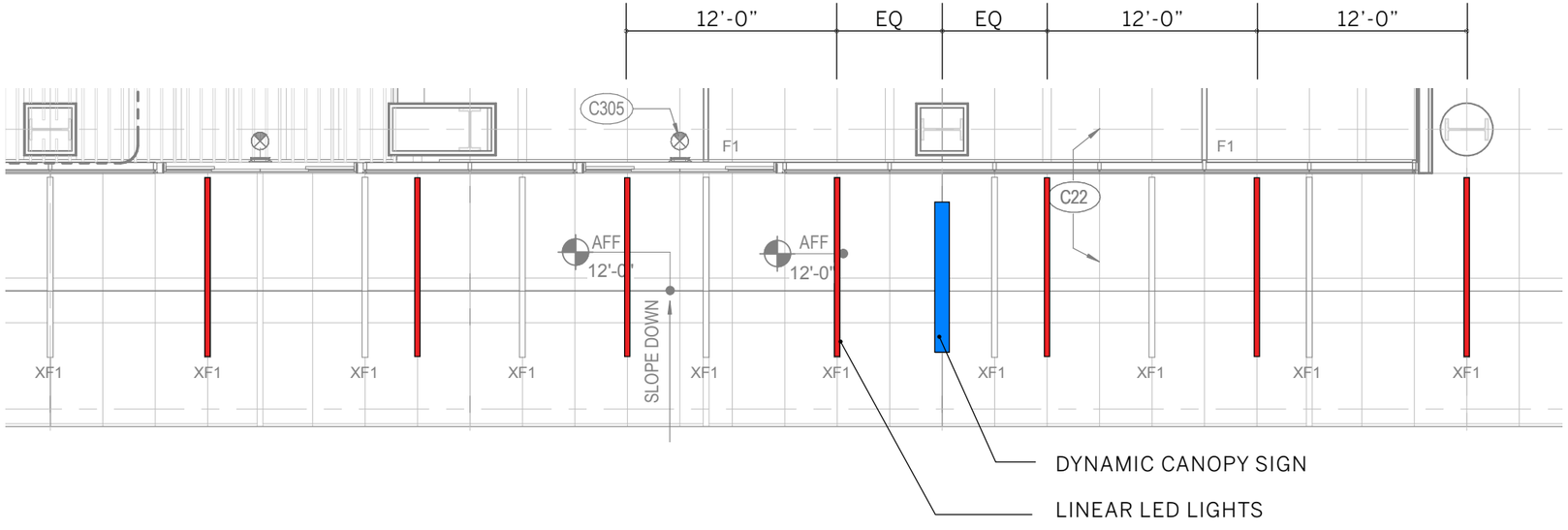


ARRIVAL LEVEL

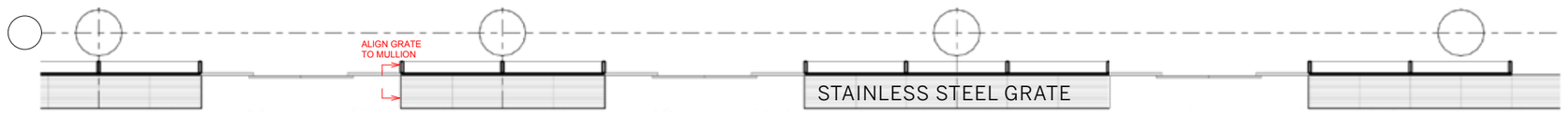


DEPARTURE LEVEL

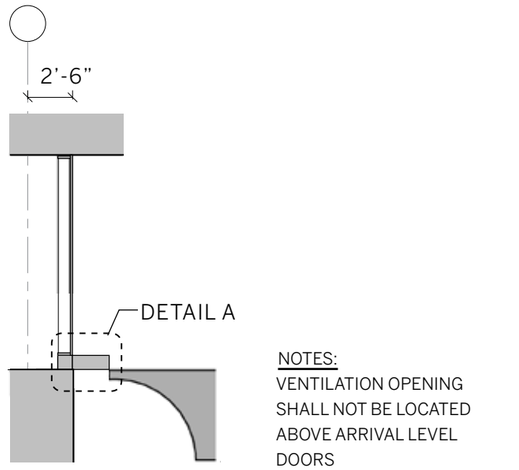
LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS



DEPARTURES LEVEL REFLECTED CEILING PLAN
CANOPY LIGHTING / SIGNAGE SPACING

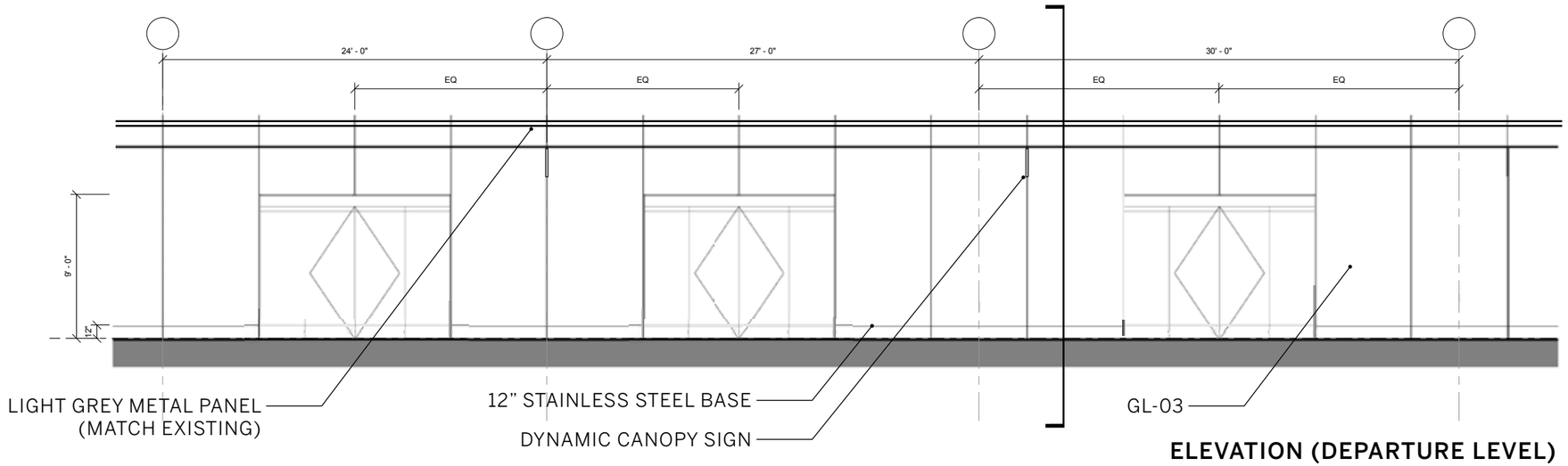


PLAN (DEPARTURE LEVEL)



NOTES:
VENTILATION OPENING SHALL NOT BE LOCATED ABOVE ARRIVAL LEVEL DOORS

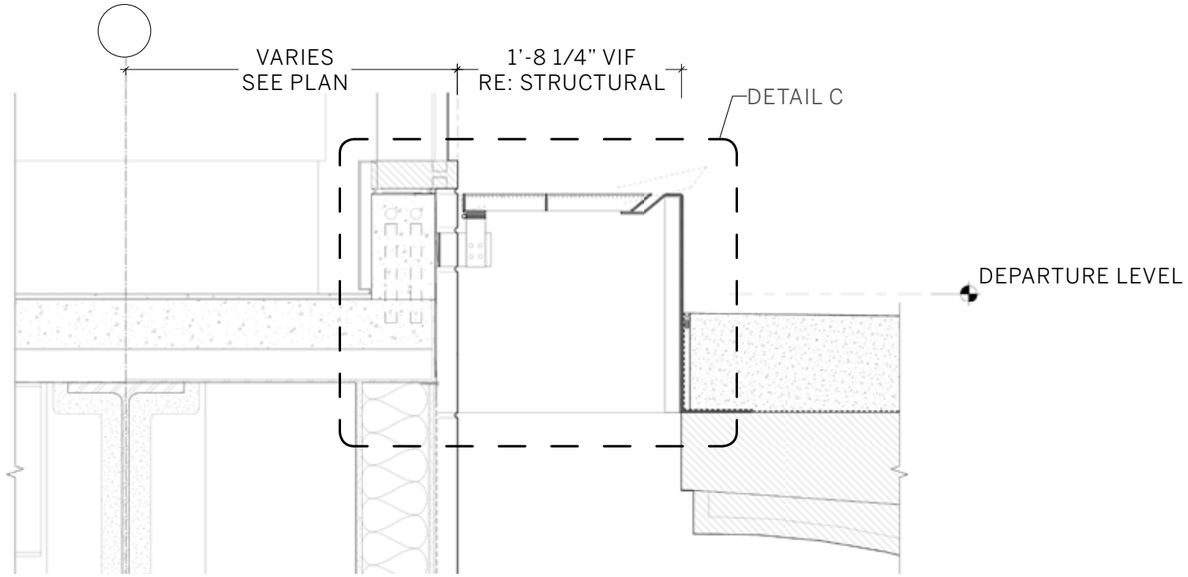
SECTION (DEPARTURE LEVEL)



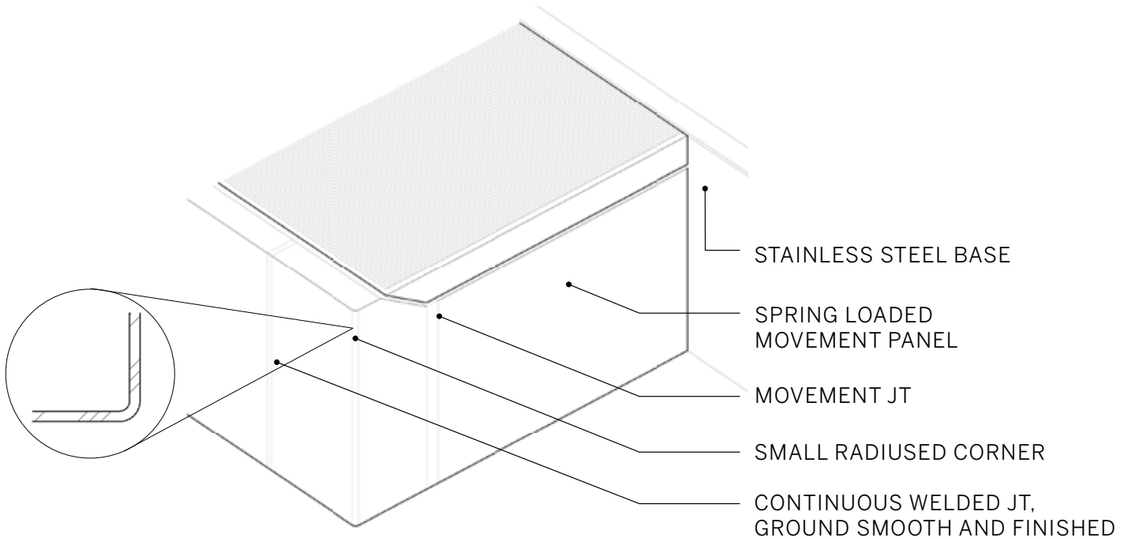
ELEVATION (DEPARTURE LEVEL)

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

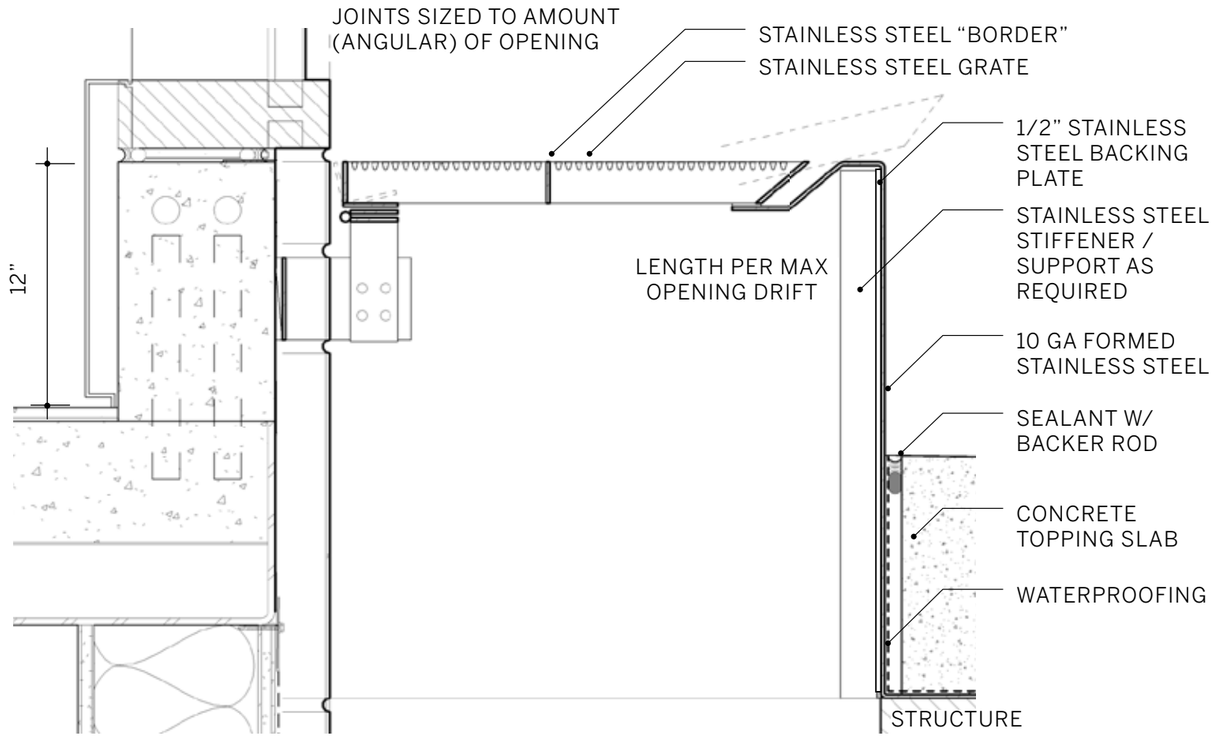
DEPARTURES LEVEL ROADWAY - VENTILATION OPENING



CONCEPT DETAIL A
DEPARTURES LEVEL - GRATING SECTION



CONCEPT DETAIL B
GRATING AXON DIAGRAM



CONCEPT DETAIL C
DEPARTURES LEVEL - ENLARGED GRATING SECTION

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

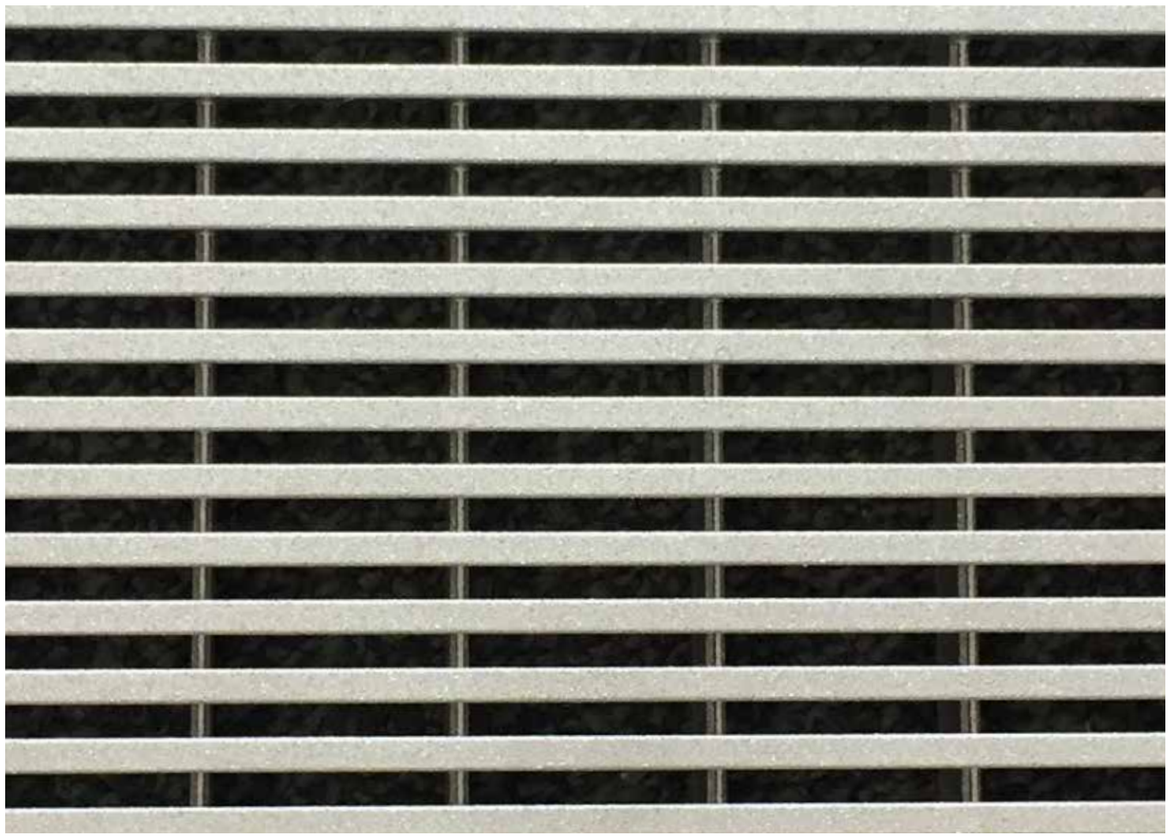
DEPARTURES LEVEL ROADWAY - VENTILATION OPENING

MATERIAL DESCRIPTION

WIRE:	0.130” V PROFILE WIRE
SLOT:	0.130”
ROD:	0.105” X 1.00” STRIP
ROD SPACING:	1” O.C.
FINISH:	ANTI-SKID

PRELIMINARY PERFORMANCE DATA:

COEFFICIENT OF FRICTION (DRY):	101
COEFFICIENT OF FRICTION (WET):	72
MAXIMUM LOAD:	1200 PSF
MAXIMUM DEFLECTION:	1/16”
AIR FLOW PRESSURE DIFFERENTIAL:	.0035 PSI



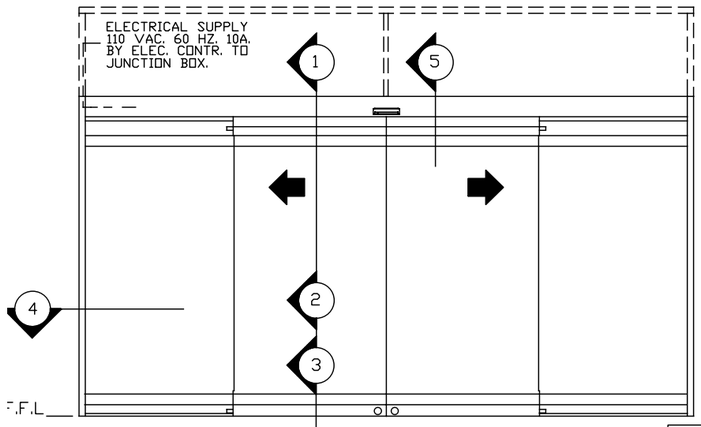
STAINLESS STEEL GRATE SAMPLE

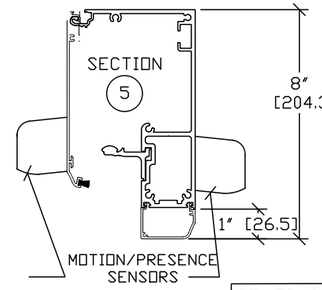
NOTE :

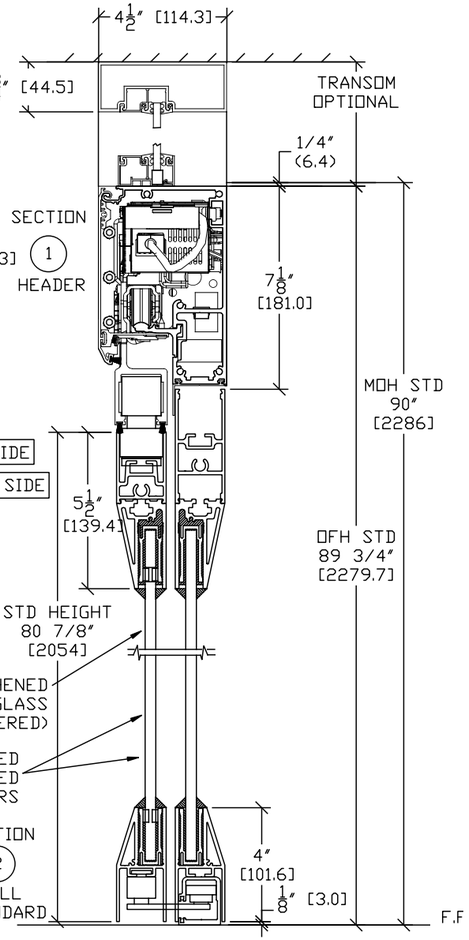
- COEFFICIENT OF FRICTION WAS EVALUATED USING ASTM E303 (2013)
- MAXIMUM LOAD AND FLOW RATES ARE APPROXIMATE REPRESENTATIONS OF REALITY. THE SIMULATIONS ARE SIMPLIFIED NUMERICAL EXPERIMENTS WITH A LIMITED SCOPE OF INPUT AND OUTPUT VARIABLES. ACTUAL PHYSICAL RESULTS MAY DIFFER AT EACH TERMINAL

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

DEPARTURES / ARRIVALS LEVEL - SLIDING DOORS

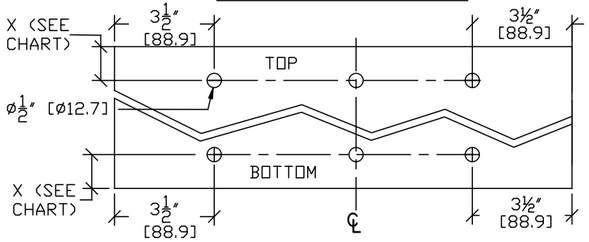


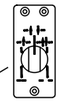


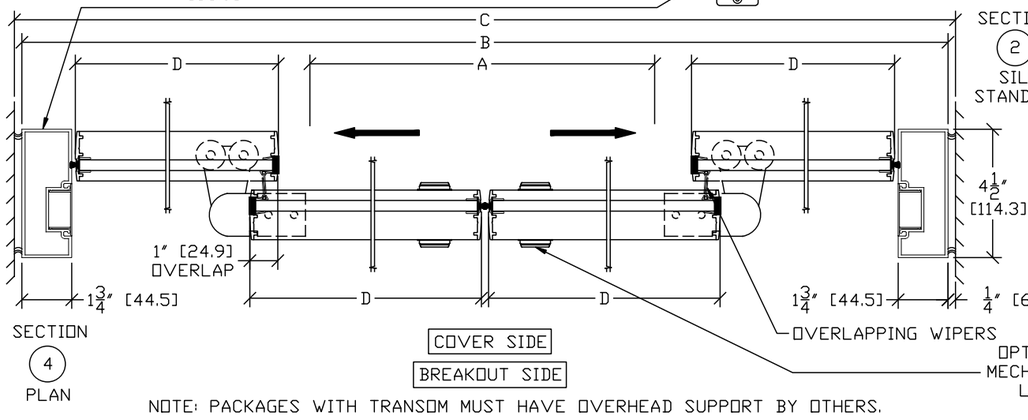


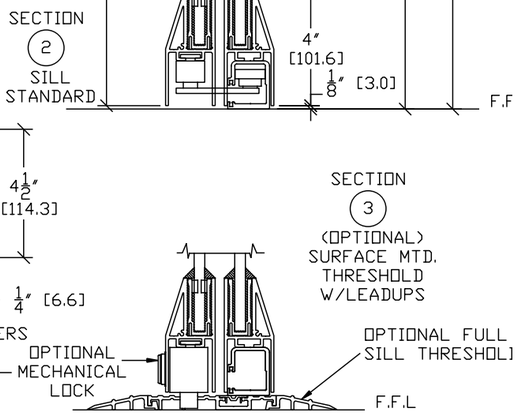
GLASS WIDTH	X
3/8"	1 9/16" [39.7]
1/2"	1 1/4" [31.75]*

* Hole Placement to be within 1/16" STD HEIGHT
* Dowell surface may require modification









NOTE: PACKAGES WITH TRANSOM MUST HAVE OVERHEAD SUPPORT BY OTHERS.

NOTE :

1. MINIMIZE FRAME THICKNESS
2. ASSA ABLOY - BESAM SL500 OR SIMILAR, PER DCH GUIDE SPECIFICATION SECTION 08 42 29 - SLIDING AUTOMATIC ENTRANCES

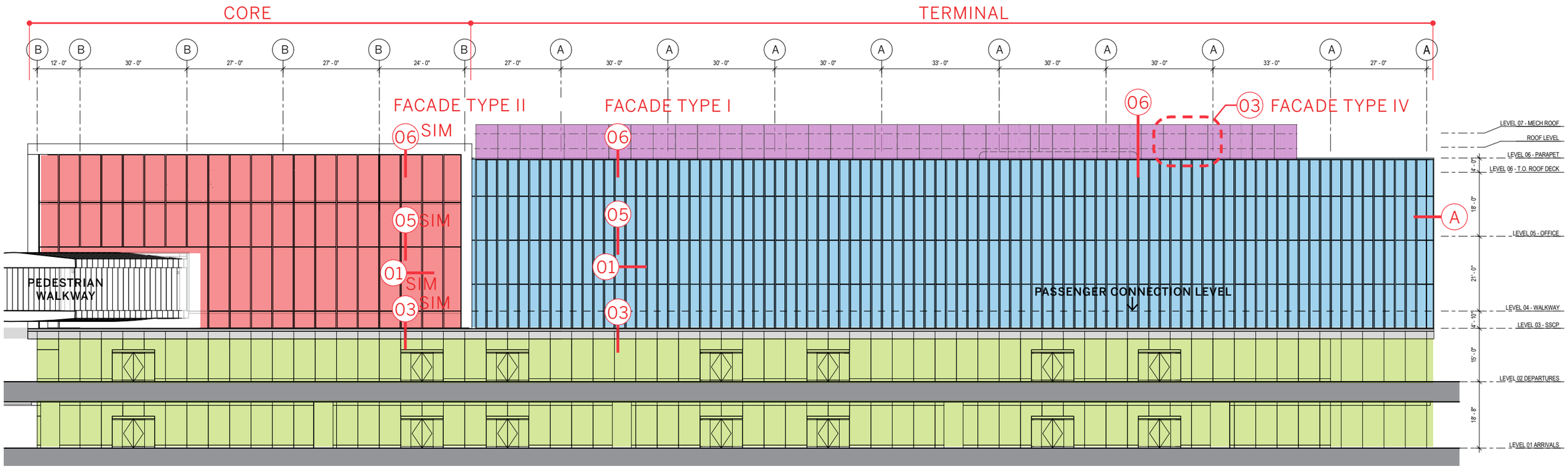
CHAPTER 5

SAMPLE / REFERENCE FACADE DETAILS

THIS CHAPTER GRAPHICALLY ILLUSTRATES THE CONCEPTS FOR FAÇADE ORGANIZATION, EXTERIOR ENCLOSURE SYSTEM DETAILS, SOLAR STUDY DIAGRAMS, AS WELL AS A NARRATIVE DESCRIPTION AND GRAPHIC REPRESENTATION OF THE EXTERIOR ENCLOSURE SYSTEM BASED ON AN ASSUMED 15’ GRID MODULE.

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

OVERALL ELEVATION



TERMINAL ELEVATION

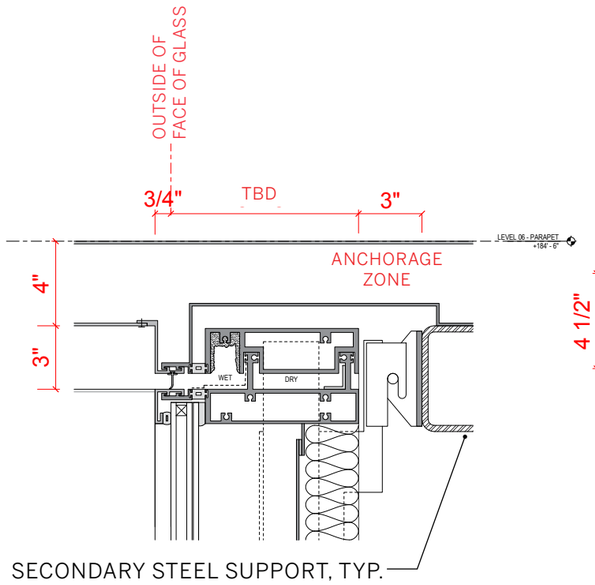
FACADE TYPE I	GL-01
FACADE TYPE II	GL-02
FACADE TYPE III	GL-03
FACADE TYPE IV	MS-01
FACADE TYPE V	MT-01

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

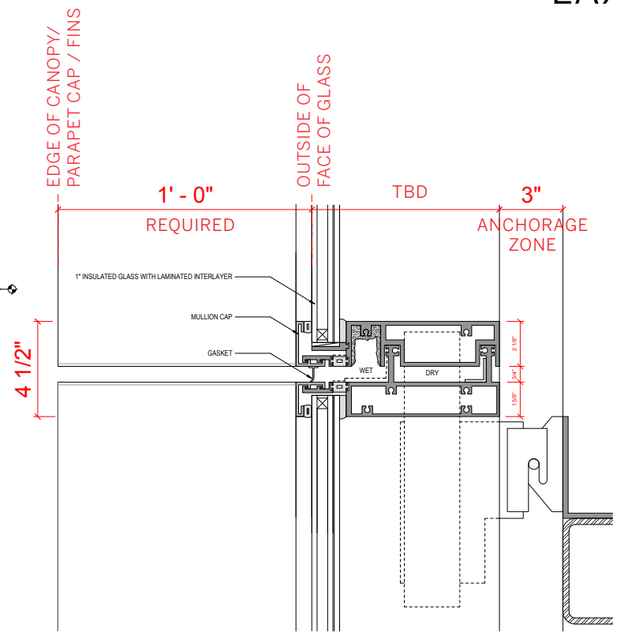
DETAIL SHEET

NOTE:

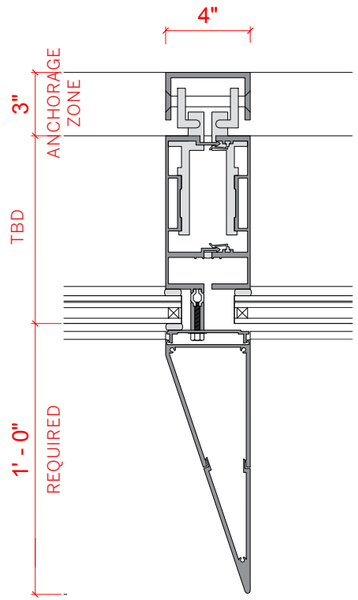
- VERTICAL FINS ONLY OCCUR AT FACADE TYPE I, TYP.



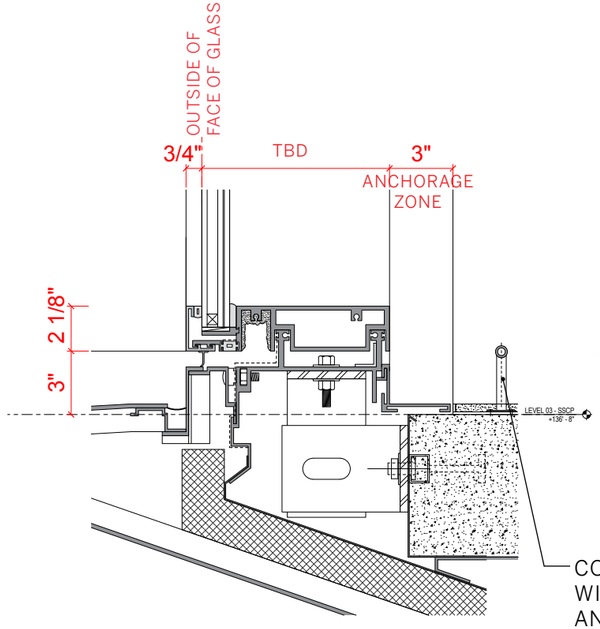
06 CONCEPT PROFILE AT PARAPET



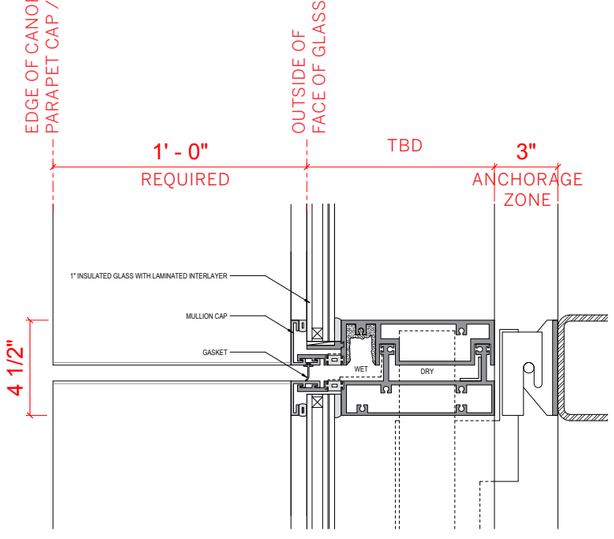
05 CONCEPT PROFILE STACK JOINT



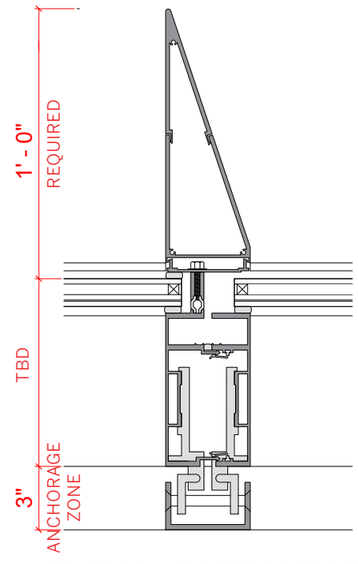
04 PLAN - NORTH FACADE



03 CONCEPT PROFILE AT CANOPY



02 CONCEPT PROFILE ALT. ANCHORAGE DETAIL

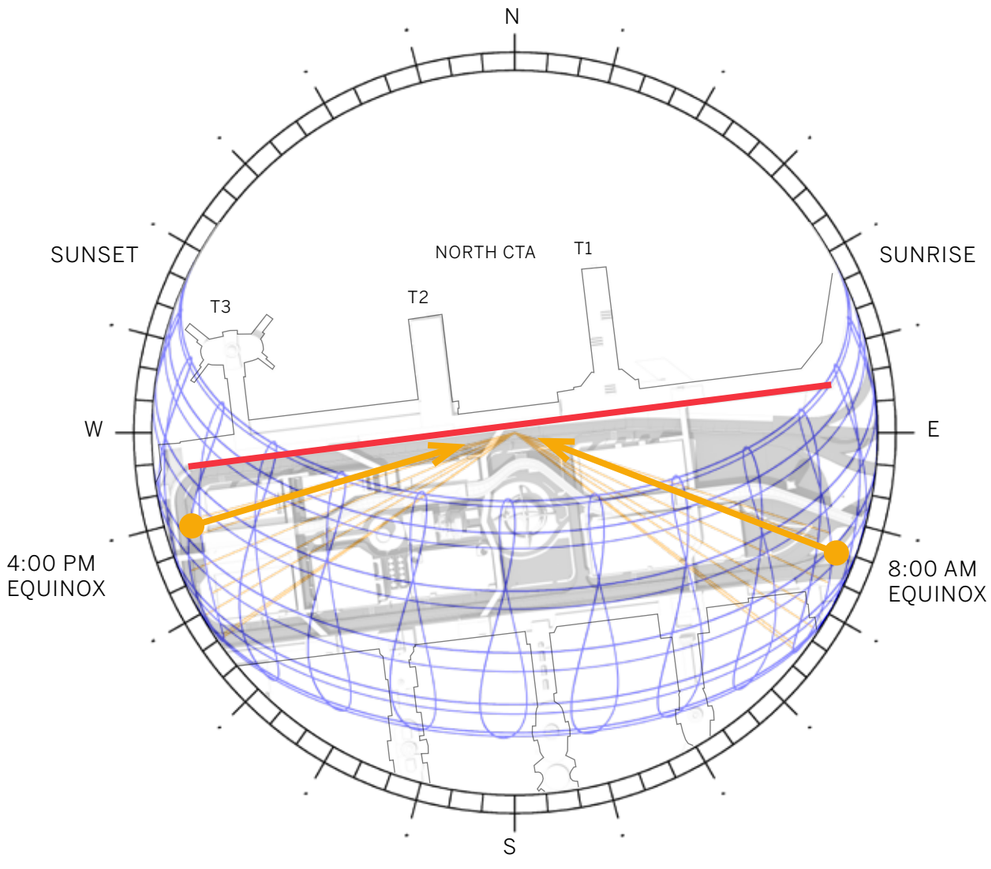


01 PLAN - SOUTH FACADE

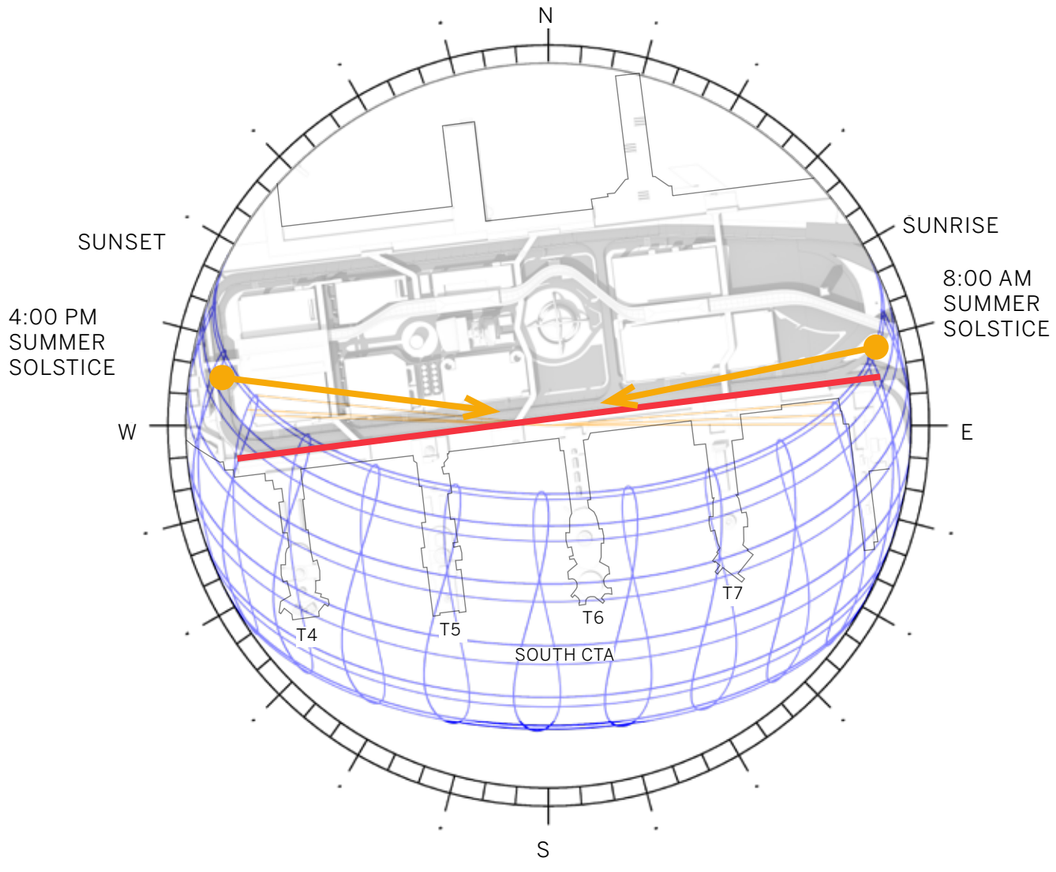
SFO INTERNATIONAL TERMINAL - SOM

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

SOLAR STUDY



NORTH TERMINALS (SOUTH FACING)



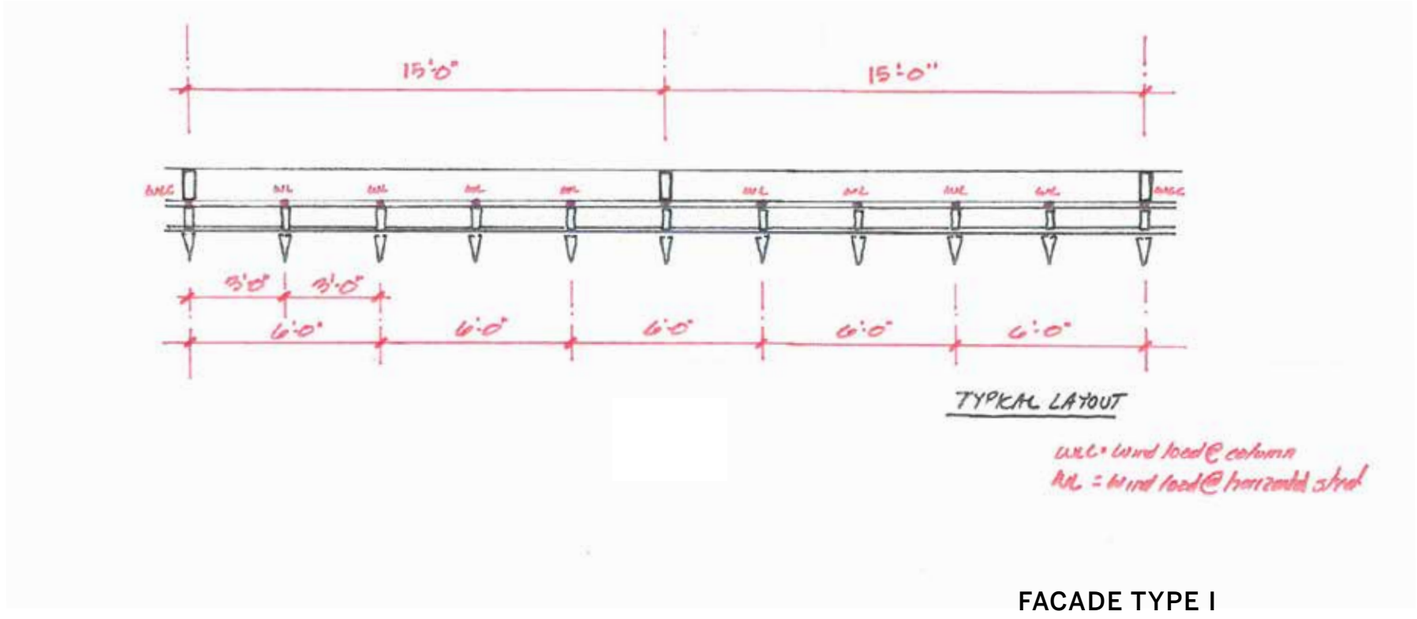
SOUTH TERMINALS (NORTH FACING)

NOTE :

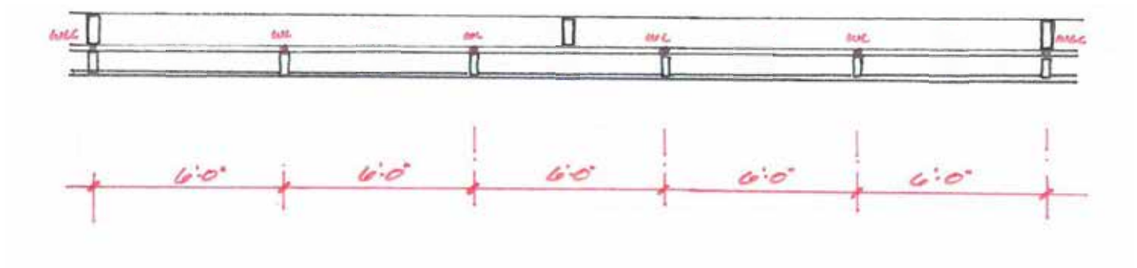
- SUN PATH DIAGRAMS (ABOVE) ILLUSTRATE CONDITIONS OF EXCESSIVE SOLAR GLARE ALONG THE NORTH AND SOUTH FACADES IN EARLY MORNING AND LATE AFTERNOON.
- FIN GEOMETRY (LENGTH AND PROFILE) HAS BEEN DEVELOPED TO MINIMIZE LIGHT CONTRAST FROM THE BUILDING INTERIOR BY CALCULATING DAYLIGHT GLARE PROBABILITY (DGP)

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

TYPICAL FACADE LAYOUT



FACADE TYPE I
30’ BUILDING STRUCTURAL GRID



FACADE TYPE II
27’ BUILDING STRUCTURAL GRID

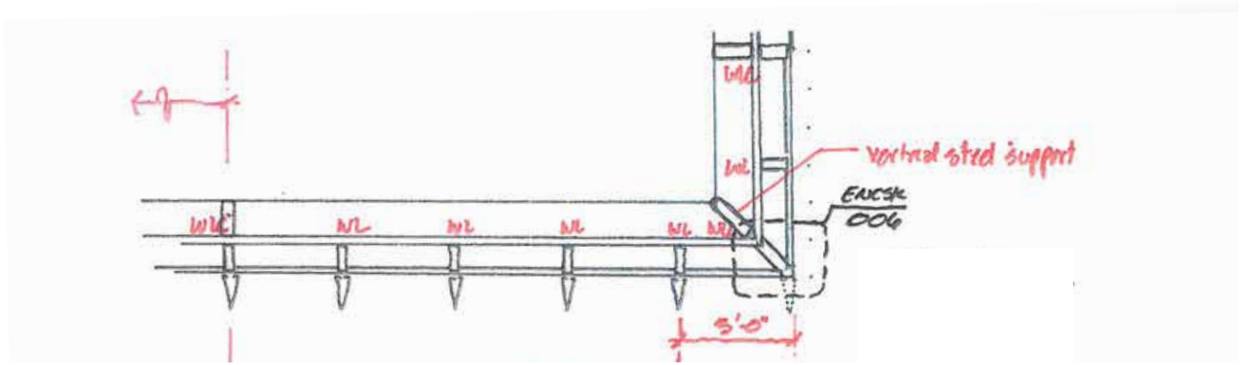
The steel wind load back up system has verticals at 15’-0” on center with steel tube horizontals spanning between the steel verticals at the necessary elevation to receive the wind load supports.

The curtain wall is either 6’-0” wide units with glass infill or 6’-0” wide units with intermediate verticals at 3’-0” on center.

The vertical mullions are supported for wind load to the steel wind load back-up system. The wind load supports are noted as: “WLC” (wind load at column) and “WL” (wind load at horizontal). For a 30’-0” run there are 3 WLC and 8 WL at the horizontals. This is a primer for what needs to happen at the corners for enclosure supports.

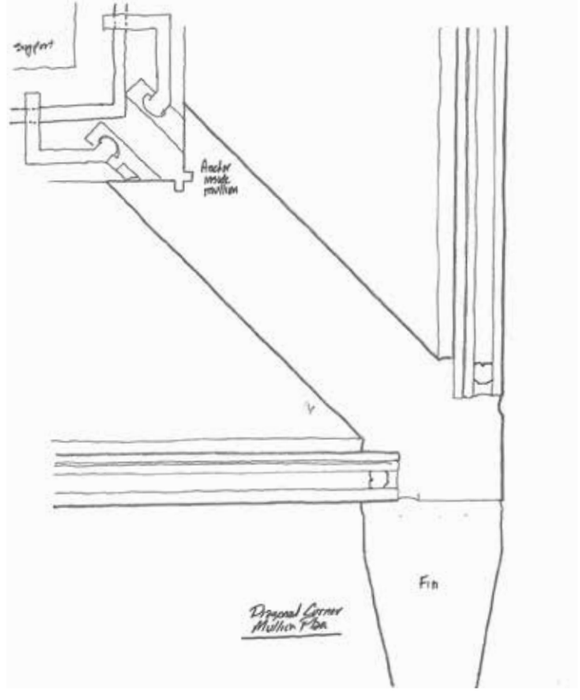
LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

TYPICAL CORNER CONDITION



PLAN LAYOUT A

If the curtain wall turns the corner to the extent of the high bay ceiling area (with either glass or aluminum panel infill at the returns), there could be a vertical steel wind load back up tube on the diagonal with a diagonal mullion. This works well for installation and seismic drift.

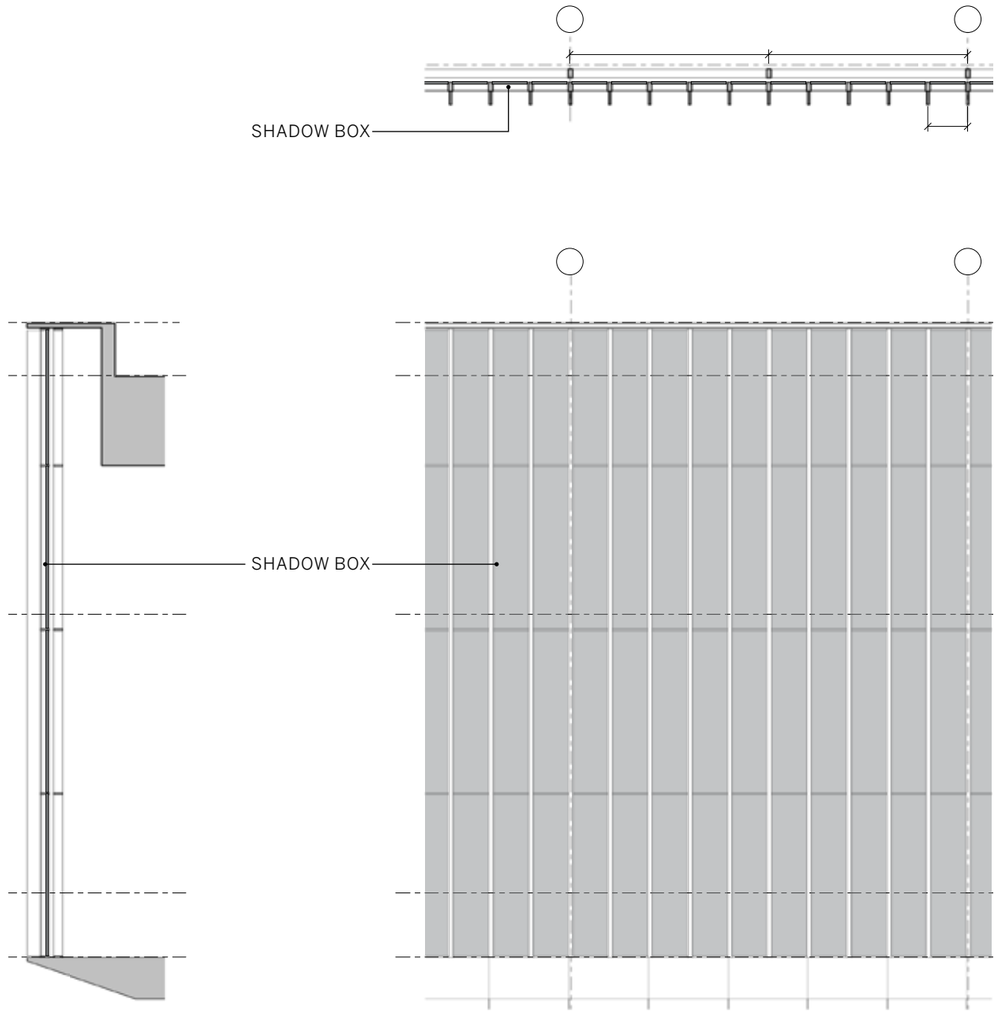


ENSCK006

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

FACADE TYPE I (TERMINAL)

SHADING STRATEGIES



NOTE :
SHADOW BOX COLOR TO BE GREY, APPLICATION TO FACADE TO BE IN COMBINATION WITH GLAZING

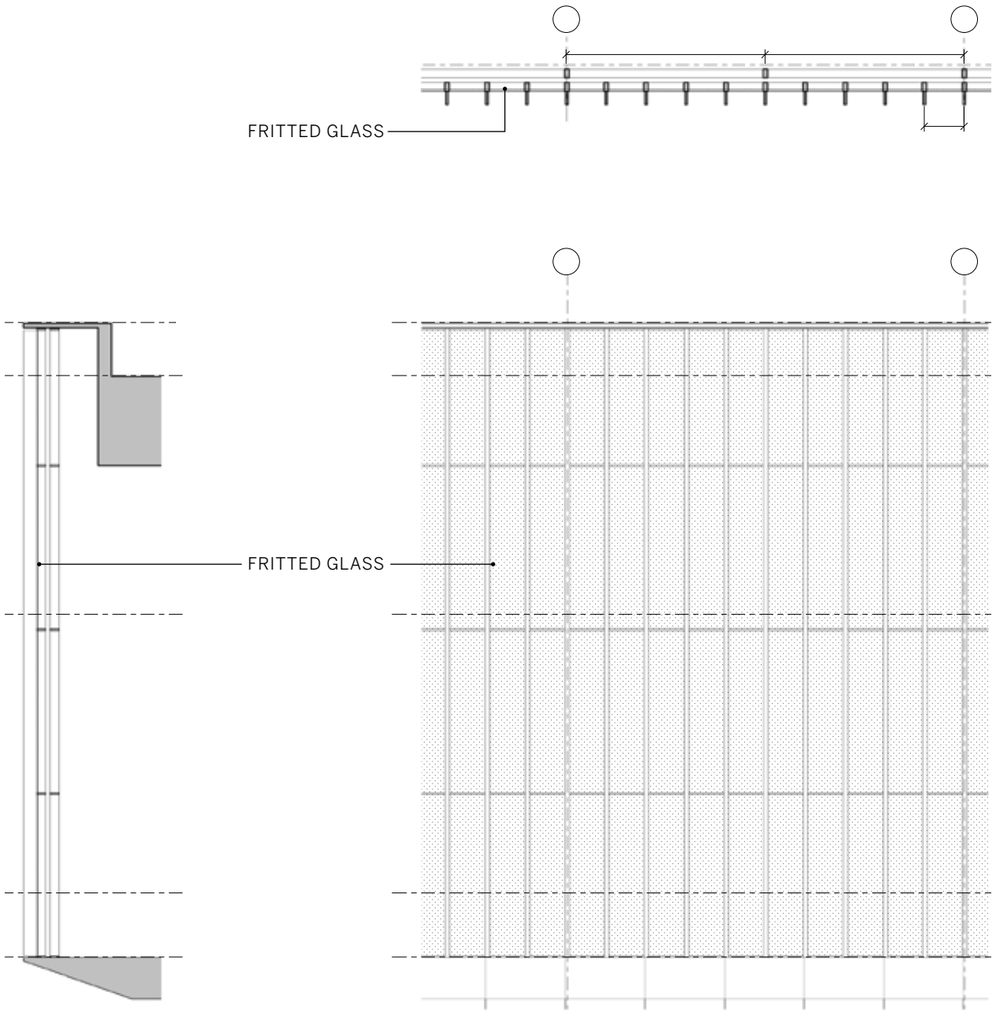
OPTION 1

SHADOW BOX - FULL COVERAGE

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

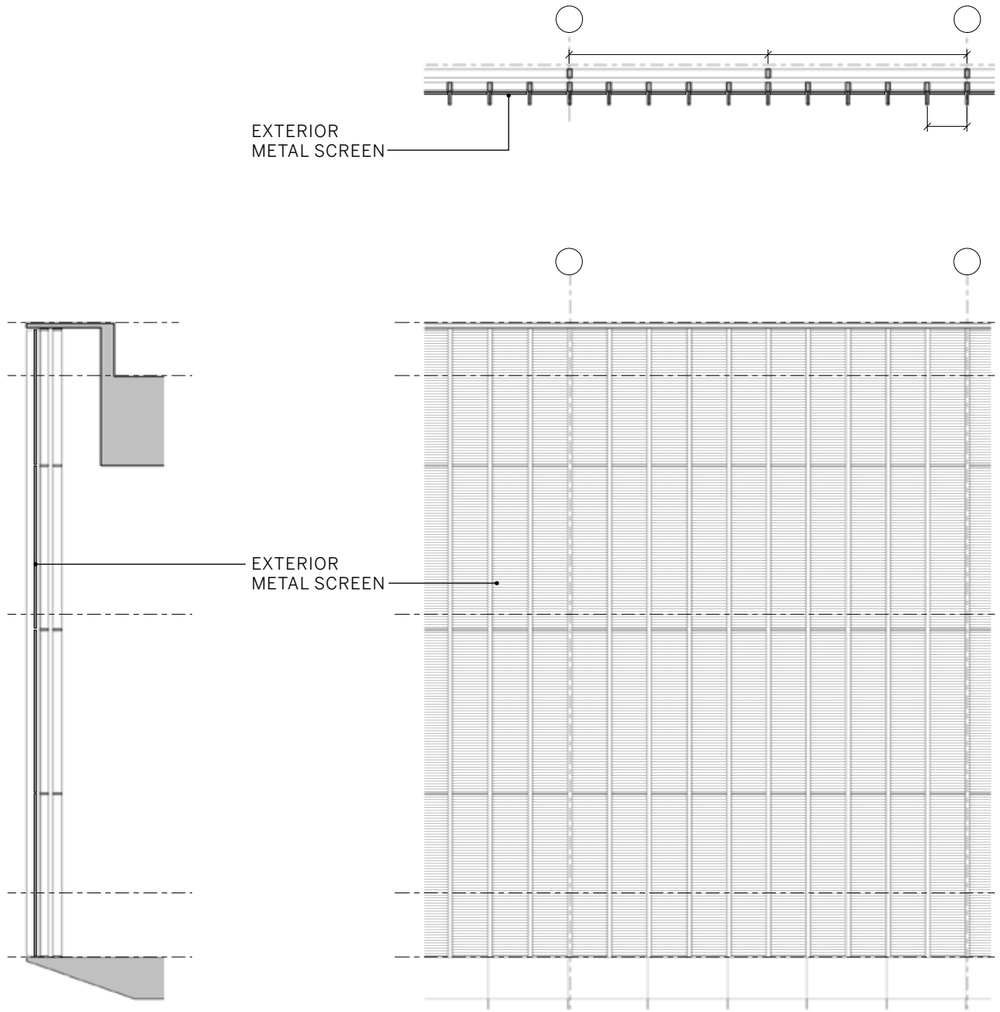
FACADE TYPE I (TERMINAL)

SHADING STRATEGIES



NOTE :
FRIT COLOR TO BE GREY, APPLICATION TO FACADE TO BE IN COMBINATION WITH GLAZING

OPTION 2
FRITTED GLASS



NOTE :
COLOR OF METAL SCREEN TO BE GREY, APPLICATION TO FACADE TO BE IN COMBINATION WITH GLAZING

OPTION 3
EXTERIOR SCREEN

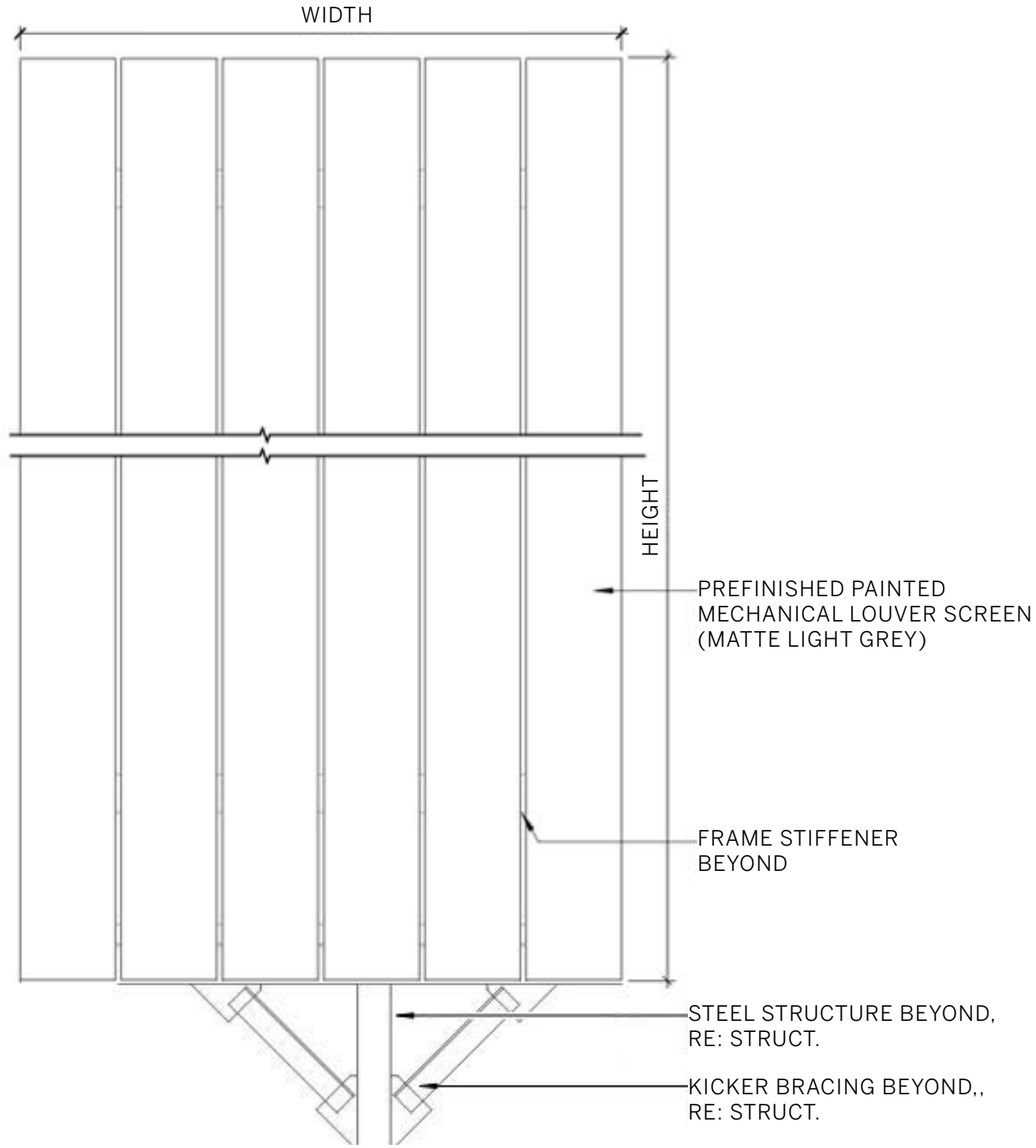
LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

FACADE TYPE V (METAL PANEL) - SAMPLE PRECEDENT IMAGES

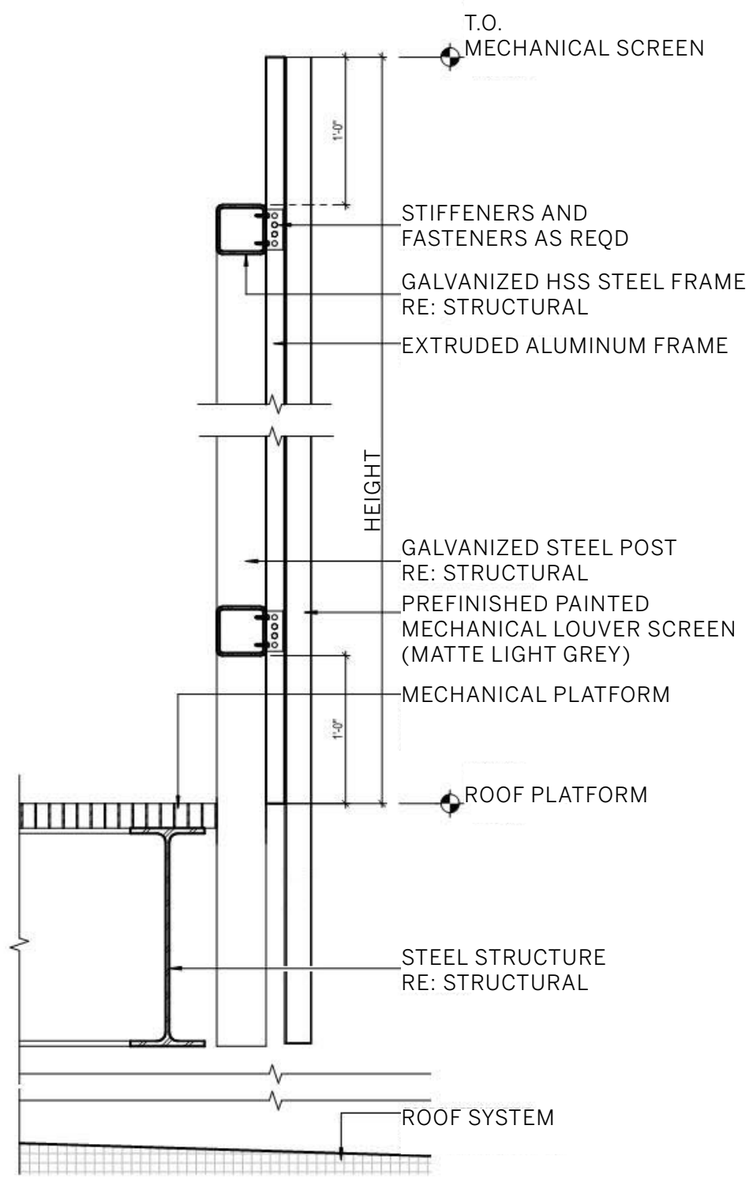
- EXTERIOR WALL / CORE ENCLOSURE
- 6’-0” MODULE
- ALIGN JOINTS TO CURTAIN WALL MULLIONS
- PPG DURANAR BRIGHT WHITE (UC55026)

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

FACADE TYPE IV - MECHANICAL SCREEN



06 ELEVATION



03 SECTION

CHAPTER 6

TERMINAL CORE INTERIOR

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

TERMINAL CORE INTERIOR

Terminal Cores consolidate heretofore randomly located vertical circulation into convenient, easily identifiable locations and provide access to all terminal levels: security screening check point (SSCP), ticketing lobby, and baggage claim. The Core serves as the primary terminal access points to the APM system. The Core is organized vertically such that the APM pedestrian walkway, SSCP and aircraft gates are essentially on the same level, meaning departing and arriving passengers with pre-printed boarding passes and carry-on bags avoid level changes within the terminal, by-passing ticket lobbies and bag claim. Provisions should be made for future baggage drop locations at Concourse Level.

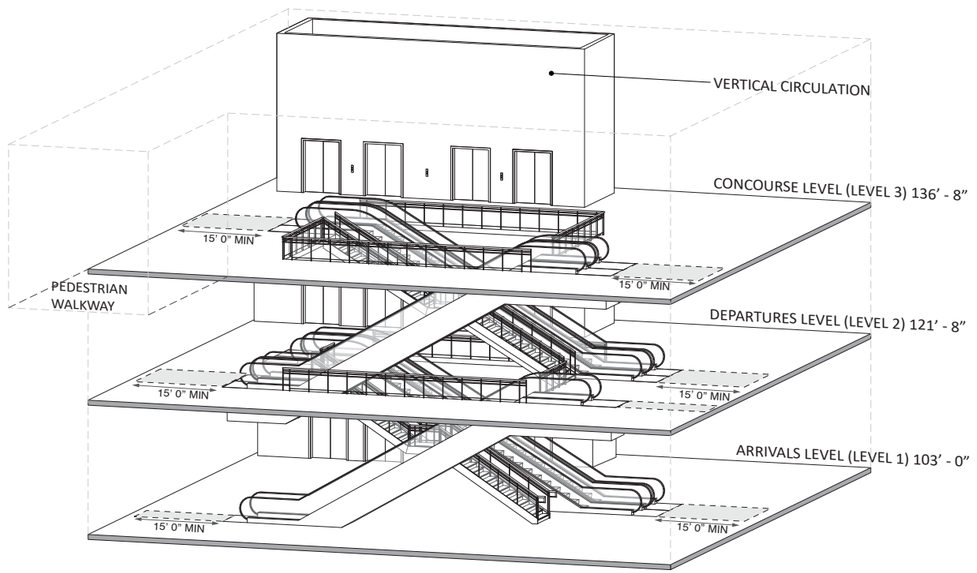
This chapter seeks to provide the information and guidance necessary to realize the principles of creating a Unified Airport Campus and enhancing User Experience within the Terminal Cores. Typical core dimensions, configuration and quantity of vertical circulation, the location and details of art & advertising as well as general design direction for materials and finishes are set forth to ensure a shared design among Terminal Core projects in the CTA. These have been developed with guidance from subject matter experts and relevant LAWA departments.

The conditions illustrate the base building condition only and do not include representations of the APM Brand & Identity.

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

TYPICAL CORE

The minimum quantity of vertical circulation equipment (escalators/elevators) shown in these exhibits satisfies the peak demand associated with APM passenger movements. Where the Terminal Core is intended to provide general building circulation, additional vertical circulation analysis is required to determine the total number of devices required to satisfy the total combined demand. Vertical circulation analysis shall be submitted to LAWA for review.



NOTE:

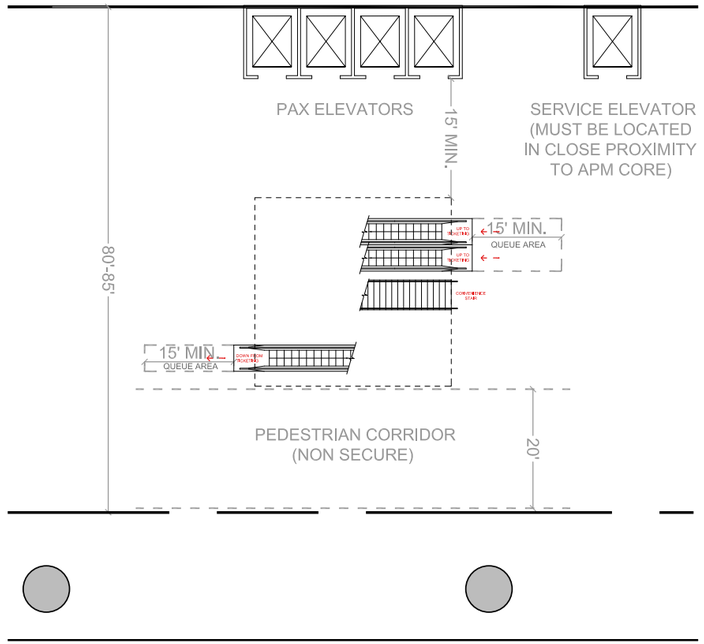
141'-6" APM PEDESTRIAN WALKWAY TO TERMINAL NOT DEPICTED

The minimum quantity of vertical circulation elements includes: two pairs of escalators between each level (7 runs total) with one set operating in each direction, public stairs and elevators (4 + 1 service elevator). Typically, there is less demand for the down movement between ticketing and bag claim, therefore only one escalator is required at this location. Escalators typically transport passengers at the fastest rate and will likely be used by the majority of terminal users. Elevators will be used by wheelchair and semi-ambulatory passengers, passengers with baggage carts as well as families travelling with small children in strollers.

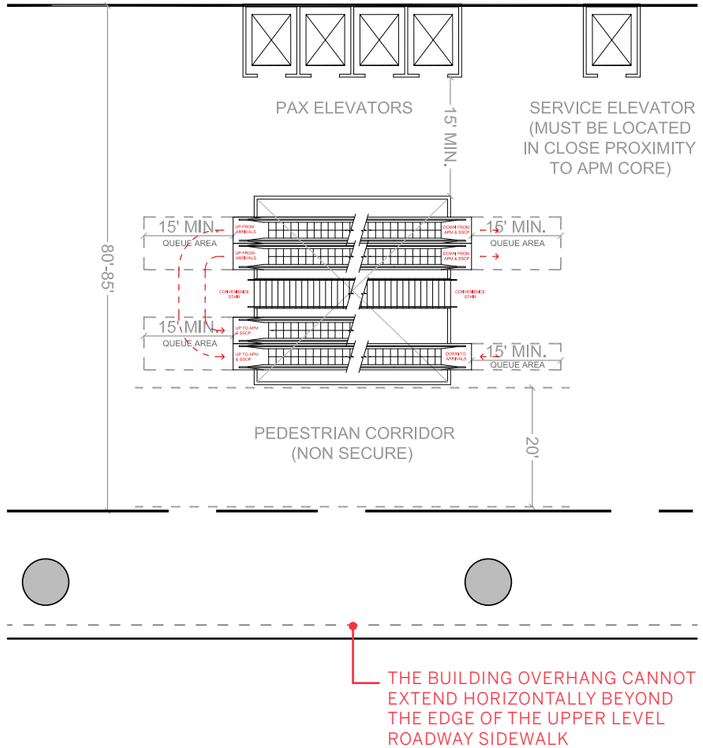
Vertical circulation equipment should be arranged in a "stacked" configuration in order to achieve an efficient, compact footprint. Placing the up and down landings of escalator pairs on the same side of the floor opening is required as this configuration simplifies circulation patterns and improves wayfinding. The escalator pair providing circulation from APM/SSCP level to ticketing should be located nearest to the exterior face of the terminal and oriented in the direction of the entrance to ticket counter queues. An unobstructed, clear queuing area is required at escalators and elevators. The queuing area associated with the entry and exit of escalator pairs shall be equal in width to the escalator housing approximately 12' wide x 15' deep measured from the face of the escalator floor plate. For elevators, a 15' deep queuing area will be provided equal in width to the total width of the elevator bank.

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

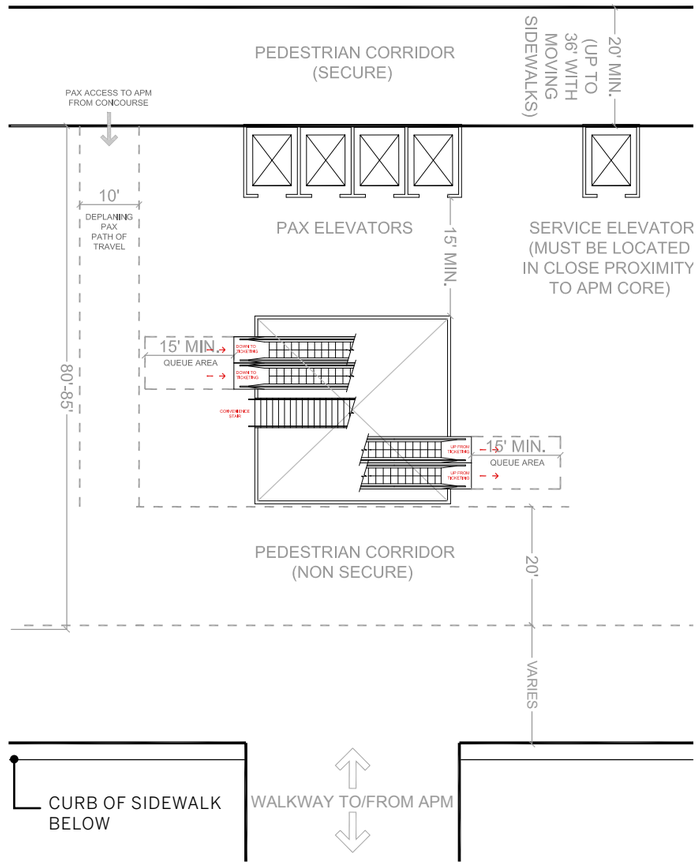
TYPICAL CORE - PLAN DIAGRAM



TYPICAL CORE
ARRIVALS LEVEL



TYPICAL CORE
DEPARTURES LEVEL



TYPICAL CORE
APM WALKWAY LEVEL

NOTE:

1. WALKWAY / TERMINAL INTERFACE FLOOR ELEVATION MAY VARY BASED ON TERMINAL LOCATION.

PUBLIC ART

LAWA staff manages an airport-wide Public Art Exhibitions Program which includes commissioned work, curated changing exhibits, and performances. In terminal buildings, the majority of the work on display is part of changing exhibits. Within the Terminal Core, LAWA requires the inclusion of Public Art Display Opportunities at the APM Walkway Level. Each location will provide for large format two-dimensional work within recessed wall niches having a depth of 8 inches minimum. Large format work is generally defined as artwork greater than 60 inches square.

The Arts Exhibitions Program features changing art exhibitions in a wide-variety of media requiring track lighting systems that provide the ability to add or remove light luminaires, and change their position, angle and beam spread in response to the unique, individual characteristics associated with each exhibition.

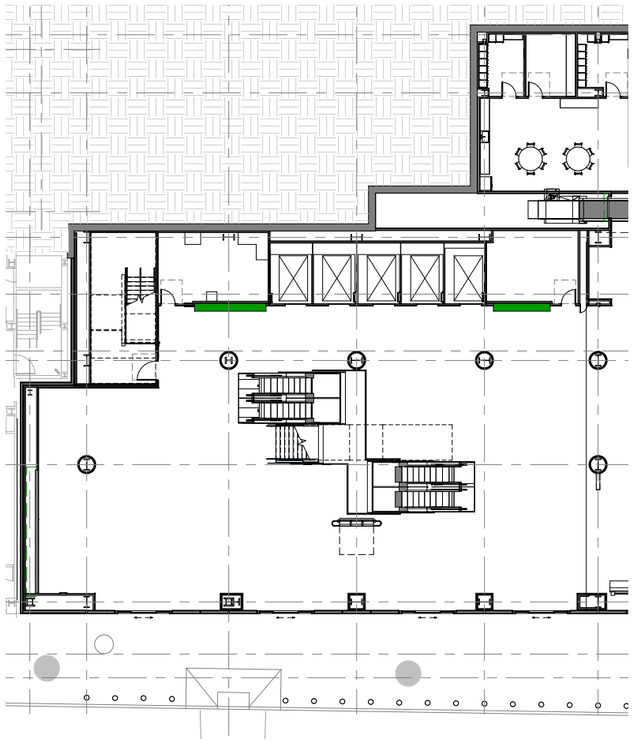
Art Display Lighting Systems will be low-heat emitting LED track lighting system technologies able to support fixtures mounted every one (1) foot that are versatile, flexible, and discreet.

The selected system(s) should:

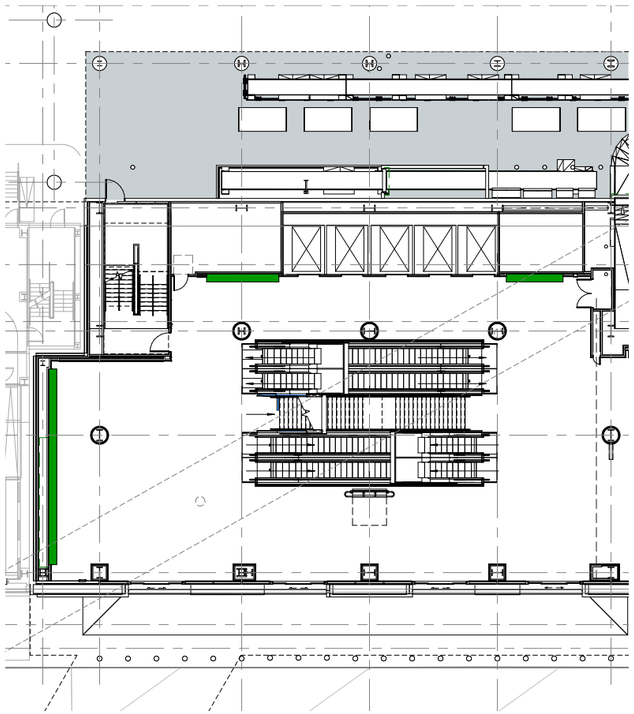
- be suitable for a wide range of applications
- provide accent and fill lighting appropriate for each environment
- include a complete set of track heads and lens accessories (spot, narrow flood, flood, and wall wash)
- provide secure dimming controls with a minimum of one (1) dimmer control per every 12 feet of light track and separate dimmable light controls for accent, fill, and work lights.
- be positioned at an optimal, safe distance from artworks based upon the Art Program's review of photometric light studies.
- provide light on exhibit surfaces shall be greater than 20 foot-candles or 200 lux per square foot and not exceed 140 foot-candles or 1,400 lux per square foot. Preferred range is between 40 and 80 foot-candles or 400 and 800 lux per square foot.
- Use of low heat-emitting (LED) technologies (no or ultra-low UV, low Infrared).

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

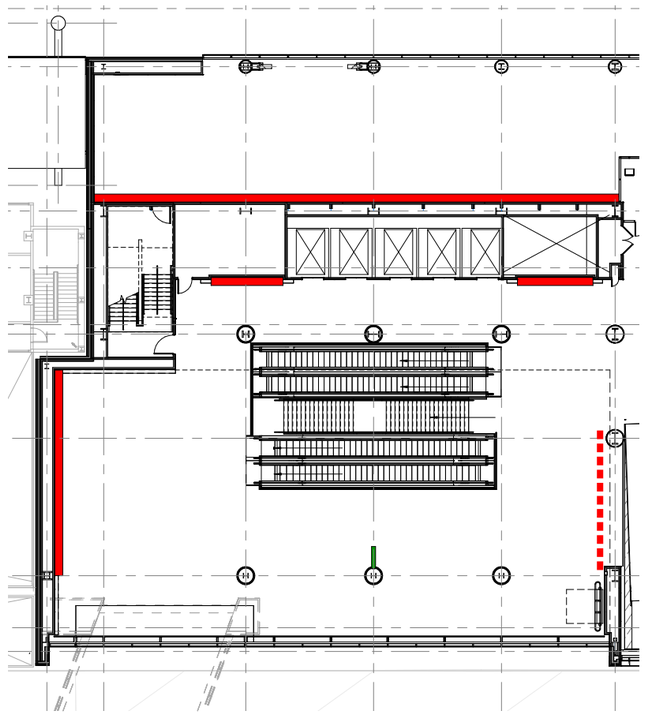
ART AND ADVERTISING



TYPICAL CORE
ARRIVALS LEVEL



TYPICAL CORE
DEPARTURES LEVEL



TYPICAL CORE
APM WALKWAY LEVEL

PUBLIC ART & ADVERTISING NOTES:

1. COORDINATE PUBLIC ART DISPLAY LOCATIONS(S) WITH LAWA ART PROGRAM REPRESENTATIVE.
2. WALL SHOULD BE REINFORCED WITH (WOOD) SUB-PANELS FOR MOUNTING ARTWORKS AND FINISHED TO APPEAR SEAMLESS. FINISHED SURFACES SHOULD BE PAINTABLE.
3. FOR WALLS, POSITION ELECTRICAL OUTLETS VERY LOW ON THE WALL, HIDDEN IN SOFFITS OR RECESSES OUTSIDE THE DISPLAY AREA, OR MOUNTED IN CEILINGS DIRECTLY ABOVE/ADJACENT TO DISPLAY WALLS. FOR FLOORS, BRING ELECTRICAL OUTLETS FORWARD PARALLEL/ADJACENT TO THE GLASS.
4. LIGHTING FOR ART WALLS, PROVIDE FOR CEILING MOUNTED TRACK LIGHTING APPROXIMATELY 4' TO 6' FROM WALL WITH LIGHTS TO BE SPACED EVERY 1'. LIGHTING TO PROVIDE 75 FOOT-CANDLES @ 6' HIGH.

VERSION 3

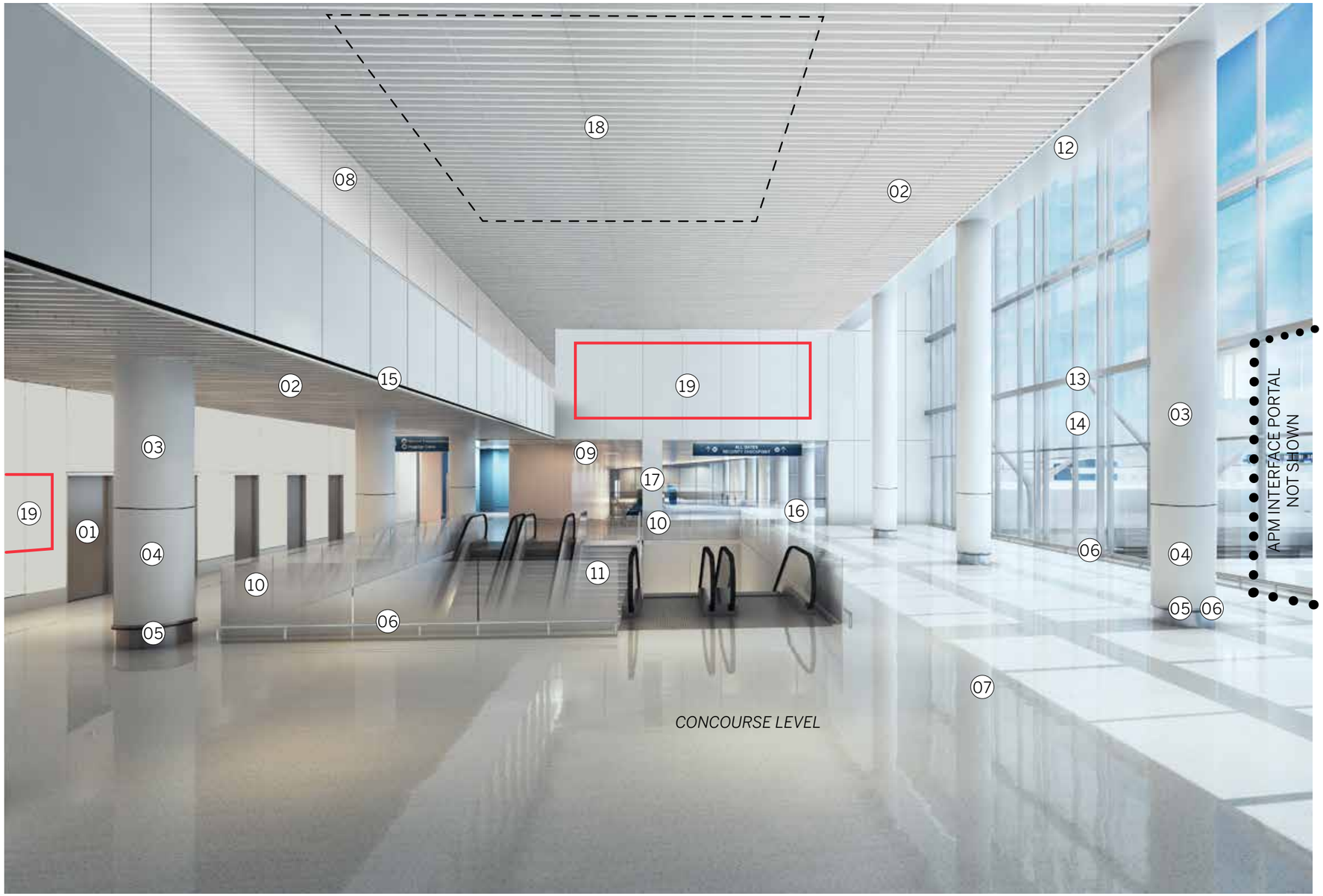
ART / GRAPHIC LOCATION

ART / GRAPHIC LOCATION (ABOVE)

ADVERTISEMENT

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

TERMINAL CORE INTERIOR - SAMPLE RENDERING



TERMINAL 1.5 CORE
SAMPLE RENDERING

01 STAINLESS STEEL ELEVATOR DESIGN

02 BAFFLE CEILING
(2" X 12" @ 9" SPACING)

03 WHITE PAINTED METAL PANEL

04 WHITE SOLID SURFACE (CORIAN OR EQUAL)

05 12" STAINLESS STEEL FLUSH BASE

06 CONTINUOUS 1-1/4" STAINLESS STEEL PROTECTIVE RAIL

07 TERRAZZO FLOOR (PER LAWA SPECIFICATIONS)

08 CLEAR LOW IRON GLASS (ALIGN MULLION SPACEING WITH EXTERIOR CURTAIN WALL SYSTEM)

09 FIRE DOOR WITH INTEGRATED COVER PLATE AT ALL LOCATIONS

10 CLEAR LOW IRON GLASS GUARDRAIL AT STAIRCASE WITH GRADUATING MICRO DOT FRIT PATTERN, (ALIGN GLASS JOINTS WITH SOFFIT PANELS)

11 STAIR TO BE CENTERED BETWEEN ESCALATORS

12 FLAT WHITE PAINTED GYPSUM BOARD
(COLOR PPG BRIGHT WHITE OR EQUAL)

13 WHITE MULLIONS
(COLOR: PPG DURANAR BRIGHT WHITE (UC55026)

14 FACADE TYPE II AT CORE: SECONDARY STRUCTURAL STEEL AS REQUIRED BY CURTAIN WALL ENGINEER / MANUFACTURER

15 CONTINUOUS LINEAR AIR DIFFUSER
(COLOR: PPG DURANAR BRIGHT WHITE (UC55026)

16 TERMINAL CORE RAMPS BEYOND
(NOT SHOWN, REFER TO FLOOR PLAN)

17 ROUND COLUMN COVER, TYPICAL

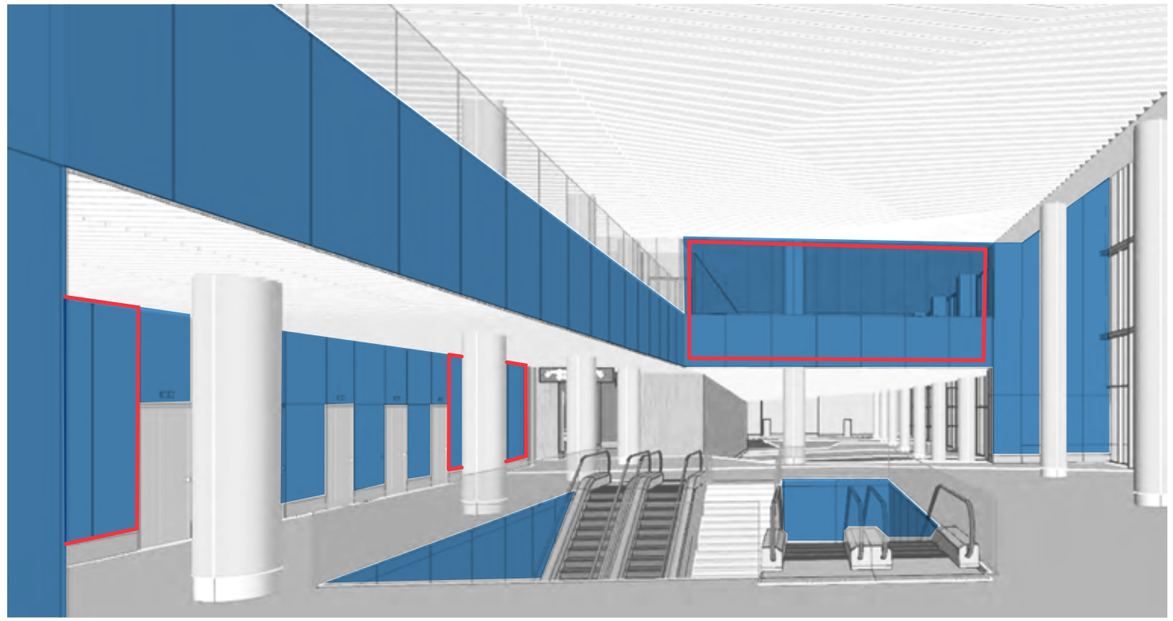
18 AREA ABOVE VERTICAL CIRCULATION (SHOWN DASHED) TO HAVE LEAST AMOUNT POSSIBLE OF CEILING ACCESSORIES

19 4" RECESSED GYPSUM BOARD SURFACE PUBLIC ART EXHIBIT SPACE

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

TERMINAL CORE WALL FINISHES

TERMINAL CORE - VIEW LOOKING WEST
TYPICAL WALL FINISHES LAYOUT



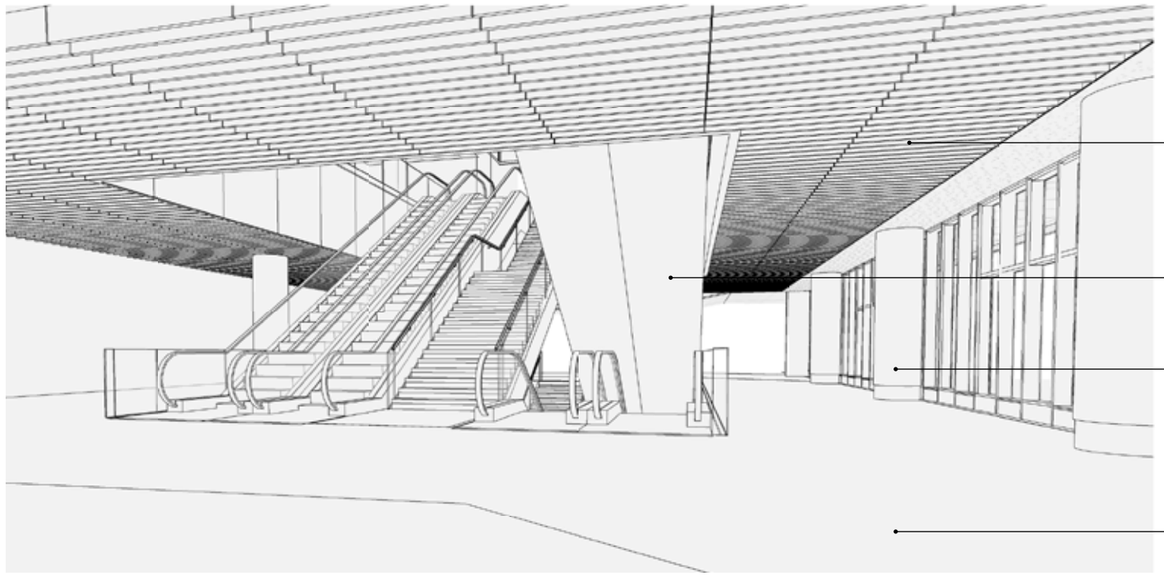
TERMINAL CORE - VIEW LOOKING EAST
TYPICAL WALL FINISHES LAYOUT

CORIAN (GLACIER WHITE)

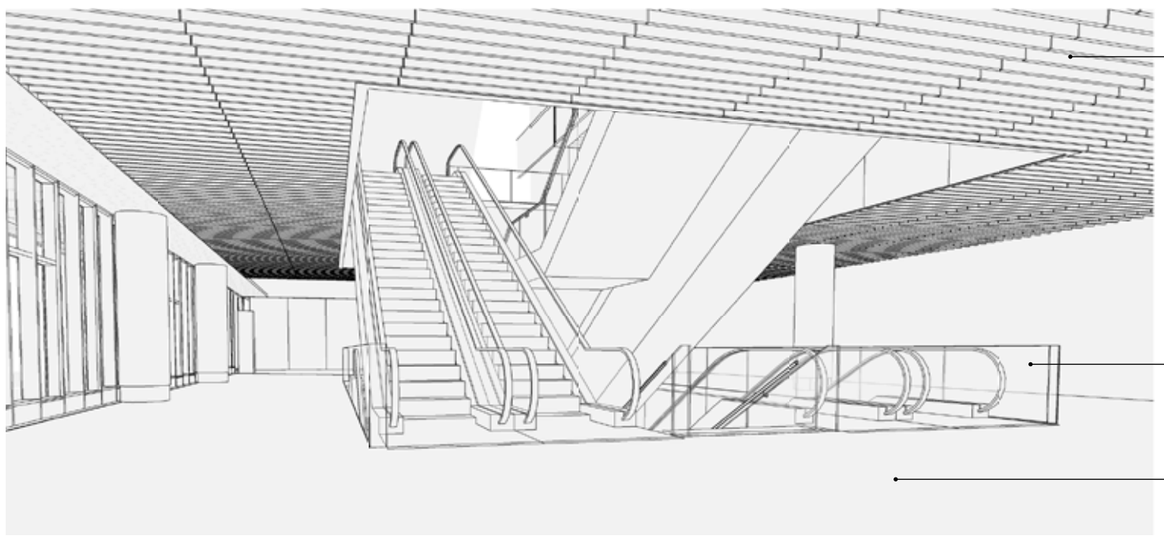
ART LOCATION OVER DRYWALL

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

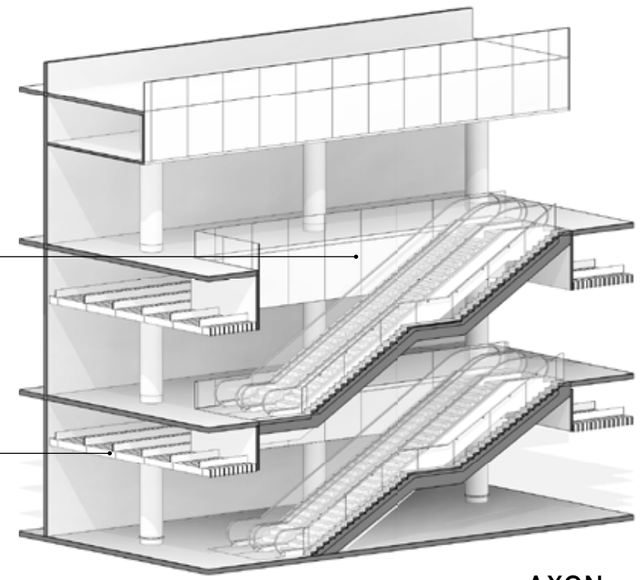
DEPARTURE LEVEL SAMPLE VIEW



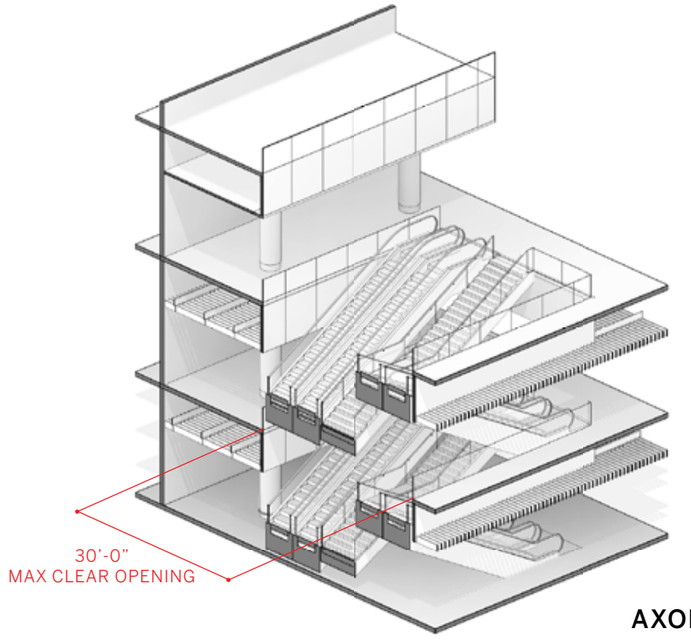
DEPARTURES LEVEL
LOOKING EAST



DEPARTURES LEVEL
LOOKING WEST



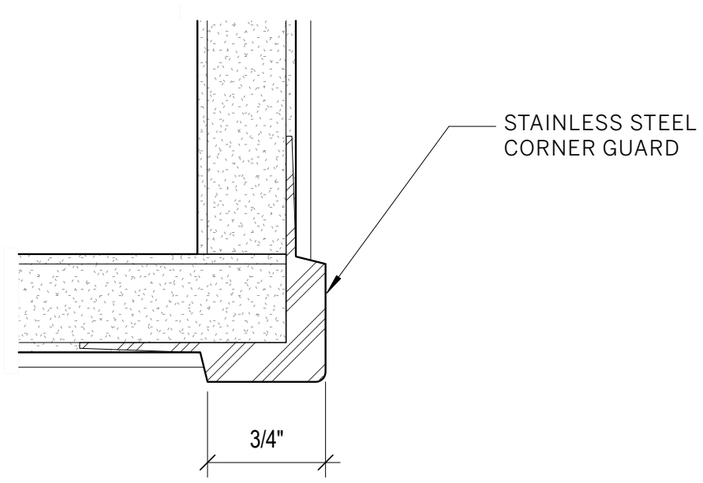
AXON



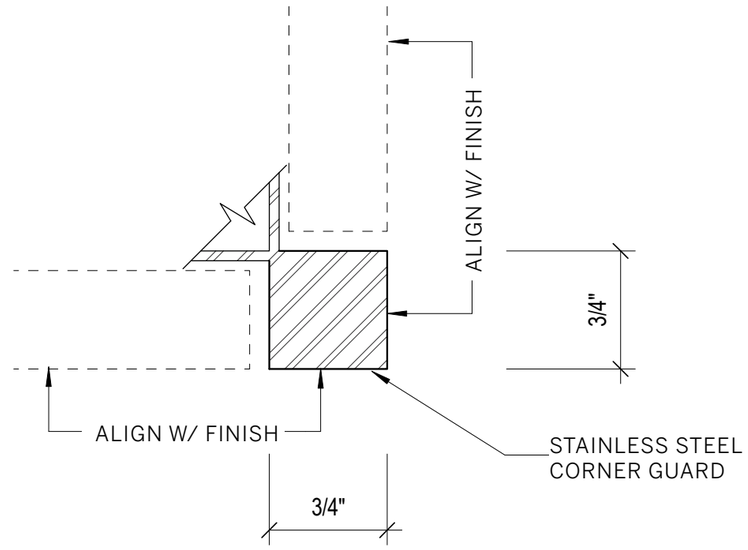
AXON

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

PROTECTIVE CORNER GUARD - SAMPLE DETAILS



**CORNER GUARD PLAN
OPTION 2**



**CORNER GUARD PLAN
OPTION 1**

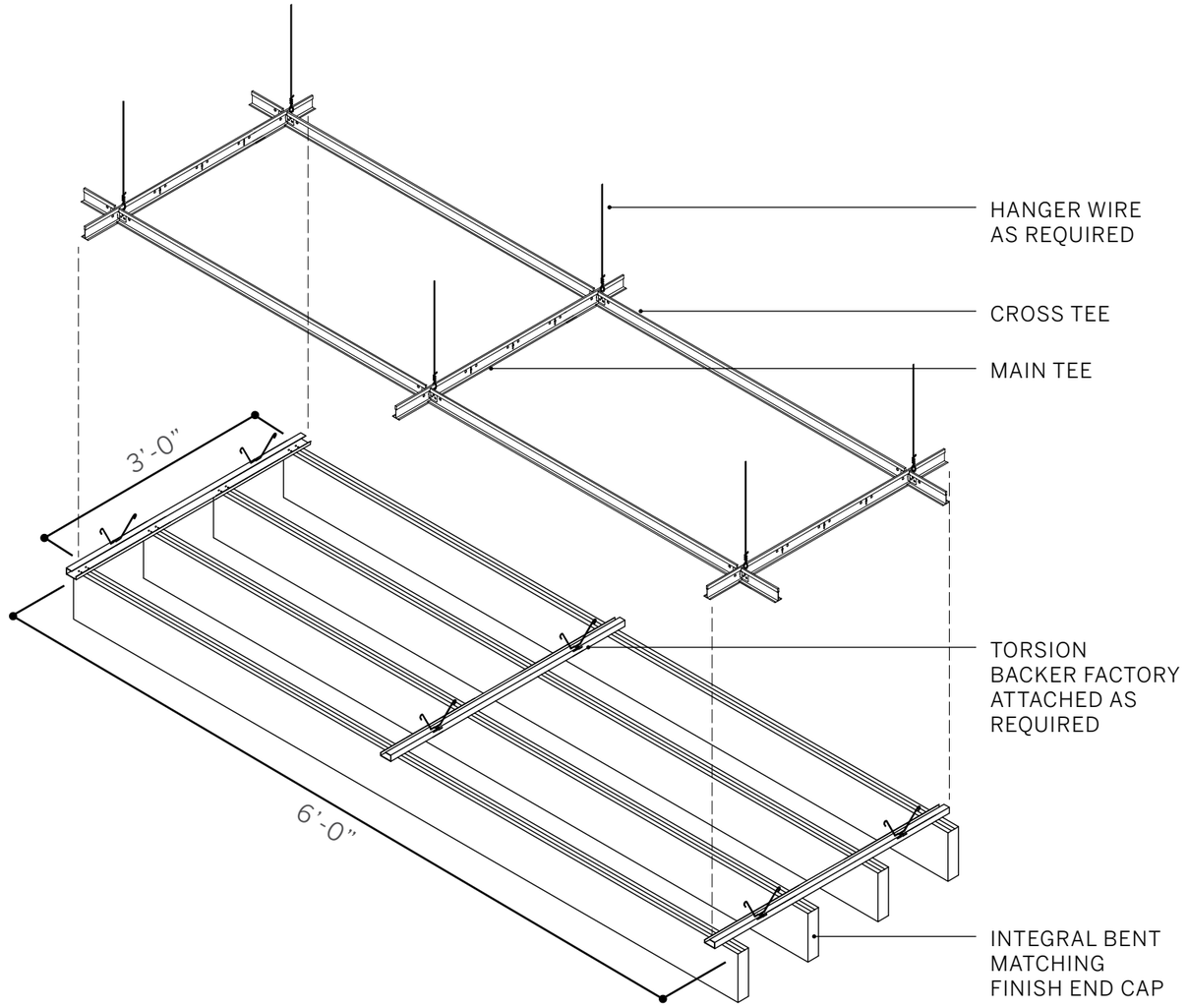
LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

TERMINAL CORE CEILING DESIGN

THE CEILING DESIGN PROVIDES A UNIFORM FIELD OF CEILING ELEMENTS WHICH REDUCE VISUAL NOISE IN THE TERMINAL CORES AS WELL AS MAINTAIN A CONSISTENT AESTHETIC THROUGHOUT ALL OF THE TERMINALS.

- BAFFLE CEILING SYSTEM
- FACTORY ATTACHED BACKING SYSTEM
- MODULAR 3'X6' GRID SYSTEM
  - FIXED (WITH LIGHTS)
  - LOOSE / ACCESSIBLE (NO LIGHTS)
- INTEGRAL BENT MATCHING FINISHED END CAP
- CONCEALED LED LINEAR LIGHTING ALIGNED TO BAFFLE DIRECTION
- BAFFLE DIRECTION PERPENDICULAR TO CURTAIN WALL
- ALL ELEMENTS LOCATED ABOVE CEILING BAFFLES TO BE FINISHED IN MATTE DARK GREY

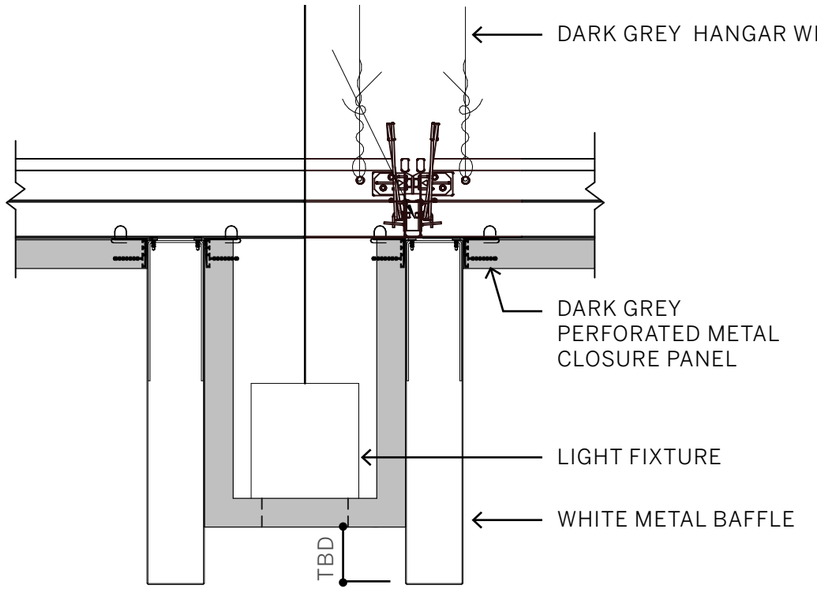
VERSION 3



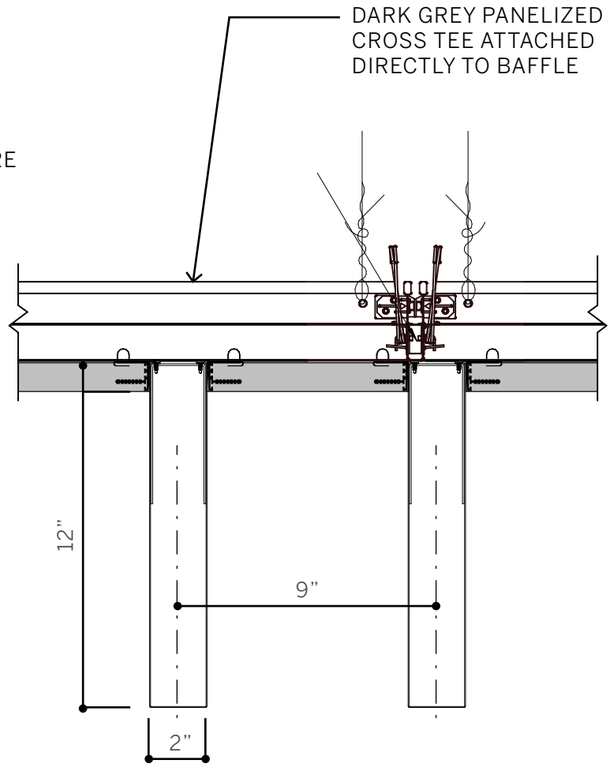
BAFFLE SYSTEM AXON

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

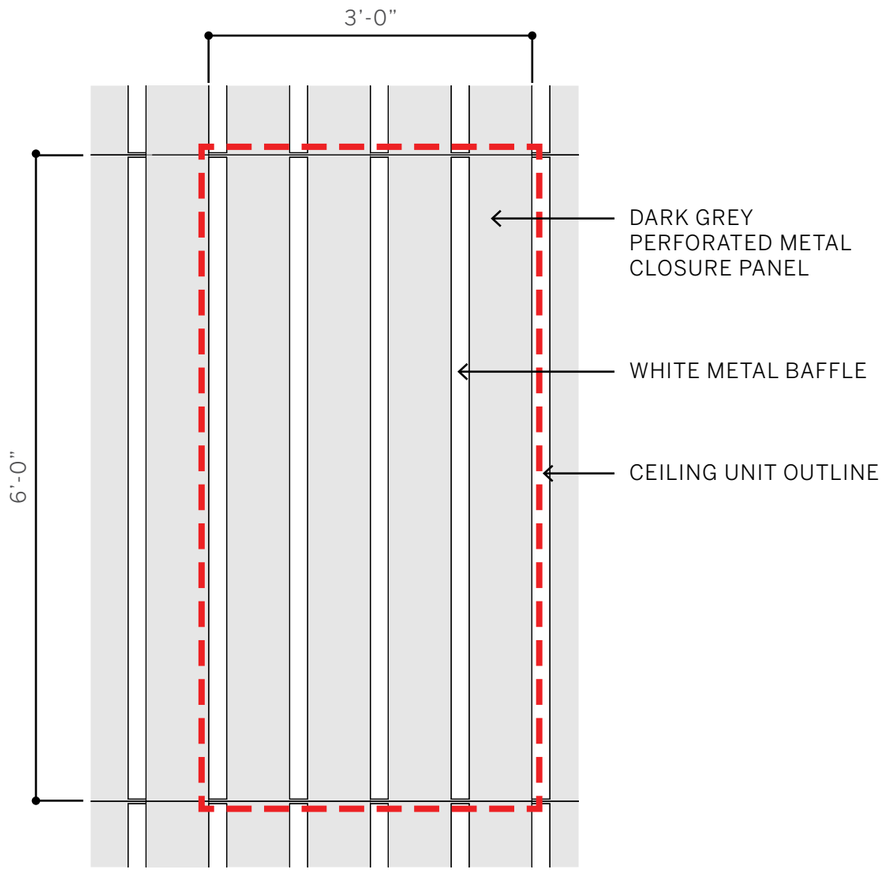
TERMINAL CORE CEILING DESIGN - SAMPLE DETAILS



SECTION DETAIL
LIGHT FIXTURE AT CLOSURE PANEL



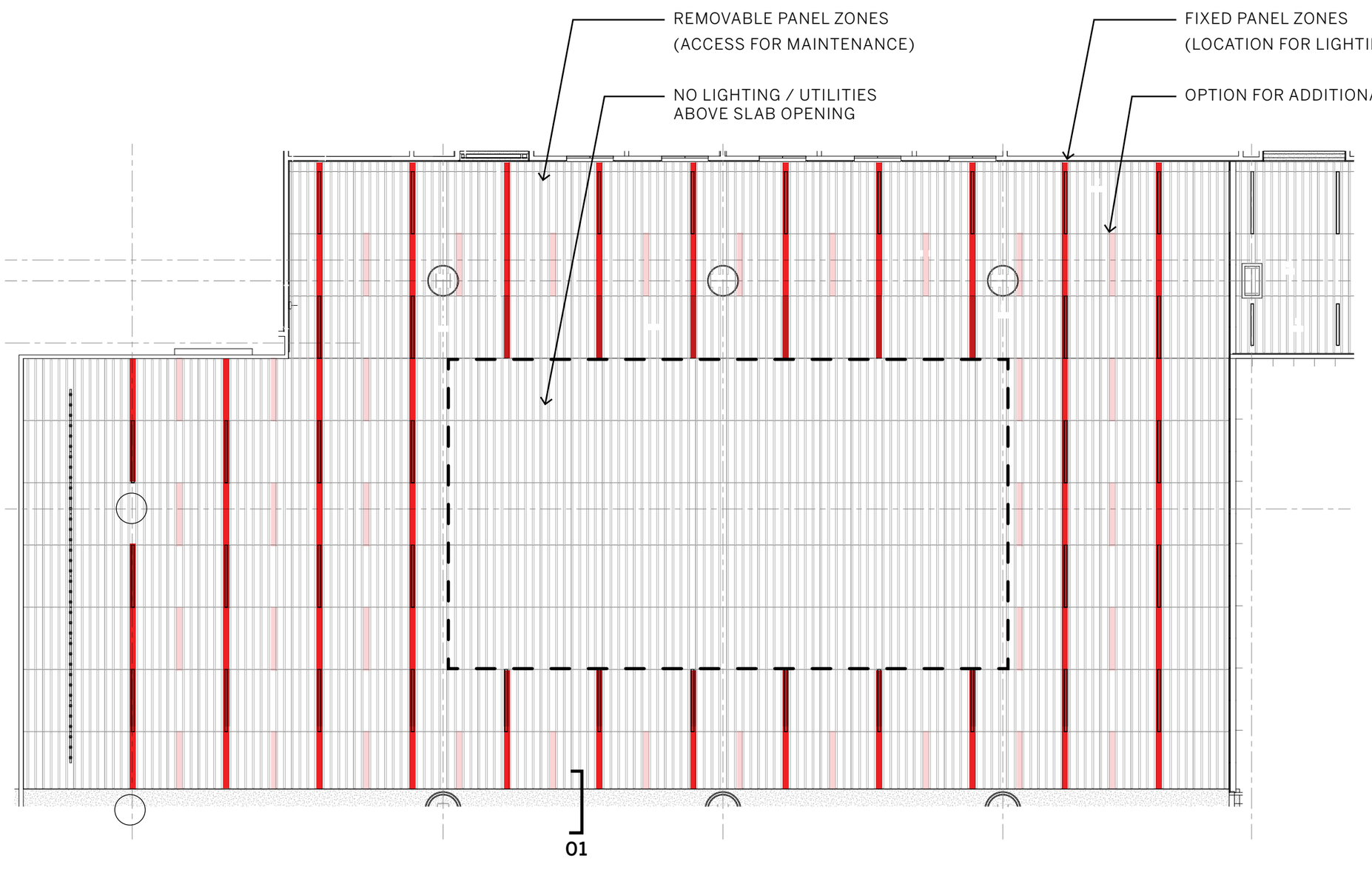
SECTION DETAIL
TYPICAL METAL BAFFLE



TYPICAL REFLECTED CEILING PLAN

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

TERMINAL CORE CEILING DESIGN - SAMPLE LAYOUT



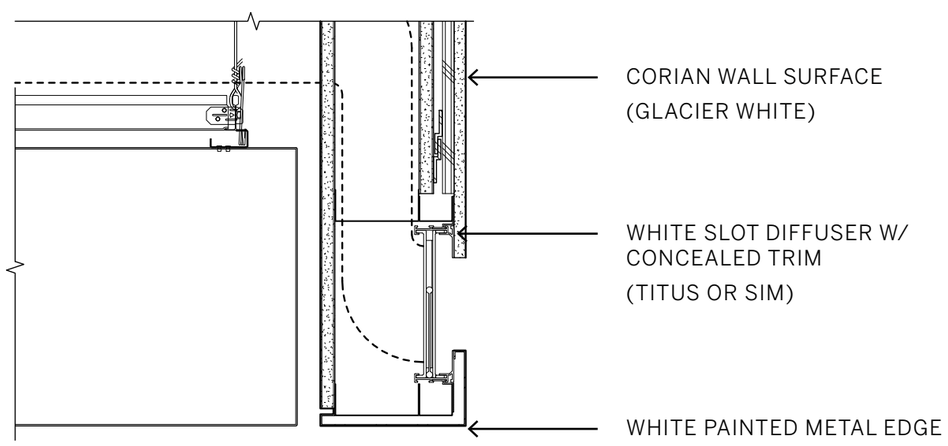
TYPICAL REFLECTED CEILING PLAN

NOTE :

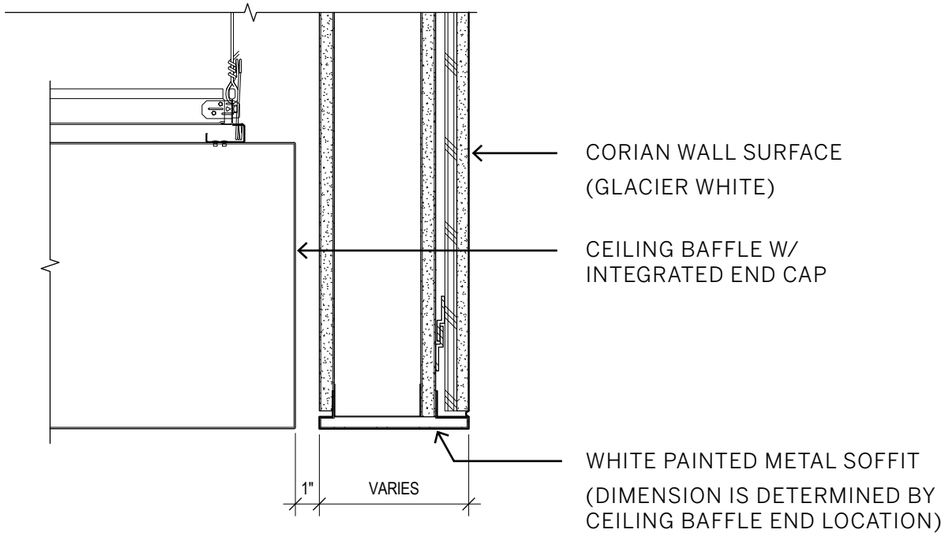
- FINAL LIGHTING DESIGN TBD

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

CEILING TO SOFFIT TRANSITIONS - SAMPLE DETAILS

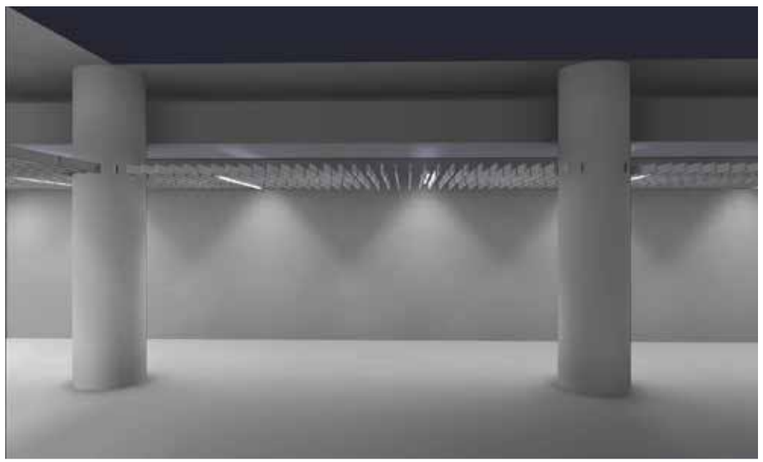


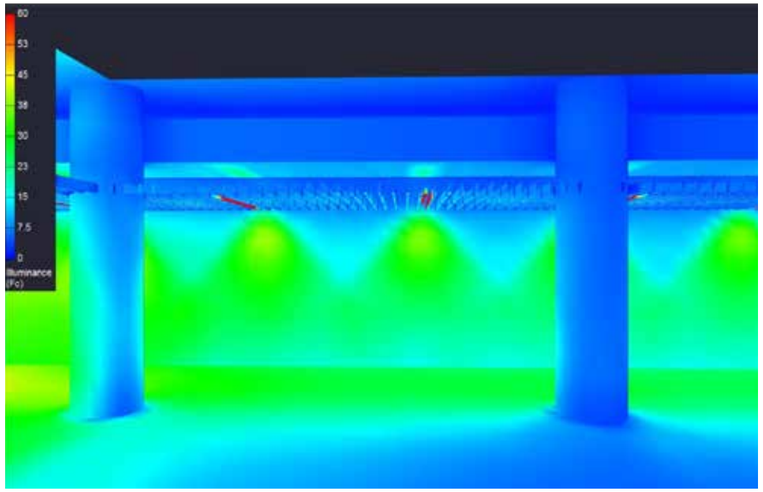
03 SOFFIT DETAIL AT HVAC SLOT DIFFUSER



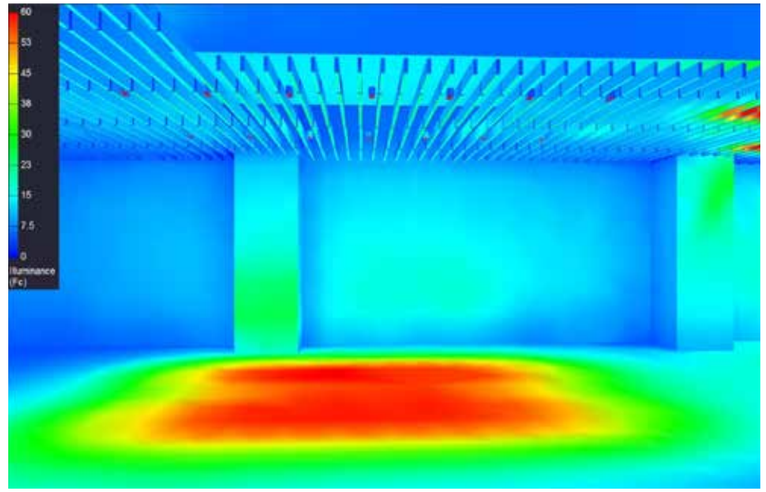
01 TYPICAL SOFFIT DETAIL

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS
PRELIMINARY CEILING LIGHTING CONCEPT





CEILING LIGHTS
OPTION 2 - LINEAR LIGHTS

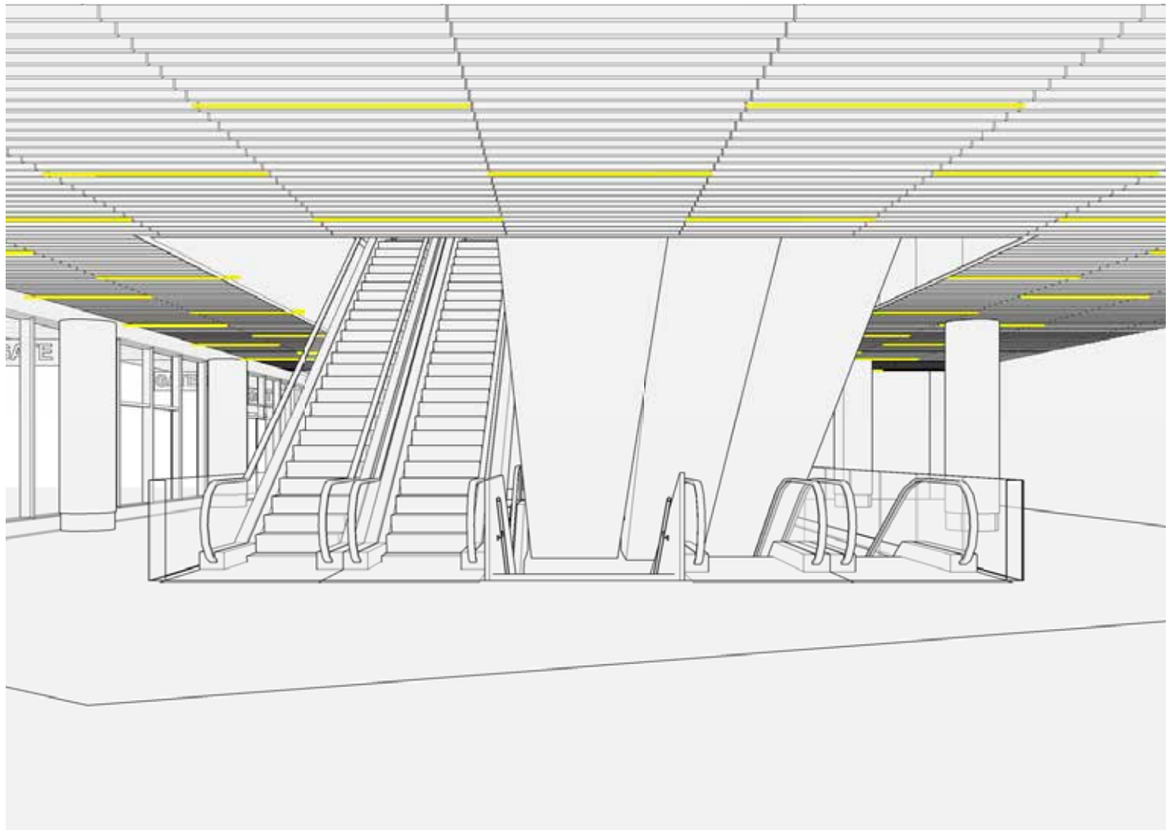


CEILING LIGHTING
OPTION 1 - DOWNLIGHTS

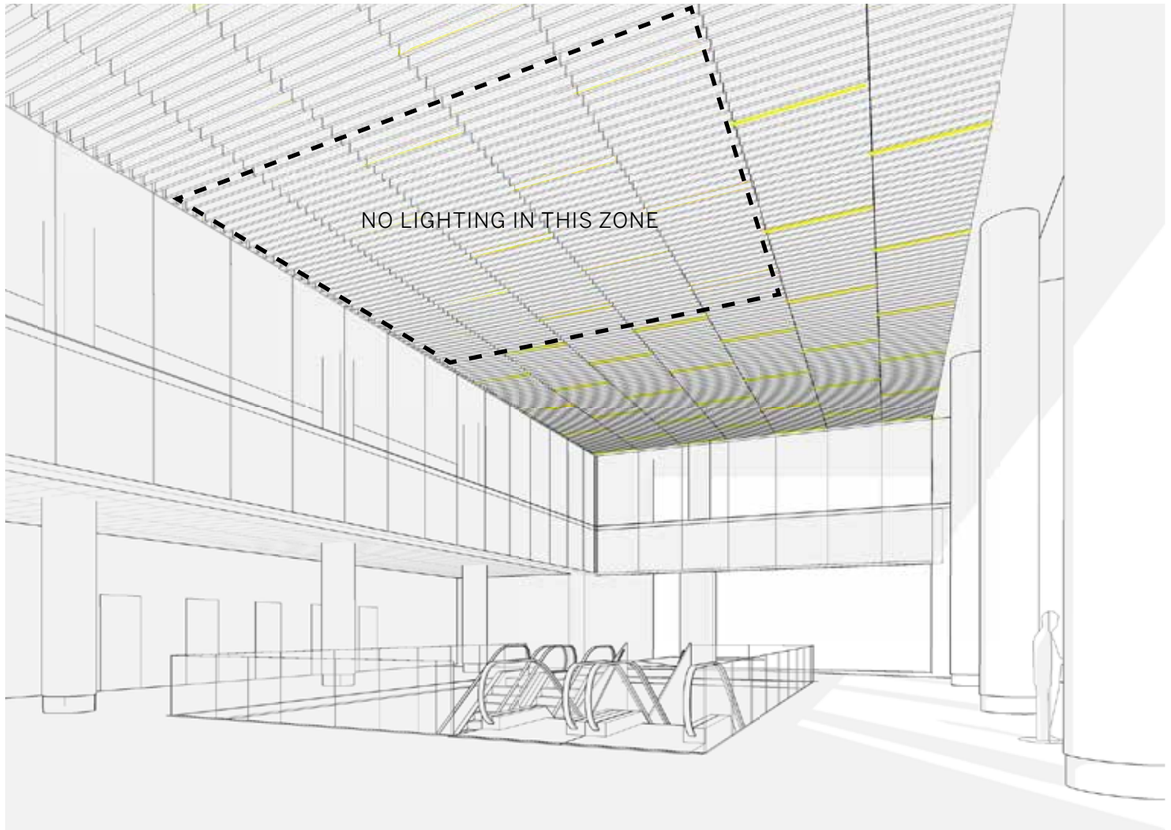
NOTE :
- LIGHT SPACING ALIGNS TO CURTAIN WALL MODULE
- EVENLY DISTRIBUTED LIGHT FIXTURES THROUGHOUT ALL BAFFLE CEILING AREAS
- CEILING LIGHT LOCATIONS TO BE COORDINATED WITH ALL EXPOSED UTILITIES
- CONCEAL ALL LIGHT FIXTURES WITHIN BAFFLE ZONE
- FINAL LIGHTING DESIGN TBD

VERSION 3

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS
PRELIMINARY CEILING LIGHTING CONCEPT



DEPARTURES LEVEL

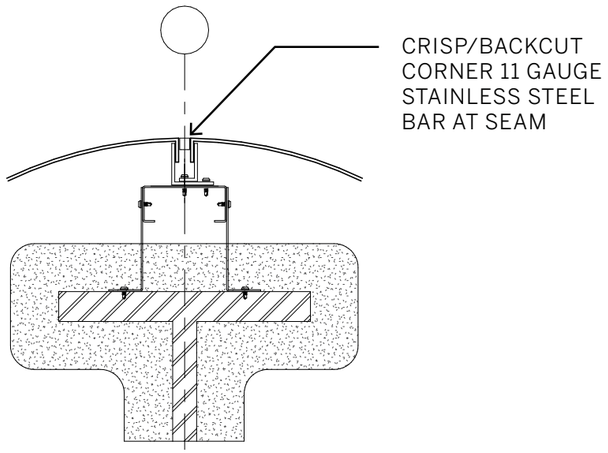


CONCOURSE LEVEL

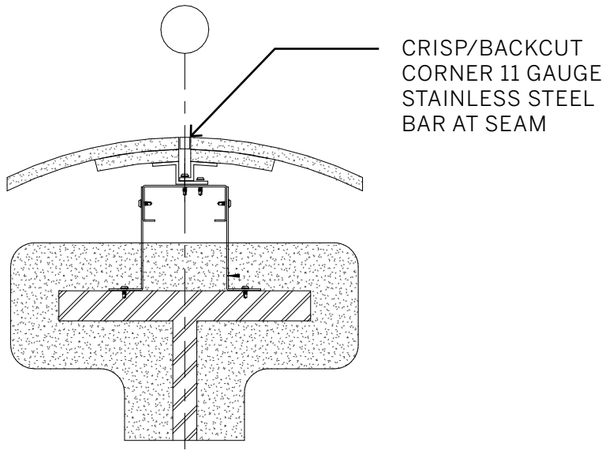
NOTE :
- FINAL LIGHTING DESIGN TBD

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

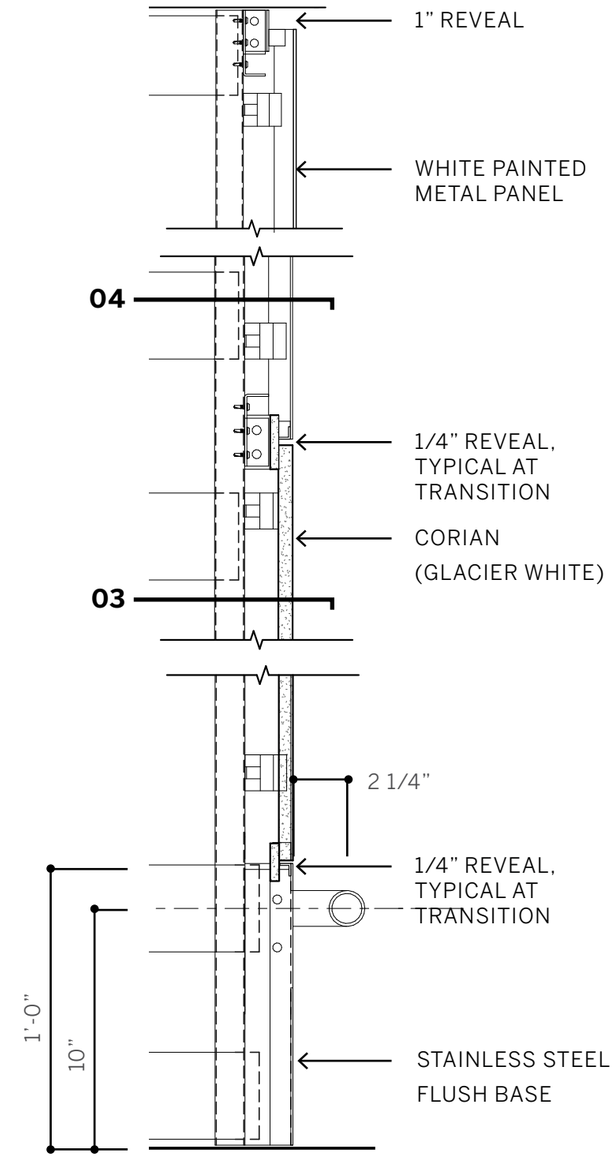
COLUMN COVERS - SAMPLE DETAILS



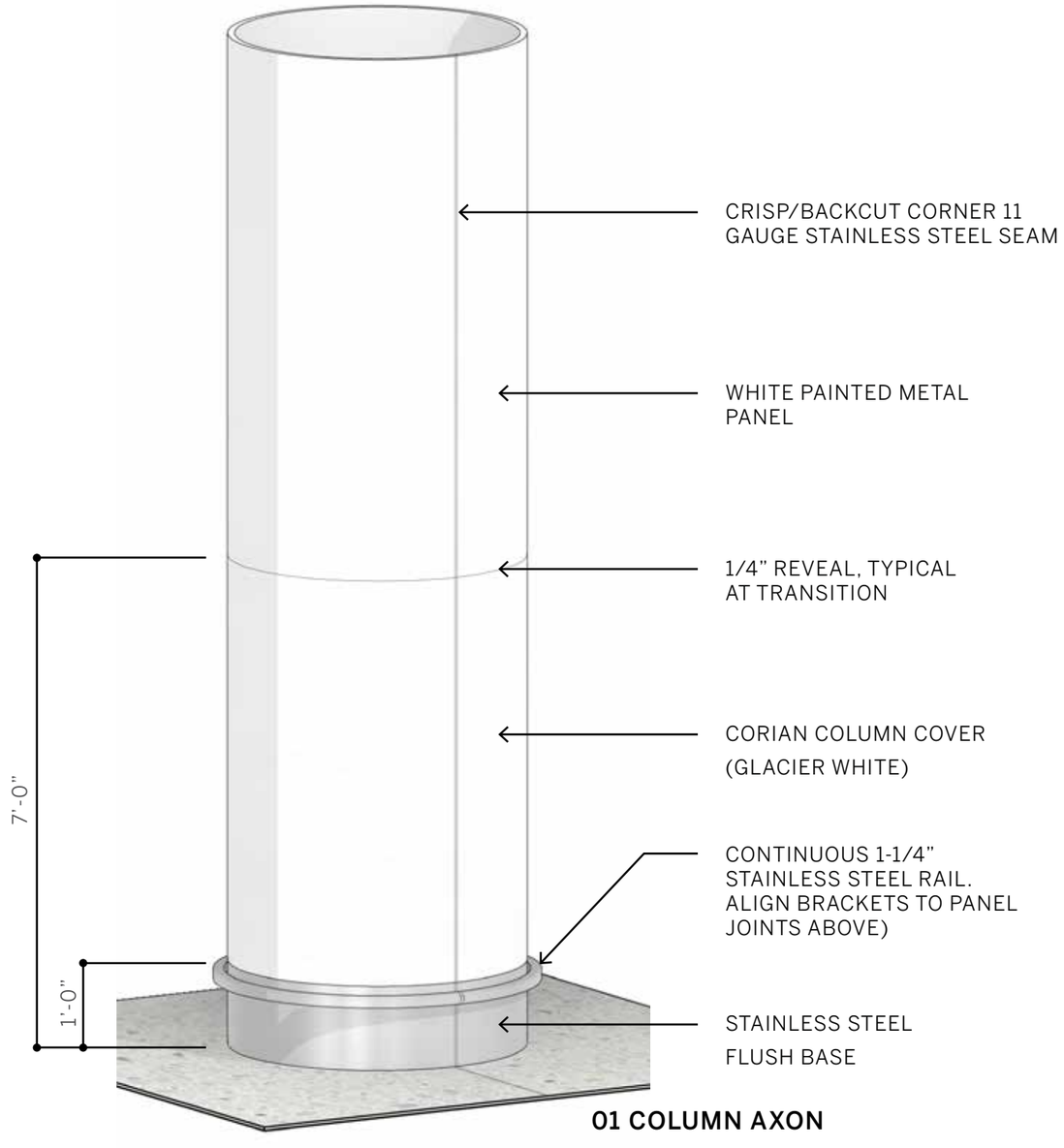
04 PLAN DETAIL
METAL PANEL



03 PLAN DETAIL
CORIAN



02 COLUMN SECTION



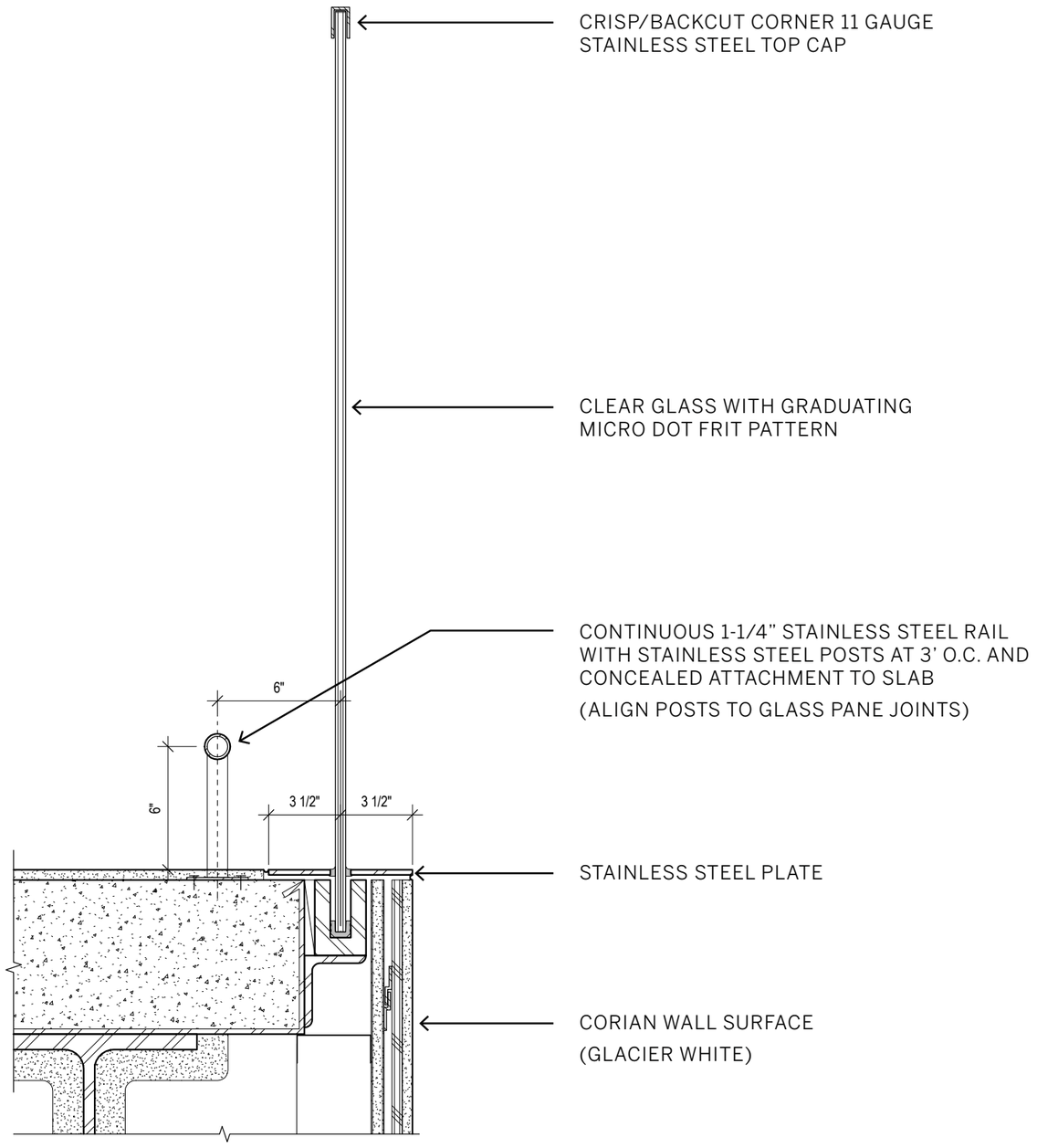
01 COLUMN AXON

NOTE :

1. REFER TO DESIGN CONSTRUCTION HANDBOOK (DCH) FOR ADDITIONAL INFORMATION
2. ALL ALUMINUM PANEL SHOULD HAVE SQUARED EDGES

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

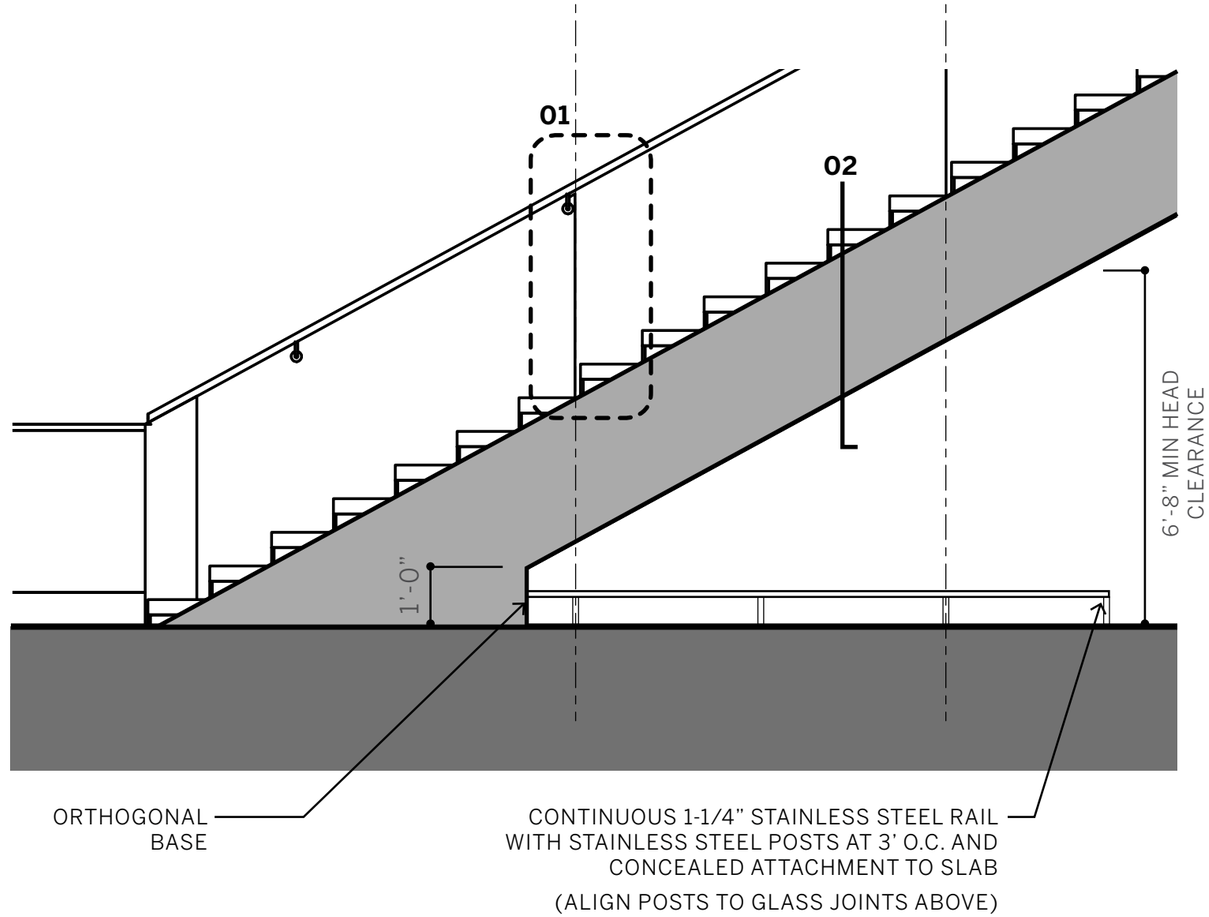
GLASS GUARDRAIL + PROTECTIVE RAIL- SAMPLE DETAIL



TYPICAL GUARDRAIL SECTION

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

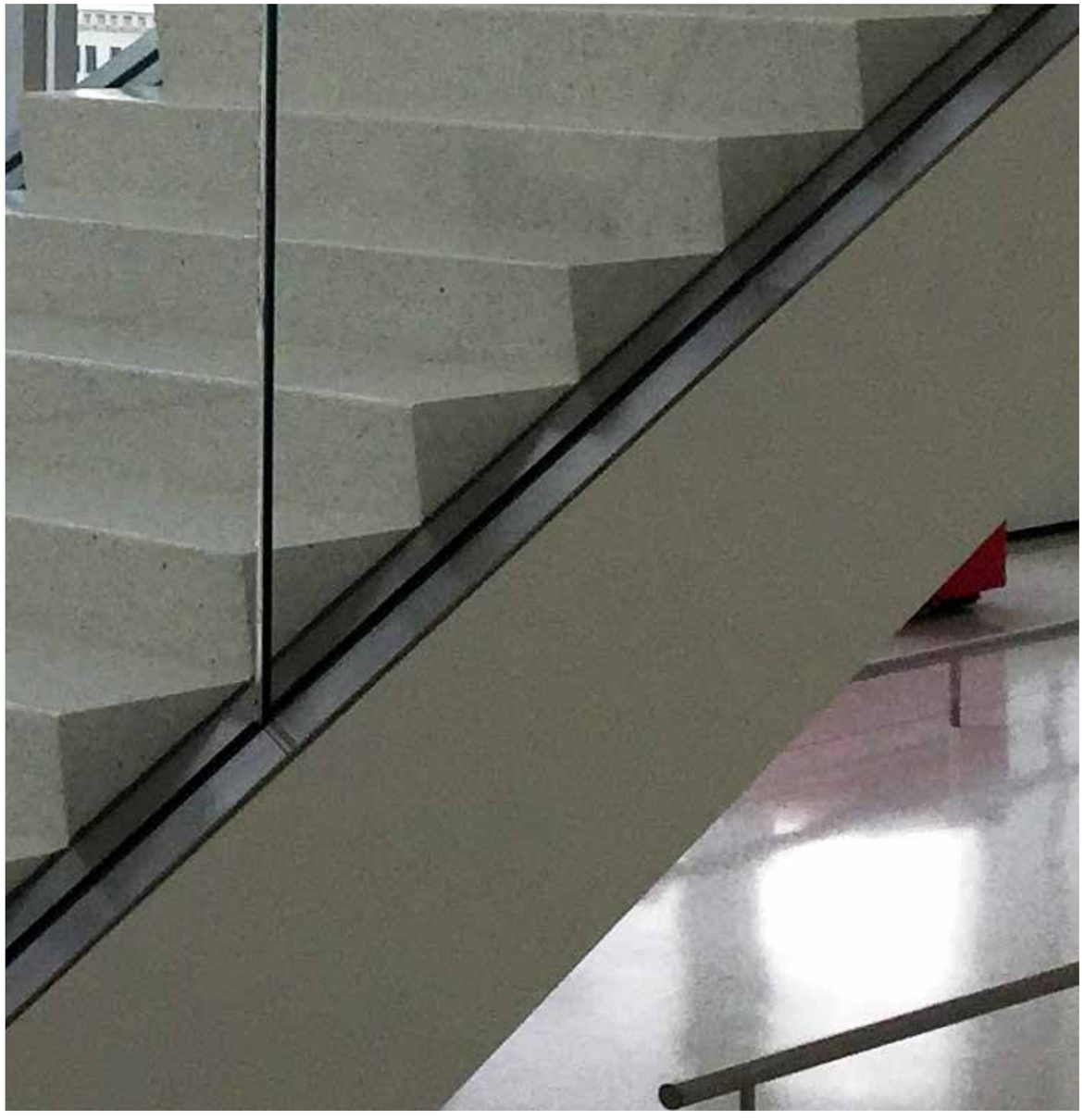
PROTECTIVE RAIL - SAMPLE IMAGES

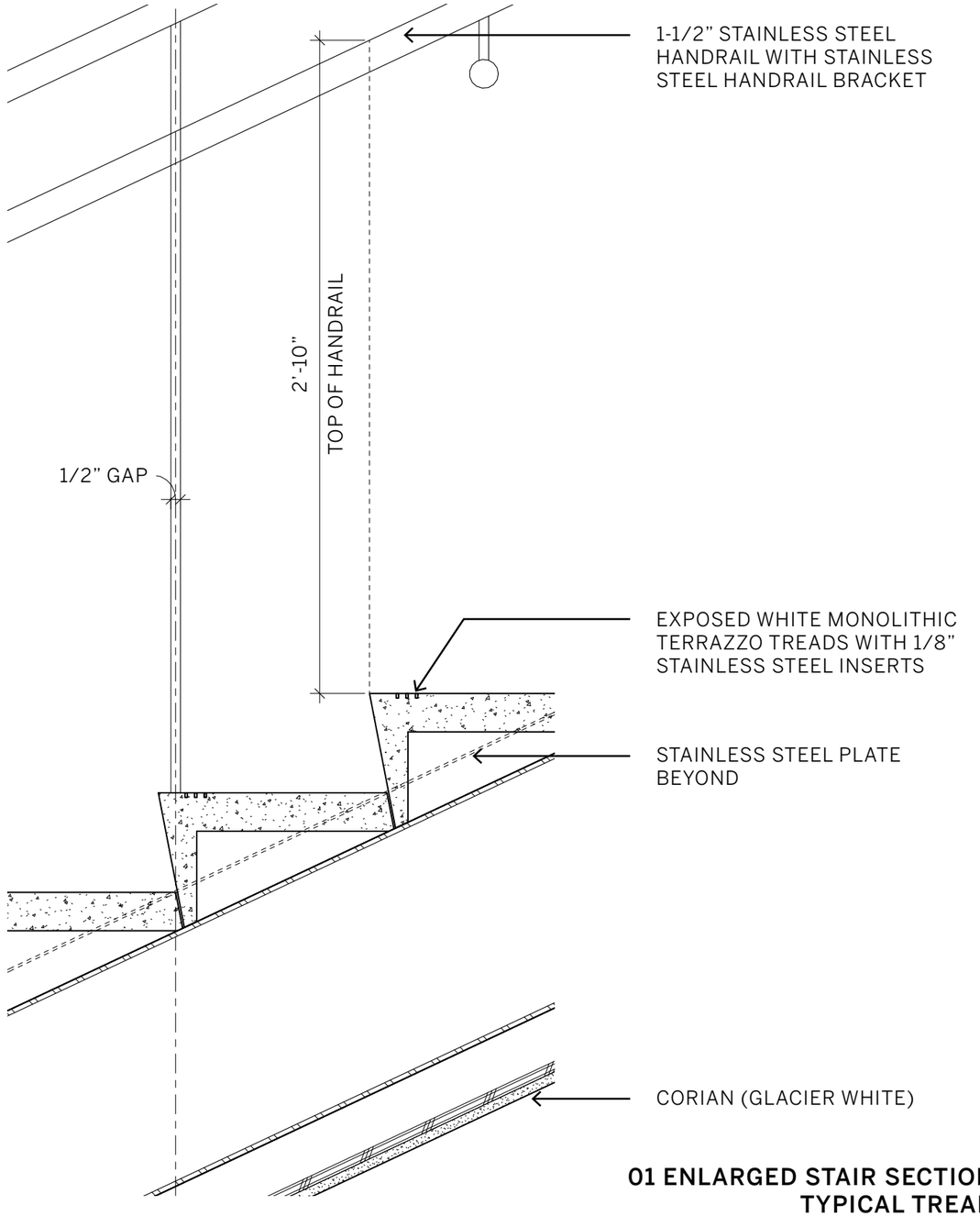


PARTIAL SECTION
ARRIVALS LEVEL STAIR

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

STAIRS AND RAILING - SAMPLE DETAILS

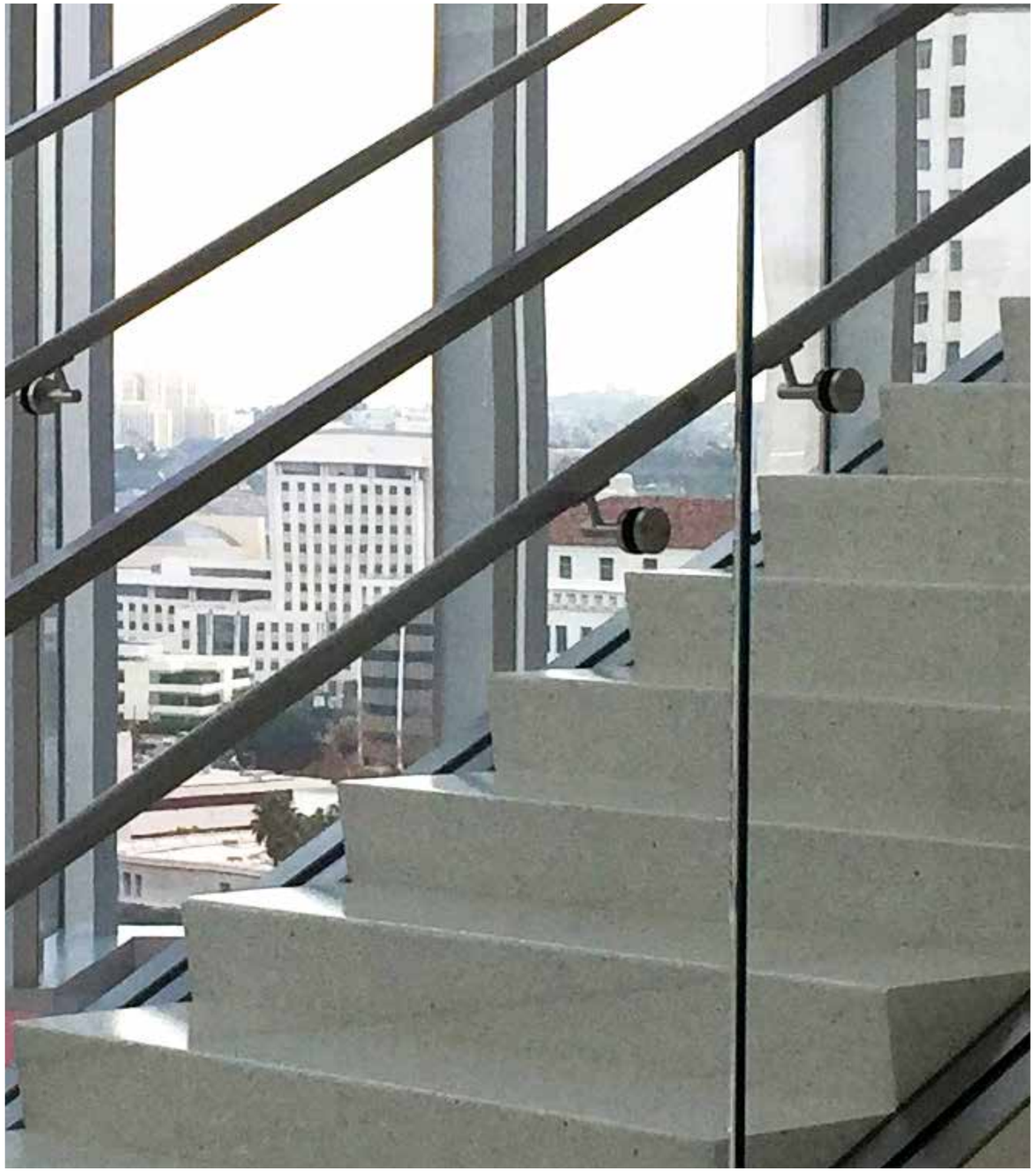


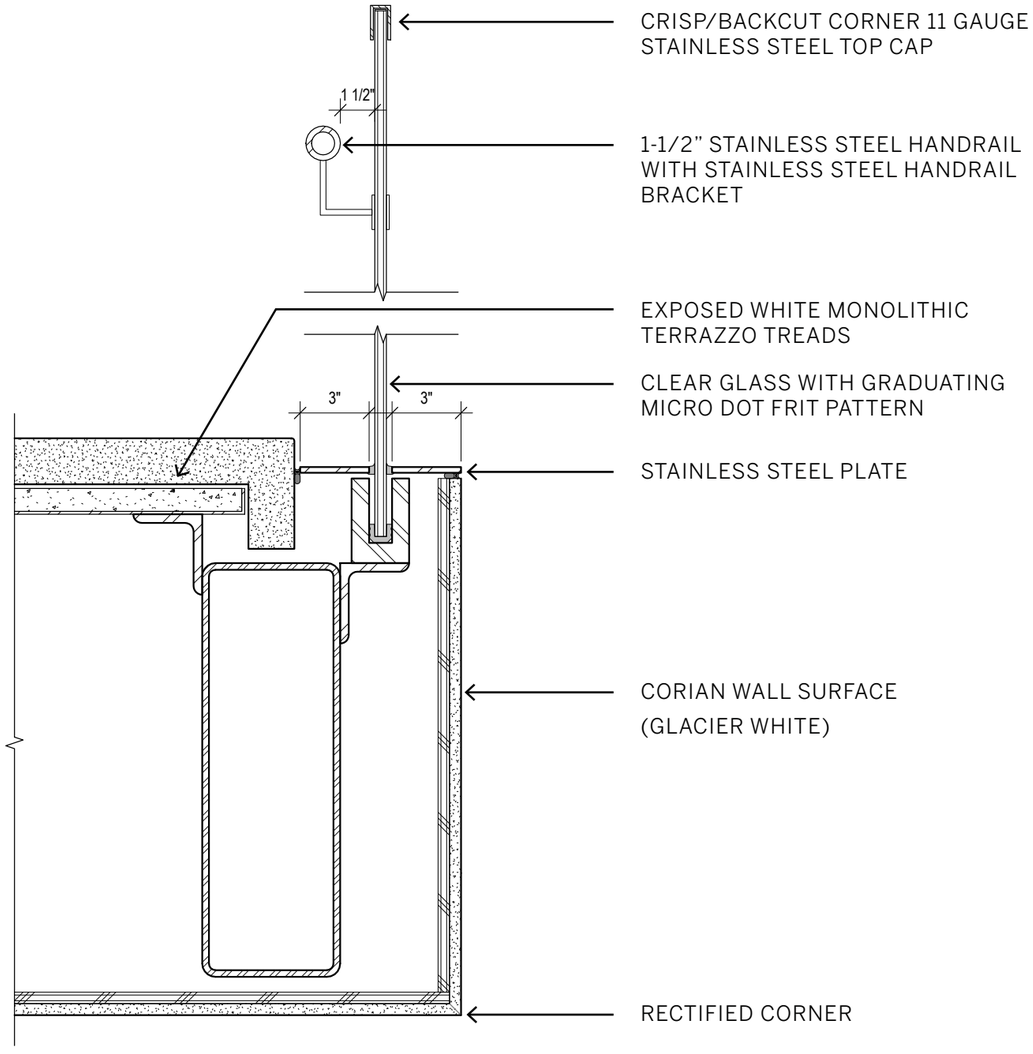


01 ENLARGED STAIR SECTION TYPICAL TREAD

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

STAIRS AND RAILING - SAMPLE DETAILS





02 TYPICAL STAIR SECTION STRINGER

LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

TERMINAL CORE FLOOR - SAMPLE

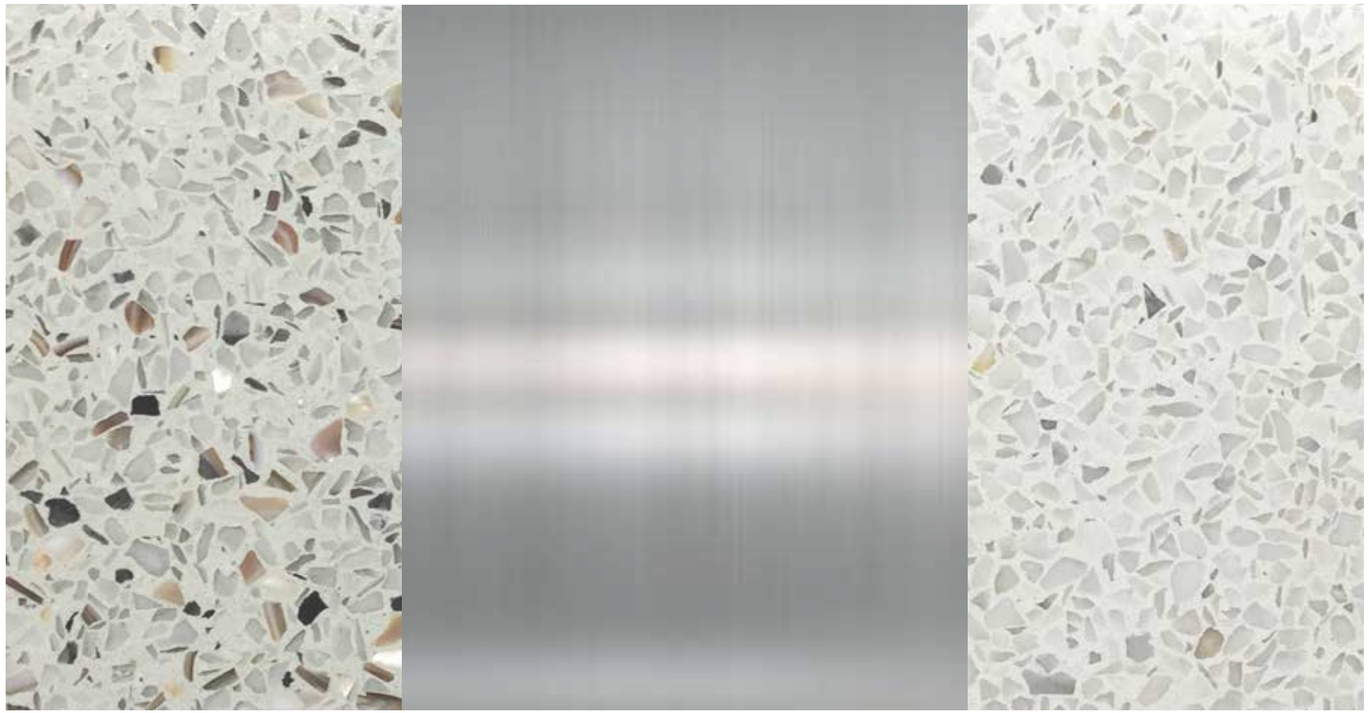
- WHITE EPOXY FILL MORTAR (TM# 3833 CITADEL WHITE)
- SIZES SHALL BE #1 AND #0 (PER LAWA)
- MIX DESIGN SHALL CONSIST OF NO MORE THAN 40% GLASS / MIRROR (PER LAWA)
- DIVIDER STRIPS
  - 1/8” MAXIMUM
  - MINIMIZE QUANTITY
  - ORTHOGONAL LAYOUT

NOTE :

- REFER TO DESIGN CONSTRUCTION HANDBOOK (DCH) FOR ADDITIONAL INFORMATION

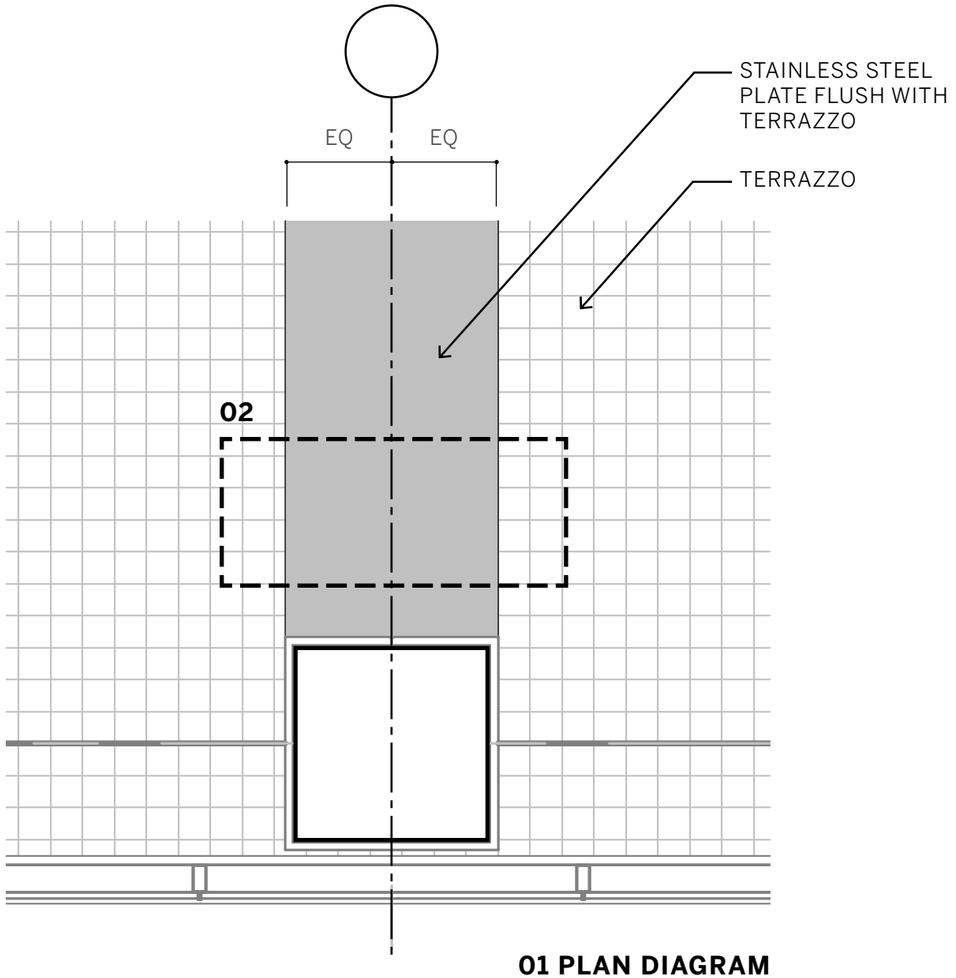
LAX TERMINAL CORE AND FACADE DESIGN REQUIREMENTS

FLOOR TRANSITION - SAMPLE DETAILS

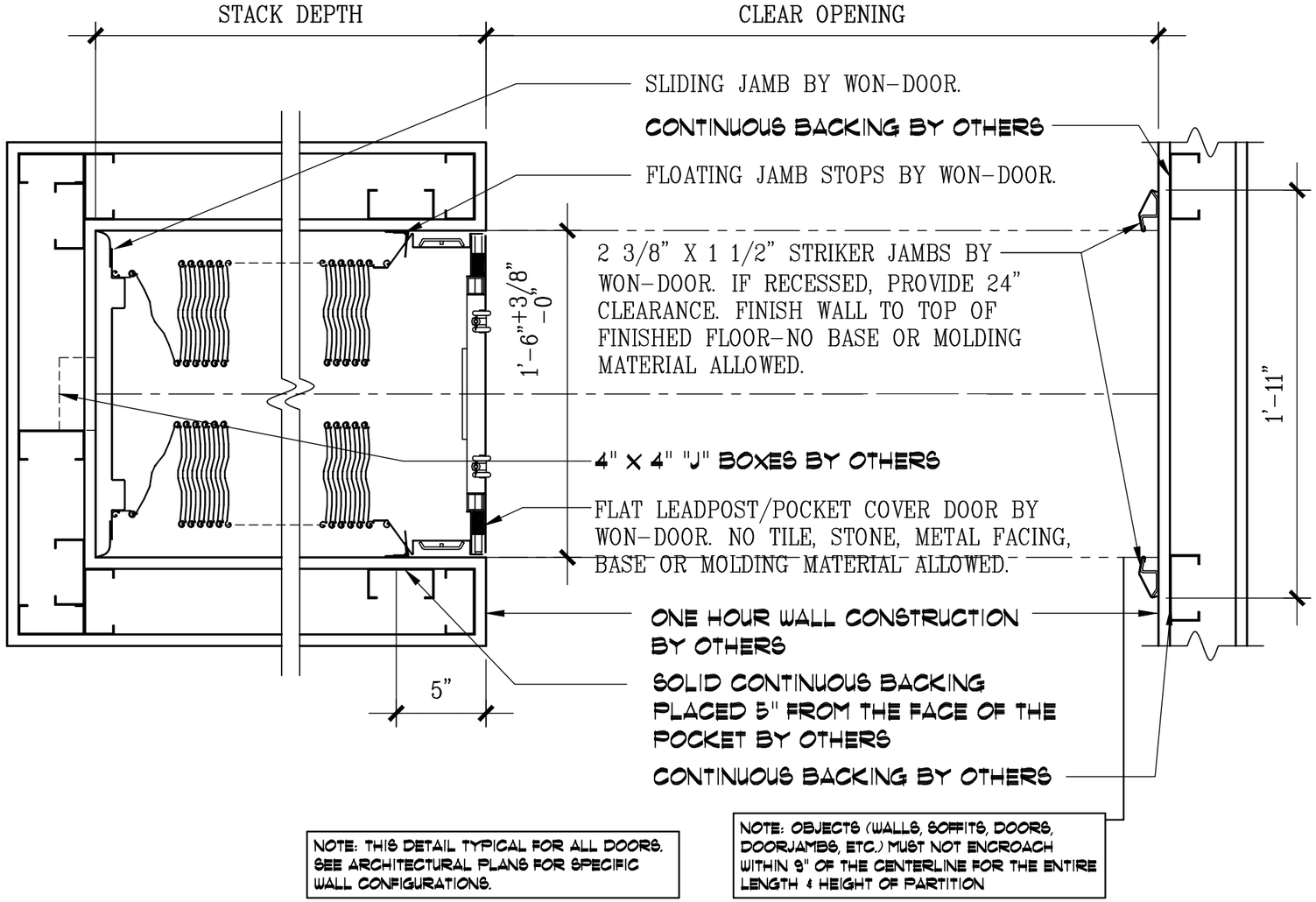


- ALIGN FLOOR TRANSITIONS TO COLUMN GRID
- FLOOR TRANSITION WIDTH IS DETERMINED BY COLUMN WIDTH OR EXPANSION JOINT WIDTH
- ANTI-SKID / SLIP-RESISTIVE FINISH PER LAWA
- NO SEAMS
- FLUSH FINISH ELEVATION

02 FLOOR TRANSITION
SAMPLE IMAGE



01 PLAN DIAGRAM
TYPICAL FLOOR TRANSITION
AT EXPANSION JOINT



POCKET DETAIL

STRIKER DETAIL

SAMPLE SHOWING INTEGRATED POCKET COVER DOOR WITH MATCHING FINISH