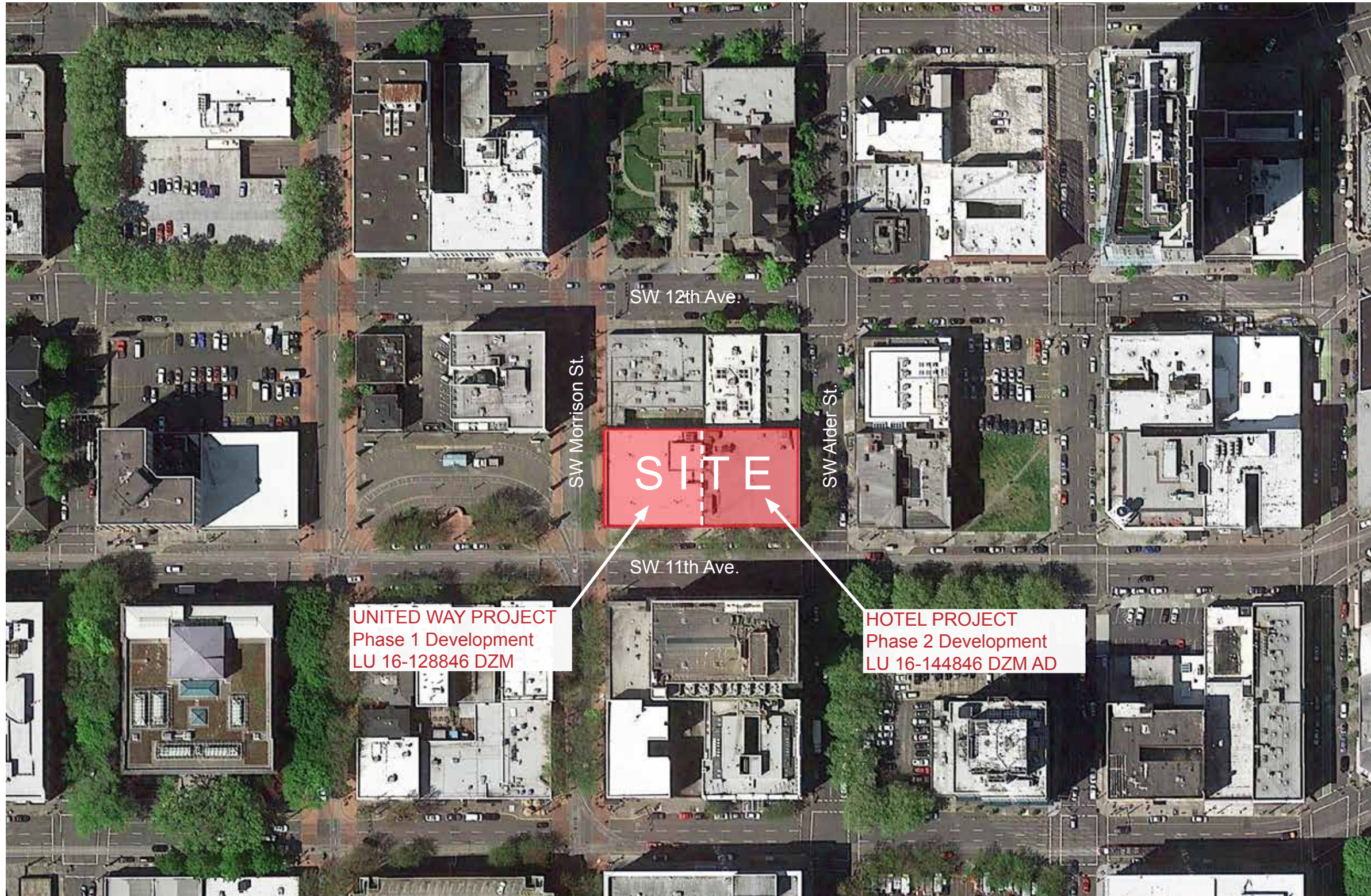




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VIEW FROM NORTH



VIEW FROM WEST



VIEW FROM SOUTH



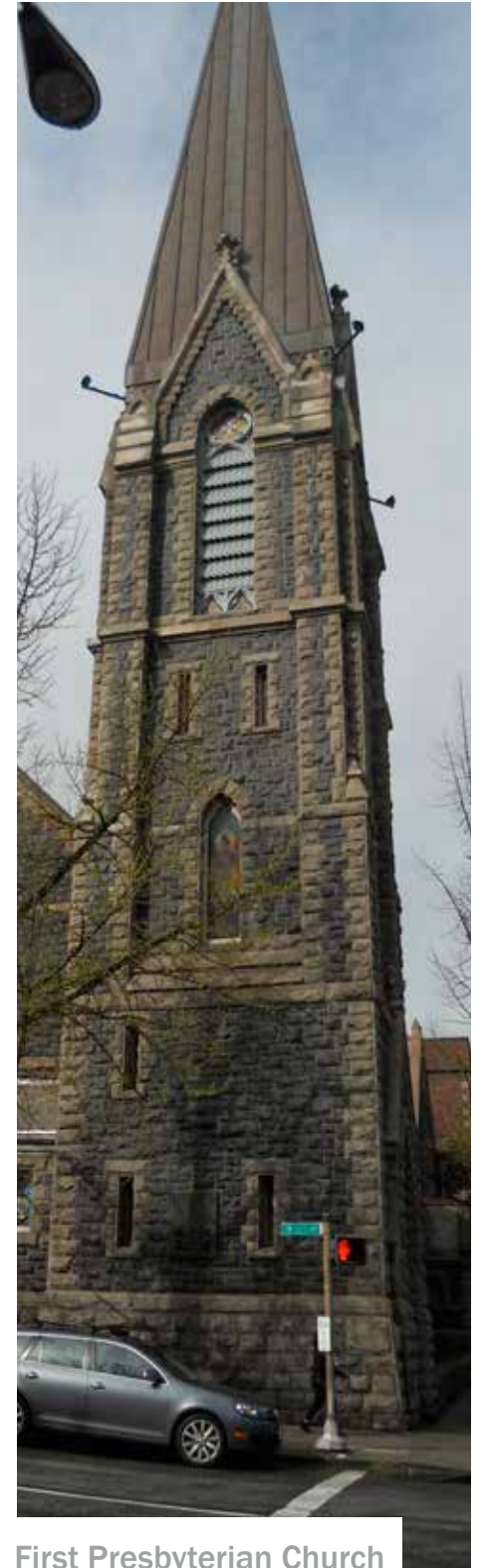
Sentinel Hotel



Skylab



Twelve West



First Presbyterian Church

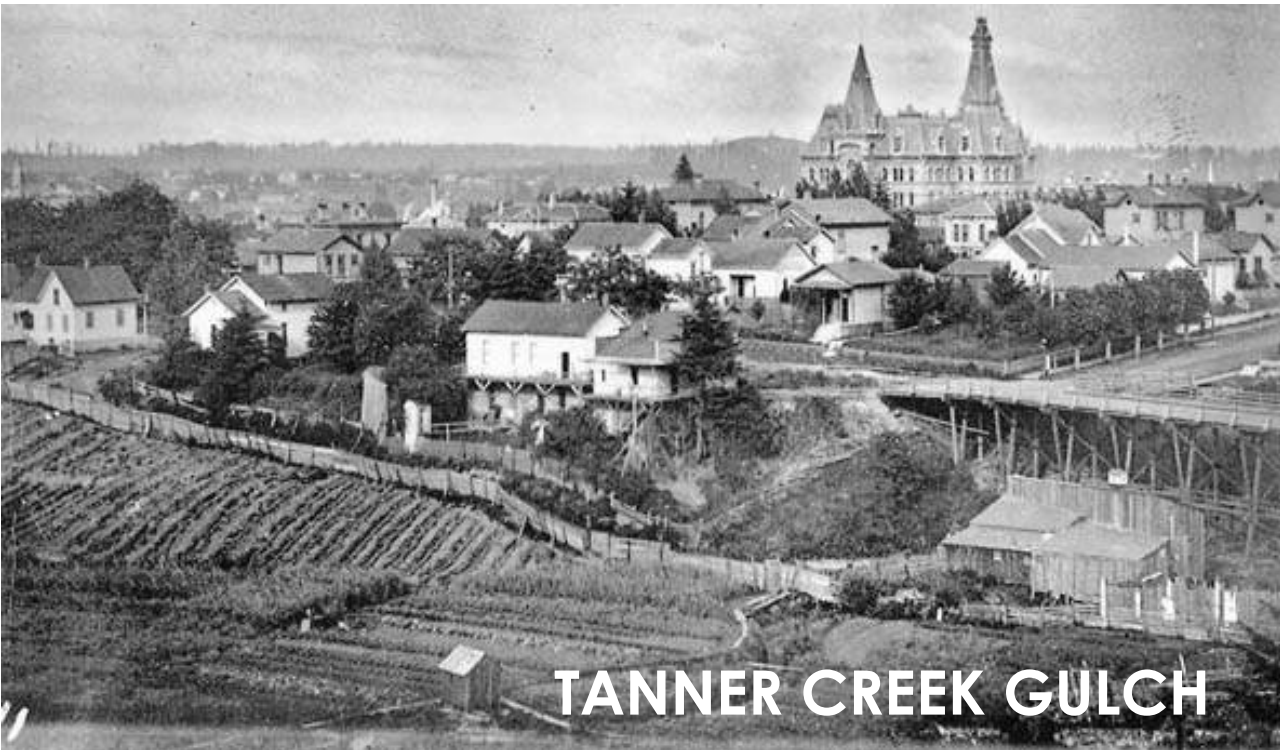


Portland is a place where people who come as outsiders become insiders

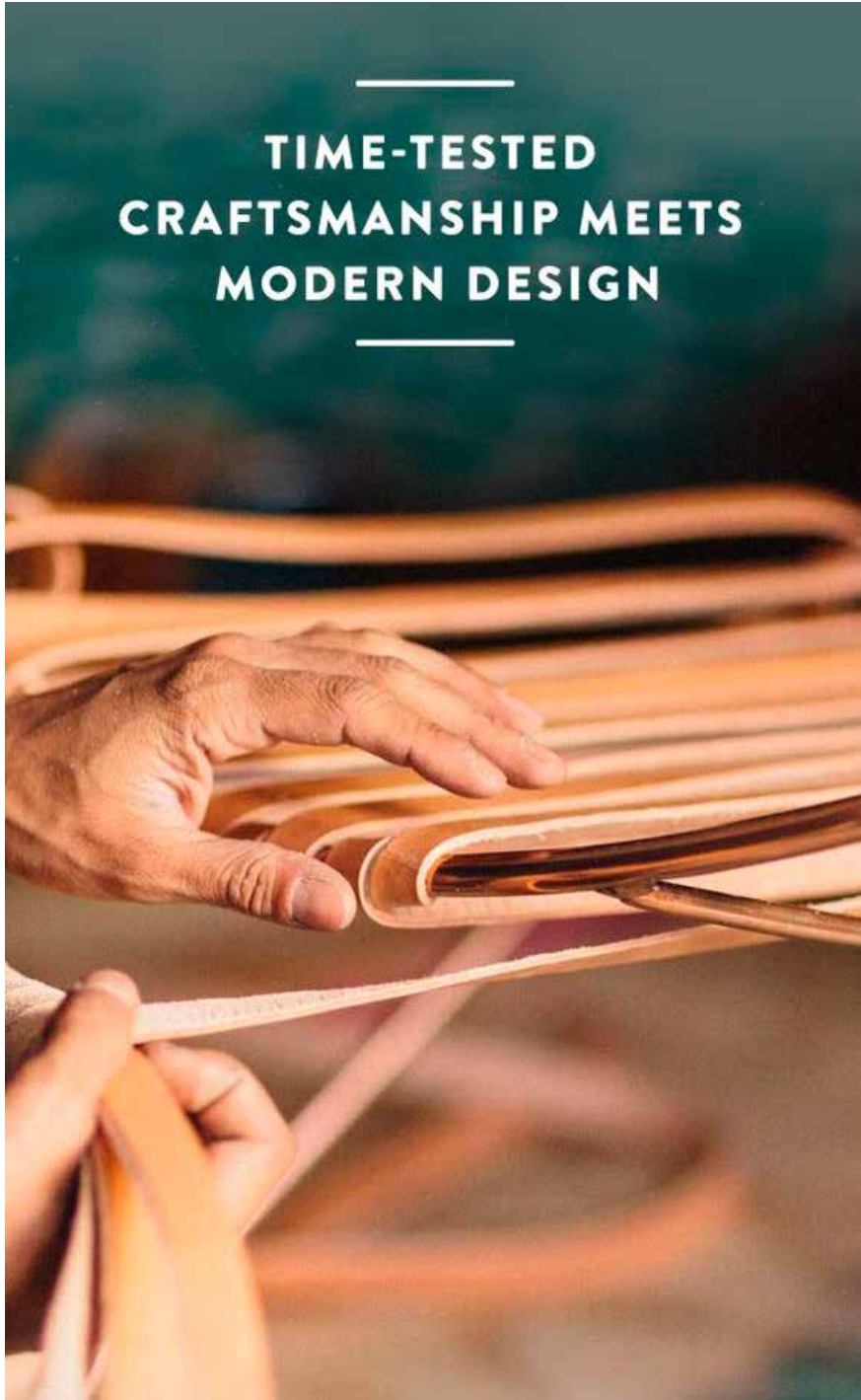
It's a city defined by its sense of personal **discovery** and adventure. Where a club or group or chapter exists for whatever seemingly peculiar **passion** drives you. This unique vibe extends to the neighborhoods with a personality to match the residents who call it home. The West End neighborhood is no different.

Its diversity of building styles and eras mirror the people and businesses that inhabit them. Fashionable stores and chic restaurants occupy classically designed structures near Old Portland institutions, while new modern buildings continue to dot the neighborhood.

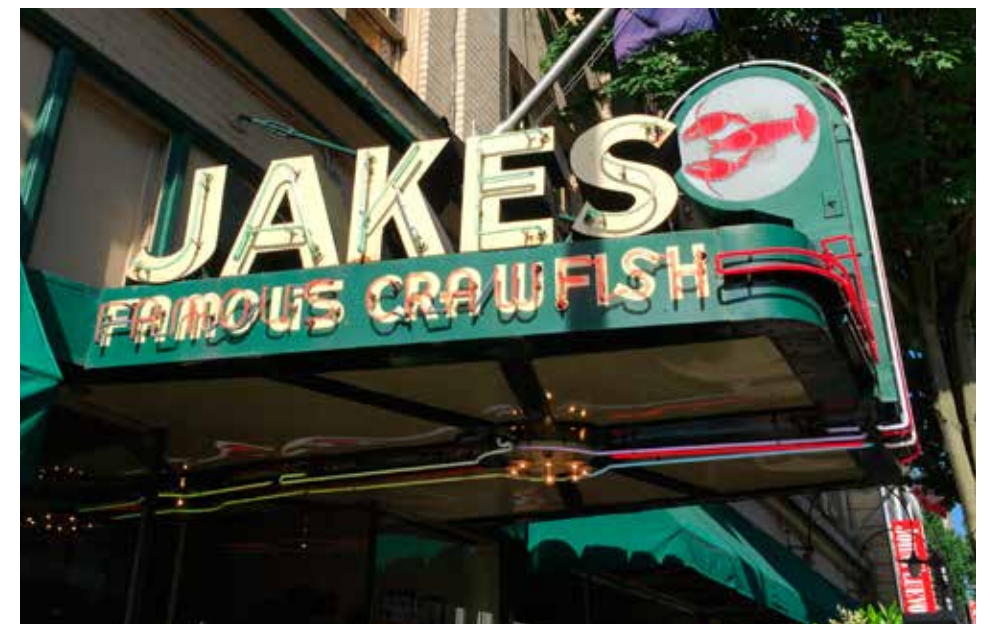
HISTORICAL CONTEXT



RANGE OF CRAFT



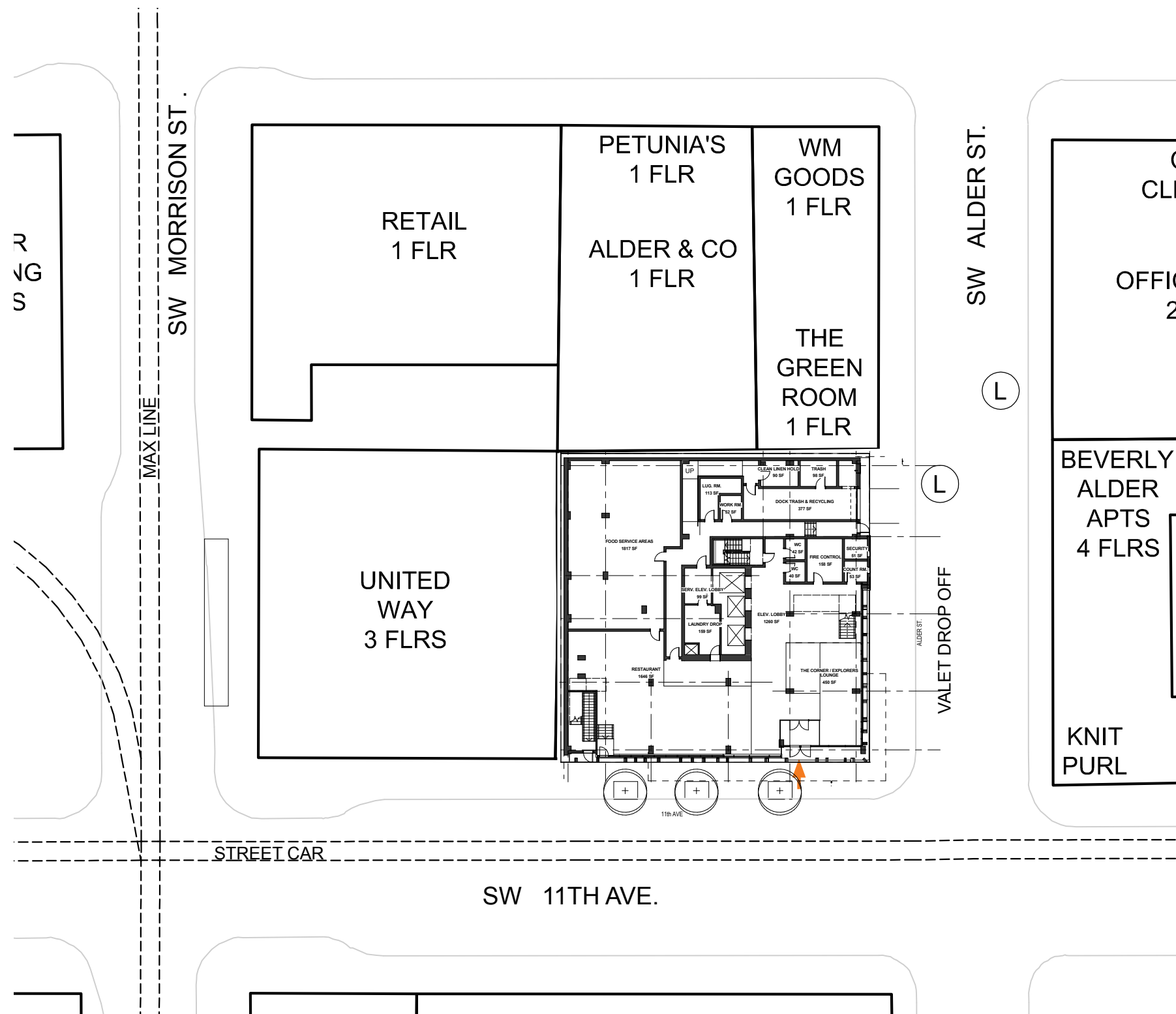
CONTEMPORARY AND CLASSIC



CONNECTION TO NATURE



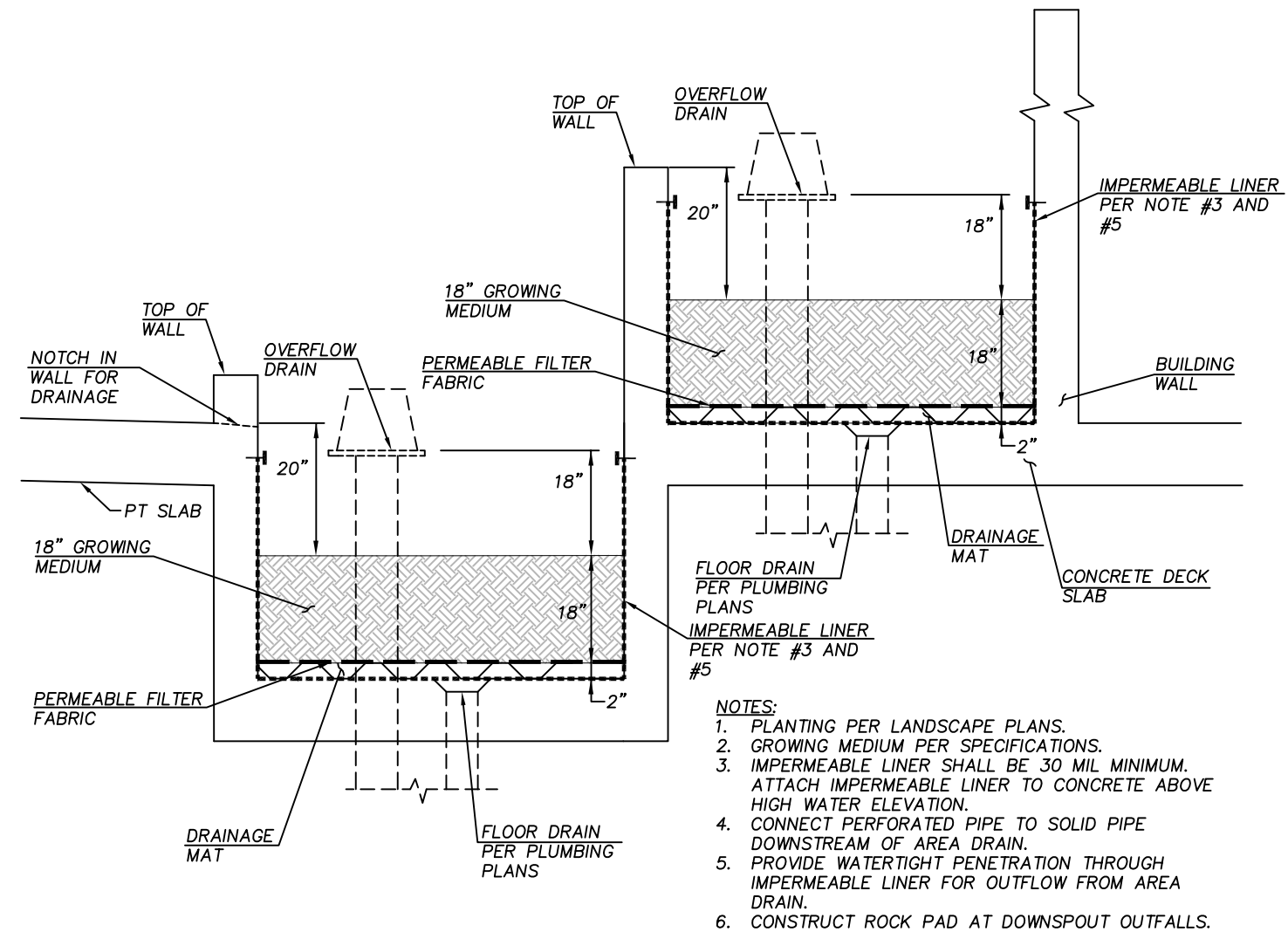
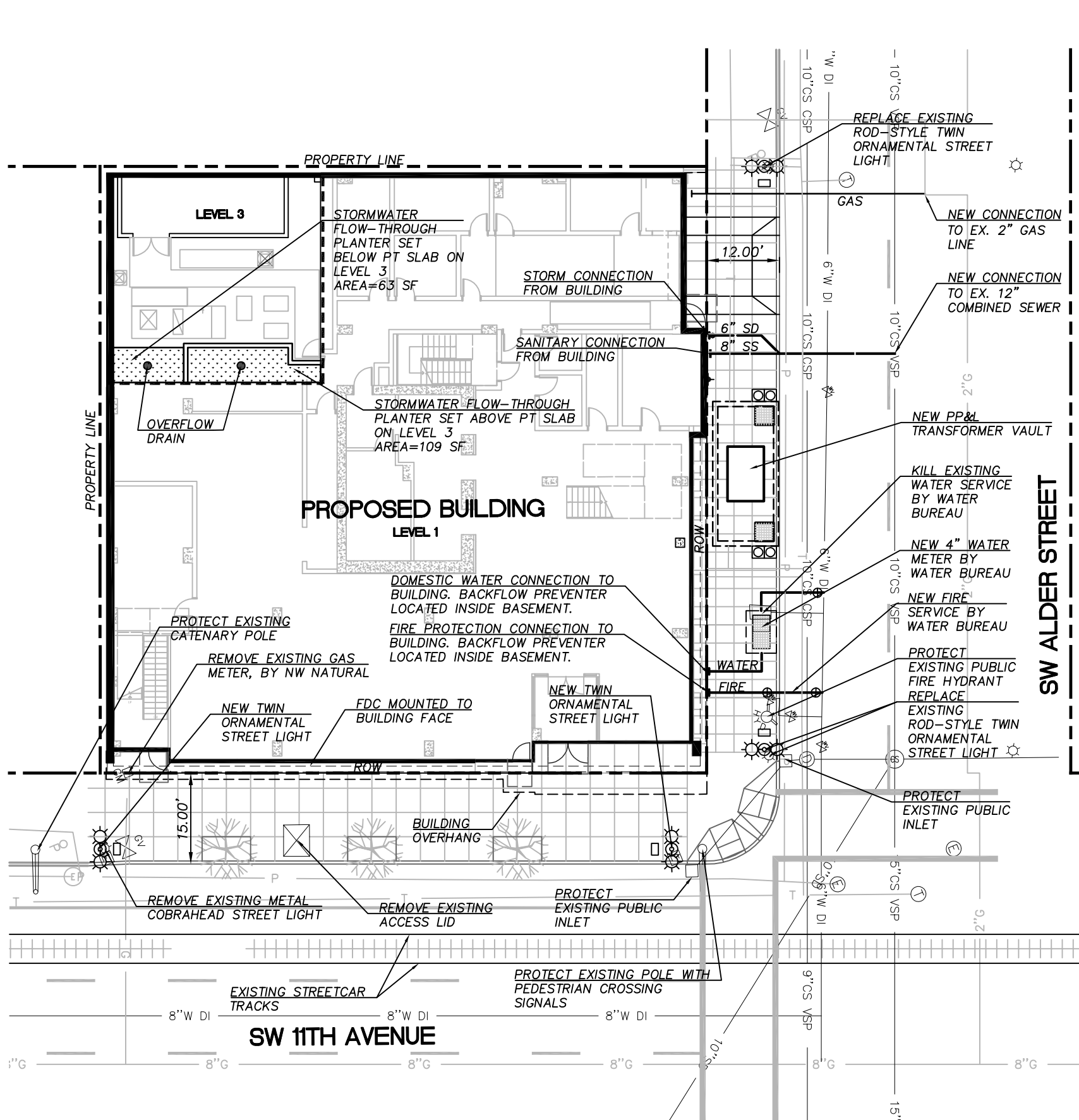




BUILDING NARRATIVE

THIS PROJECT IS A NEW 15 STORY HOTEL AT THE INTERSECTIONS OF SW 11TH AVENUE AND SW ALDER STREET IN THE CENTRAL CITY PLAN DISTRICT AND WEST END SUBDISTRICT IN PORTLAND, OREGON. THE PROJECT CONSISTS OF TWO PUBLIC/SERVICE LEVELS WITH 13 GUEST ROOM LEVELS ABOVE. THE STRUCTURE IS CAST IN PLACE AND POST TENSIONED CONCRETE.

- Ⓛ LOADING ACCESS
- Ⓟ PARKING ACCESS



1 STORMWATER FLOW-THROUGH PLANTER
NTS

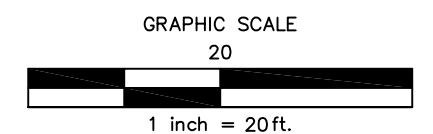
STORMWATER NARRATIVE

PRIVATE SITE:

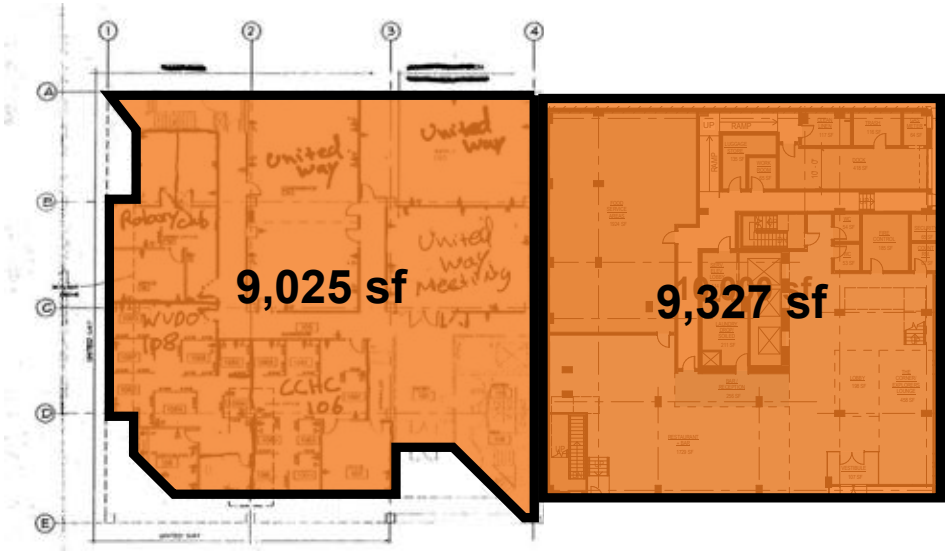
WATER QUALITY & WATER QUANTITY
WATER QUALITY CONTROL AND QUANTITY CONTROL IS MET WITH TWO FLOW-THROUGH PLANTERS AND ECOROOF. THE PLANTERS ARE SIZED TO TREAT ALL REMAINING IMPERVIOUS AREA NOT COVERED BY ECOROOF.

DISPOSAL
INFILTRATION IS NOT POSSIBLE DUE TO LOW PERMEABILITY OF NATIVE SOILS. ALL RUNOFF FROM THE SITE WILL BE PIPED TO THE 12" COMBINED SEWER PIPE IN SW ALDER STREET. THE PROJECT WILL FALL UNDER CATEGORY 4 OF THE STORMWATER DISPOSAL HIERARCHY.

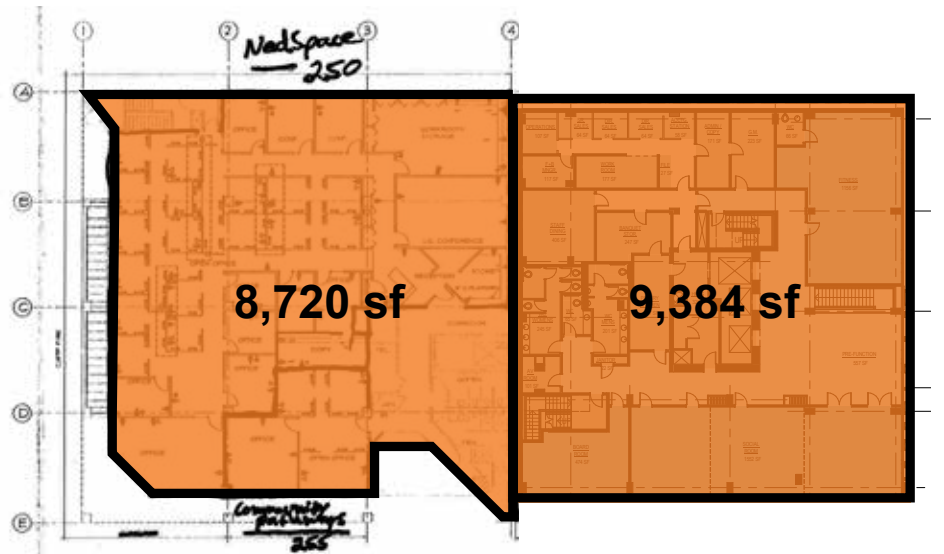
PUBLIC STREET IMPROVEMENTS:
STORMWATER MANAGEMENT IS NOT REQUIRED FOR THE IMPROVEMENTS TO THE PUBLIC SIDEWALKS IN THE PUBLIC RIGHT OF WAY. THE EXISTING STORMWATER DRAINAGE FOR THE RIGHT OF WAY WILL BE PROTECTED DURING CONSTRUCTION.



LEVEL	FLOOR	Gross Floor Area sf			FAR Floor Area Ratio sf		
		Office	Hotel	Total	Office	Hotel	Total
B	Basement	10,000	4,882	14,882			
1	Ground	9,025	9,327	18,352	9,025	9,327	18,352
2	2nd Floor	8,720	9,384	18,104	8,720	9,384	18,104
3	3rd Floor	9,700	8,634	18,334	9,700	8,634	18,334
4	4th Floor		8,634	8,634		8,634	8,634
5	5th Floor		8,634	8,634		8,634	8,634
6	6th Floor		8,634	8,634		8,634	8,634
7	7th Floor		8,634	8,634		8,634	8,634
8	8th Floor		8,634	8,634		8,634	8,634
9	9th Floor		8,634	8,634		8,634	8,634
10	10th Floor		8,634	8,634		8,634	8,634
11	11th Floor		8,634	8,634		8,634	8,634
12	12th Floor		8,634	8,634		8,634	8,634
13	13th Floor		8,634	8,634		8,634	8,634
14	14th Floor		8,634	8,634		8,634	8,634
15	15th Floor		8,634	8,634		8,634	8,634
	Parapet						
	TOTAL	37,445	135,835	173,280	27,445	130,953	158,398

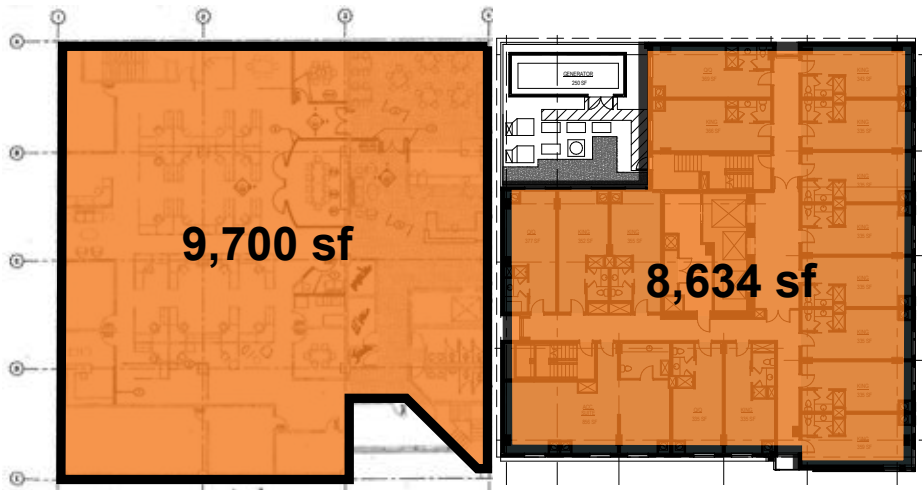


Total sf : 18,352 LEVEL 1 FLOOR PLAN

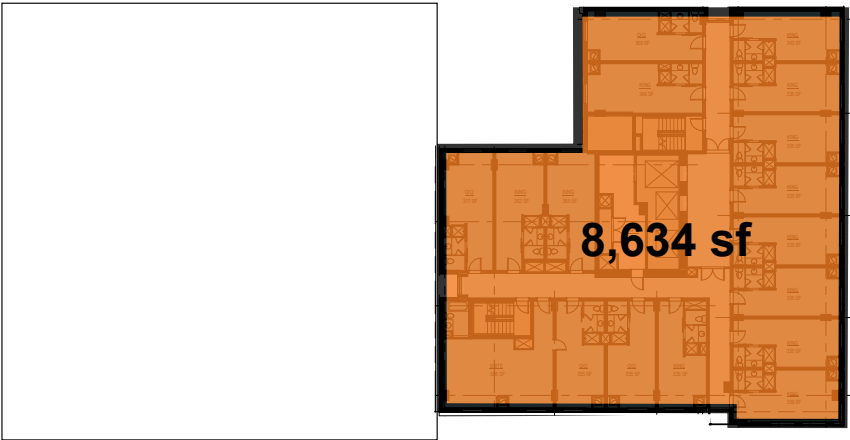


Total sf : 18,140 LEVEL 2 FLOOR PLAN

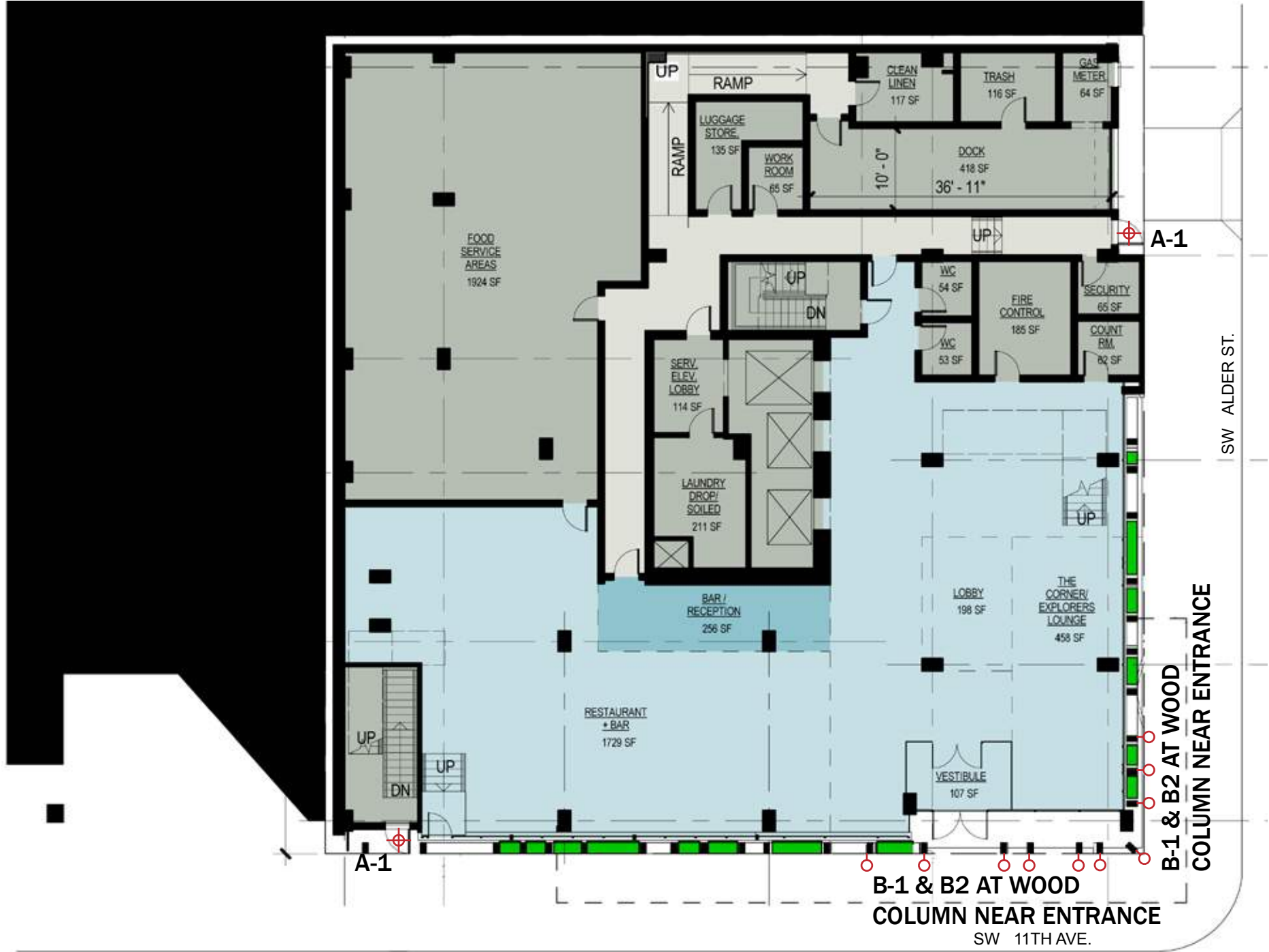
	FAR	1/2 block - 20,000 sf
FAR allowed (Map 510-2)	6:1	120,000
FAR max - bonus (33.510.200.C.1)	3:1	60,000
FAR max - total w/ bonuses	9:1	180,000
FAR proposed-office		27,445
FAR proposed-hotel		130,953
FAR proposed-total	7.9:1	158,398
FAR proposed-remaining	1.1:1	21,602



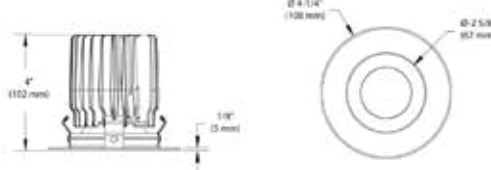
Total sf : 18,334 LEVEL 3 FLOOR PLAN



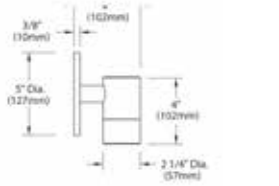
Total sf : 8,634 LEVELS 4-15 FLOOR PLAN



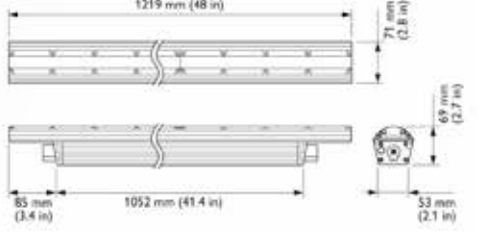
FIXTURE TYPE A-1



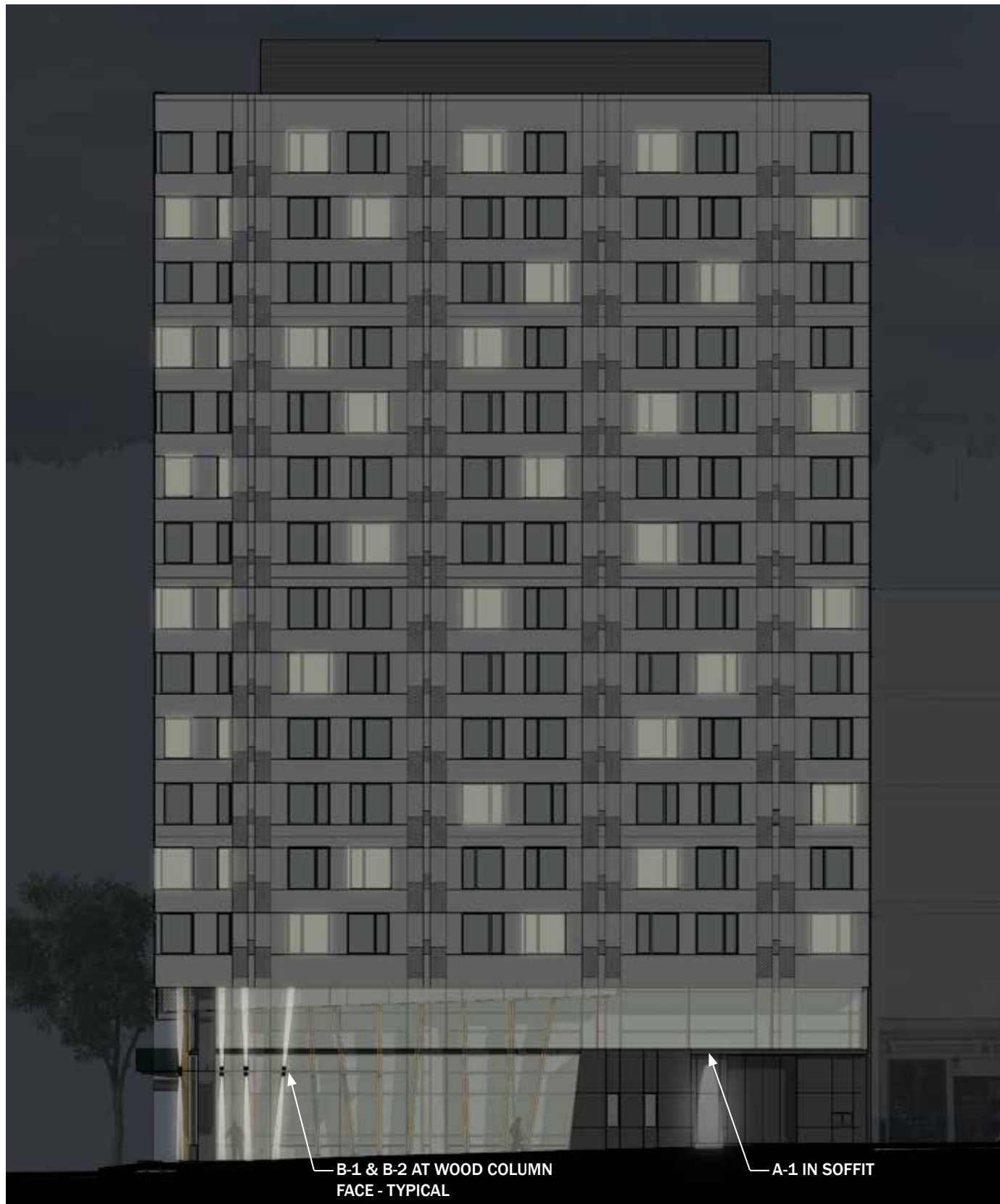
FIXTURE TYPE B1 & B2



FIXTURE TYPE C1



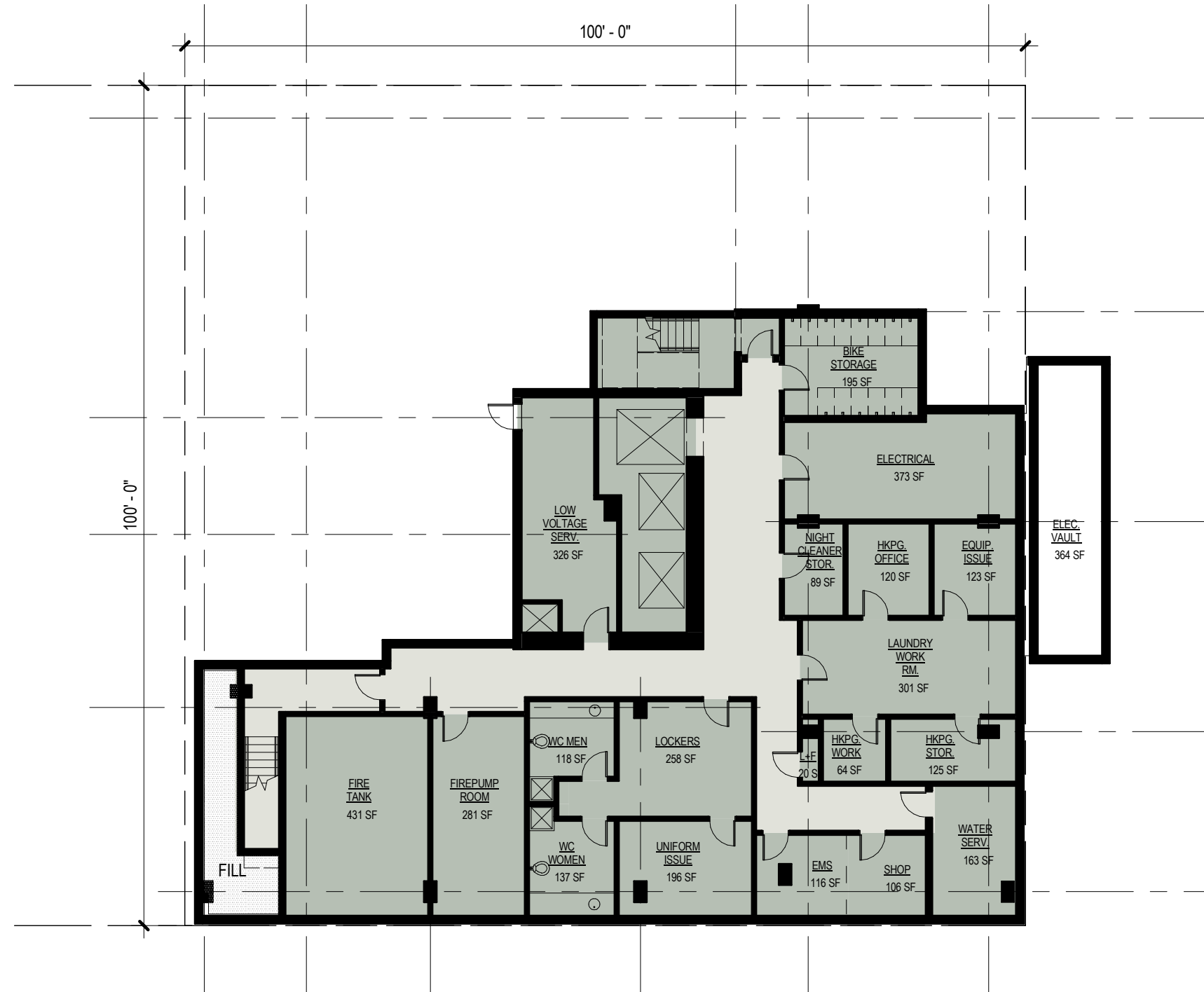
TYPE	DESCRIPTION	HOUSING	SHIELDING	MOUNTING	FINISH	UL/IP RATING	BALLAST	LAMP(S)	INPUT WATTS	VOLTAGE	DESIGN LUMINAIRE MFG/CATALOG #
A1	RECESSED DOWNLIGHT	STEEL HOUSING NOMINAL 3-INCH DIAMETER APERTURE	NATURAL BRUSHED ALUMINUM REFLECTOR NARROW FLOOD, 30 - 40 DEGREE	RECESSED	MARINE GRADE PAINTED TO MATCH CANOPY	DAMP	ELECTRONIC 0-10V DIM	LED 3000K 90+ CRI NOMINAL 1200 LUMENS	30		CONTRAST LIGHTING CONCERTO LED - LD3D
B1	WALL MOUNT EXTERIOR DOWNLIGHT	MACHINED ALUMINUM HOUSING AND HARDWARE NOMINAL 5-INCHES TALL, 2- INCH DIAMETER	NARROW SPOT FLOOD DISTRIBUTION PROVIDE 1-INCH "B" SNOOT OPTION	SURFACE MOUNT TO WALL.	MARINE GRADE POWDERCOAT, SILVER	WET LISTED	ELECTRONIC 0-10V DIM REMOTE TRANSFORMER	LED 3000K 80+ CRI	7		BK LIGHTING EL-CAPITAN SERIES
B2	WALL MOUNT EXTERIOR UPLIGHT	MACHINED ALUMINUM HOUSING AND HARDWARE NOMINAL 5-INCHES TALL, 2- INCH DIAMETER	NARROW SPOT FLOOD DISTRIBUTION PROVIDE FLUSH "A" SNOOT OPTION	SURFACE MOUNT TO WALL.	MARINE GRADE POWDERCOAT, SILVER	WET LISTED	ELECTRONIC 0-10V DIM REMOTE TRANSFORMER	LED 3000K 80+ CRI	7		BK LIGHTING EL-CAPITAN SERIES
C1	LINEAR LED EXTERIOR LUMINAIRE	EXTRUDED ALUMINUM HOUSING NOMINAL 3-INCHES TALL AND 2-INCHES WIDE. 4'-0" LENGTH	30 DEGREE X 60 DEGREE OPTIC	SURFACE MOUNT TO WALL WITH ADJUSTABLE BRACKET	NATURAL ALUMINUM	WET LISTED	INTEGRAL DRIVER PROVIDE INDIVIDUAL LUMINAIRE ADDRESSABLE LIGHTING CONTROLLER	LED 2700K 2460 LUMENS PER 4'-0"	60		COLOR KINETICS EW GRAZE MX POWERCORE



NORTH ELEVATION

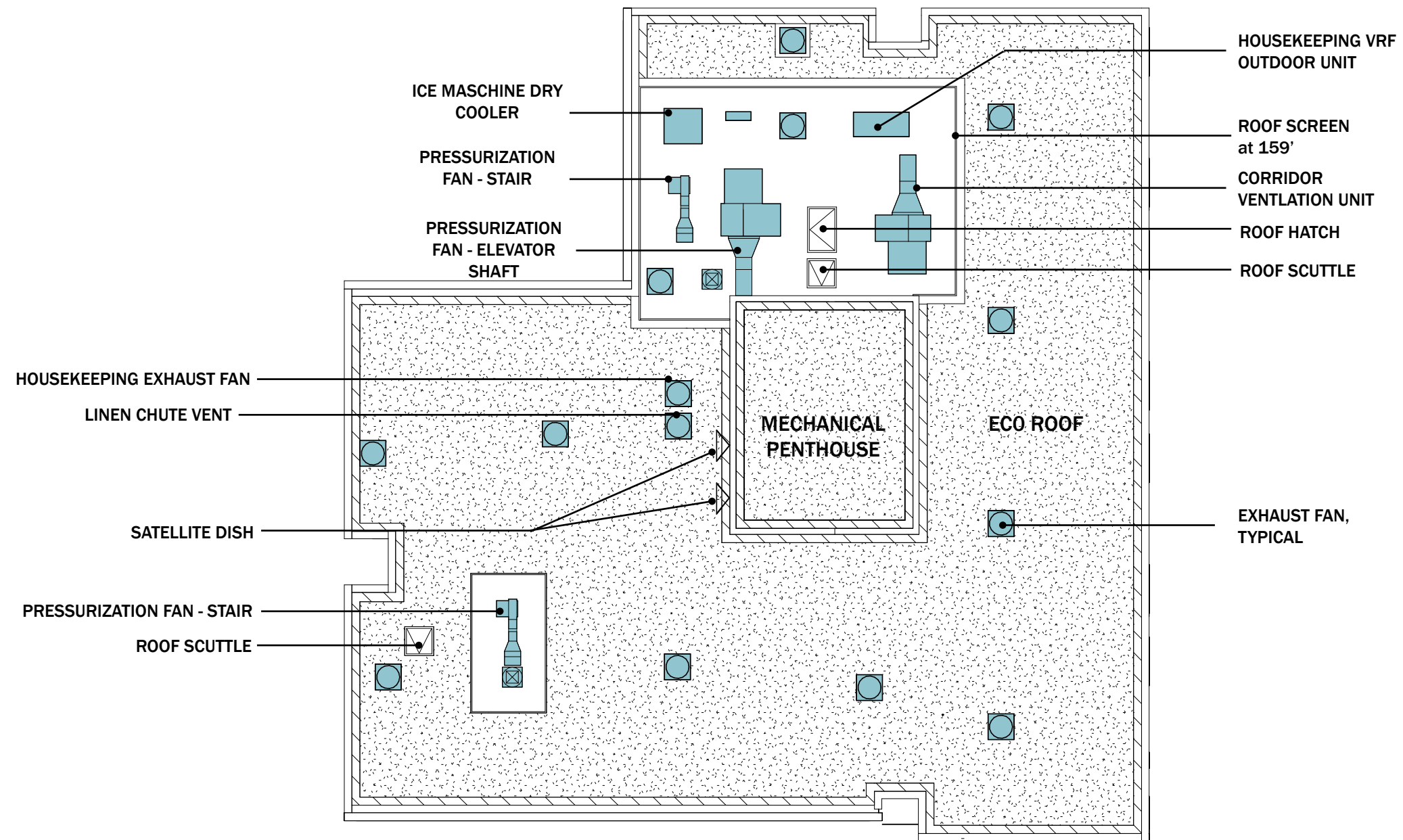


EAST ELEVATION

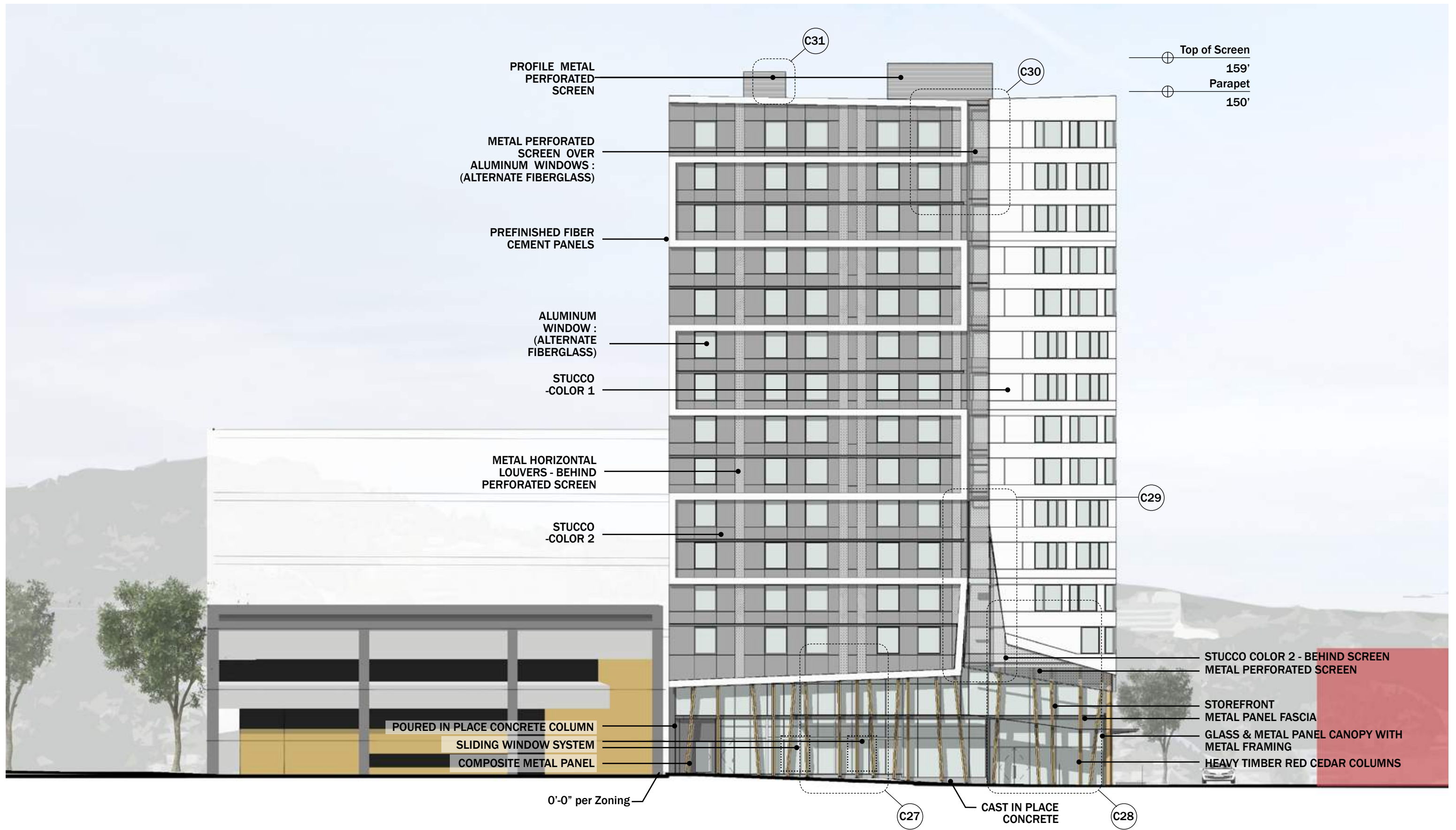




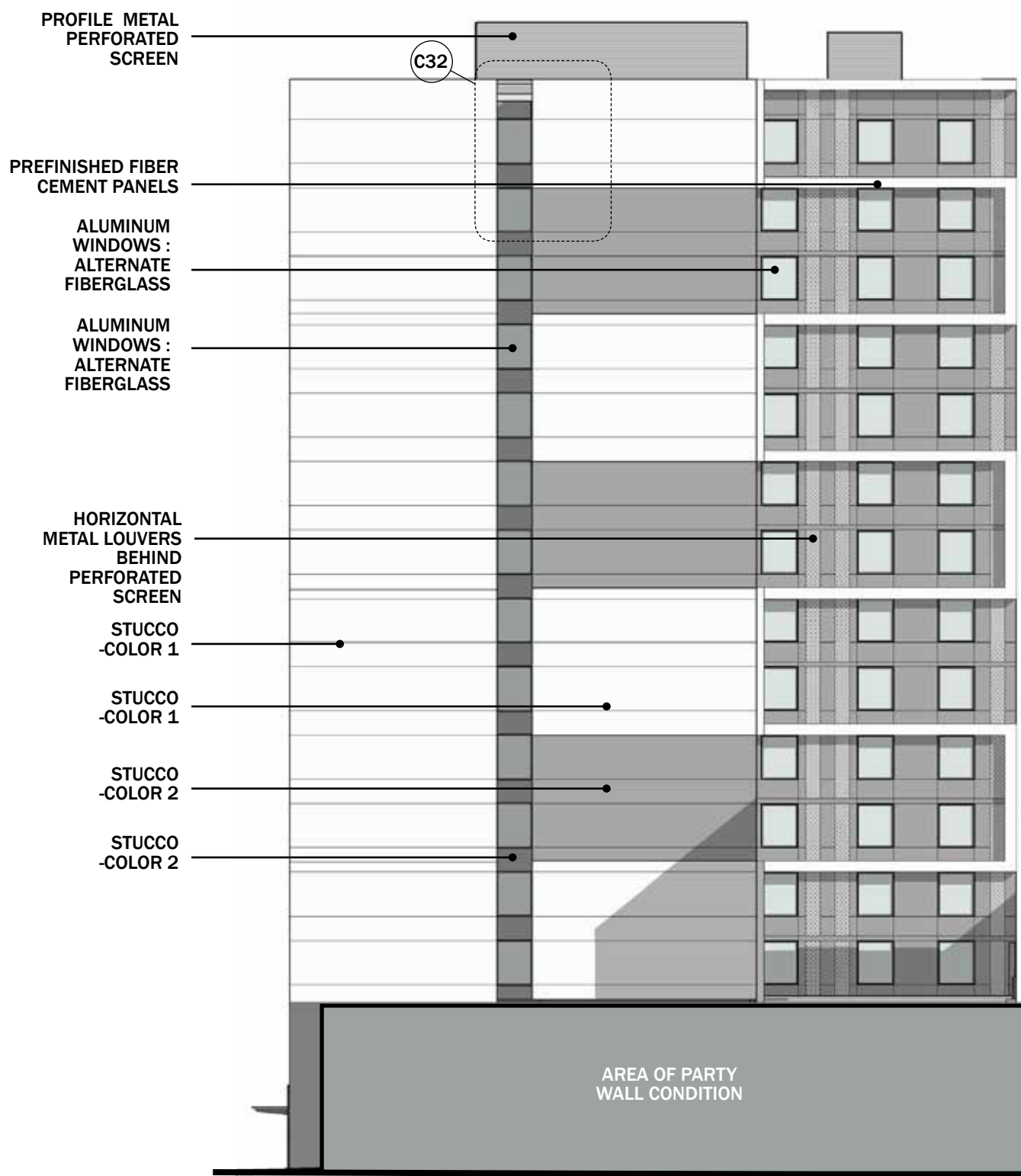




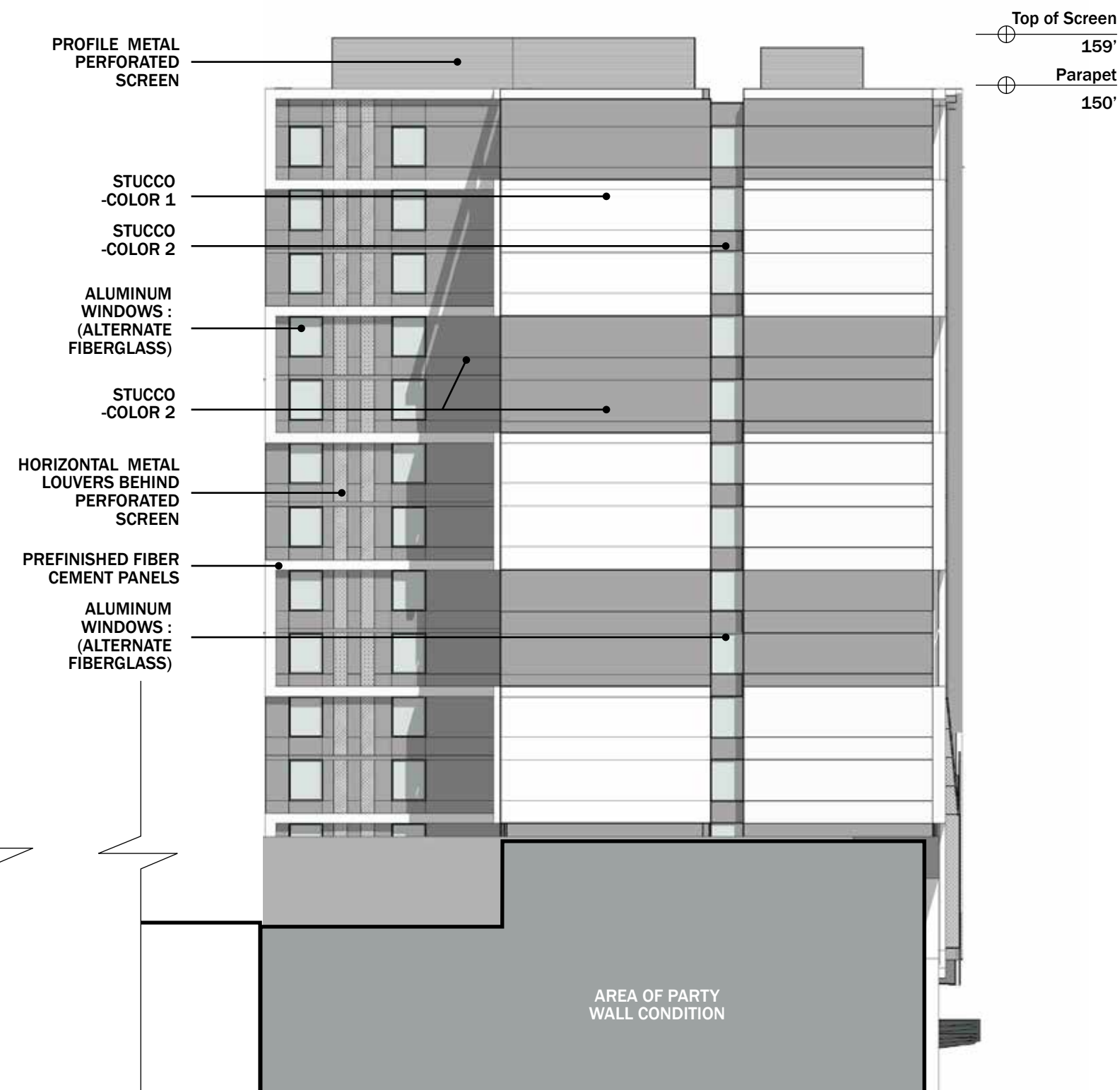
**MECHANICAL EQUIPMENT:
4.5% OF ROOF AREA**







WEST ELEVATION



SOUTH ELEVATION

ELEVATIONS

0' 5' 10' 20'

DESIGN REVIEW #LU 16-144846 DZM, AD

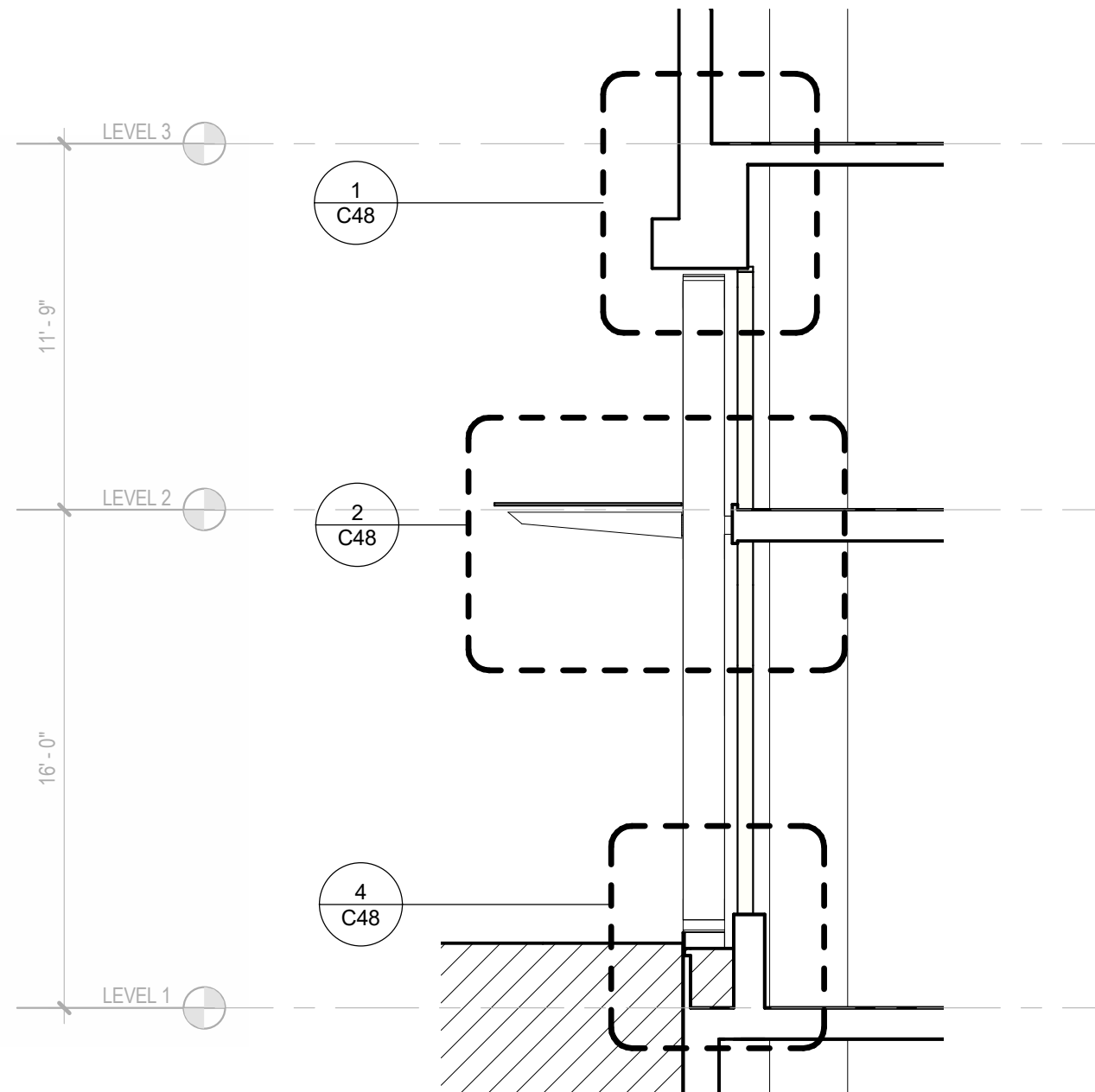
C26



EAST - ELEVATION

3/16" = 1'-0"

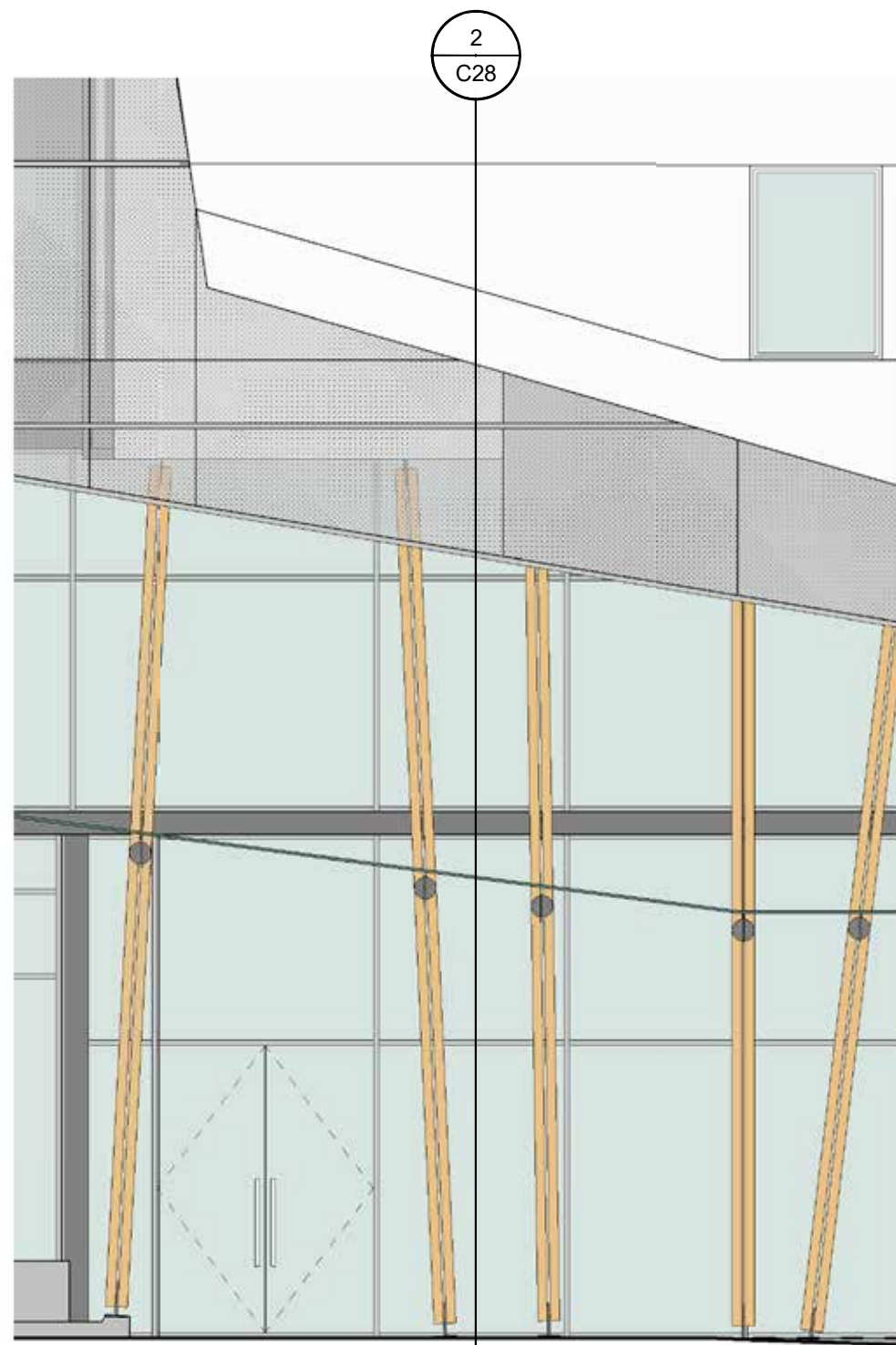
1



EAST - SECTION - STOREFRONT

3/16" = 1'-0"

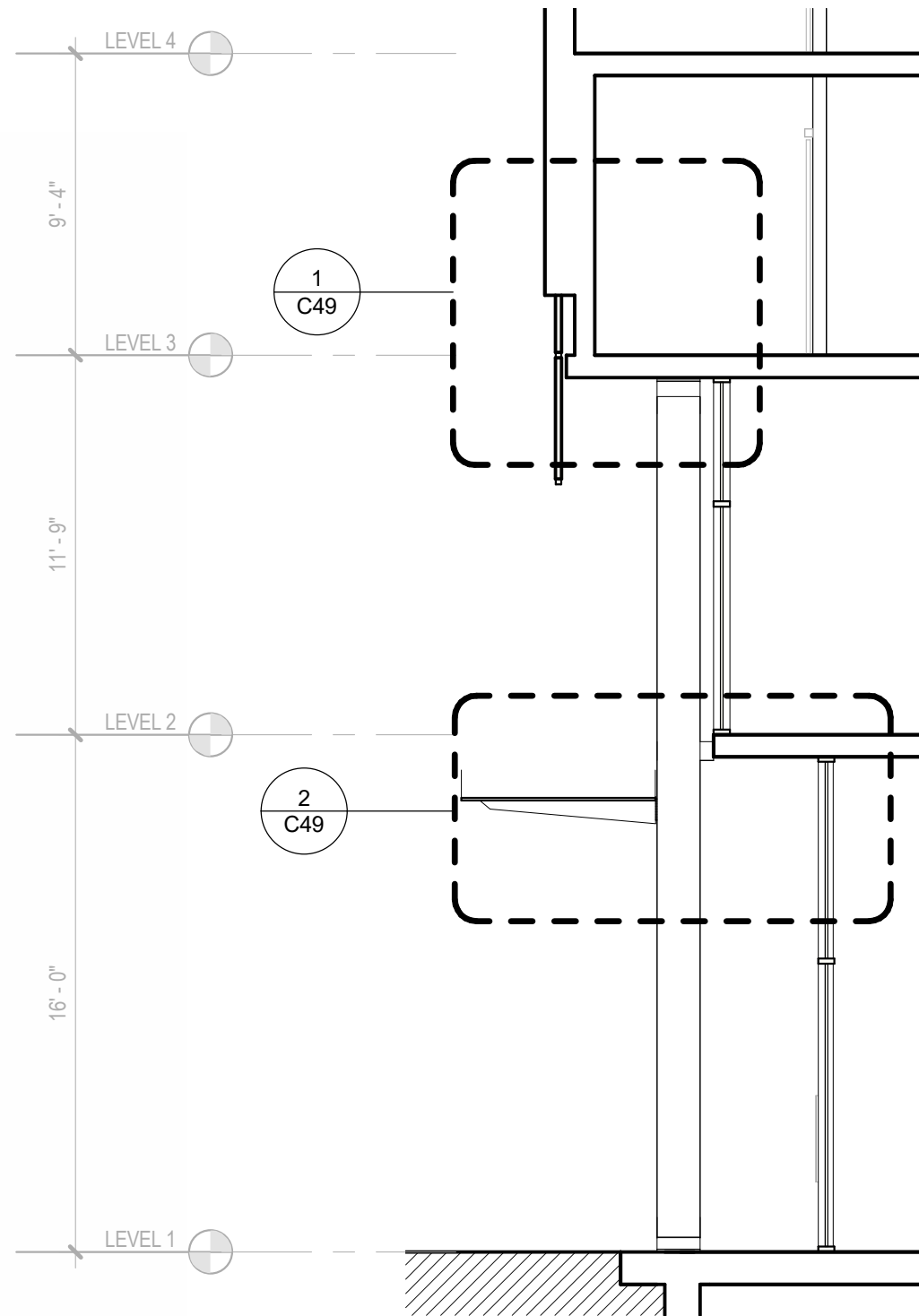
2



EAST - ELEVATION - ENTRANCE

3/16" = 1'-0"

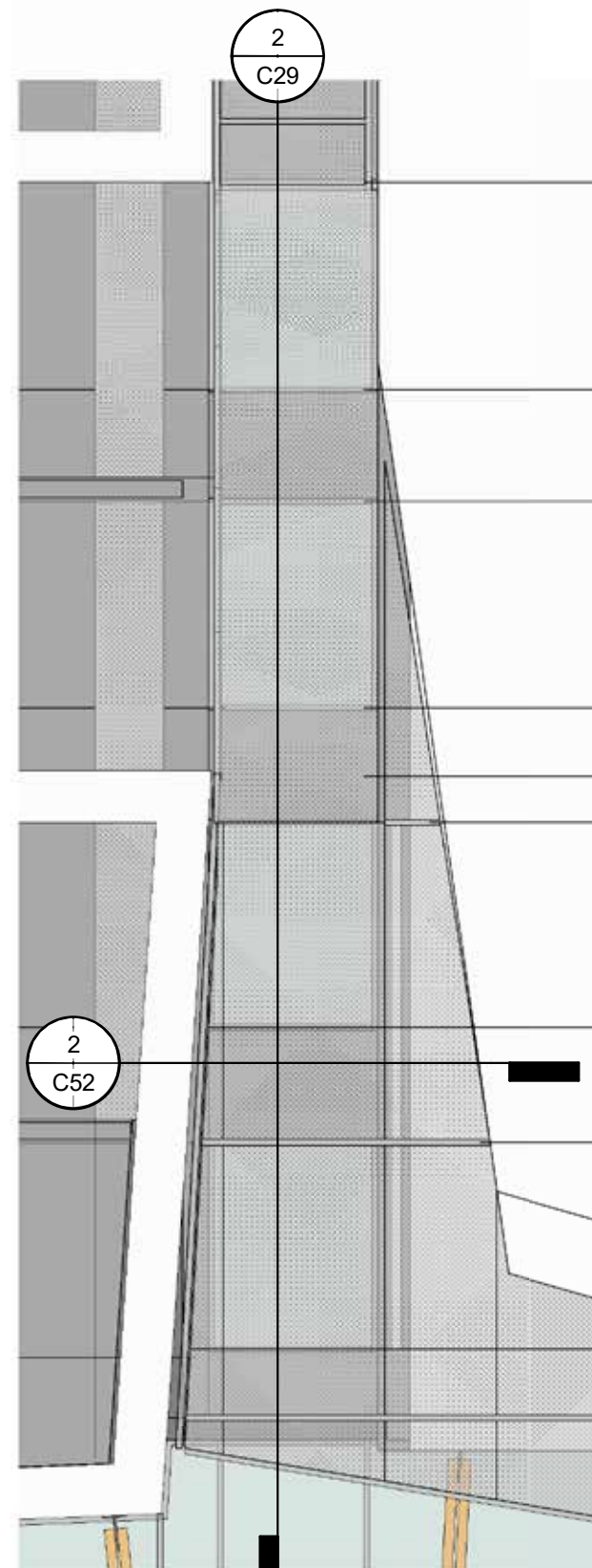
1



EAST - SECTION - ENTRANCE

3/16" = 1'-0"

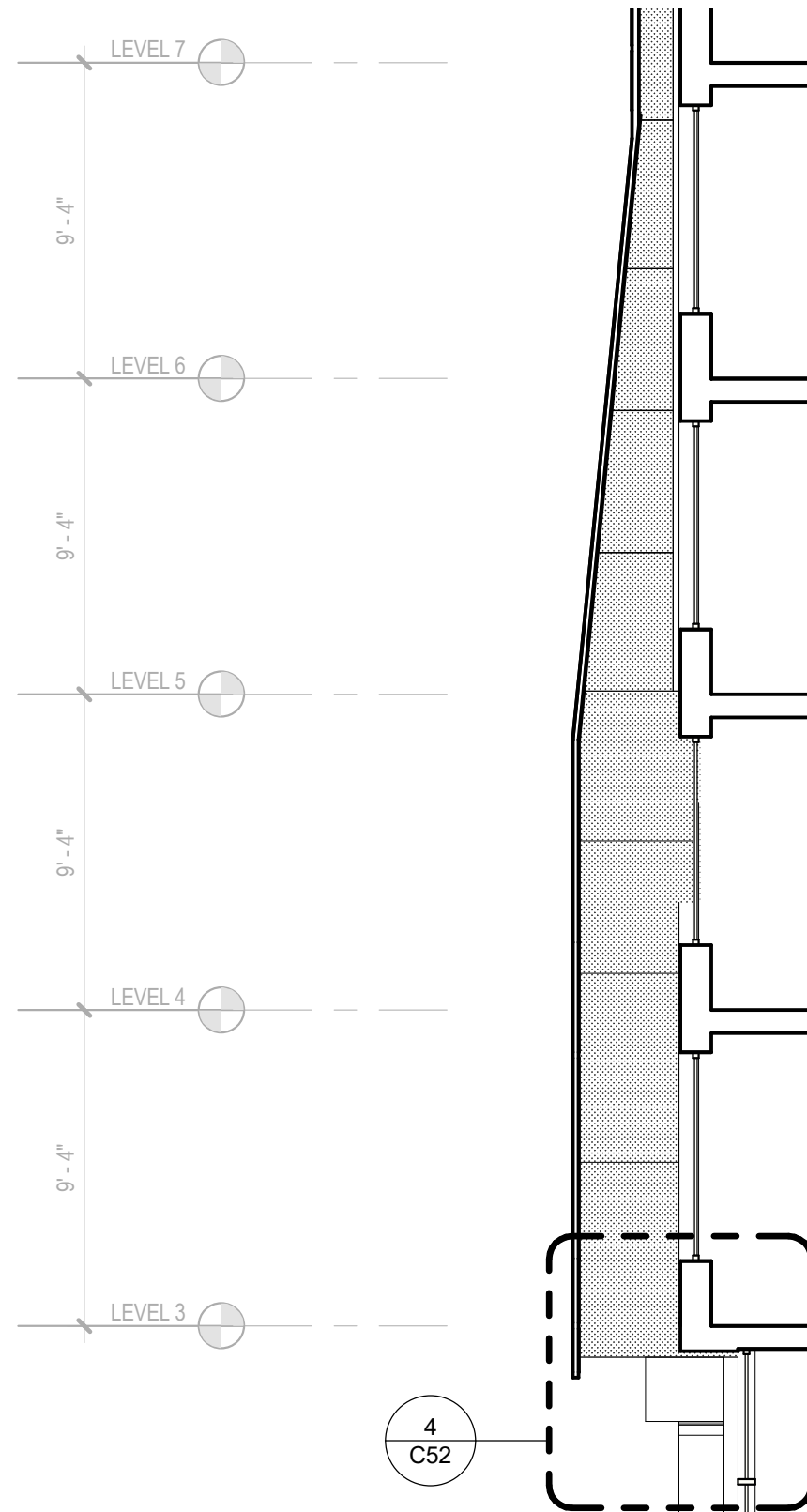
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EAST - ELEVATION - SCREEN

3/16" = 1'-0"

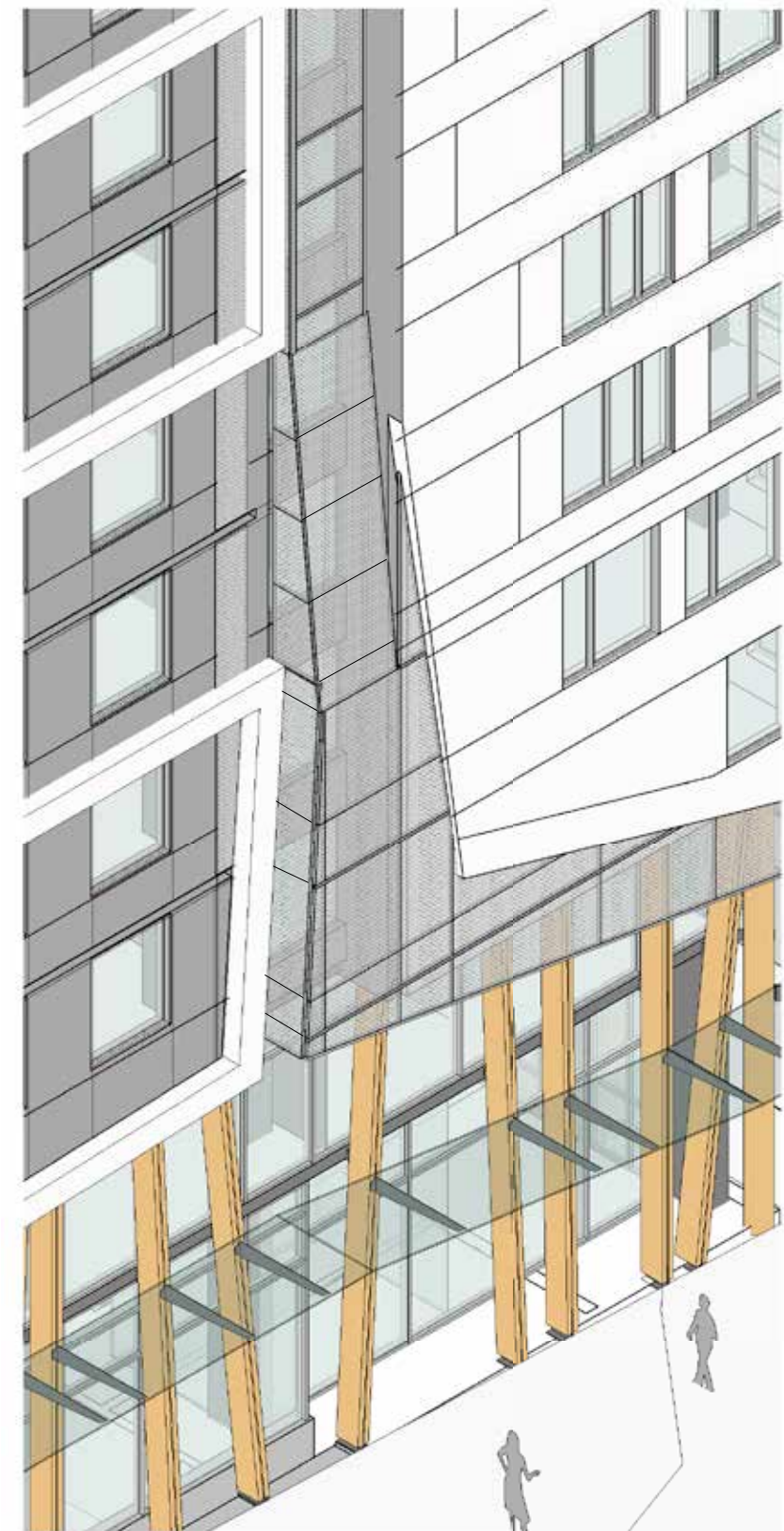
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EAST - SECTION - SCREEN

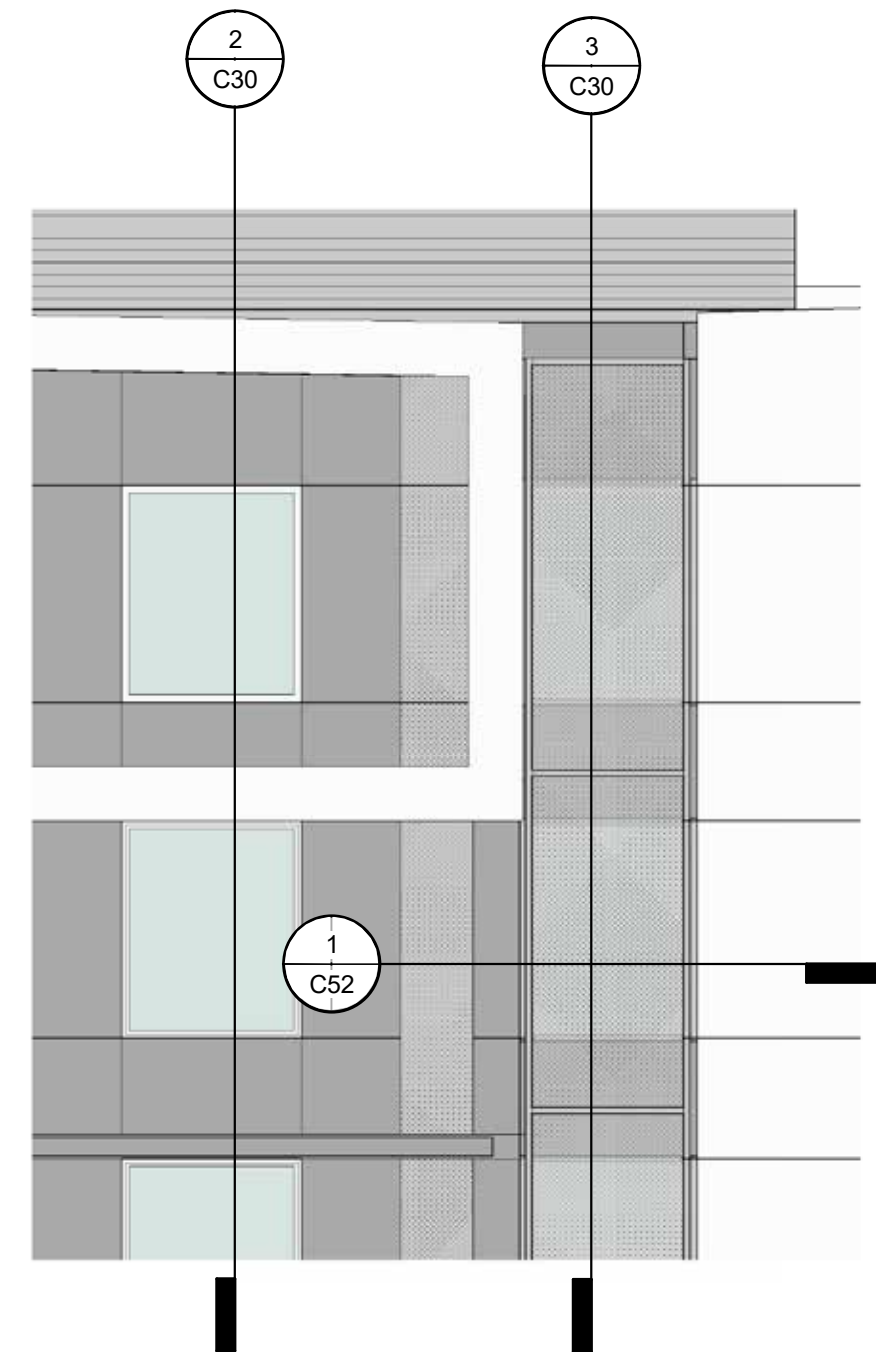
3/16" = 1'-0"

2



SCREEN AXON

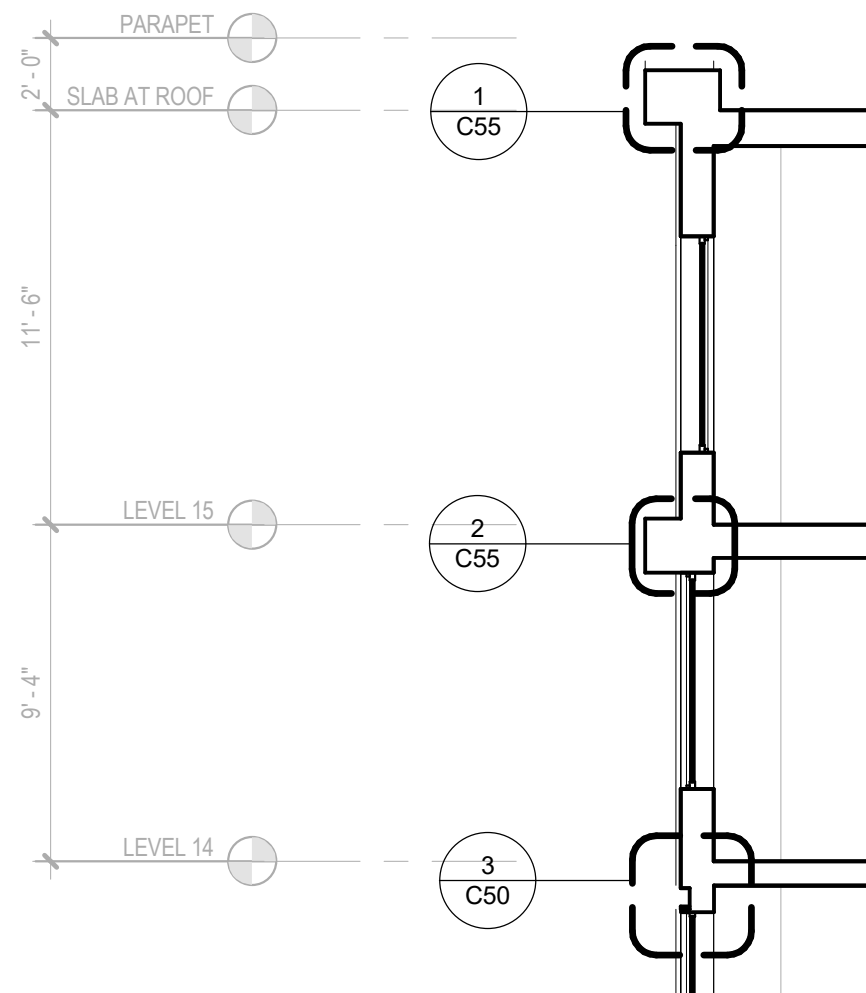
3



EAST - ELEVATION - UPPER LEVELS

3/16" = 1'-0"

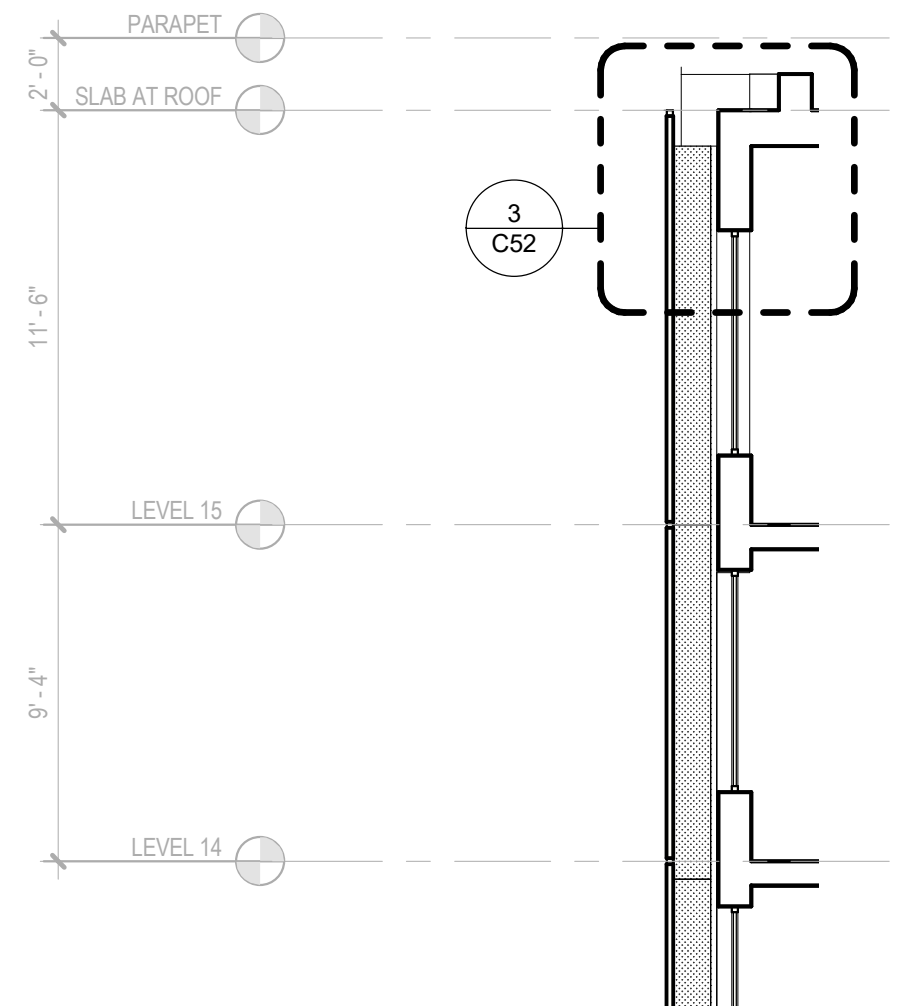
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EAST - SECTION - UPPER WINDOWS

3/16" = 1'-0"

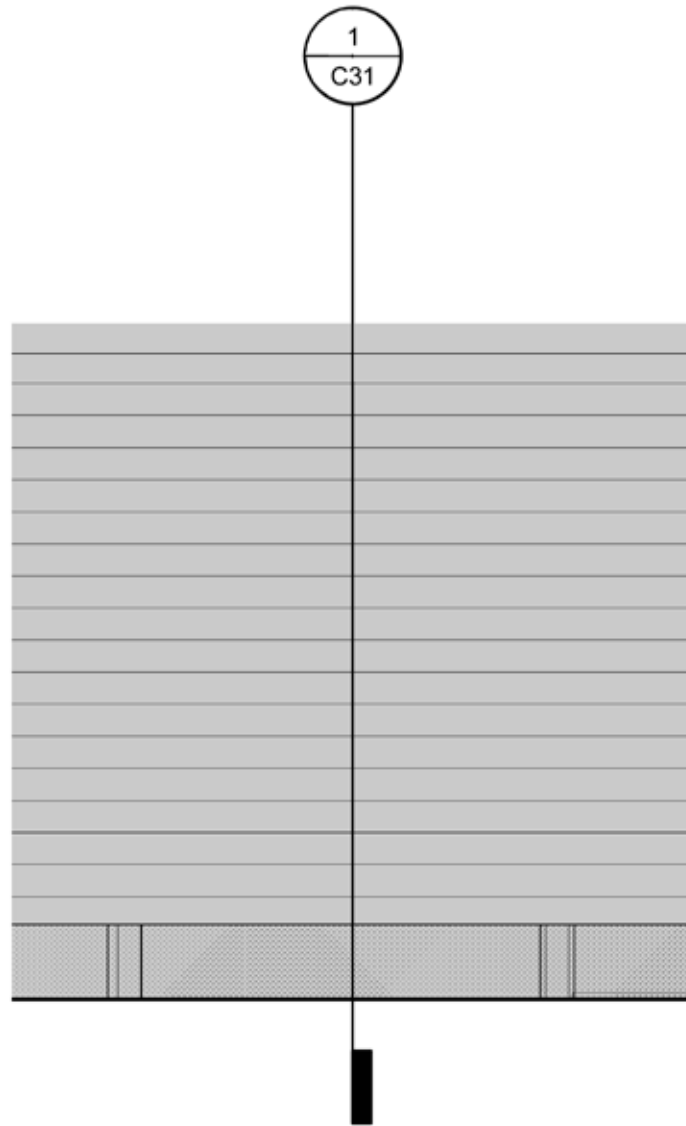
2



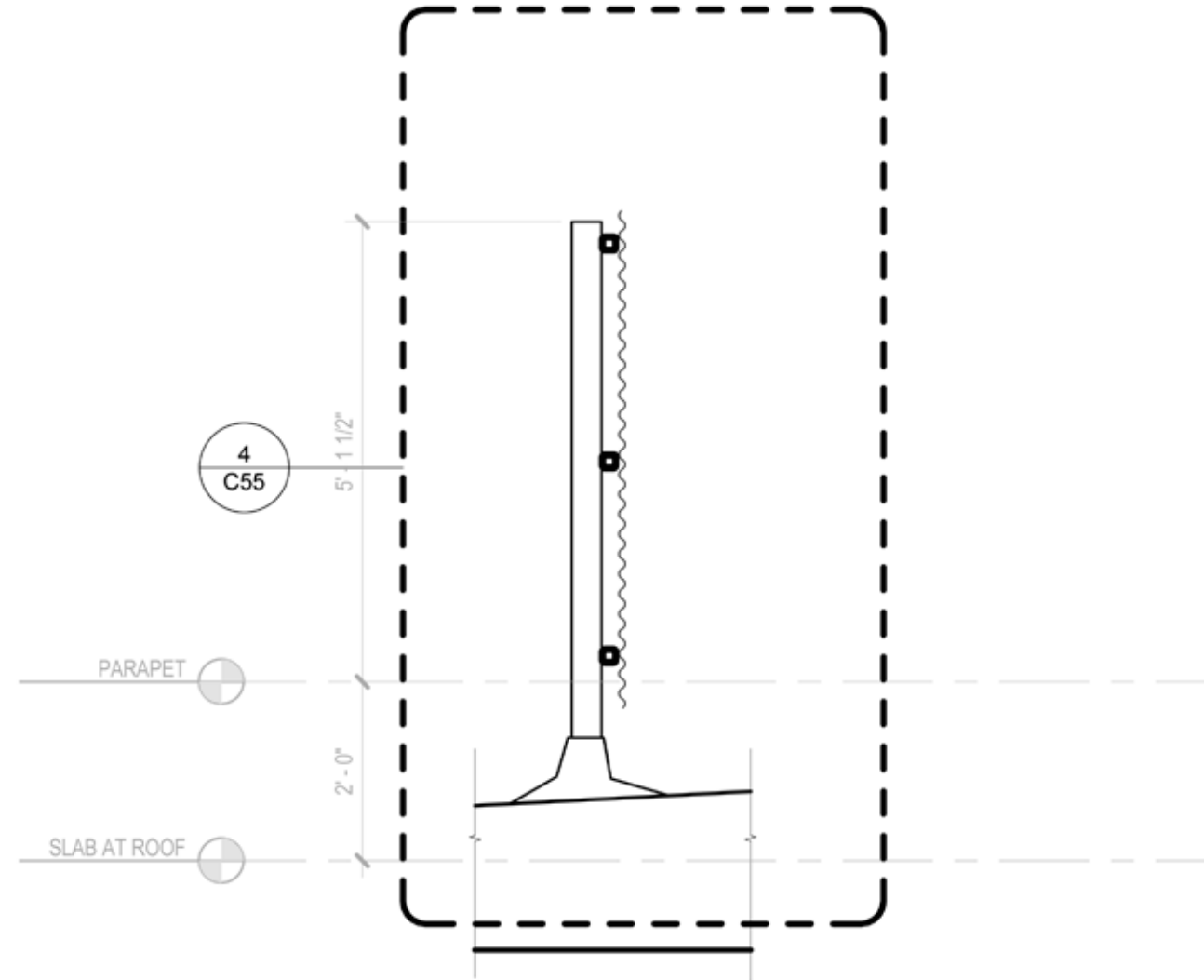
EAST - SECTION - UPPER SCREEN

3/16" = 1'-0"

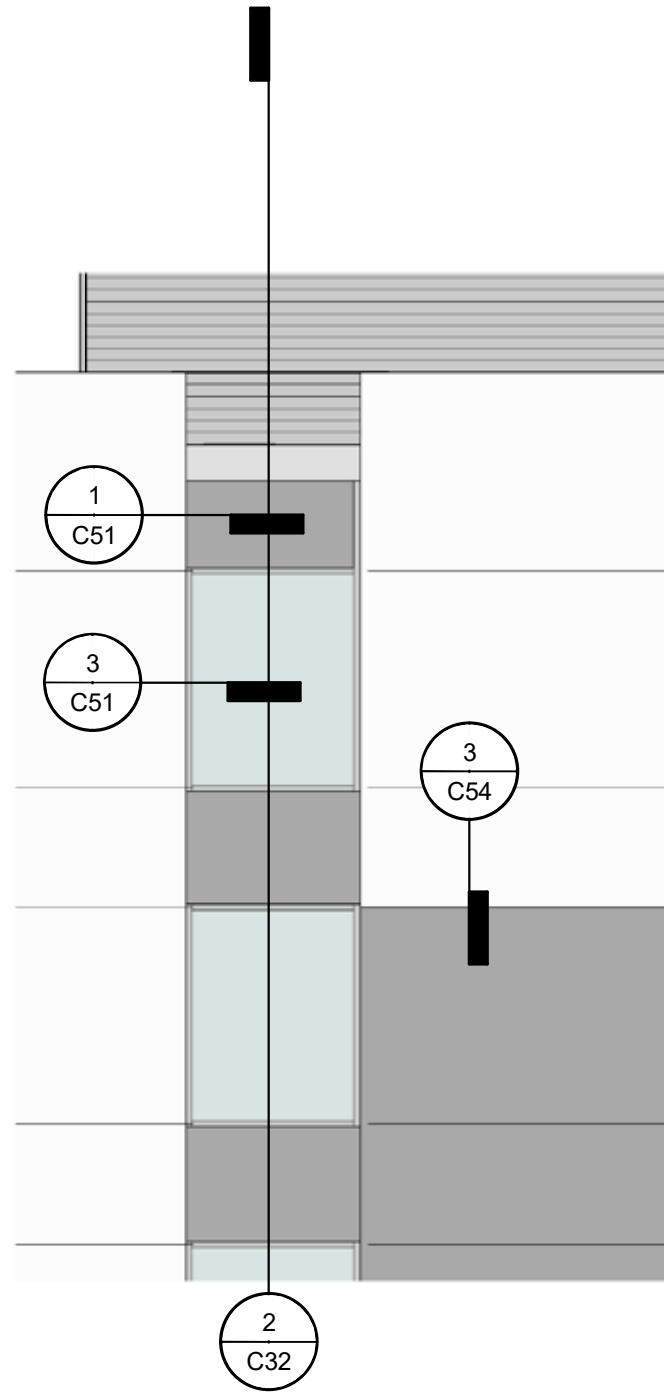
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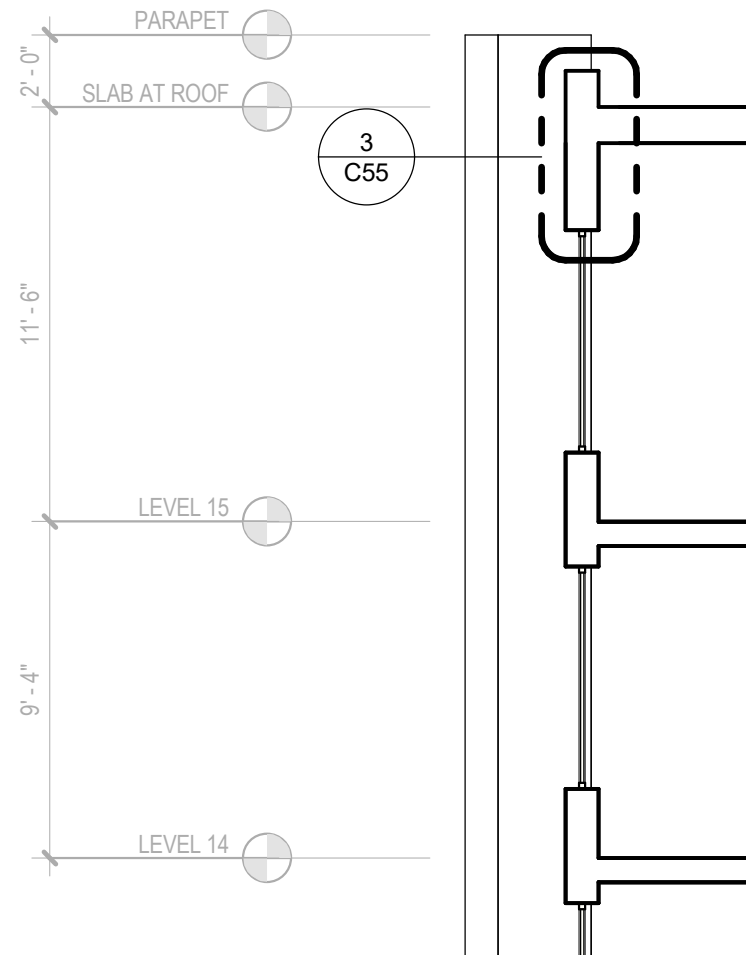
EAST - ELEVATION - ROOF SCREEN 2
1/2" = 1'-0"



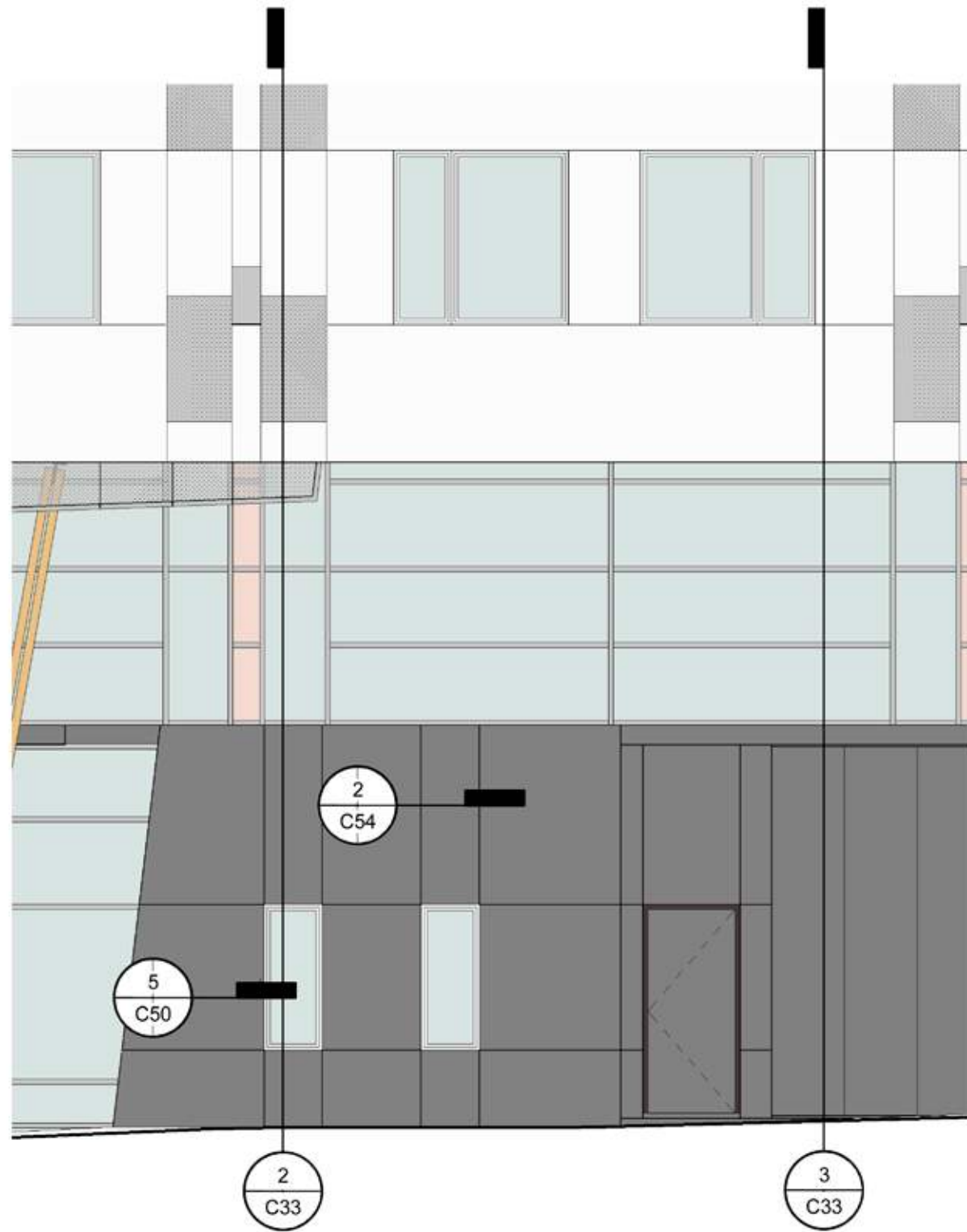
EAST - SECTION - ROOF SCREEN 1
1/2" = 1'-0"



WEST - ELEVATION - UPPER NOTCH ①
3/16" = 1'-0"



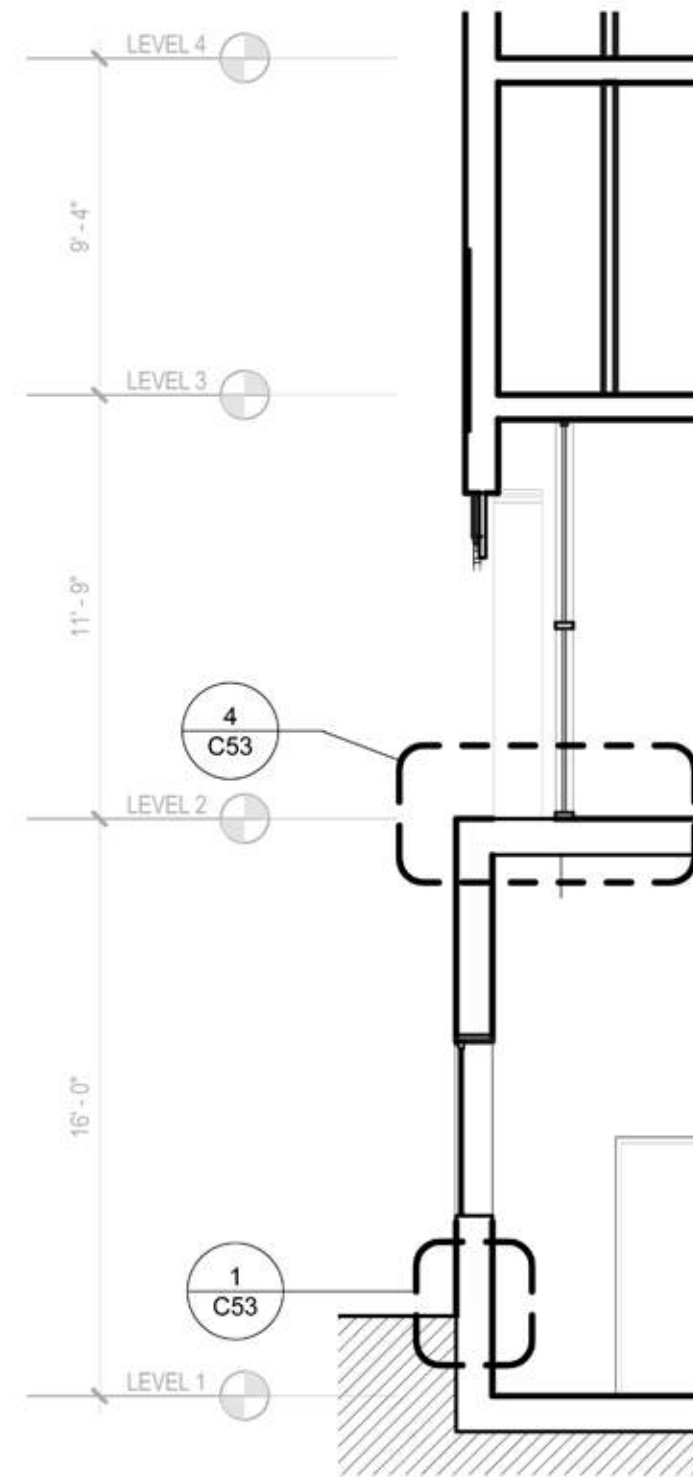
WEST - SECTION - UPPER NOTCH ②
3/16" = 1'-0"



NORTH - ELEVATION - DOCK + OFFICE

3/16" = 1'-0"

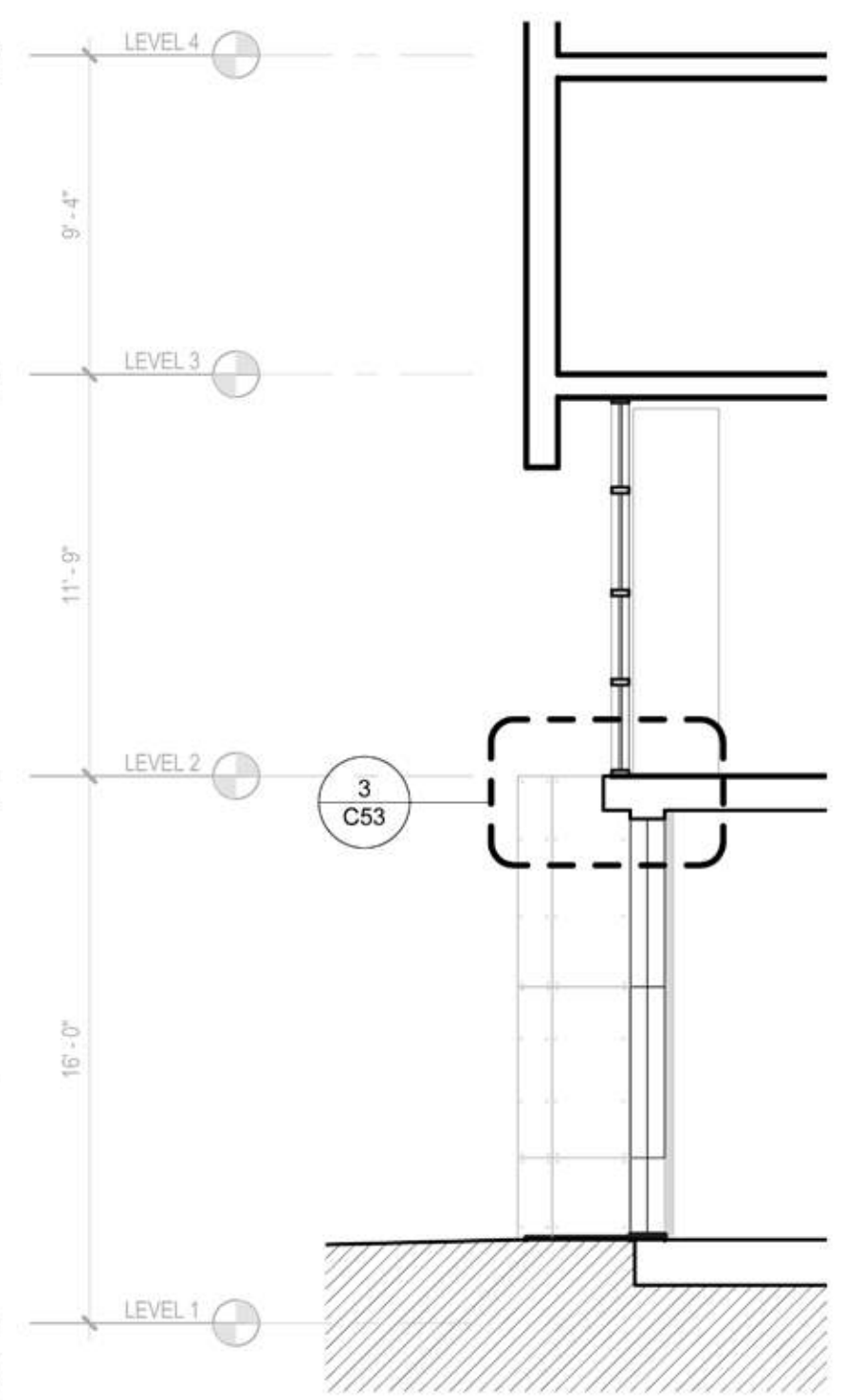
1



NORTH - SECTION OFFICE

3/16" = 1'-0"

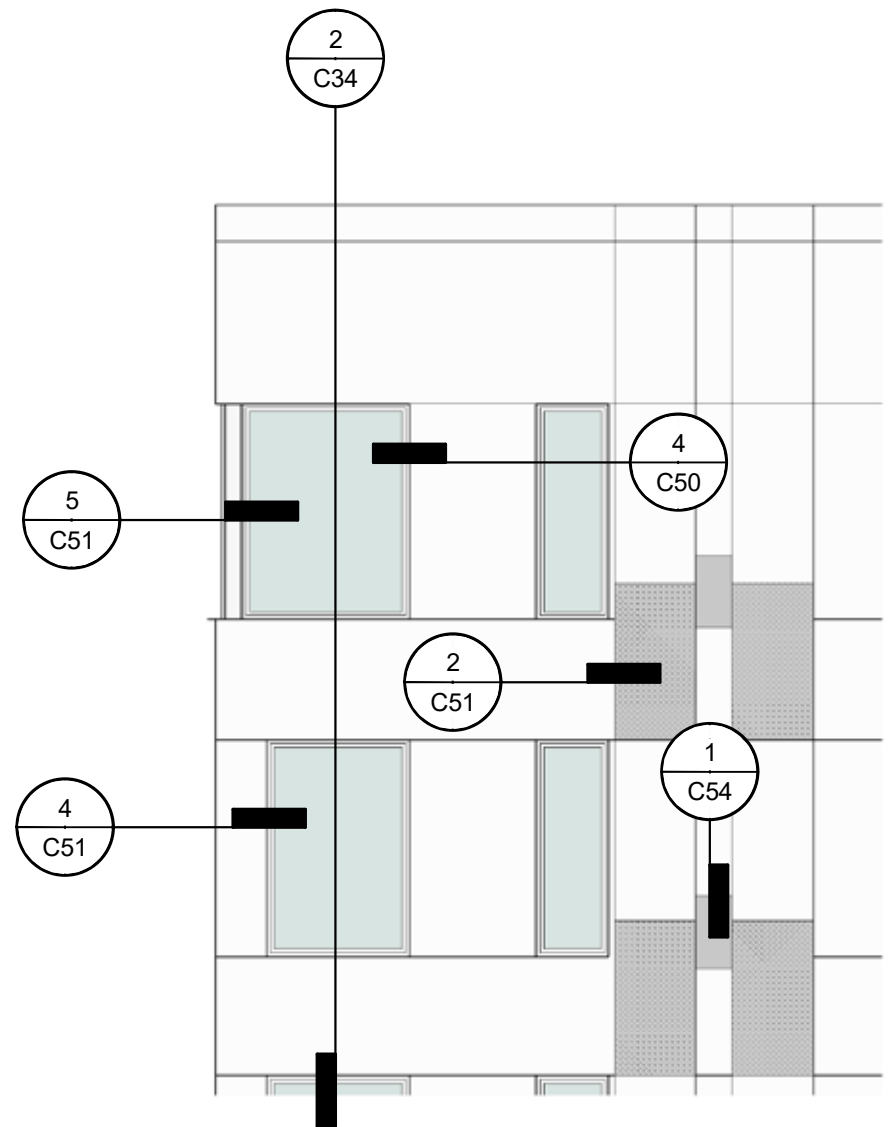
2



NORTH - SECTION - DOCK

3/16" = 1'-0"

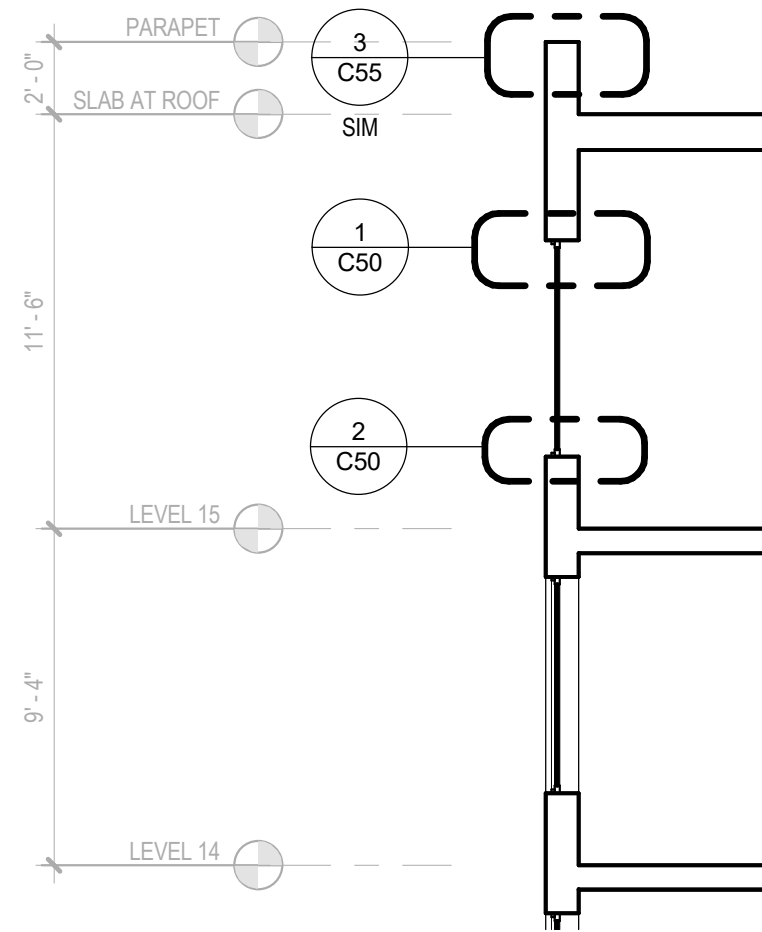
3



NORTH - ELEVATION - UPPER CORNER

3/16" = 1'-0"

1



NORTH - SECTION - UPPER CORNER

3/16" = 1'-0"

2



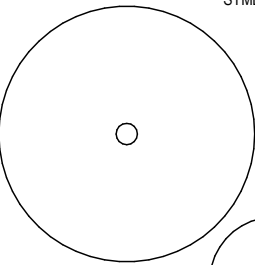
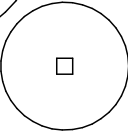
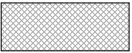
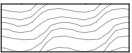
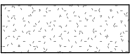

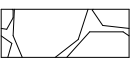


STREET LEVEL PERSPECTIVE FROM NORTHWEST





LEGEND - STORMWATER PLANTER

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	O.C. SPACING
	ACER CIRCINATUM	VINE MAPLE	25 GAL.	PER PLAN
	VIBURNUM EDULE	SQUASHBERRY	5 GAL.	PER PLAN
	JUNCUS TENUIS	POVERTY RUSH	1 GAL.	12"
	CAREX DENSA	SLOUGH SEDGE	1 GAL.	12"
	POLYPODIUM GLYCYRRHIZA	LICORICE FERN	1 GAL.	12"
	1" - 1 1/2" WASHED COBBLE			
	3" WASHED COBBLE			

ACER CIRCINATUM



VIBURNUM EDULE



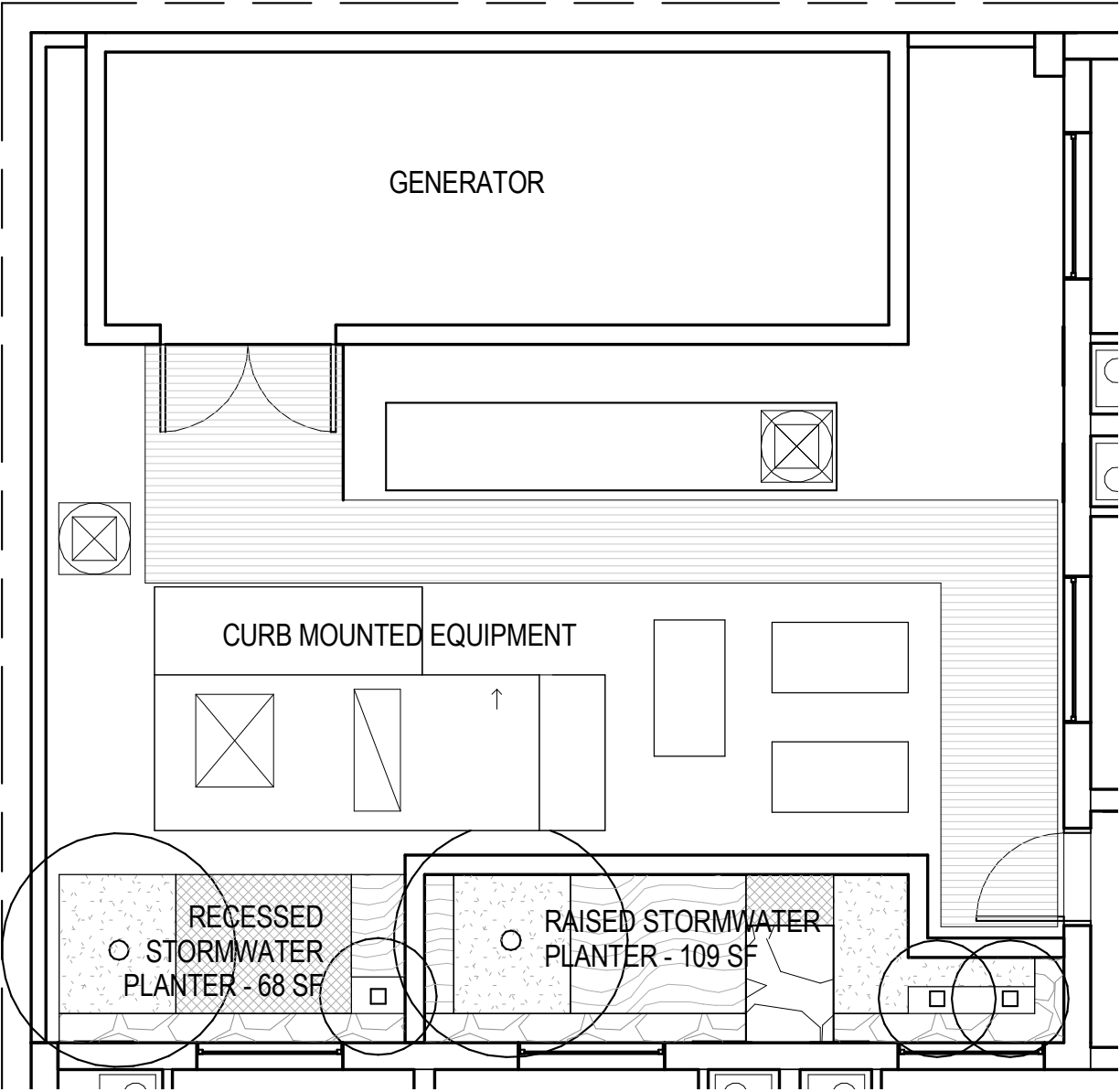
JUNCUS TENUIS



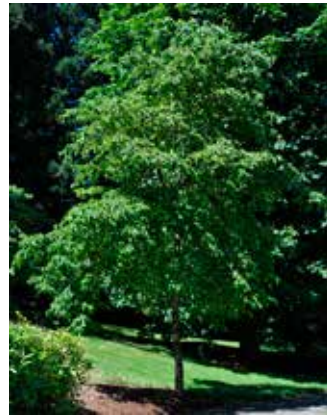
CAREX DENSA



POLYPODIUM GLYCYRRHIZA



LEVEL 3 PLAN



FESTCUA MAIREI





Standards for windows allowed to project into public right-of-way.

A. Projection. Maximum projection of 4 feet into the right-of-way including trim, eaves and ornament. **Compliant: 3'-6" projection**

B. Clearance. Clearance above grade as defined in Chapter 32, Section 3202.3.2 of the current Oregon Structural Specialty Code. (The 2014 edition of the Oregon Structural Specialty Code states that no projection is allowed for clearances less than 8 feet above grade. For clearances above grade greater than 8 feet, 1 inch of projection is allowed for each additional inch of clearance, provided that no such projection shall exceed a distance of 4 feet.) **Compliant: Projection begins 25'-0" above grade.**

C. Area. Maximum wall area of all windows which project into public right-of-way on a wall is 40% of the wall's area. **Compliant: East Facade 23.5% North Facade 3%**

D. Wall Length. Maximum width of any single window which projects into public right-of-way is 50% of its building wall length. **Compliant: East Facade 28.2%**

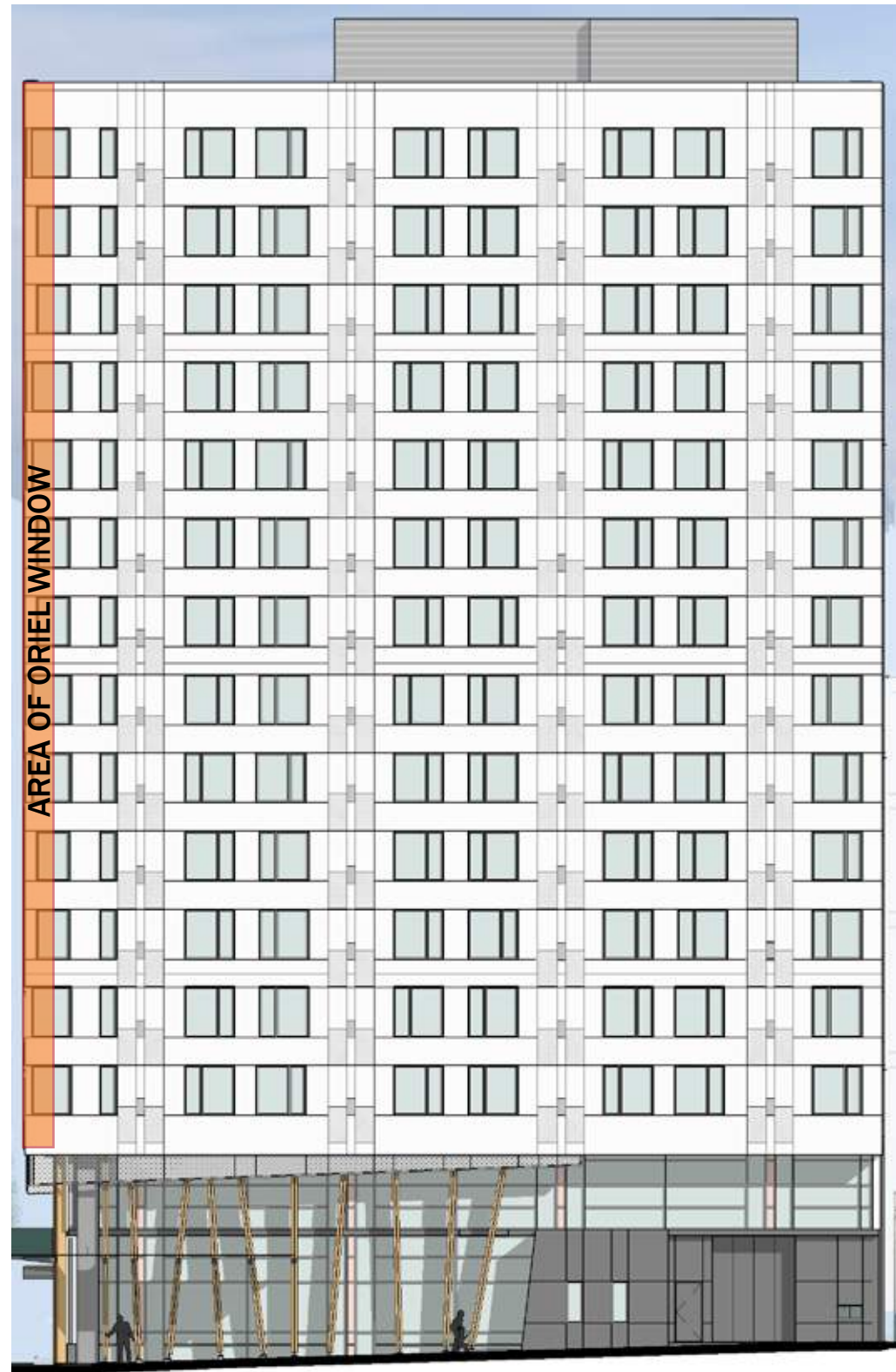
E. Window Area. Minimum of 30% window area at the face of the projecting window element. Projections greater than 2 feet 6 inches must have windows at all sides, and required side windows must be a minimum of 10% of side walls. When approved through design review, the window requirement for side walls may vary. Side windows must meet the requirements of Table 705.8 of the current Oregon Structural Specialty Code, maximum area of exterior wall openings based on fire separation distance and degree of opening protection. The separation distance is measured from the continuation of the property line. No openings will be allowed within 3 feet of the property line continuation. **Compliant: East Facade 30.3% North Facade 48%**

F. Width. Maximum width of 12 feet for each projecting window element. When approved through design review, the width may vary provided the area of all windows on a wall which project into public right of way does not exceed 40% of the wall's area and the width of any single projecting window element does not exceed 50% of its building wall's length. **Non Compliant: Width greater than 12' seeking modification for 27'-11" width. Compliant: Total Width 28.2%**

G. Separation. Minimum separation of 12 feet measured from other projecting window elements on the same elevation or plane of wall. When approved through Design Review, required separation may vary provided the area of all projecting window elements on a wall does not exceed 40% of the wall's area and the width of any single projecting window element over the right-of-way does not exceed 50% of its building wall's length. **Compliant**



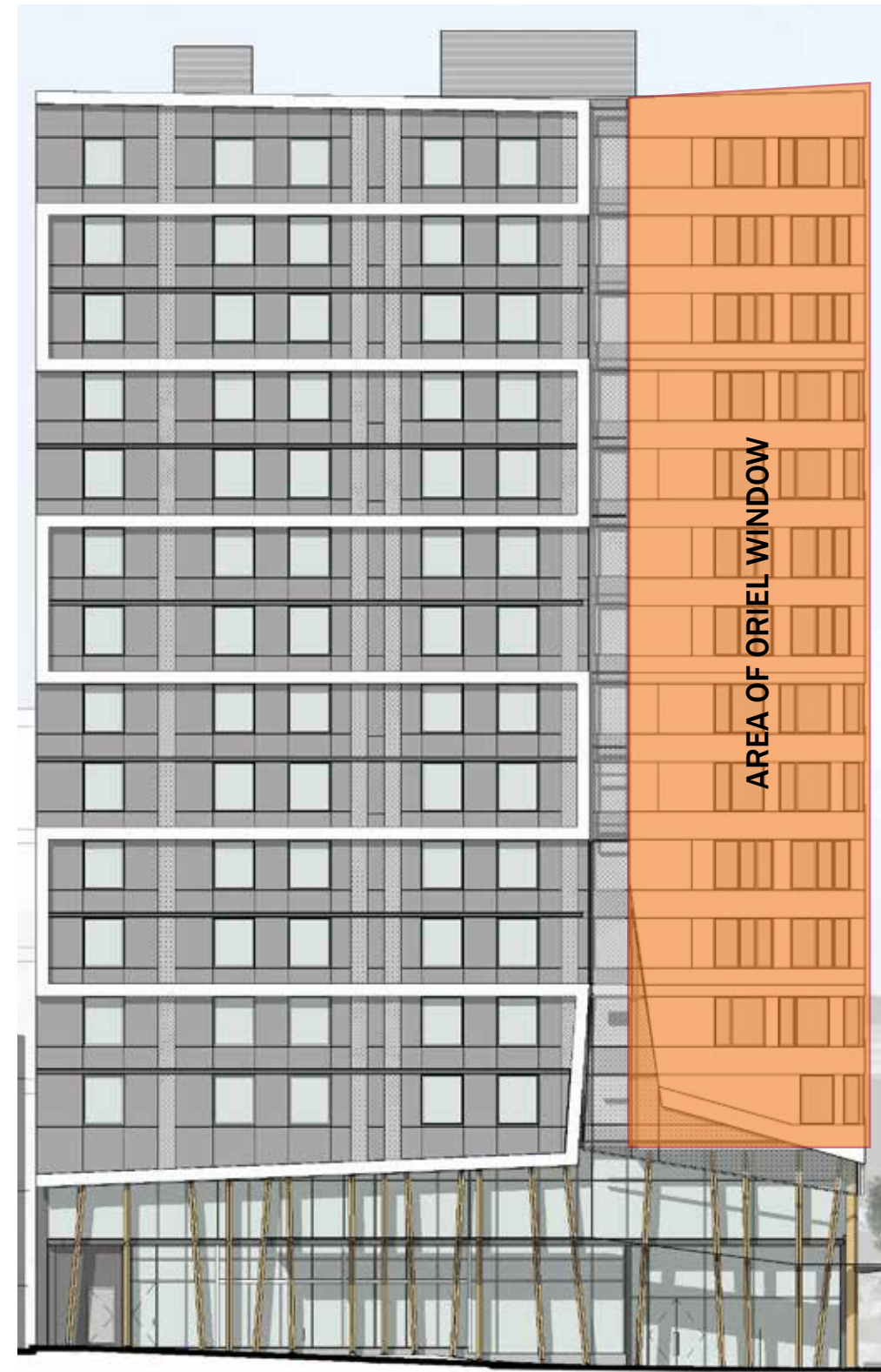
AREA OF ORIEL WINDOW = 97.7 sf levels 3 to 15



AREA ORIEL WINDOW
IN RELATION TO
NORTH FACADE = 3%
MAX AERA ALLOWED = 40%

WINDOW AREA AT
ORIEL PROJECTION = 48%
MINIMUM WINDOW AREA = 10%

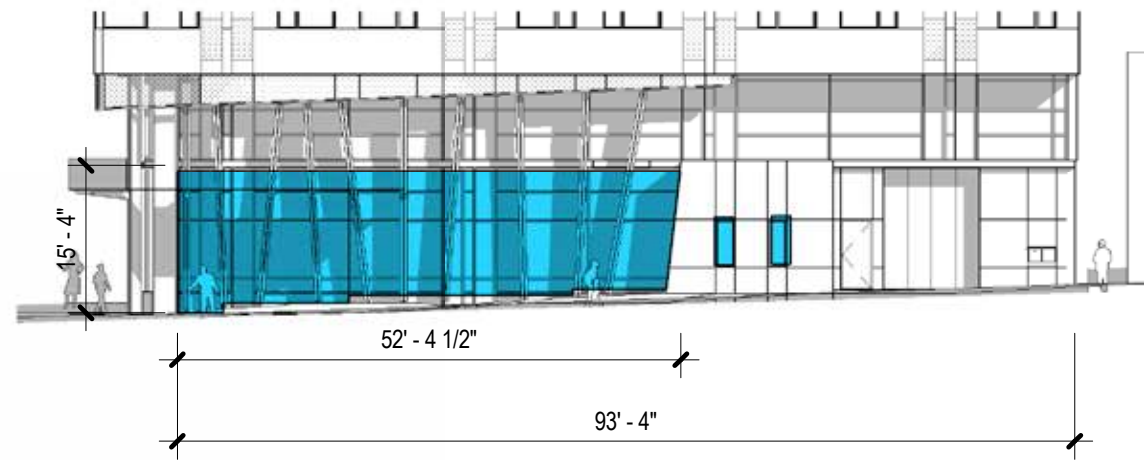
NORTH ELEVATION



AREA ORIEL WINDOW
IN RELATION TO
EAST FACADE = 23.5%
MAX AERA ALLOWED = 40%

WINDOW AREA AT
ORIEL PROJECTION = 30.3%
MINIMUM WINDOW AREA = 30%

EAST ELEVATION



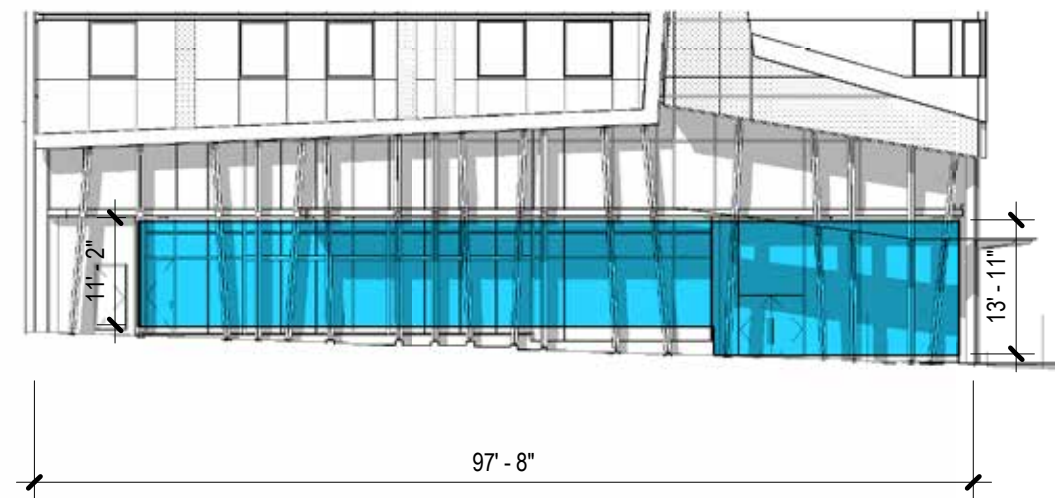
east elevation

north elevation:

Required amount of Window Area at
Ground Floor > 25%
Proposed amount of Window Area at
Ground Floor: 54.5%

Required amount of Window Length at
Ground Floor > 50%
Proposed amount of Window Length at
Ground Floor: 60%

Required amount of Window Area
above Ground Floor > 15%
Proposed amount of Window Area
Above Ground Floor: 41%



north elevation

east elevation:

Required amount of Window Area at
Ground Floor > 25%
Proposed amount of Window Area at
Ground Floor: 70%

Required amount of Window Length at
Ground Floor > 50%
Proposed amount of Window Length at
Ground Floor: 86.7%

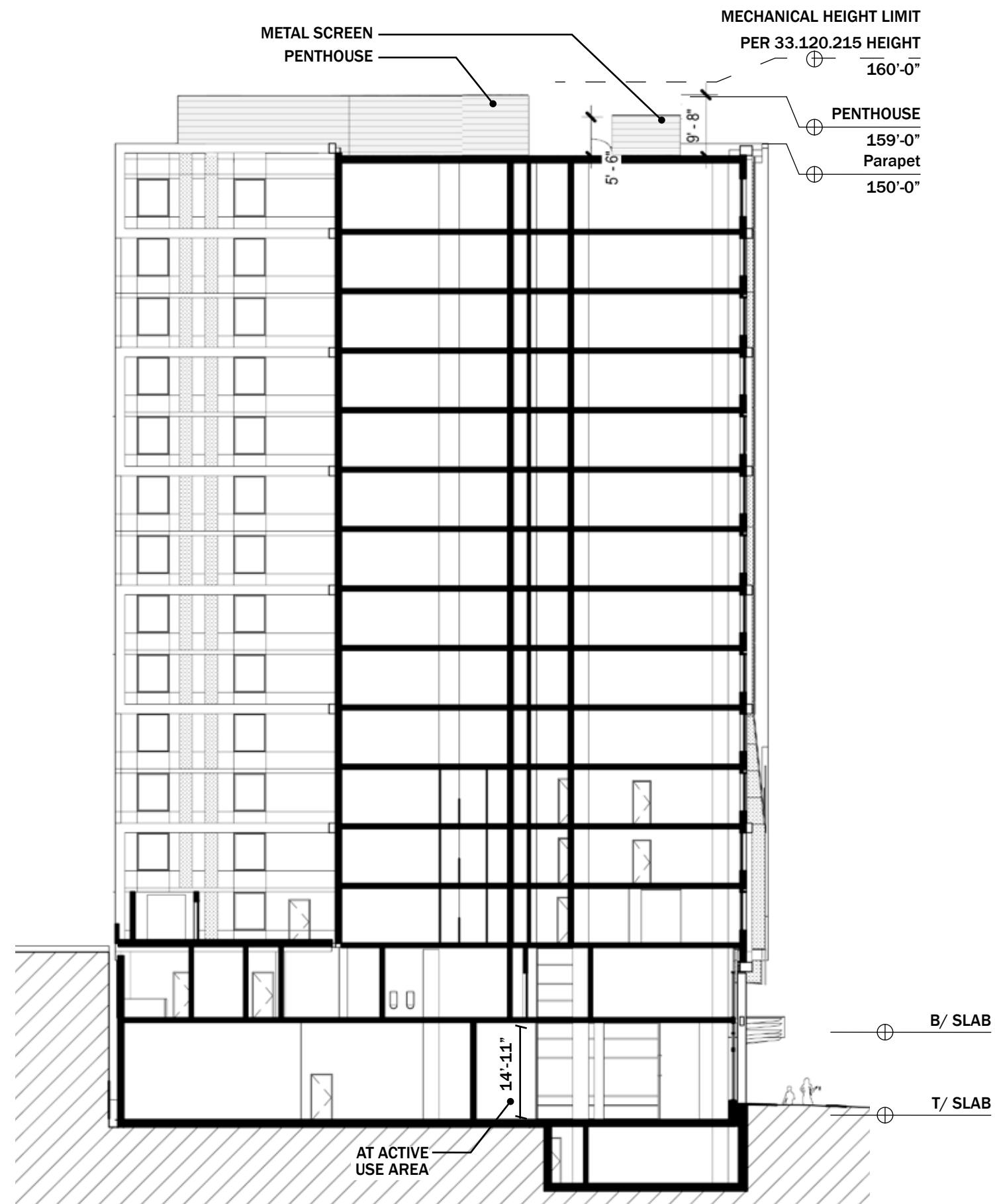
Required amount of Window Area above
Ground Floor > 15%
Proposed amount of Window Area above
Ground Floor: 46%

GROUND FLOOR WINDOWS

0' 5' 10' 20'

DESIGN REVIEW #LU 16-144846 DZM, AD

C44

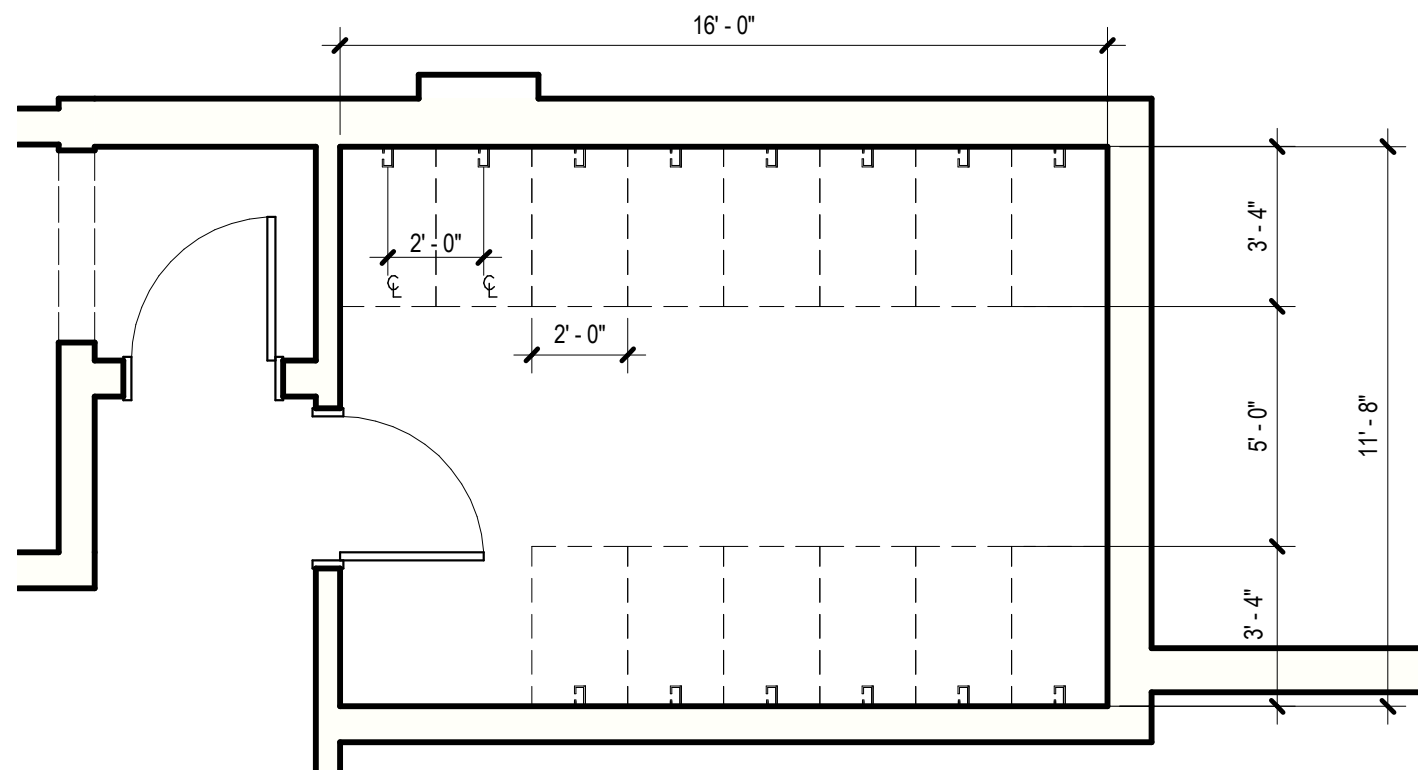


BUILDING SECTION

0' 5' 10' 20'

DESIGN REVIEW #LU 16-144846 DZM, AD

C45



Bike Parking -
wall mounted

14 required
14 provided



The Stirrup Wall Mounted Bike Rack



stucco system fine finish, color 1



heavy timber western red cedar columns



cast in place concrete column



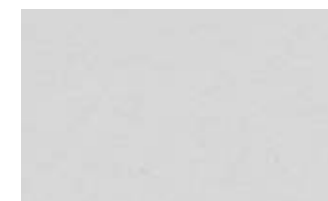
stucco system fine finish, color 2



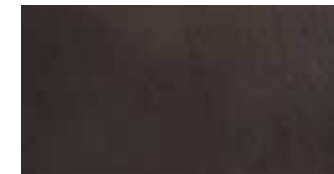
prefinished fiber cement board inlaid accent, with concealed fasteners



prefinished fiber cement board band, with concealed fasteners



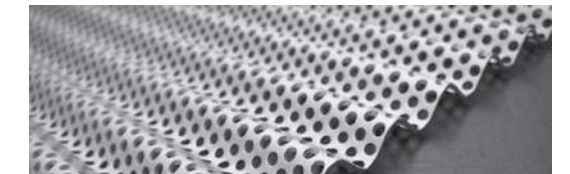
fiber cement board painted to match stucco @ guest rm. window head only.



composite metal panel with concealed fasteners



perforated metal panel at screen at vertical slot and grille at VTAC



perforated corrugated metal panel at rooftop mechanical screens



glass and metal panel canopy: panel point supported canopy system



tinted glazing, color: green and blue

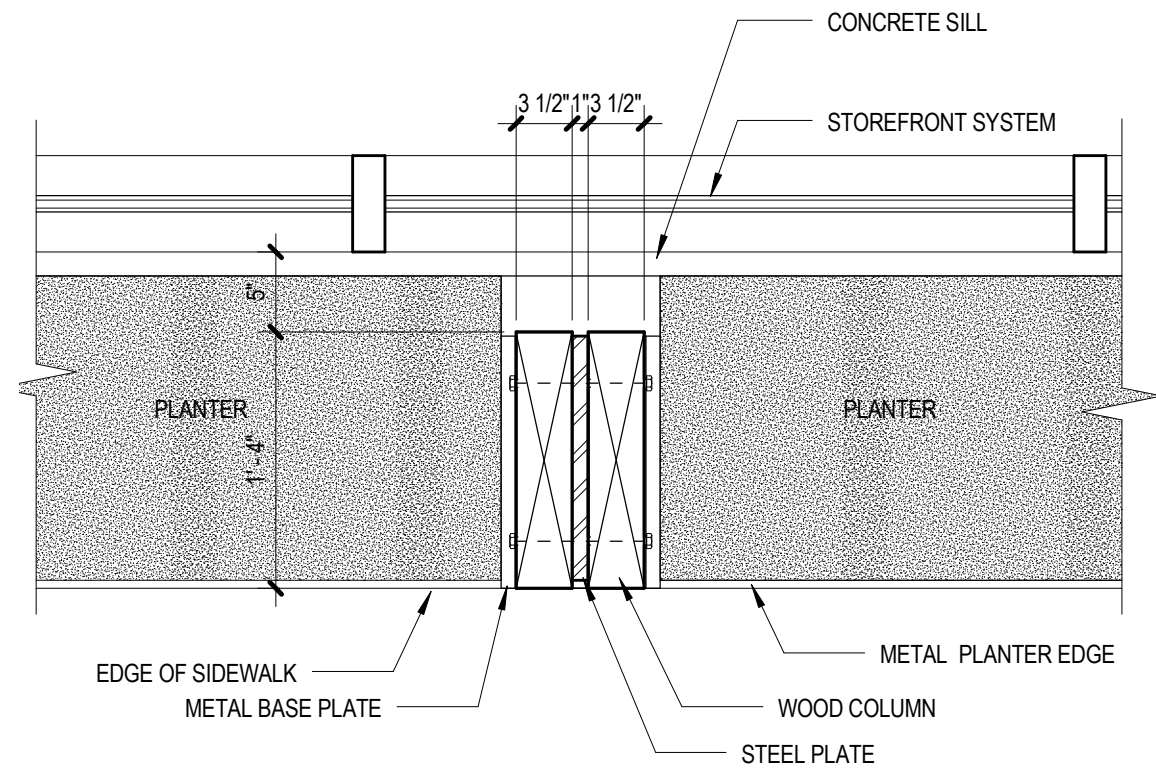


aluminium storefront system: color: anodized



aluminum windows, color: anodized

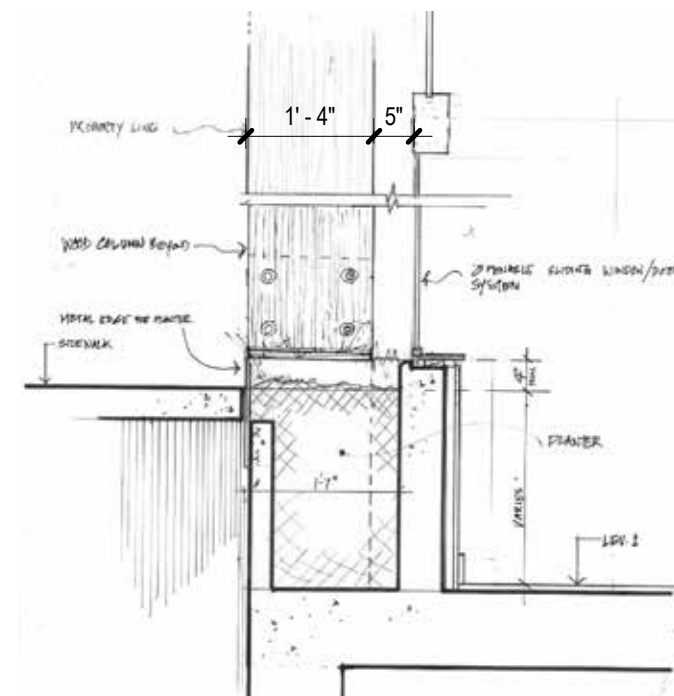
MATERIALS



COLUMN PLAN

1" = 1'-0"

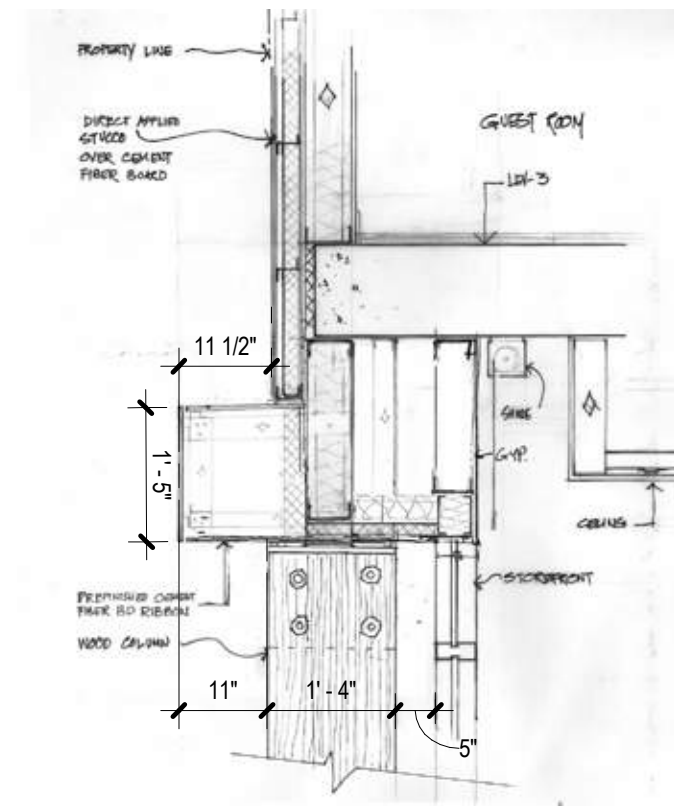
3



COLUMN BASE

1/2" = 1'-0"

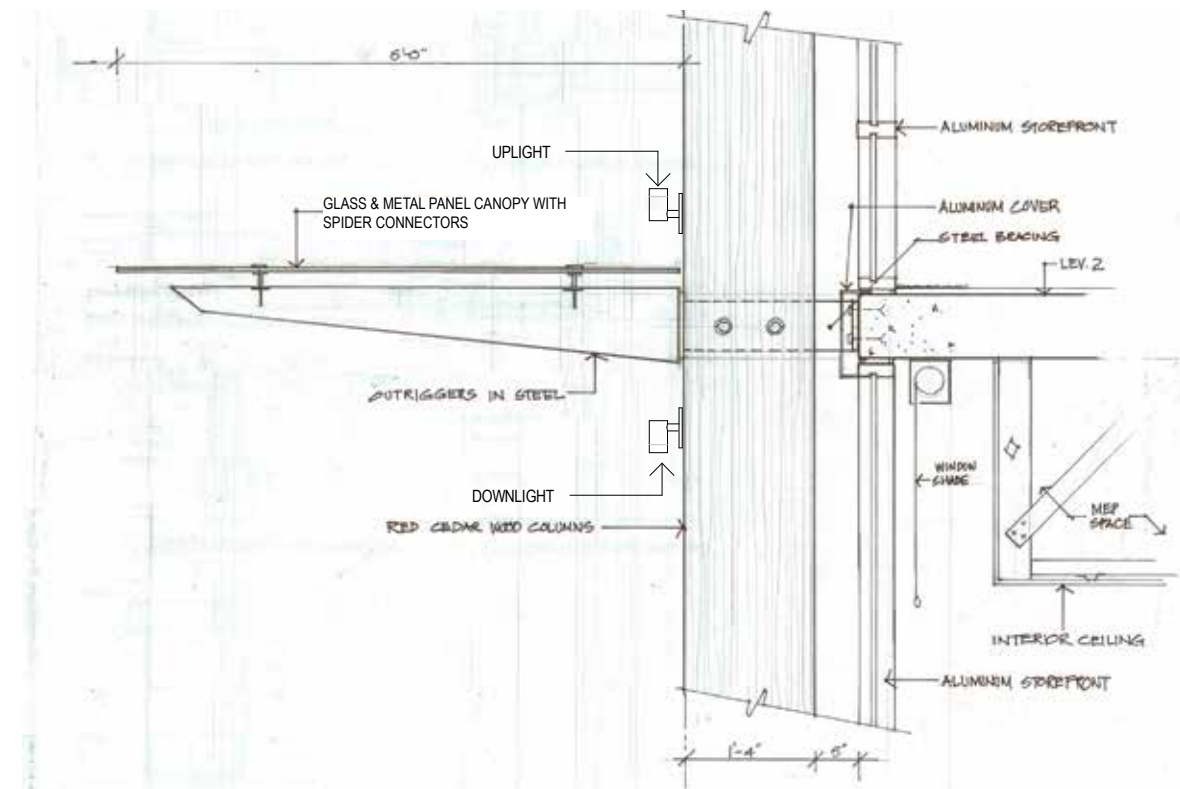
4



EAST - DETAIL - STOREFRONT TOP

1/2" = 1'-0"

1



EAST - DETAIL - CANOPY

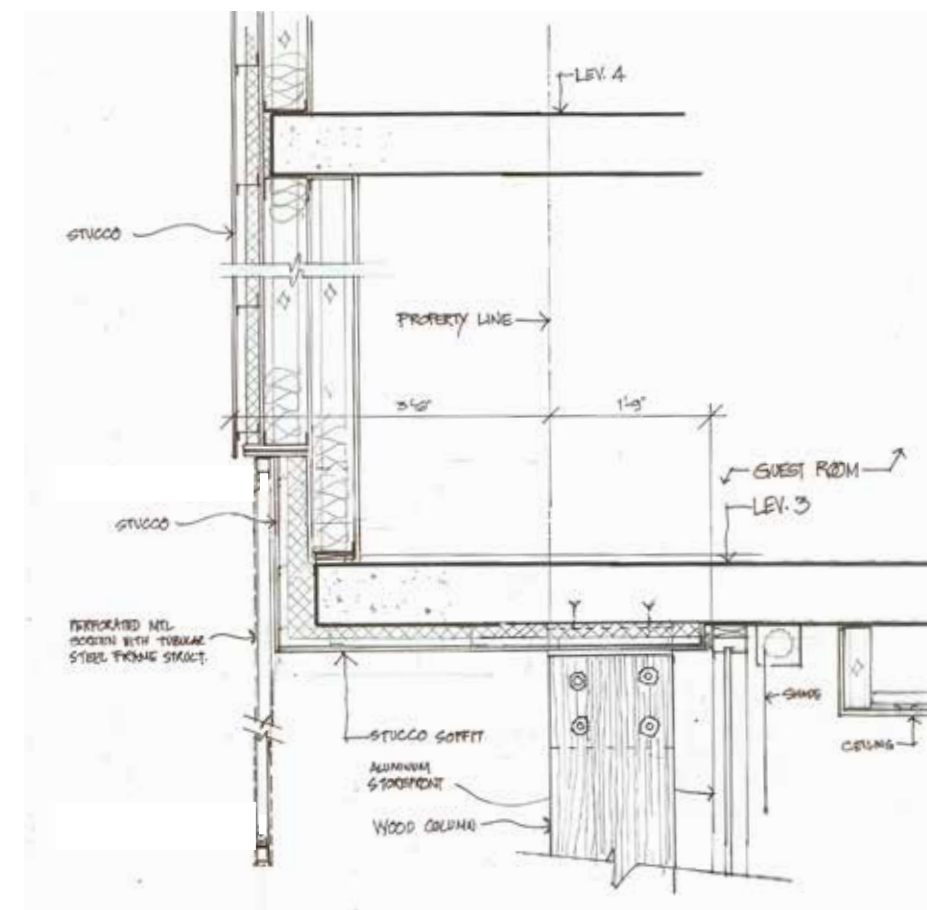
1/2" = 1'-0"

2

DETAILS

DESIGN REVIEW #LU 16-144846 DZM, AD

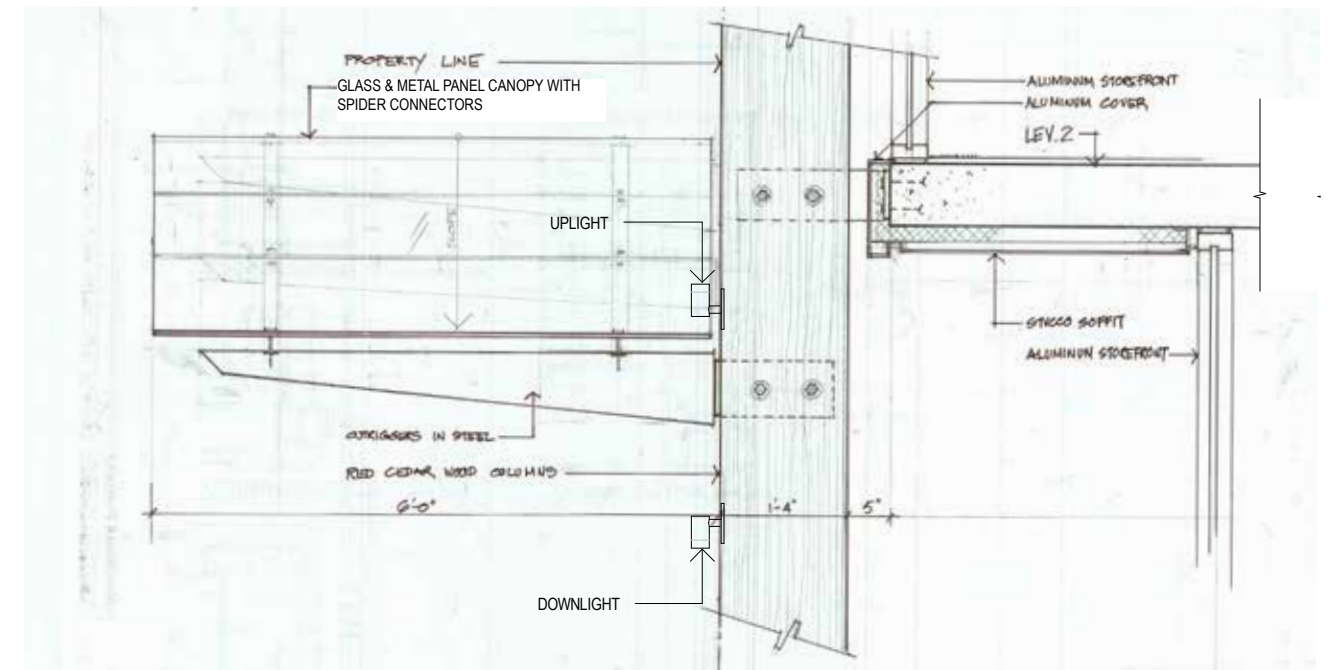
C48



SOFFIT - 2ND LEVEL

1/2" = 1'-0"

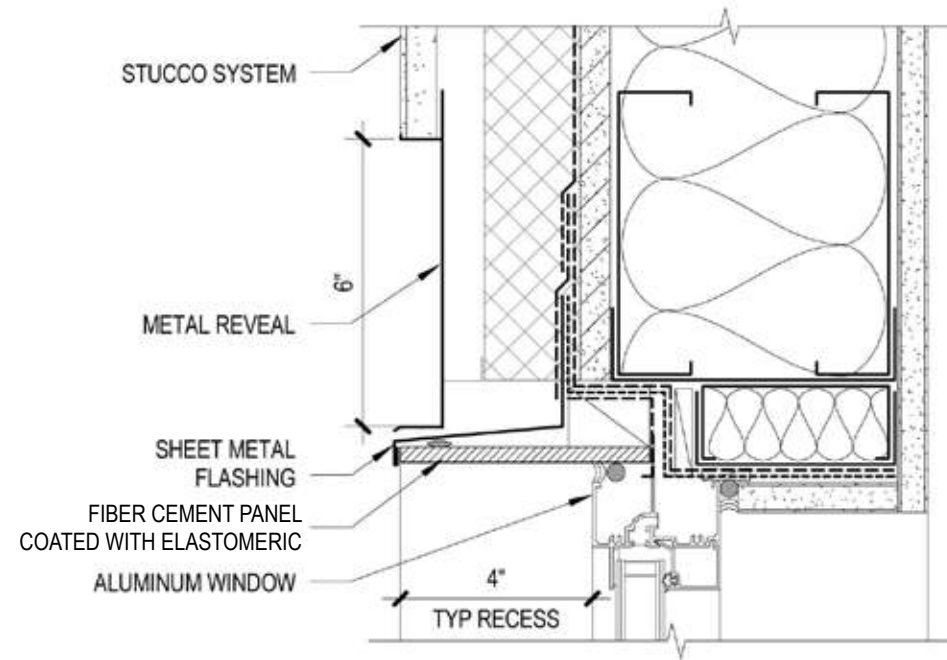
1



SOFFIT - ENTRANCE

1/2" = 1'-0"

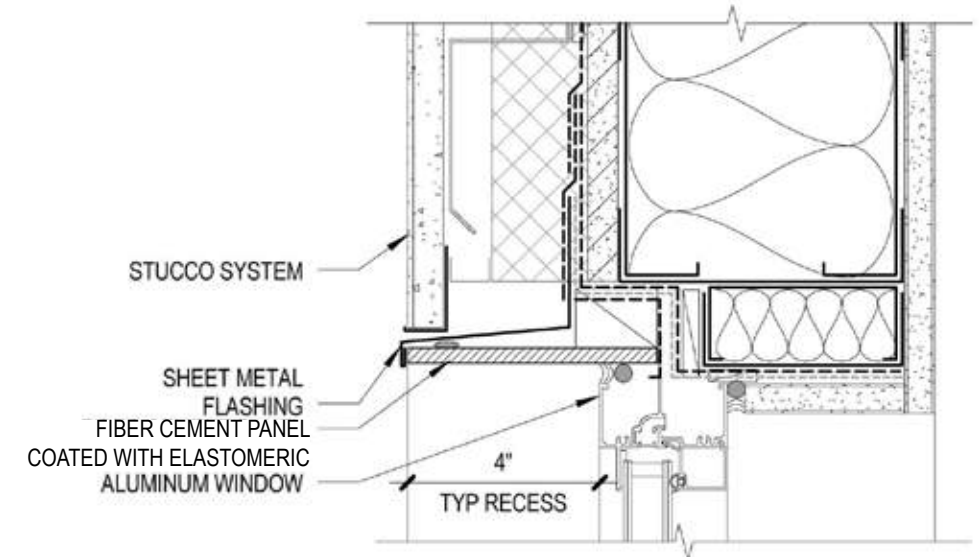
2



WINDOW HEAD @ REVEAL

3" = 1'-0"

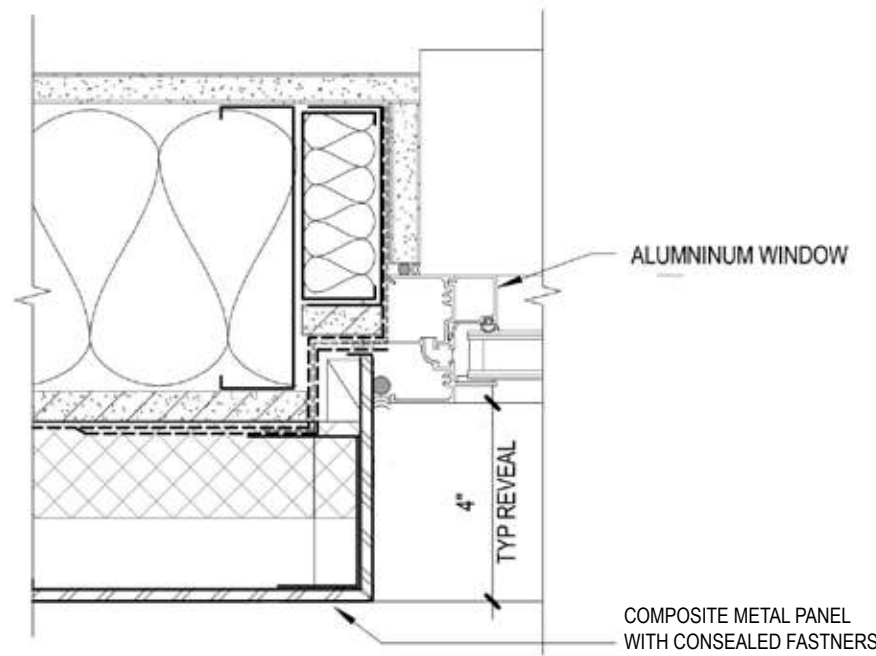
3



WINDOW HEAD @ STUCCO

3" = 1'-0"

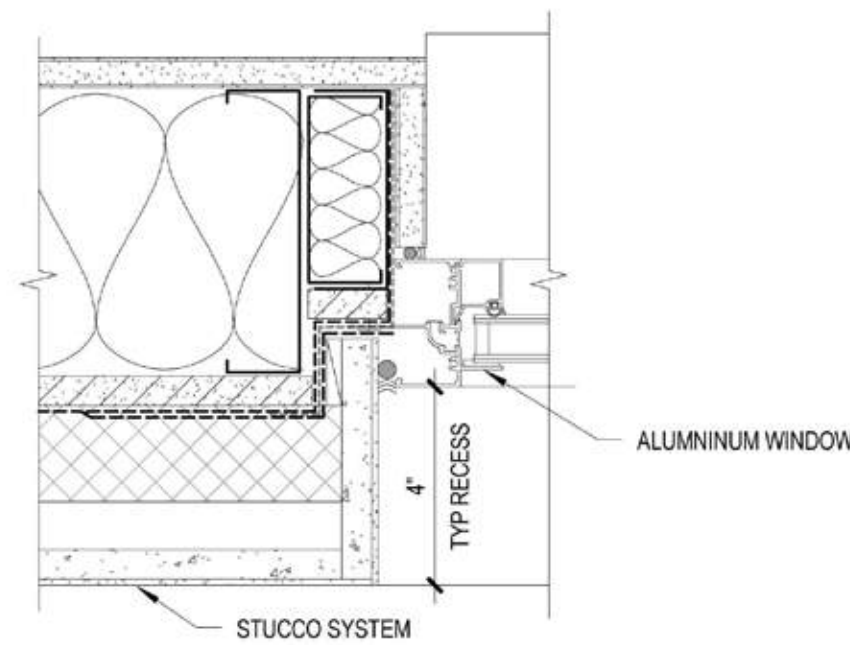
1



WINDOW JAMB @ METAL PANEL

3" = 1'-0"

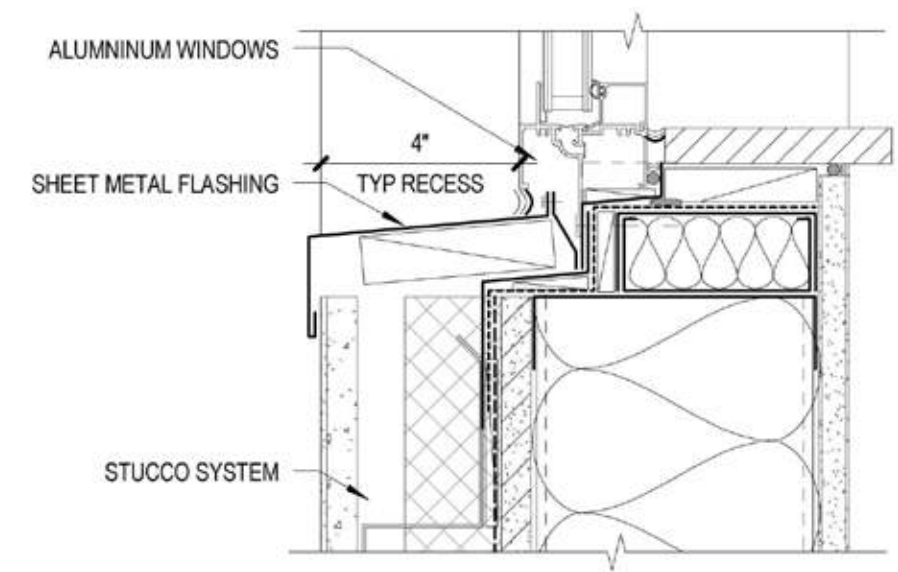
5



WINDOW JAMB @ STUCCO

3" = 1'-0"

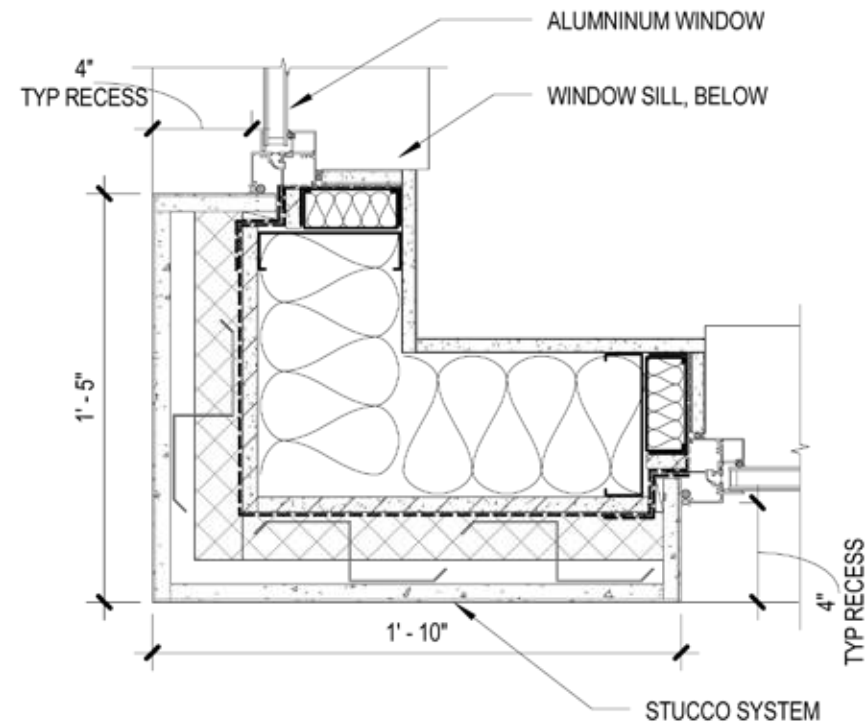
4



WINDOW SILL @ STUCCO LEDGE

3" = 1'-0"

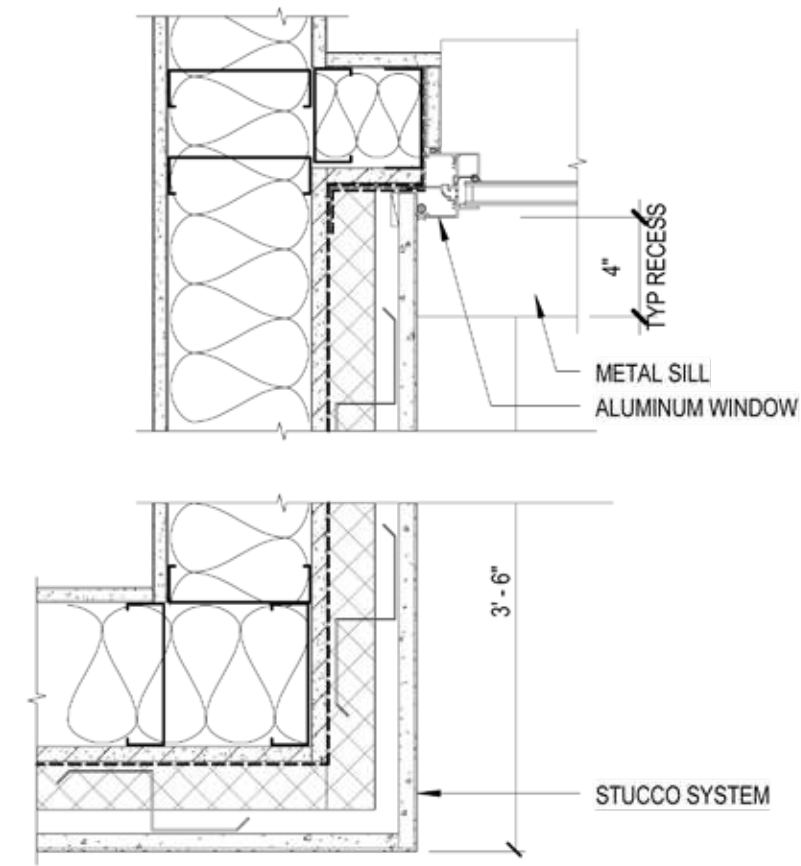
2



WINDOW CORNER @ STUCCO

1 1/2" = 1'-0"

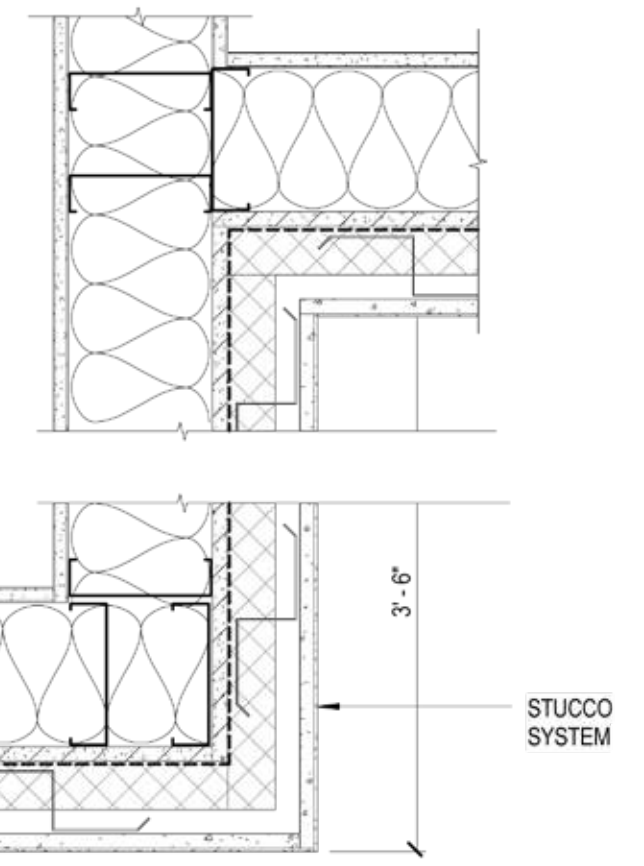
4



CORNER @ WINDOW

1 1/2" = 1'-0"

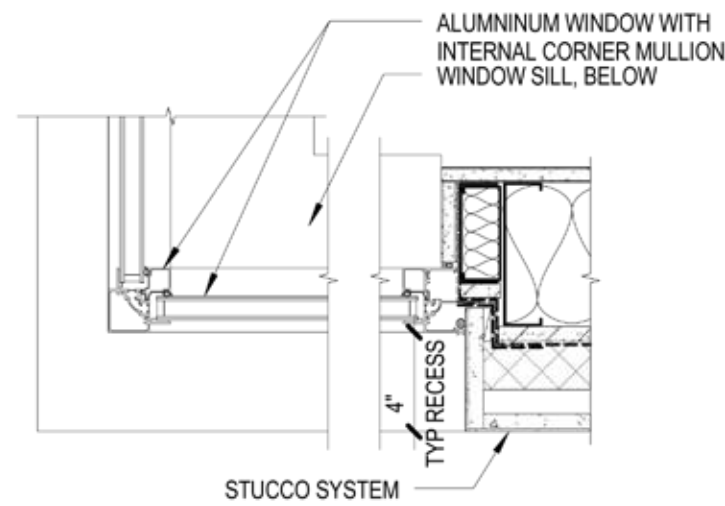
3



CORNER @ STUCCO

1 1/2" = 1'-0"

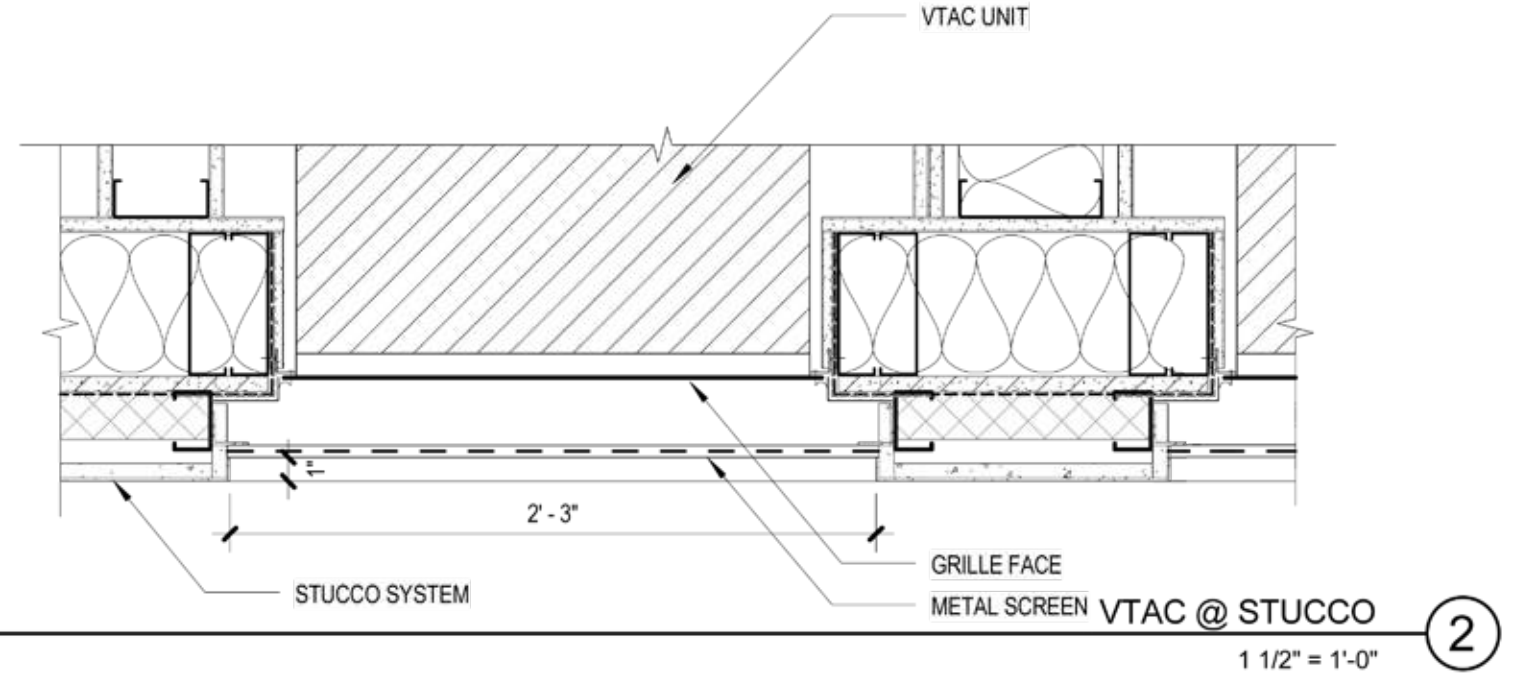
1



WINDOW CORNER MULLION

1 1/2" = 1'-0"

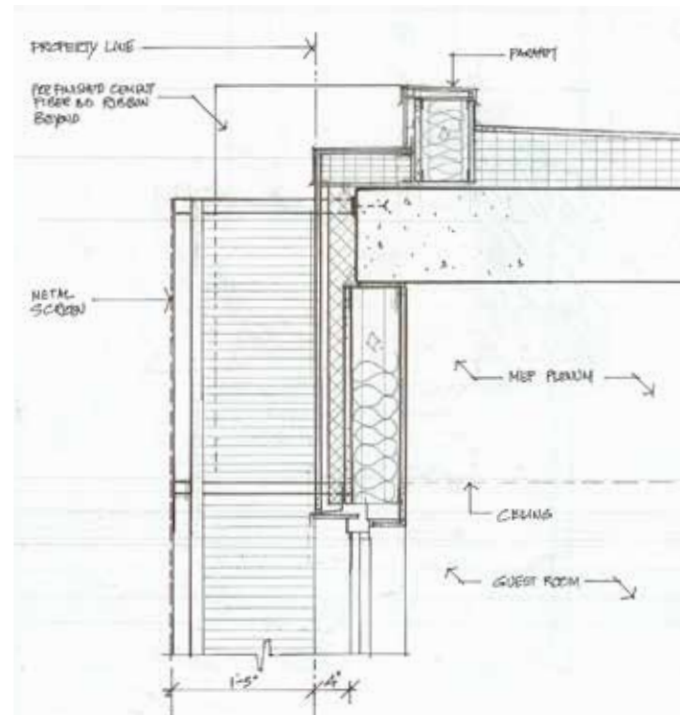
5



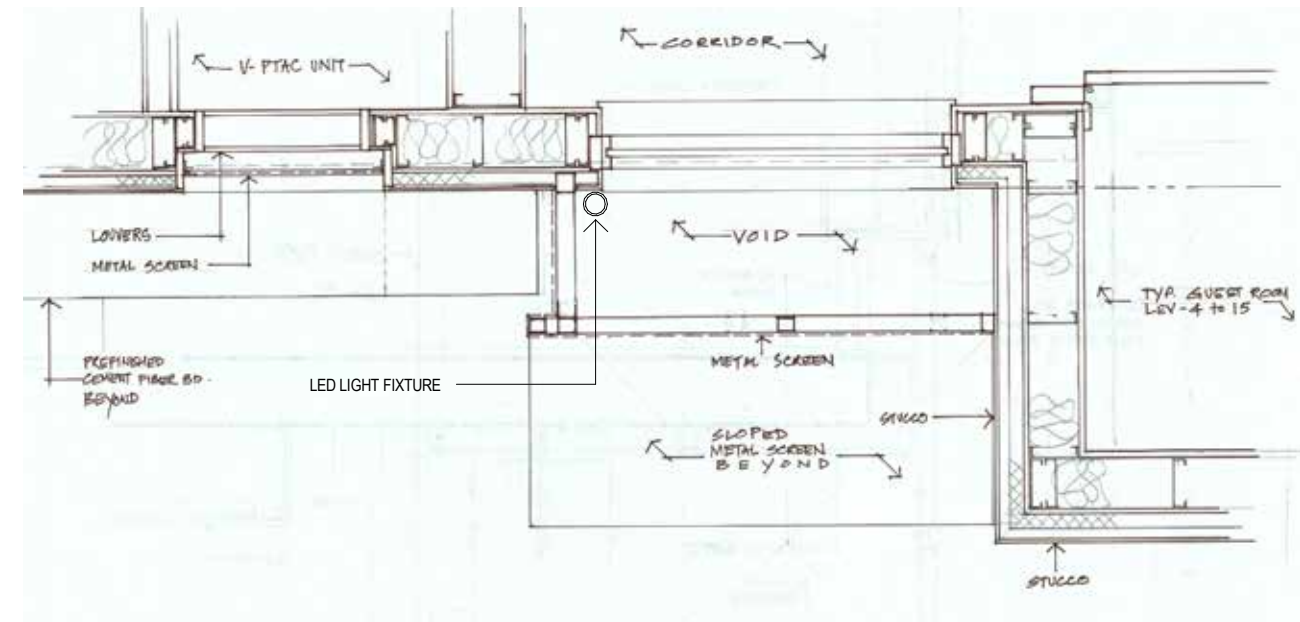
VTAC @ STUCCO

1 1/2" = 1'-0"

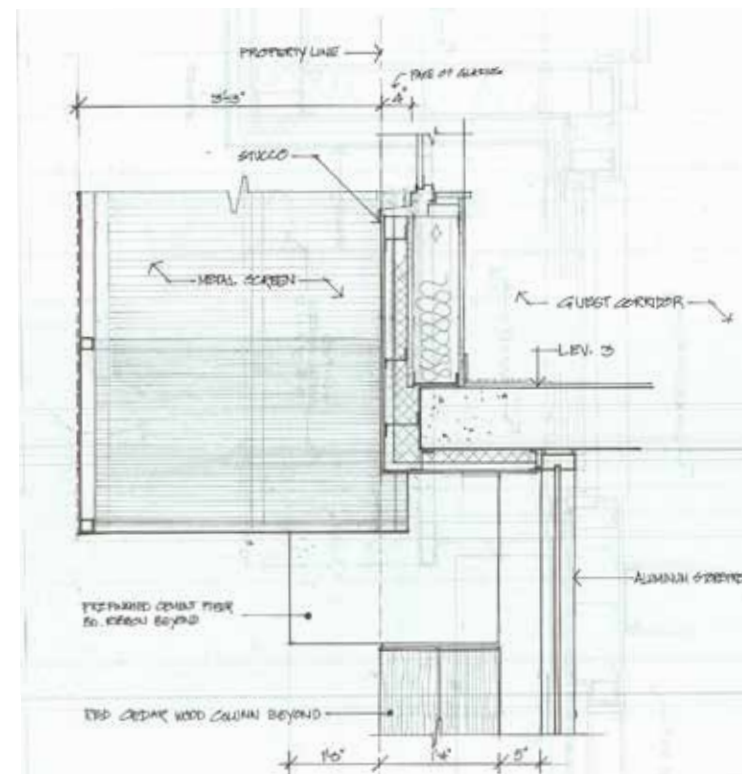
2



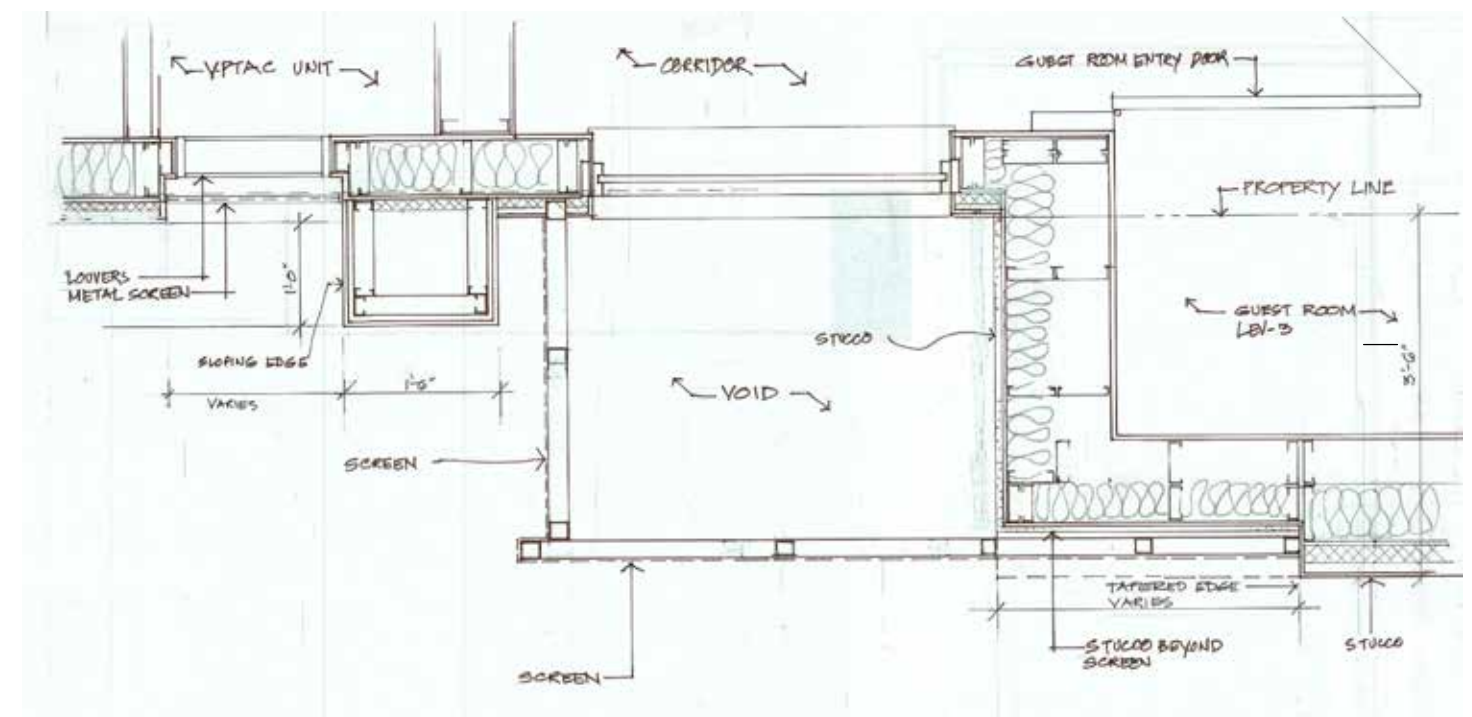
EAST - DETAIL - UPPER SCREEN
1/2" = 1'-0" ③



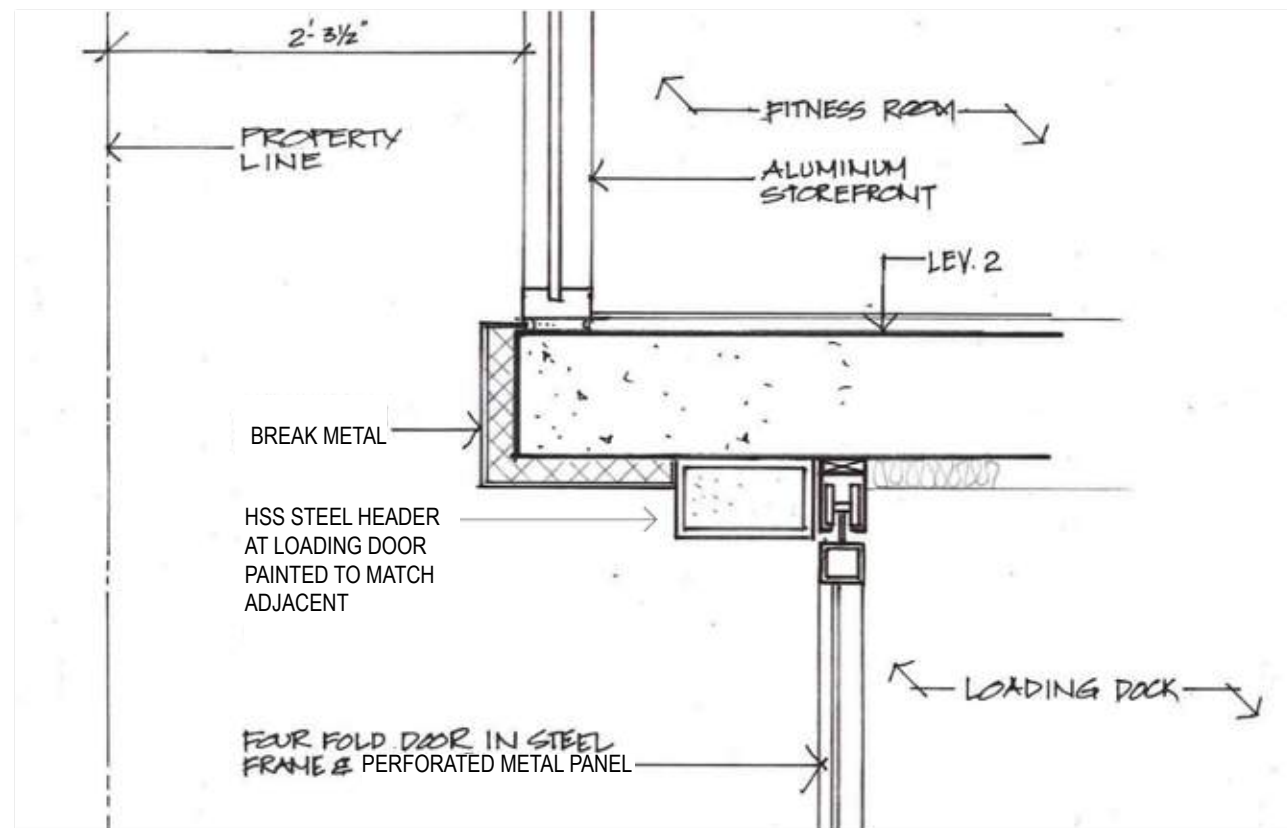
UPPER LEVEL SCREEN
1/2" = 1'-0" ①



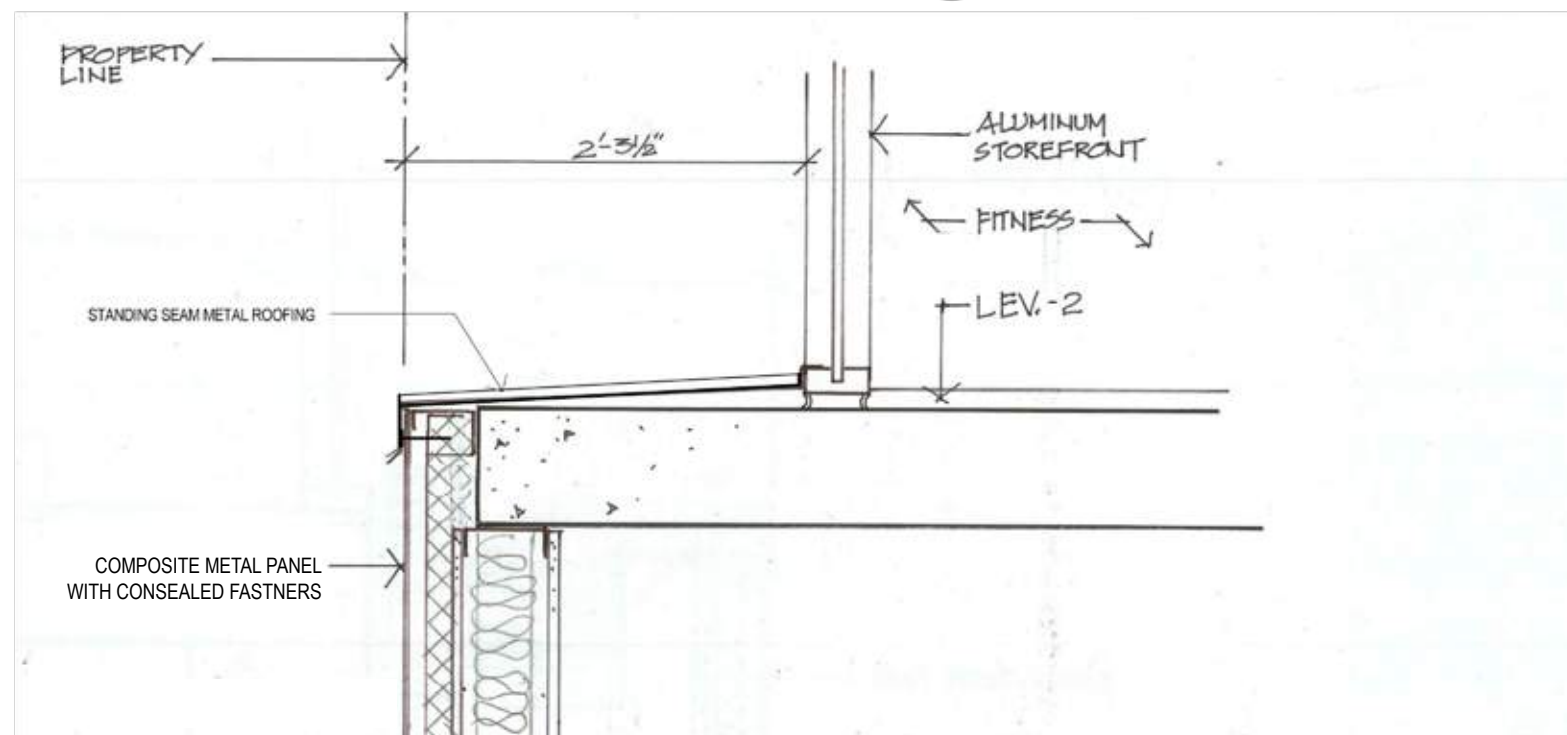
EAST - DETAIL - SCREEN BASE
1/2" = 1'-0" ④



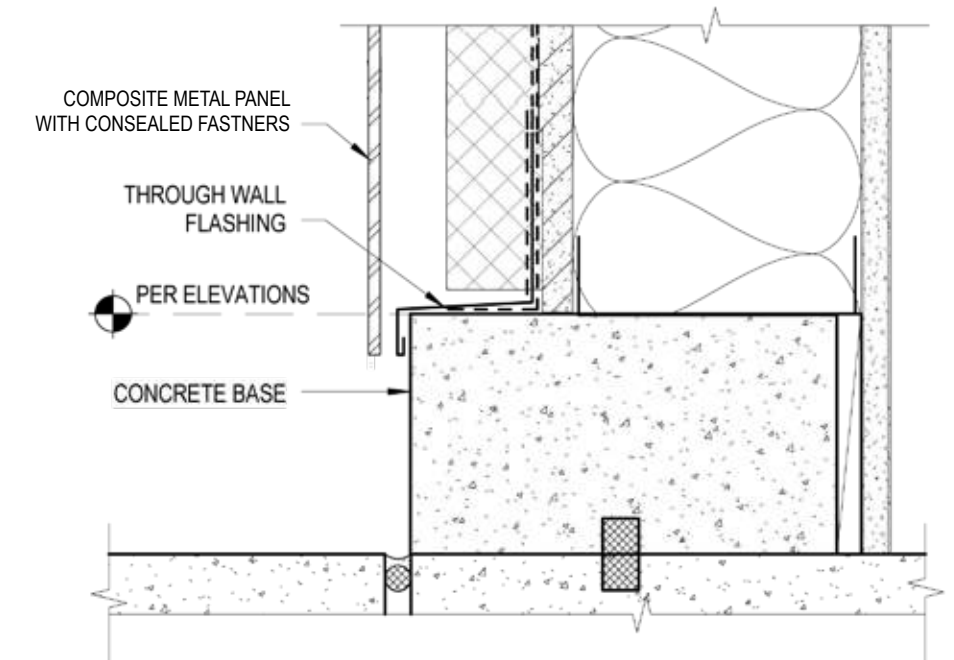
LOWER LEVEL SCREEN
1/2" = 1'-0" ②



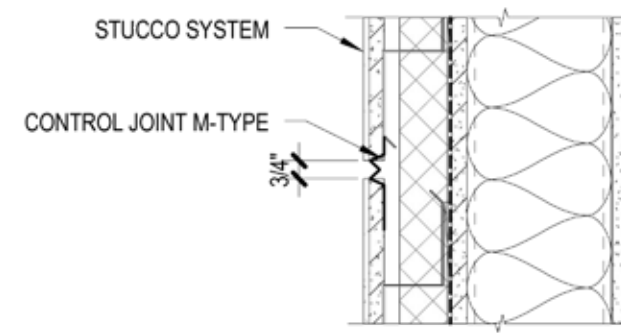
NORTH - DETAIL - DOCK SOFFIT ③
1" = 1'-0"



NORTH - DETAIL - OFFICE ROOF ④
1" = 1'-0"



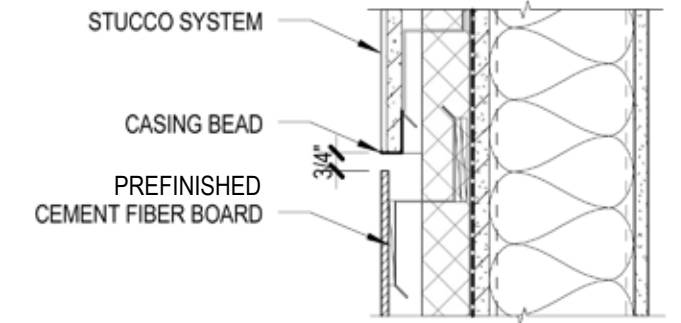
METAL PANEL @ CONC. BASE ①
3" = 1'-0"



STUCCO - CONTROL JOINT

1 1/2" = 1'-0"

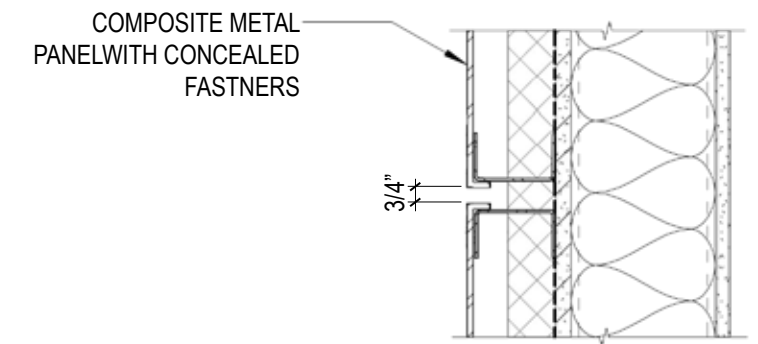
3



CEMENT BOARD TO STUCCO TRANSITION

1 1/2" = 1'-0"

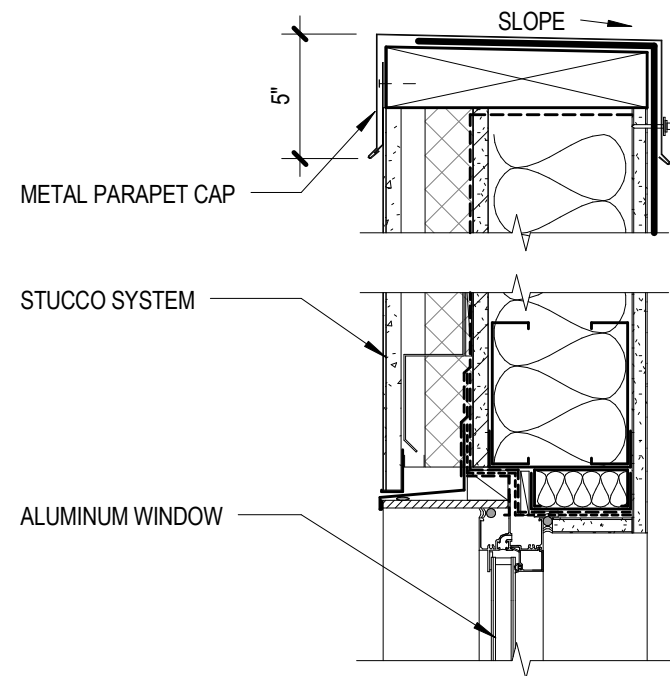
1



METAL PANEL JOINT

1 1/2" = 1'-0"

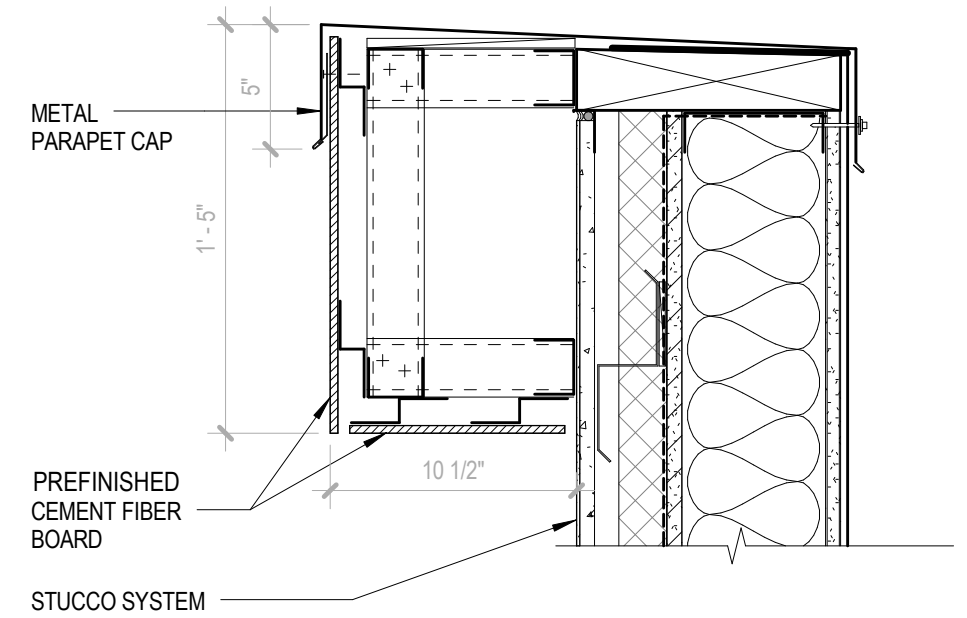
2



PARAPET @ NOTCH

1 1/2" = 1'-0"

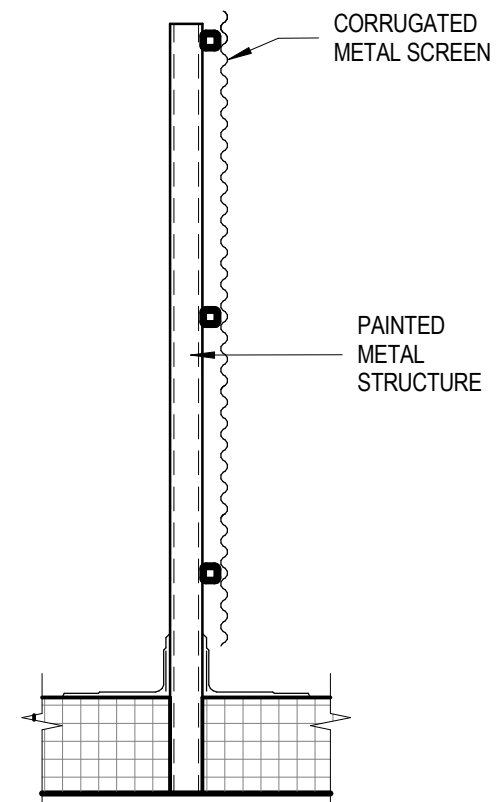
3



PARAPET @ BAND

1 1/2" = 1'-0"

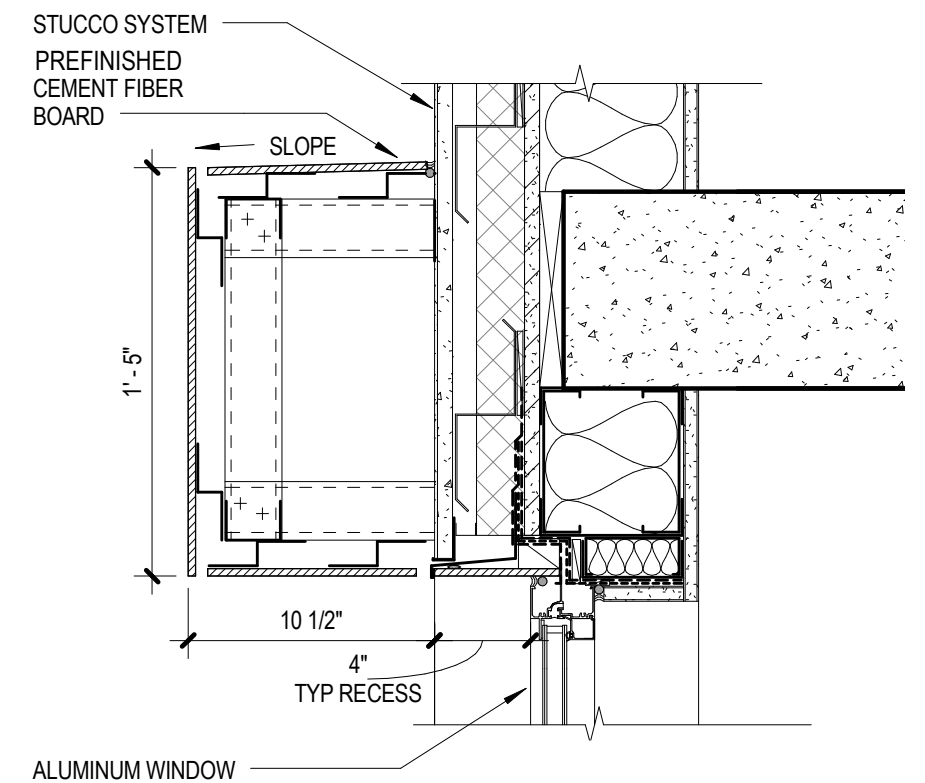
1



ROOFTOP SCREEN

1/2" = 1'-0"

4

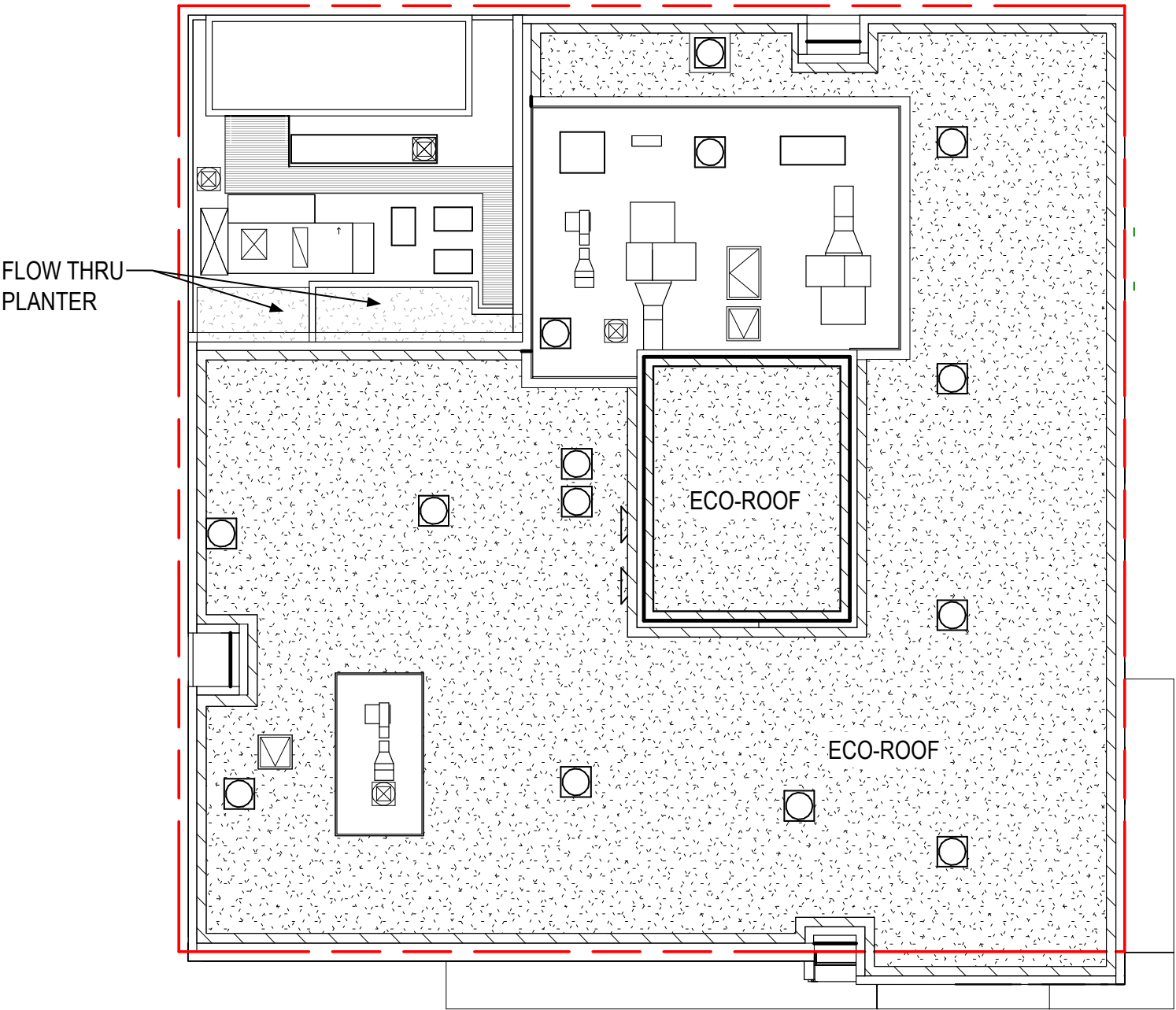


WINDOW HEAD @ BAND

1 1/2" = 1'-0"

2

DETAILS





PLANTER MATERIAL NOTES:

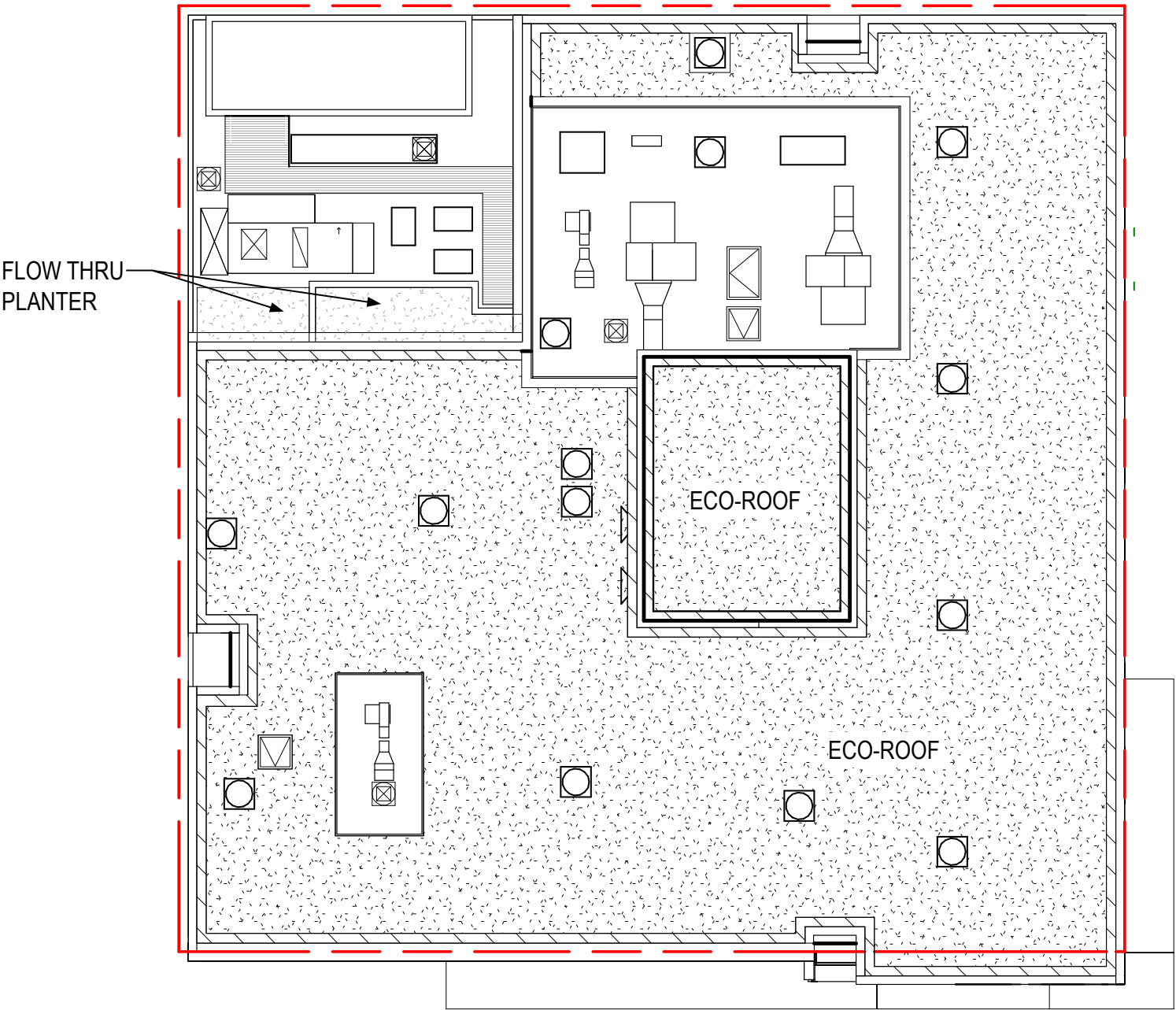
1. All stormwater planters and street trees shall receive a two inch layer to pea gravel mulch. All other planting areas and pots shall receive a two inch layer of bark mulch.
2. All planting soil shall be amended as recommended in an approved agricultural soils report.
3. A permanent automatic irrigation system shall be installed in all planting areas, including stormwater planters and pots.

STORMWATER FACILITY NOTES:

1. All stormwater planters and ecoroof shall conform to the City of Portland B.E.S. Stormwater Management Manual for planter facilities.
2. Contractor shall maintain the stormwater planter and ecoroof per Chapter 3 of the City of Portland B.E.S. Stormwater Management Manual. See specifications for specific information.
3. Area calculations:
Roof Area:
Impermeable Roof Area: 10,000 sf
Ecoroof Area:
Planted Ecoroof: 6,129 sf
Gravel Access
Paths and Vents: 529 sf (7.9%)
Total Ecoroof: 6,658 sf
Ecoroof Percentage:
Total Ecoroof ÷
Impermeable Roof Area: 66.6%
4. Basis of design: Columbia Green Technologies: Extensive Growing Media
5. Ecoroof growing media shall contain a 70-85% volume of expanded media, 8-12% volume of compost, and 15-35% volume of organic matter.
6. Ecoroof growing media shall meet a maximum media density per ASTM E 2399, 80 lb/ft³
7. Ecoroof maximum media water retention shall conform to ASTM E 2399, 35% to 65% by volume.
8. Ecoroof assembly will have a maximum weight of 32 lbs/ft² including saturated growing medium and plants.

LEGEND - ECOROOF PLANTING MATERIAL

-  ECOROOF PRE-GROWN TRAY SYSTEM "ALL SEASONS" SEDUM PLANT MIX BY COLUMBIA GREEN
- SEDUM ALBUM 'CORAL CARPET' | WHITE STONECROP
SEDUM DISPANICUM 'IMMERGRUNCHEN' | SPANISH STONECROP
SEDUM FLORIFERUM | ORANGE STONECROP
SEDUM MIDDENDORFFIANUM DIFFUSUM | CHINESE MOUNTAIN STONECROP
SEDUM REFLEXUM 'GREEN SPRUCE' | SPRUCE STONECROP
SEDUM SPURIUM 'COCCINEUM' | RED CAUCASIAN STONECROP
SEDUM SPURIUM 'FULDAALUT' | CAUCASIAN STONECROP
SEDUM SPURIUM 'JOHN CREECH' | JOHN CREECH CAUCASIAN STONECROP
SEDUM SPURIUM 'ROSEUM' | ROSEUM CAUCASIAN STONECROP
SEDUM STEFCO | STEFANOV STONECROP
SEDUM TAKESIMENSIS 'GOLDEN CARPET' | GOLDEN CARPET SEDUM
SEDUM TETRACTINUM 'CORAL REEF' | FISH SCALE SEDUM
-  ECOROOF BALLAST ACCESS PATHWAY



LEGEND - ECOROOF PLANTING MATERIAL

	AREA OF ECOROOF
	QUICK COUPLER LOCATION TO BE DETERMINED
	ROOF DRAIN LOCATION TO BE DETERMINED
	AUTOMATIC CONTROL VALVE, LOCATION TO BE DETERMINED
	POINT OF CONNECTION, LOCATION TO BE DETERMINED
	AUTOMATIC SMART CONTROLLER, LOCATION TO BE DETERMINED

ECOROOF O + M PLAN:

Ecoroofs are vegetative systems that retain and filter stormwater and provide aesthetic and energy conservation benefits. The Extensive Ecoroof filters stormwater with a plant palette composed primarily of sedum plants.

Soil medium, vegetation, irrigation and drains shall be inspected for proper operations throughout the life of the ecoroof. All elements shall be inspected annually. Facilities personnel shall keep a log, recording all inspection dates, observations, and maintenance activities. Work orders and invoices shall be kept on file and made available to City inspector upon request. The following items shall be inspected and maintained as stated:

Soil Substrate / Growing Medium shall sustain healthy plant cover and infiltrate within 48 hours

- Growing medium shall be inspected for evidence of erosion from wind, water and settlement. If erosion channels are evident, they shall be stabilized with additional soil substrate/growth medium and covered with additional plants. All depressions as the result of maintenance foot traffic activity, settlement, etc. shall be filled flush with adjacent medium. Plant mortality as a result of foot traffic shall be replaced immediately. Bare soil shall be planted per the planting design. Soil shall drain within 48 hours.

Ecoroof System shall be operated and maintained in accordance with manufacturer’s requirements.

Drain inlets shall be kept unrestricted

- Inlet pipe shall be cleared when soil substrate, vegetation, debris, litter or other materials clog the drain inlet. Sources of sediment and debris shall be identified and corrected.
- Determine if drain inlet pipe is in good condition and correct as needed.
- Contact membrane manufacturer if tears or perforations are found in the membrane.

Vegetation shall be maintained to provide 95% plant cover.

- During the Establishment Period, dead or damaged plants shall be replaced by contractor once per month as needed until expiration of warranty after which the Owner or building facilities shall be responsible for maintenance. During the Long-Term Period, dead plants shall generally be replaced once per year in the fall months.
- Fallen leaves and debris from deciduous plant foliage shall be removed.
- Nuisance and prohibited vegetation from the Portland Plant List shall be removed when discovered.
- Weeding shall be manual with no herbicides or pesticides used. Weeds shall be removed regularly and not allowed to accumulate.
- Vegetation must cover at least 90% of the facility at maturity. Plants should be replanted from the original planting plan or can be substituted from the plant list in the SWMM

Irrigation of Extensive Ecoroof

- During the Establishment Period (2 years), the irrigation timer shall be set to assure plant establishment at a rate of .25 inch every 14th day during the months of June and September (warm periods) and .25 inch every seventh day during July and August (hot dry periods).
- During Long-Term Period (after 2 full years), water at a rate of .25 inch every 14th day during the months of July and August to maintain plant cover. Irrigation at the same rate may be used during the months of May, June, September, and October only as needed. No irrigation is allowed from the beginning of November through the end of April.

- Irrigation watering times shall be modified as needed to accommodate fluctuations in dry and wet periods with the exception that at no time shall the irrigation exceed .5 inches per ten days. Accurate monitoring and assessment of temperature and rainfall shall dictate schedule and watering lengths. Automatic rain shut off valves are to be inspected and any debris removed during irrigation regime.

Spill prevention measures from mechanical systems located on roof shall be exercised when handling substances that can contaminate stormwater

- Release if pollutants shall be corrected as soon as identified.
- Best management practices shall be implemented to prevent hazardous wastes from contaminating stormwater. Record time, date, weather and site conditions when site activities contaminate stormwater.

Training and/or written guidance information

- A copy of O&M Plan for maintaining Ecoroofs shall be provided to the Owner’s maintenance personnel for reference. Building facilities / maintenance personnel shall receive instruction as to needs and regular schedules for properly maintaining the health and vigor of the ecoroof plantings and associated drainage surface.

Access and Safety to the Ecoroof

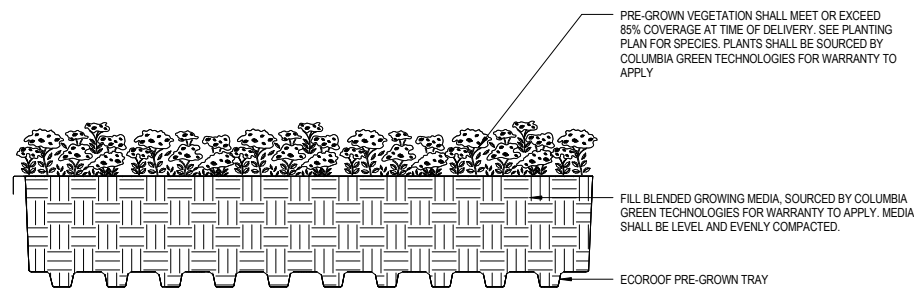
- No tenant circulation or egress routes are proposed or allowed on extensive ecoroof areas. Maintenance personnel shall access roof via utility access points and tie into safety points as needed when inspecting or maintaining perimeter areas that pose a safety concern.
- Aesthetics of the Ecoroof shall be maintained as an asset to the property owner and community
- Evidence of damage or vandalism shall be repaired and accumulation of trash debris shall be removed upon discovery.

Insects shall not be harbored at the Ecoroof

- Standing water creating an environment for development of insect larvae shall be eliminated by manual means. Chemical sprays shall not be used.
- Record time, date, weather, and site conditions when insect or rodent activity is observed. Record when insect or rodent activity abated or ended.

Annual Maintenance Schedule:

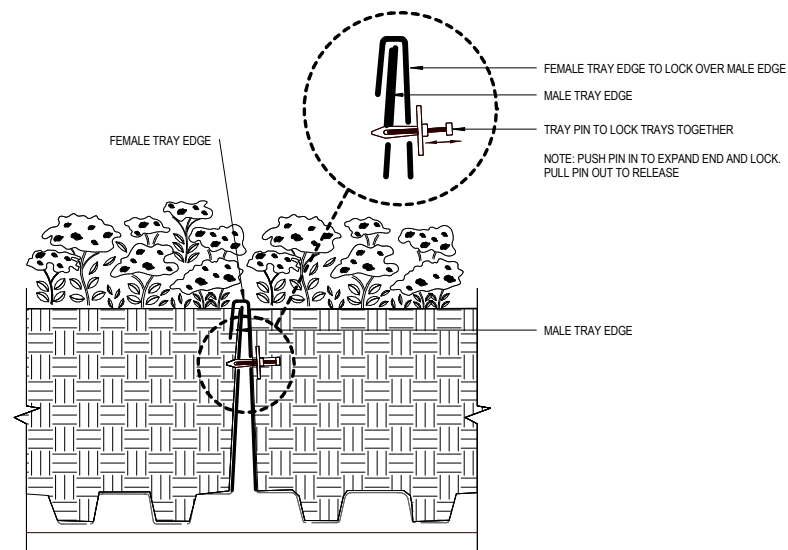
Summer: Make necessary repairs. Improve growing medium as needed. Clear drains. Irrigate as described above.
Fall: Replace exposed soil and dead plants. Remove sediment and debris from drains. Provide erosion controls for base soil if necessary.
Winter: Monitor infiltration/flow rates. Clear drains as needed.
Spring: Replant exposed soil and dead plants. Remove sediment and debris from drains.
All Seasons: Weed as necessary.



Ecoroof Tray Planting

1 1/2" = 1' - 0"

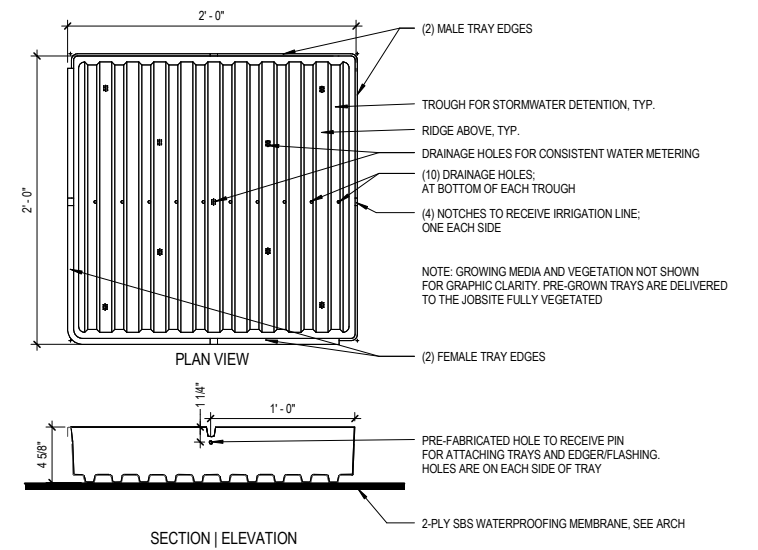
5



Ecoroof Tray Connection

3" = 1' - 0"

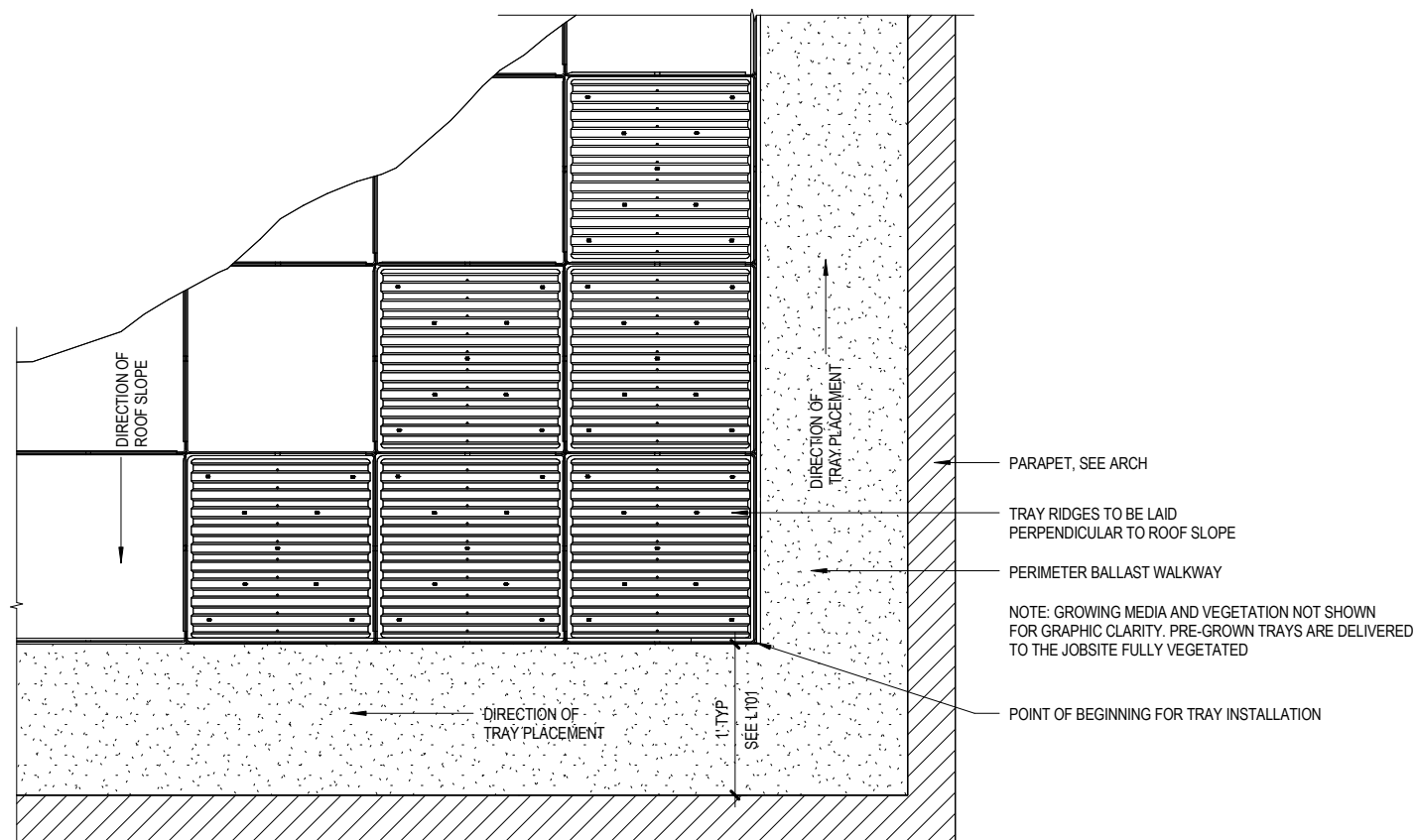
3



Ecoroof Tray

3/4" = 1' - 0"

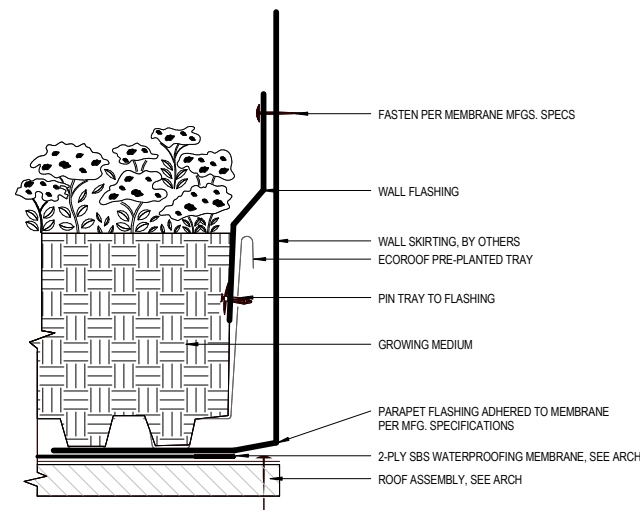
1



Ecoroof Tray Layout

1/2" = 1' - 0"

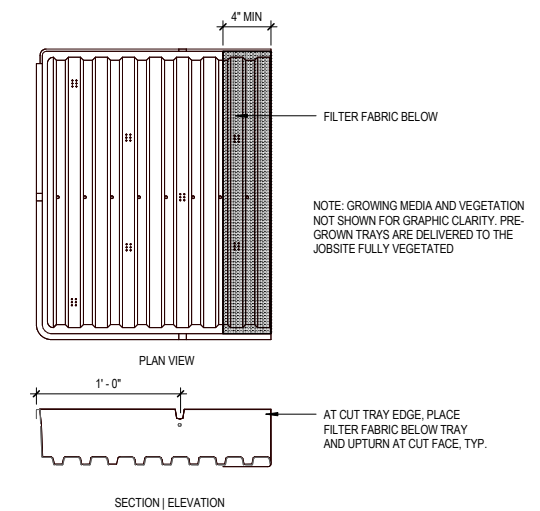
6



Ecoroof at Flashing

3" = 1' - 0"

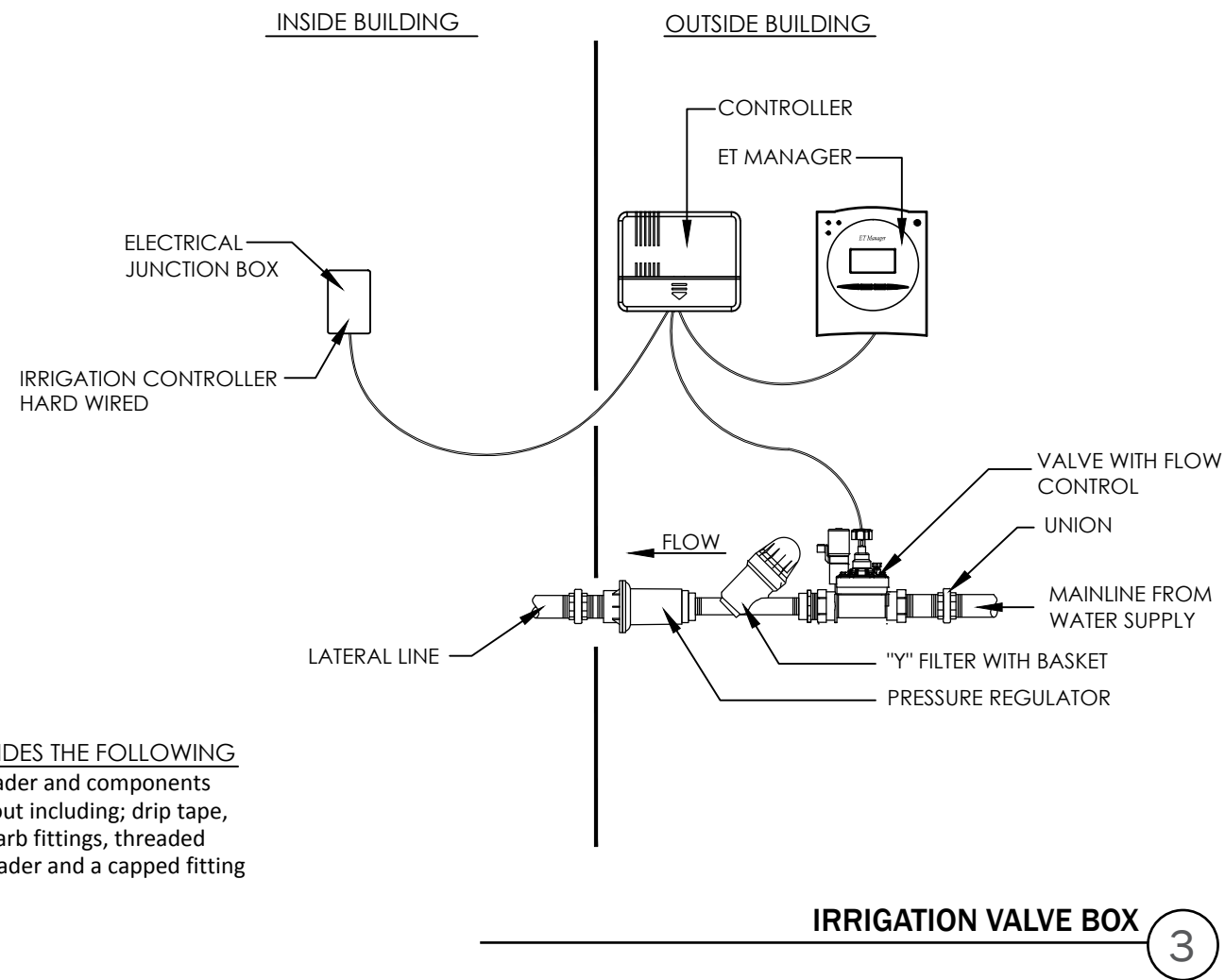
4



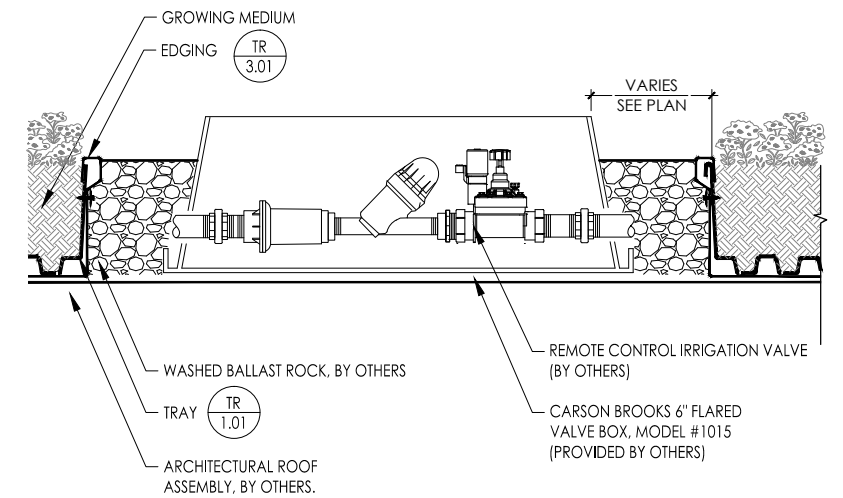
Ecoroof Partial Tray

3/4" = 1' - 0"

2



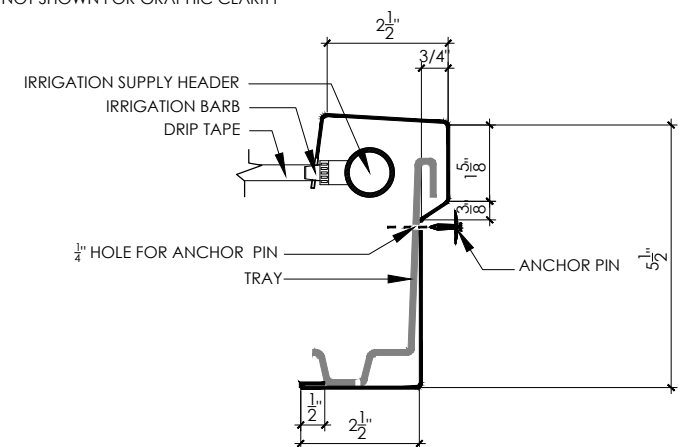
NOTE: COLUMBIA GREEN PROVIDES THE FOLLOWING IRRIGATION COMPONENTS: Header and components inside the perimeter of the tray layout including; drip tape, tape ell's, drip tee's, compression barb fittings, threaded male point of connection for the header and a capped fitting for the opposing end of the header.



TRAY EDGING - IRRIGATION HEADER

2

NOTE: GROWING MEDIA AND VEGETATION NOT SHOWN FOR GRAPHIC CLARITY



IRRIGATION CONTROLS - SCHEMATIC

1



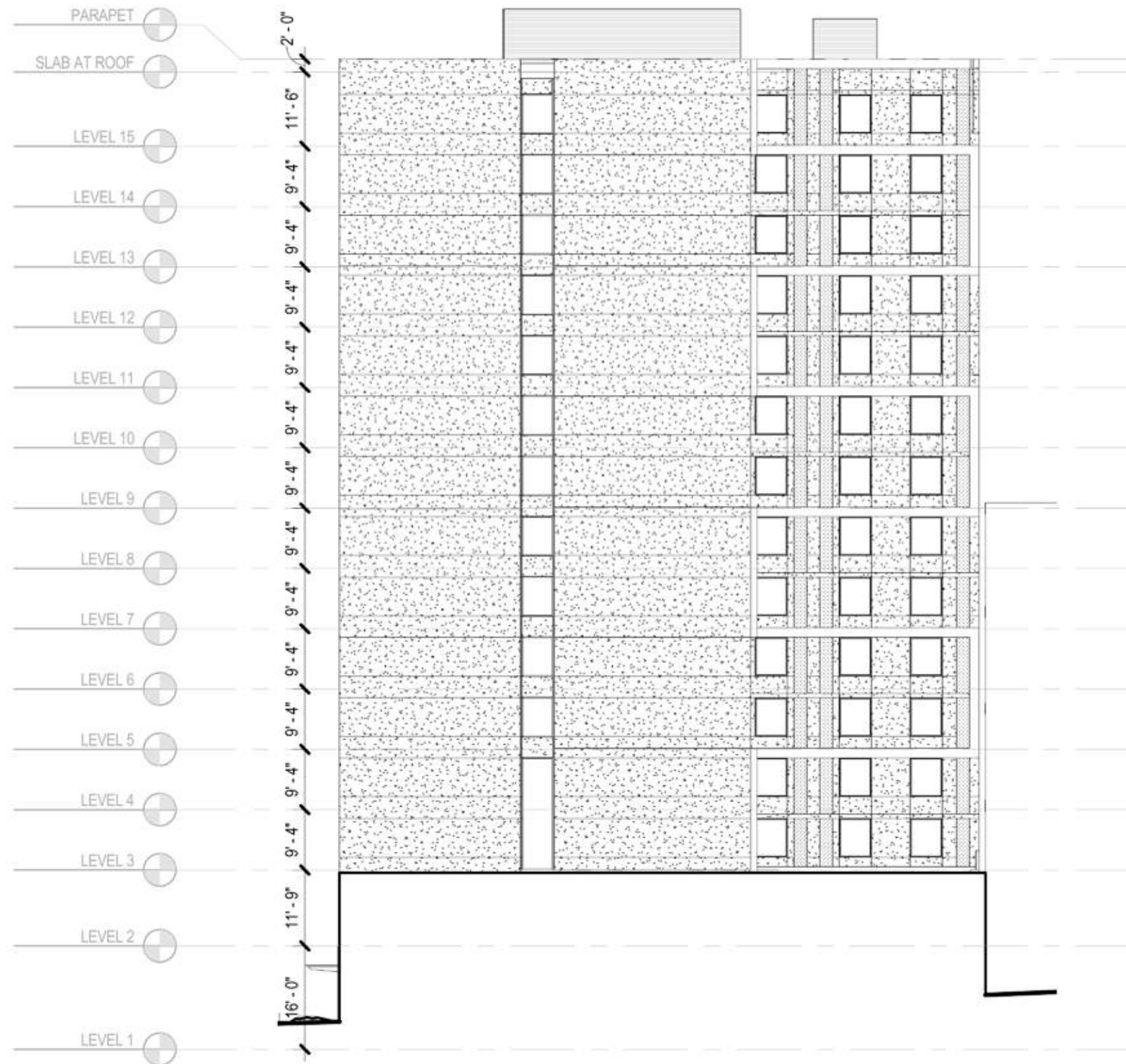
LEGEND - EXTERIOR ELEVATIONS

- STUCCO
- PERFORATED METAL SCREEN
- FIBER CEMENT PANEL




NORTH ELEVATION

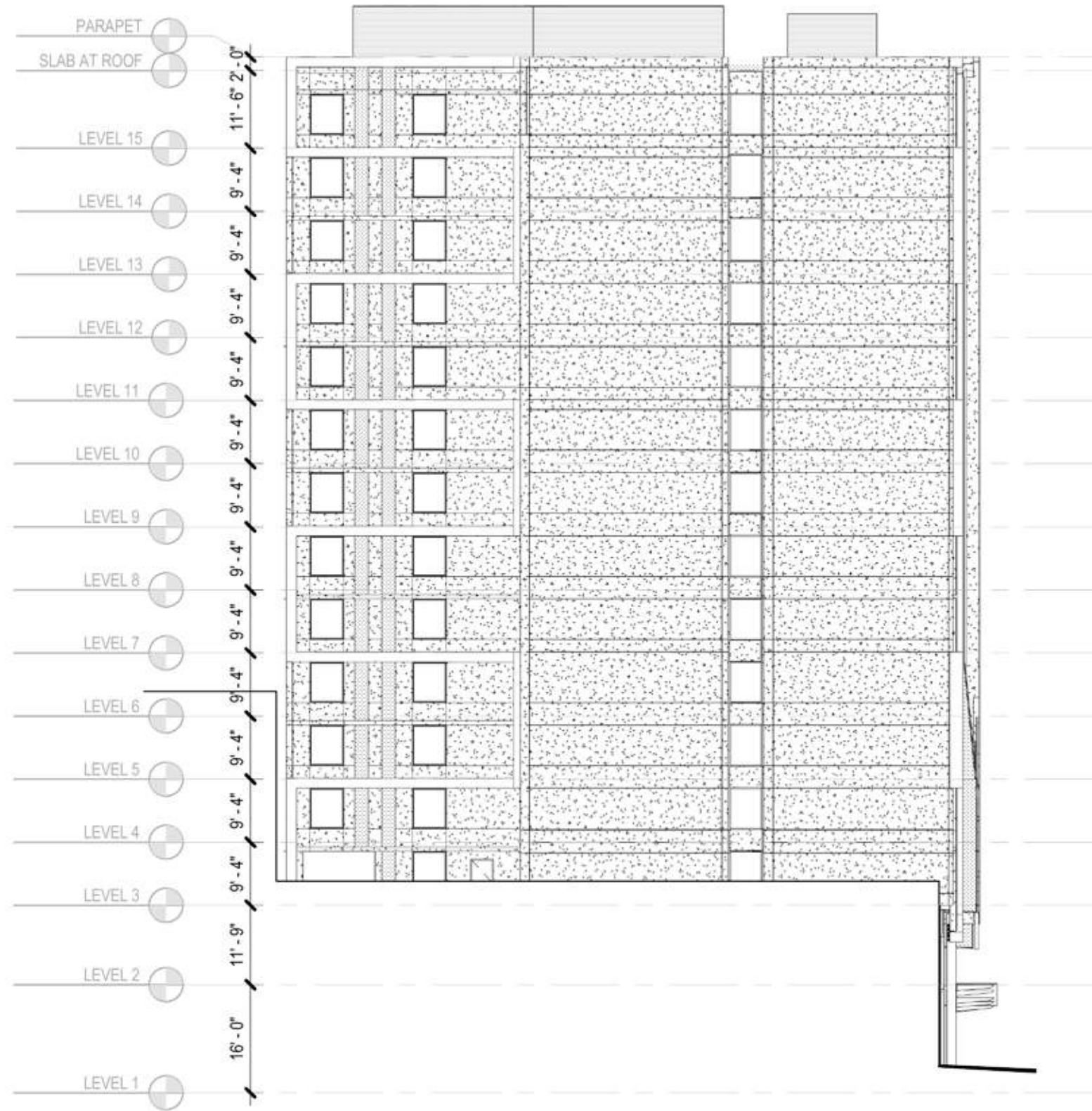
DESIGN REVIEW #LU 16-144846 DZM, AD

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LEGEND - EXTERIOR ELEVATIONS

-  STUCCO
-  PERFORATED METAL SCREEN
-  FIBER CEMENT PANEL



LEGEND - EXTERIOR ELEVATIONS

-  STUCCO
-  PERFORATED METAL SCREEN
-  FIBER CEMENT PANEL