5th and Virginia

CONTENTS /

SECTION 01.
PROGRAM & CONTEXT

FOR ADDITIONAL CONTEXT INFORMATION REFER TO SECTION 06

5th and Virginia is an approximately 500' mixed-use high-rise comprised of approximately 425,000 SF of residential use (431 apartments), 108,000 SF of luxury hotel use (155 hotel rooms), street level retail and restaurants, a rooftop bar, and 6 levels of below grade parking for 239 cars and 131 bicycles.

The proposed development at the corner of 5th and Virginia is conceived as a contemporary, fresh, and vital addition to Downtown and will play a positive role in the ongoing evolution of the Belltown neighborhood as a lively and diverse urban community.

The boutique hotel, restaurant, retail space, destination rooftop bar, apartments, and associated amenities will add vibrancy, activity, and street life to the neighborhood. These uses and the proposed design will enhance the community in a manner consistent with the City of Seattle's adopted Comprehensive Plan, the Downtown Neighborhood Plan, and the associated DOC-2 Zoning and Downtown and Belltown design guidelines which encourage a vibrant urban center comprised of mixed use high rise with activated street edges.

Significant consideration has been given to the design at all scales particularly to the relationship to context through massing, materials, details, and façade articulation which have been developed in thoughtful response to priority design guidelines set by the Design Review Board.

The architectural character of the design is a fusion of Downtown and Belltown influences with engaging design elements and inviting 'destination' spaces expressed in the architecture. The tower is compact and articulates a meaningful response to context through its massing and cladding within a unified design concept in which each element is tailored appropriately and precisely.

PROJECT SITE
The site is immediately adjacent to major bus stops, the Westlake transit station, and the South Lake Union Streetcar. The Monorail runs north-south along 5th Avenue, just east of the project site. Virginia Street is a SDOT defined walking route that links the Belltown area to the waterfront.

The site is within close proximity to many of Seattle's landmarks. It is an eight minute walk to Pike Place Market and the harbor edge, and is a twenty minute walk to the Olympic Sculpture Park or the Space Needle.

The site is within close proximity to many public parks and open spaces. It is within a ten minute walk to Pier 62, Bell Street Park, Freeway Park, Denny Park, and Westlake Park. It is within a twenty minute walk to Belltown Cottage Park, the Olympic Sculpture Park, the Waterfront Park, and Myrtle Edwards Park.

PEDESTRIAN EXPERIENCE
The proposed development will improve the healthy pedestrian experience along 5th Avenue and Virginia Street by providing a building that engages pedestrians through transparent street frontage and by providing pedestrian orientated programming along both arterials.

The project will improve pedestrian safety by providing overhead weather protection, which currently does not exist, and by providing improved lighting. A 24/7 lobby with staff, a restaurant, and retail space will improve pedestrian safety by activating the street day and night.

NEIGHBORING BUILDINGS
The Avis Building is immediately adjacent to the south. The building is a six story parking garage. The building meets the street with multiple garage doors and a small administrative office for car rentals.

The Escala building, located directly across the alley, is a 352' tall, 30 story, 270 unit, condominium high rise with parking for 490 cars below grade. The building meets the street with a single parking garage ramp, several retail spaces, and an entry lobby for building residents. There are two loading bays accessed from the alley.

The Griffin Building is located to the north, on the opposite side of Virginia Street. It is a four story office building with ground floor retail. The building meets the street with commercial retail space currently used by a bank.

The Westin building garage, a seven story parking structure, is located diagonally across the 5th Avenue and Virginia Street intersection. The building meets the 5th Avenue street with two retail spaces and a parking garage ramp. The Virginia Street facade is opaque.

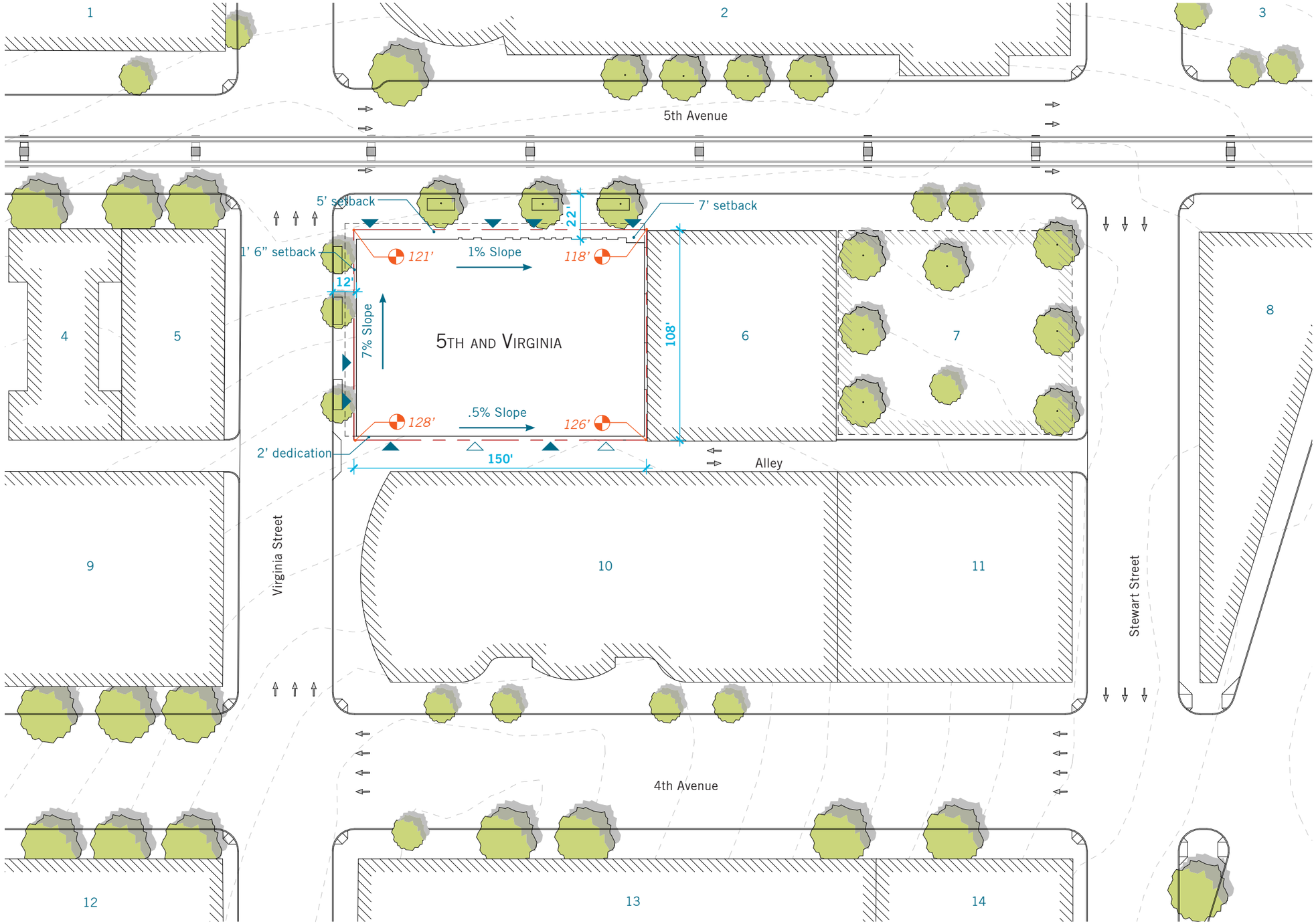
The Westin Hotel is located to the east, on the other side of 5th Avenue. The Westin Hotel has two towers that extend from a larger podium. The 400' tall, 41 story south tower was constructed in 1969 and the 450' tall, 47 story north tower was constructed in 1982. The building meets 5th Avenue with a combination of glazed and opaque walls with hotel event space behind. The Virginia Street side of the hotel is opaque.

CONTEXT PLAN /

1 Westin Garage (Parking)
2 Westin Building (Hotel)
3 McGraw Square (Public Park)
4 Sheridan Building (Apartments)
5 Griffin Building (Office / Mixed Use)
6 Avis Building (Parking)
7 Parking Lot (Future Hotel / Retail)
8 Times Square Building (Office)
9 Hotel Andra (Hotel / Mixed Use)
10 Escala (Condominiums / Mixed Use)
11 Centennial Building (Retail)
12 Marshall Building (Office)
13 Security Market Building (Parking)
14 Securities Building (Office)

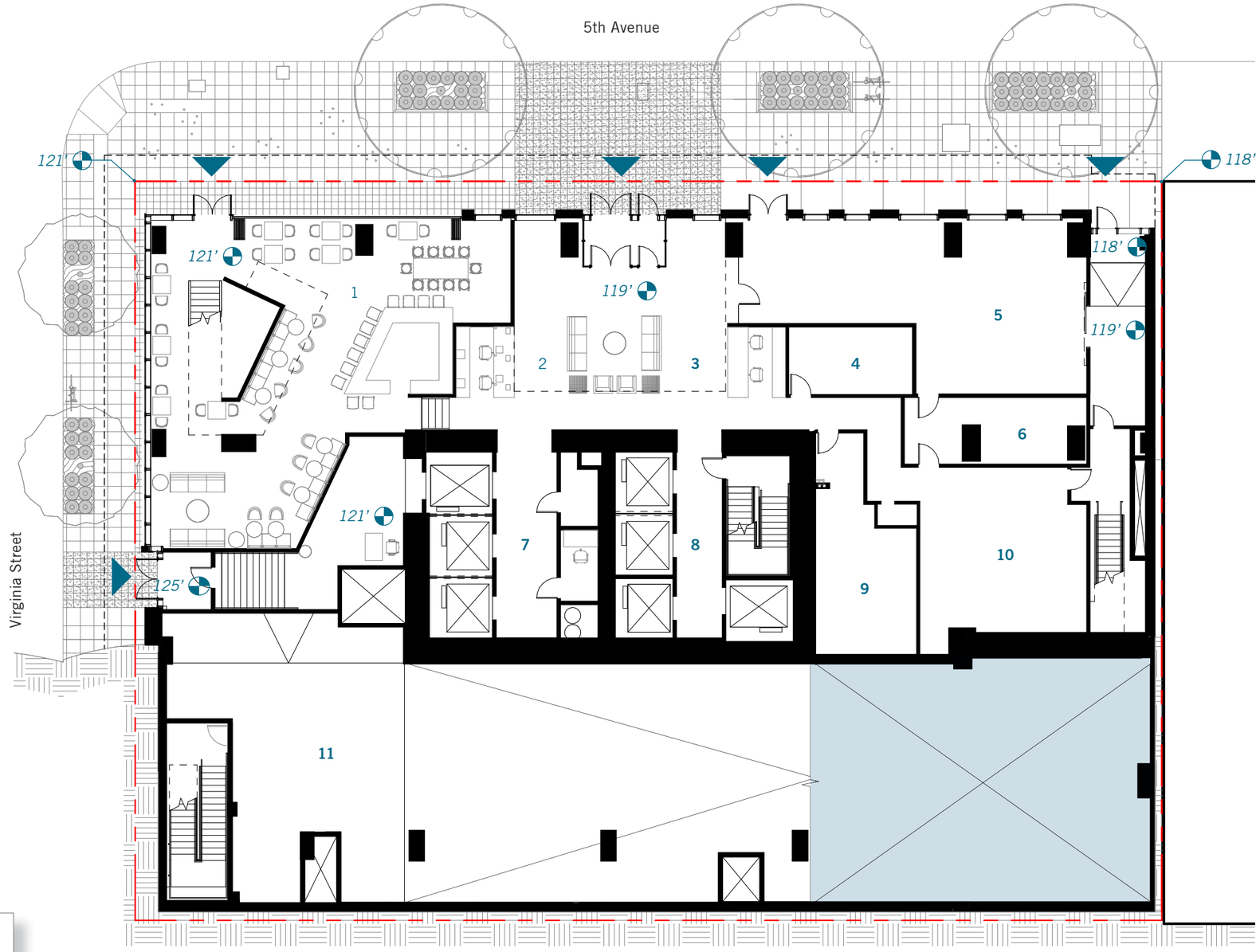
Pedestrian Entry
Vehicular Entry

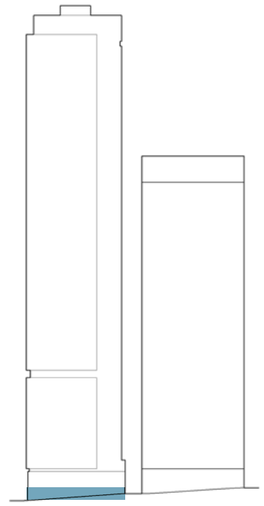
0 25 50 100



PERKINS+WILL

PLAN, LEVEL 01, FIFTH AVENUE ENTRY LEVEL /





Pedestrian Entry

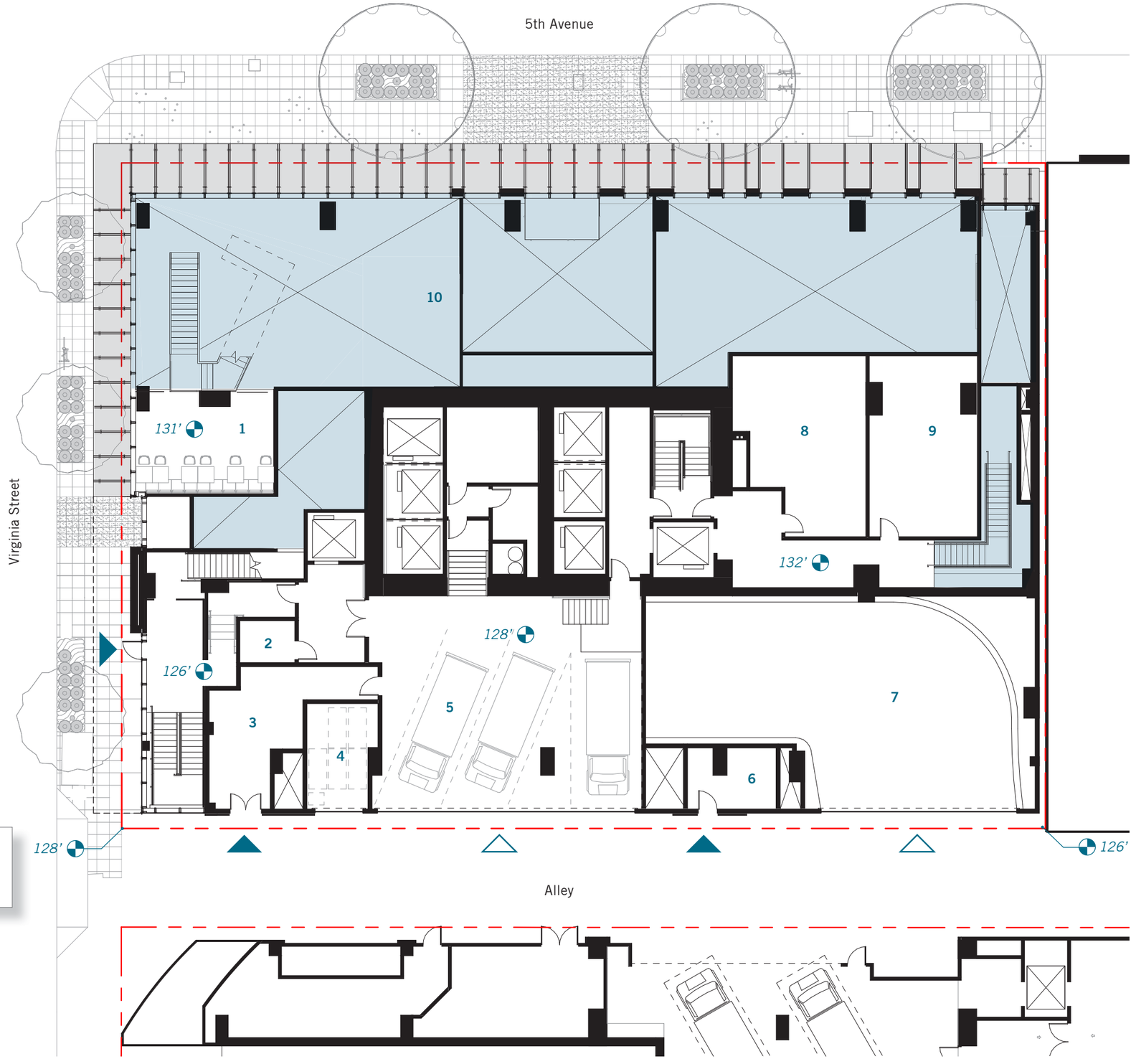
Open to Below

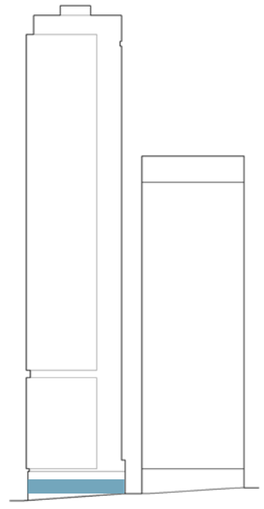
1 Hotel Bar and Restaurant
2 Hotel Front Desk
3 Residential Front Desk
4 Package Room
5 Retail
6 Retail Kitchen
7 Hotel Elevators
8 Residential Elevators
9 Fire Command Center
10 Mail Room
11 Ramp Down to Parking Garage

FOR ADDITIONAL FLOOR PLANS AND SECTIONS, REFER TO SECTION 07

0 4 8 16 32

PLAN, LEVEL 1.5 ALLEY SERVICE LEVEL /





Pedestrian Entry

Vehicle Entry

Open to Below

1 Restaurant Alcove
2 Building Security
3 Commercial Trash
4 Residential Trash
5 Loading Dock
6 Gas Meters
7 Ramp Down to Parking Garage
8 Domestic Hot Water Room
9 Telecommunications Room
9 Open to Below

FOR ADDITIONAL FLOOR PLANS AND SECTIONS, REFER TO SECTION 07

0 4 8 16 32

SECTION 02.
DRB REC1 GUIDANCE & DESIGN RESPONSE

GUIDANCE * /

8. MASSING & BUILDING FORM:
The Board heard the public concerns about building positioning, bulk and setbacks, and considering the tower shaping that had taken place since EDG, the Board endorsed the proposed forms and massing, and did not recommend any further shaping, setbacks or reduction of the floorplates. The primary issues remaining are to revise and refine the materiality and composition of the façade treatments. (A2, B4).

9. WEST VOLUME:

The Board agreed the proposed west, curved volume provided a positive form interlock with the east tower [23]. The Board heard the public concerns about adequate light, air and privacy along the alley façade, and recommended the following revisions to the facades of the west form to better differentiate it from the east volume, and address the adjacency across the alley. The Board did not accept the applicant rationale that the entire building needs to be visually unified, and the Board agreed that the currently proposed variations between the two forms were far too subtle, based on overly abstract graphical models, and almost imperceptible [47, 96-99]. (B1.2, B4, C2)

A) MATERIAL SOFTENING AND OPACITY:
The three facades of the entire curved, west volume should be redesigned with more percentage of opaque and less reflective materials, so the form reads legibly different from the east volume. The proposed glass spandrels, which constitute a large percentage of the west elevation [50-66% per pg 61], in combination and coplanar with the vision glass, create a uniform, semi reflective, hard image to the residents across the alley [68, 99]. More use of opaque, non-glass and discernibly textured and/or matte finish spandrels was recommended, to variegate the large alley wall, and possibly produce depth and interest. The Board did not support efforts to increase the appearance of vision glass on the west facade, as suggested by the amount of "vision-matched spandrel glass" shown on pg 47. The Board also recommended more warm tones and colors be explored for the west volume, in contrast to the cool and blue character for the facades and materials of the east volume.

B) MULTIPLE PERSPECTIVE STUDIES:
The Board recommended several options be studied and all shown to staff and the Board (not just the applicant preferred one) showing various levels of opacity, color and material options on the west volume. The test perspectives for each option should include at minimum the perspectives shown on the following pages: 68, 110, 112 and 115. One option should start with all non-vision portions being an opaque, non-metallic, non-reflective material, and other options should show different materials and degrees of opacity. To be clear, the Board was not recommending just slightly more spandrel percentage, or mere color changes in spandrel glass; the inherent material, reflectivity and extent of glass spandrels was unanimously questioned.

C) GLASS VERIFICATION:
In response to public comment and the importance of the proposed vision glass on the west volume, the Board requires more information to understand and better verify its transparency characteristics. The "T-rex box" simulation shown on pg 64 should be brought to the next meeting and also have an interior light source for testing by the Board. Other glass samples should be provided besides the applicant preferred one, which can be tested in the same box simulation.

West Elevation

RESPONSE /

8: Massing & Building Form

The massing and building form has been preserved.

9: West Volume

The materials and composition of the west volume preferred alternative incorporates more opaque area, less vision glass and is matte finish with depth and a diffuse treatment of daylight. The concept of "interlock" has been preserved and the east/west relationship has been developed to enhance differentiation.

(see pages 12-13, 70-77)

9a: Material Softening and Opacity

The west volume has been revised to include a higher percentage of opaque and matte finish materials with greater depth and softness, and the color palette has been shifted to lighter and warmer tones.

(see pages 46-57)

9b: Multiple Perspective Studies

Multiple perspectives of five alternatives in addition to the preferred are provided in subsequent pages of the submittal and are compared side by side with the REC1 design.

(see pages 14-17, 67, 78-87, 90-103)

9c: Glass Verification

A range of vision glass alternatives were rigorously and scientifically evaluated under third party expert oversight which can only be conducted in an appropriately controlled laboratory setting such as the Integrated Design Lab. The proposed vision glass exhibits performance characteristics consistent with the Board's guidance.

(see pages 58-61)

** REC#1 guidance as noted by SDCI staff, verbatim.*

GUIDANCE * /

10. EAST VOLUME & PODIUM:
The Board supported the basic rectilinear form, the reveals, the upper tower composition and materiality of the east volume, and the upper balconies as shown on pages 96,110, 125 and elsewhere. The Board also supported the materials and composition of the lowest three floors – especially the folding nanawall and corner frame at 5th and Virginia - as shown on pg 100 and 104, but the Board recommended the following facade revisions to floors 3-11 of the podium: (C2, B1.III, B3.I)

A) PODIUM SCALE AND DIFFERENTIATION:
Consistent with public comments and EDG comments 3a and 7a, the Board agreed the east podium floors 3-11 should display more scale, depth and/ or visual interest to the street, and is too similar to the tower above, as evidenced by pg 111. The Board did not accept the applicant rationale that the gradient of opacity is perceptible, or adequate enough [96, 97]. The Board recommended more opacity, more distinctive colors, more mullion depth or variation, and/or a less staggered composition that would establish a transition from the base to the upper tower. The primary aim is to add scale to the street, and better differentiation from the upper tower; a legible but not dramatic change is recommended.

B) MULTIPLE PERSPECTIVE STUDIES:
The Board recommended several options be studied and all shown to staff and the Board (not just the applicant preferred one) showing various levels of opacity and material options on floors 3-11 of the east volume. The test perspectives should include at minimum, the perspectives shown on the following pages: 111, 112/left and 115.

11. LIGHTING:
The Board reiterated the importance of the tower top lantern having sufficient glow and presence at dusk and dark night conditions [the image on pg 125 was minimally acceptable pertaining to amount of glow/presence]. The Board recommended more details on that element be provided to staff and at the next meeting, including large scale sections with fixtures shown, reflected ceiling plans, and specific fixture cut-sheets. The Board supported the stated intent to up-light the important soffit at the level 12 recess. (D5, A2)

12. SIGNAGE:
Acknowledging public concerns related to this building contributing to the Belltown context, the Board supported the "Alweg monorail font" being used in the sidewalk paving, and supported other uses of distinctive fonts and/or bold neon/ lighting to add scale and interest [examples on 127/129]. The Board recommended specific, preliminary sign scripts ("Café XYZ") and proposed sizes be shown on elevations (rather than the generalized location balloons shown on 126/128) for staff and the Board at the next meeting. (D3.I, D4)

North Elevation

** REC#1 guidance as noted by SDCI staff, verbatim.*

RESPONSE /

10: East Volume & Podium

The rectilinear form, reveals, and upper tower composition have been retained. The east mass color palette has been simplified to strengthen pattern legibility and better harmonize with west mass material changes.

(see pages 12-13, 68-69)

10a: Podium Scale and Differentiation

The podium has been modified to display more scale and visual interest to the street by incorporating more opacity, colors more distinct from one another, more mullion variation, and a more legible and scaled composition. The gradient is emphasized and the podium and tower are differentiated with a legible "weave" pattern scaled to each use.

(see pages 52-53, 62-65)

10b: Multiple Perspective Studies

Multiple perspectives of five alternatives in addition to the preferred are provided in subsequent pages of the submittal and are compared side by side with the REC1 design.

(see pages 14-17, 67, 78-87, 90-103)

11: Lighting

The top lantern design has been developed in accordance with Board guidance, and requested details are provided in subsequent pages of the submittal.

(see pages 38-41)

12: Signage

Signage details are provided in subsequent pages of the submittal.

(see pages 42-43)

Every aspect of the two masses has been adjusted in light of the Board's guidance and design guidelines. The east and west masses are differentiated by form, glass type, vision glazing percentage, pattern, and material/color while maintaining a unified whole, as is consistent with the Downtown and Belltown Design Guidelines.

Design Guideline B-4:

"Design the architectural elements and finish details to create a unified building, so that all components appear integral to the whole."

EAST VOLUME (ALL FACES) /

Vision glass:

- SolarBan60

Glazing %:

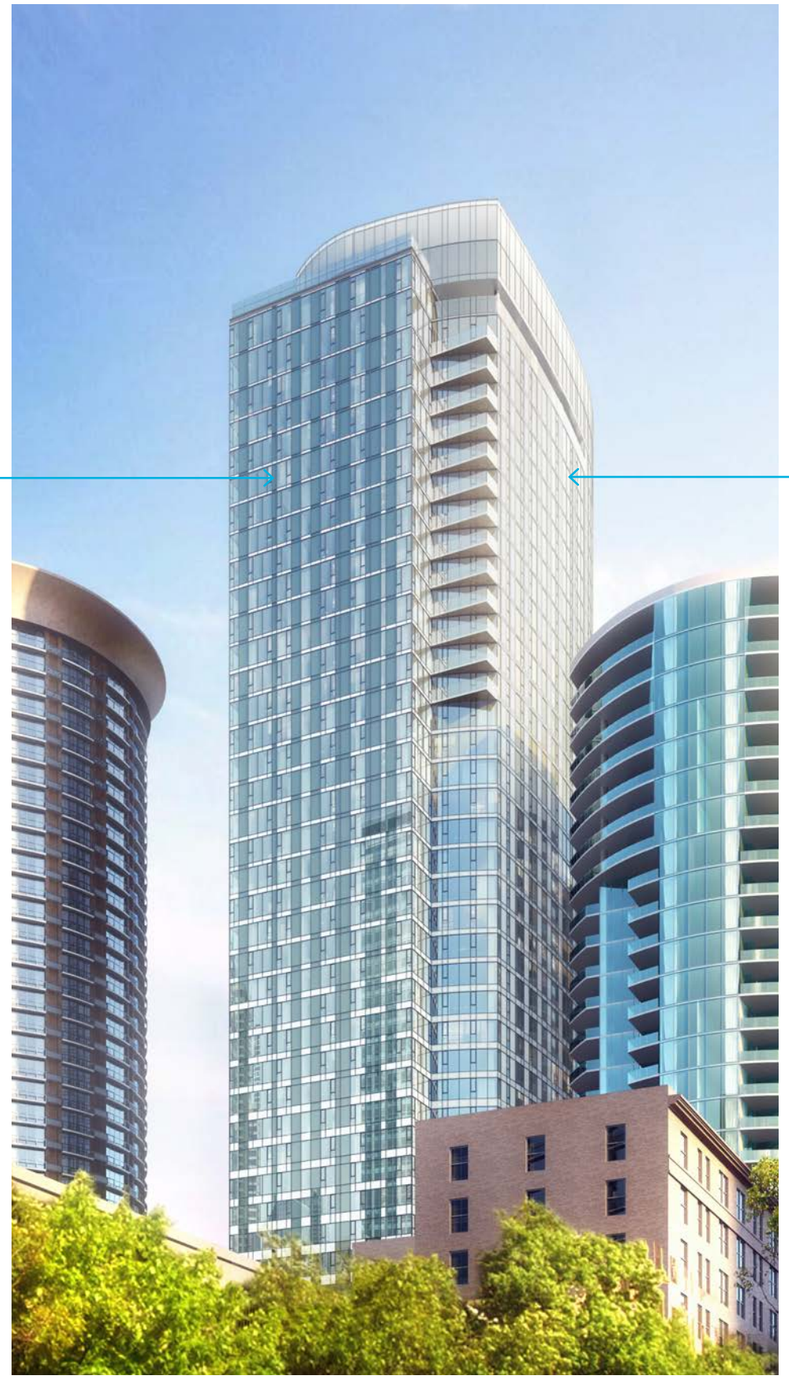
- 35-55%

Pattern:

- 2 story weave at podium
- 3 story weave at residential

Opaque Materials:

- Monolithic spandrel
- 2 distinct colors
- Color/depth distinct from west



WEST VOLUME (ALL FACES) /

Vision glass:

- SNX51/23

Glazing %:

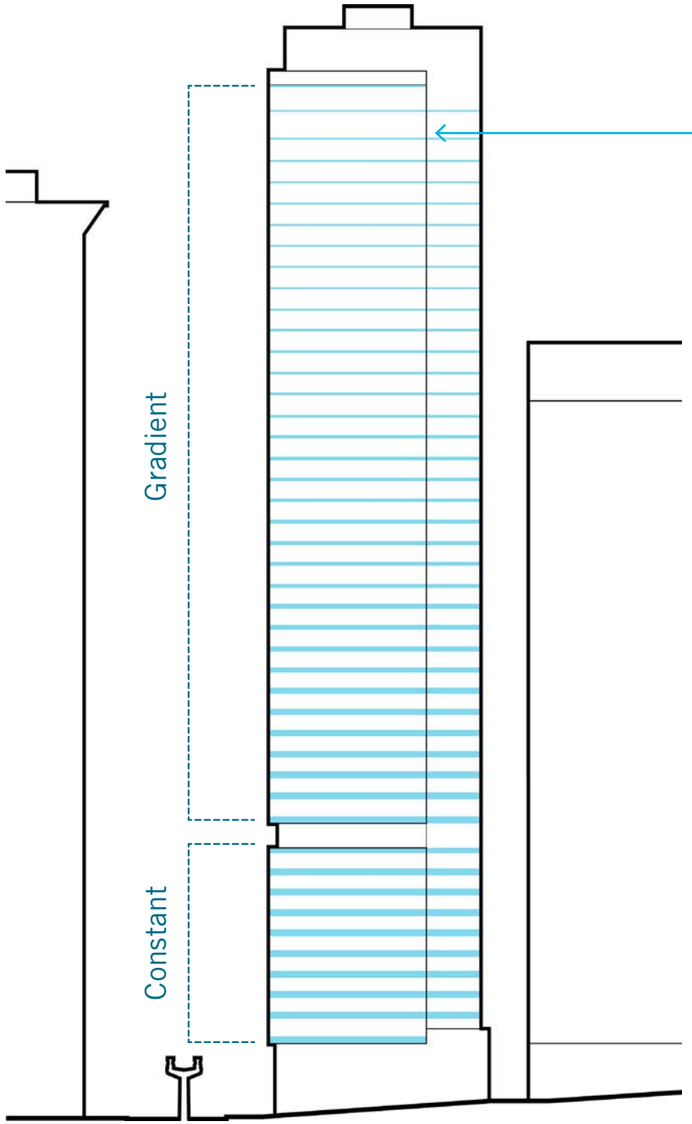
- 28-50% (below 360')

Pattern:

- Lattice (responds to program and context)

Opaque Materials:

- Etched IGU 'shadow box'
- Color/depth distinct from east

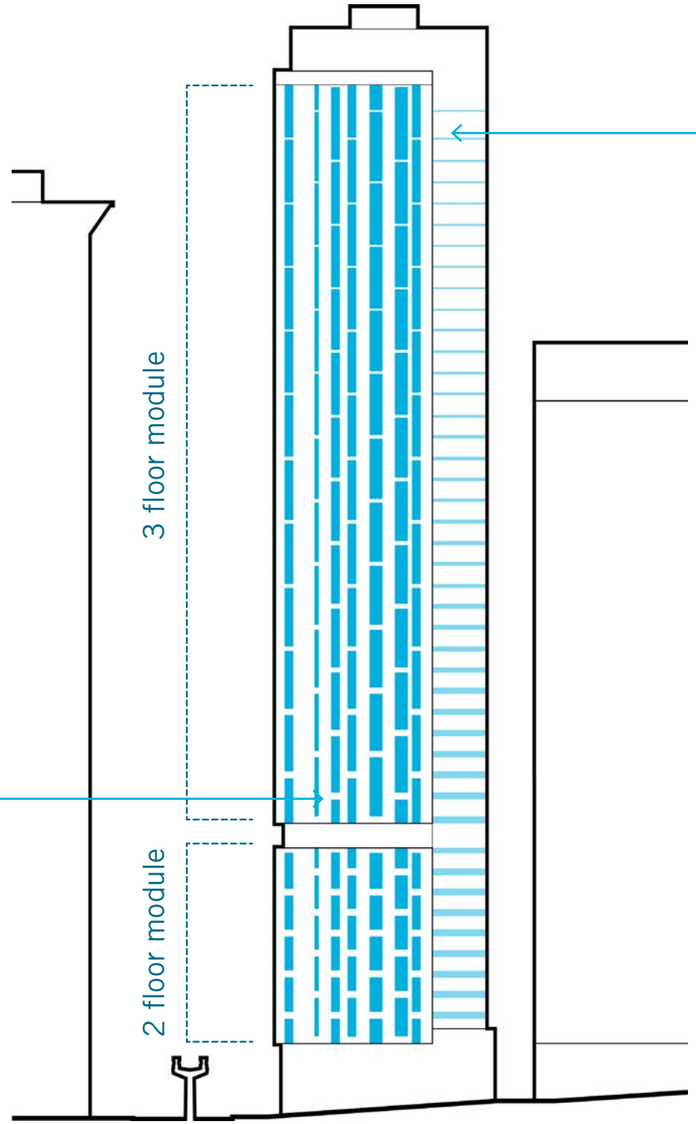


GRADIENT /

Horizontal bands at the window wall bypass (slab edge) the east and west masses are reduced in height across the residential levels. The bypass height at the podium remains constant.

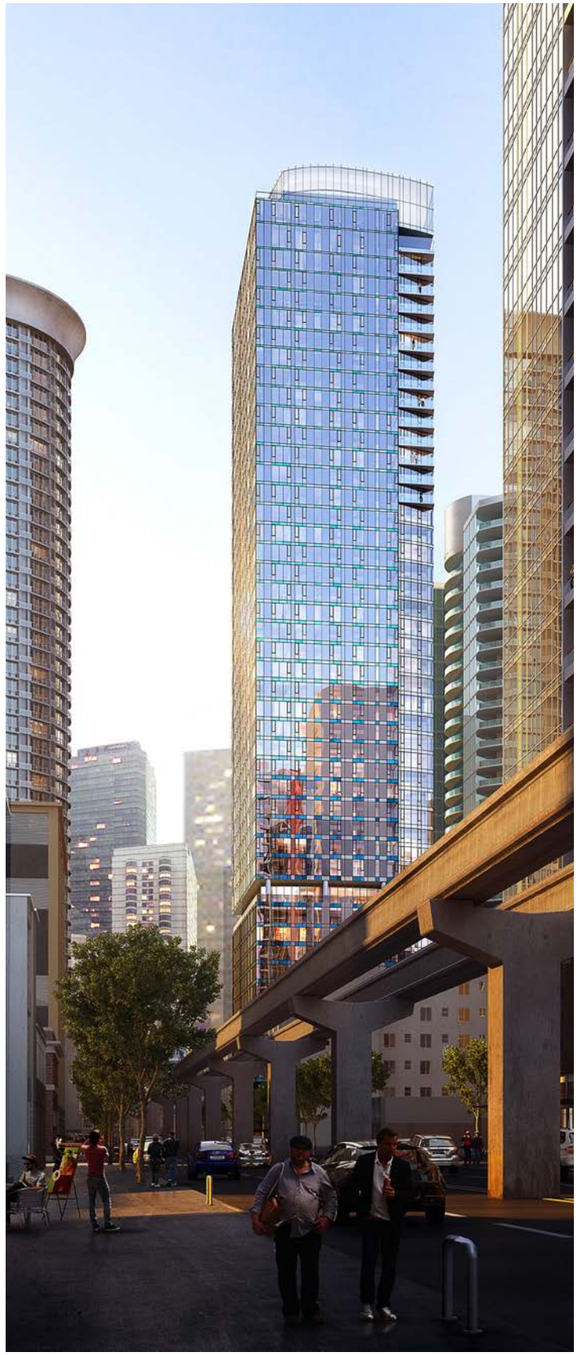
WEAVE PATTERN /

The weave pattern on the east mass and podium create scale and differentiation that is ‘legible but not dramatic’.



LATTICE PATTERN /

The lattice pattern on the west mass adapts to interior program and plan configuration as well as to exterior context, to provide varying degrees of transparency which is minimized where opposite the Escala. The lattice expands to incorporate north and south views from the western mass and to effectively ‘interlock’ with the eastern mass.



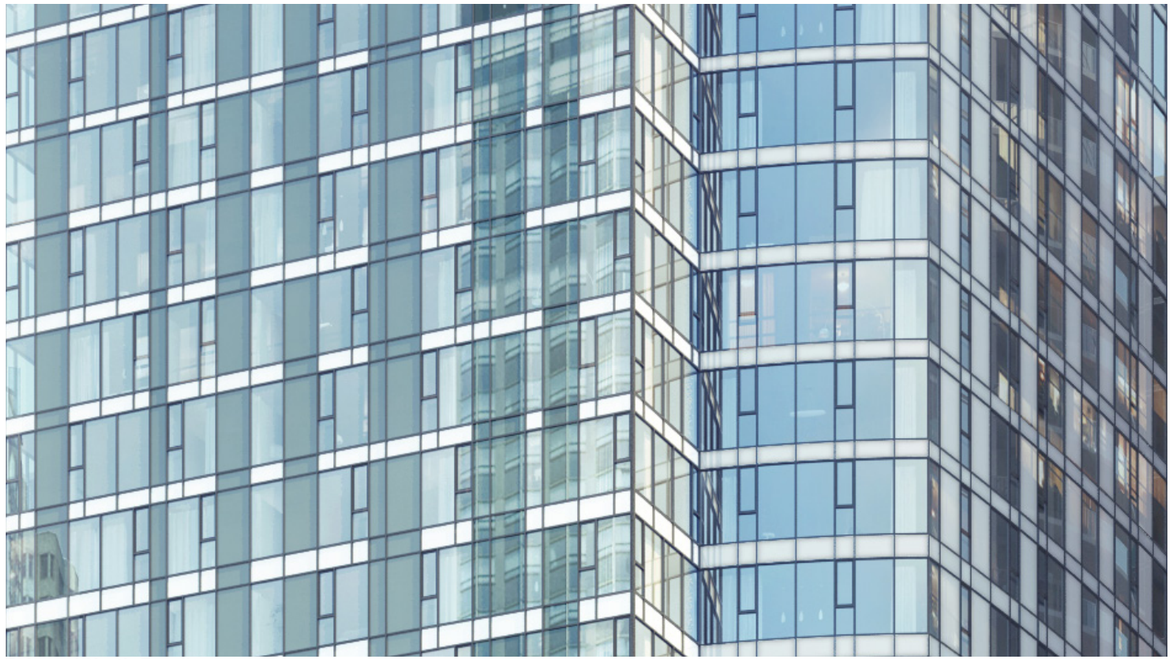
5th and Blanchard

Enlarged North Facade

5th and Virginia

4th and Lenora

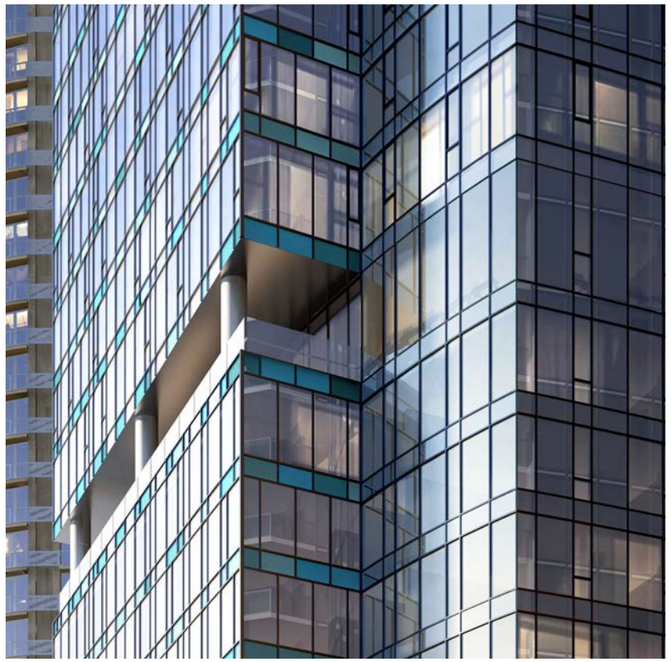
5th and Blanchard



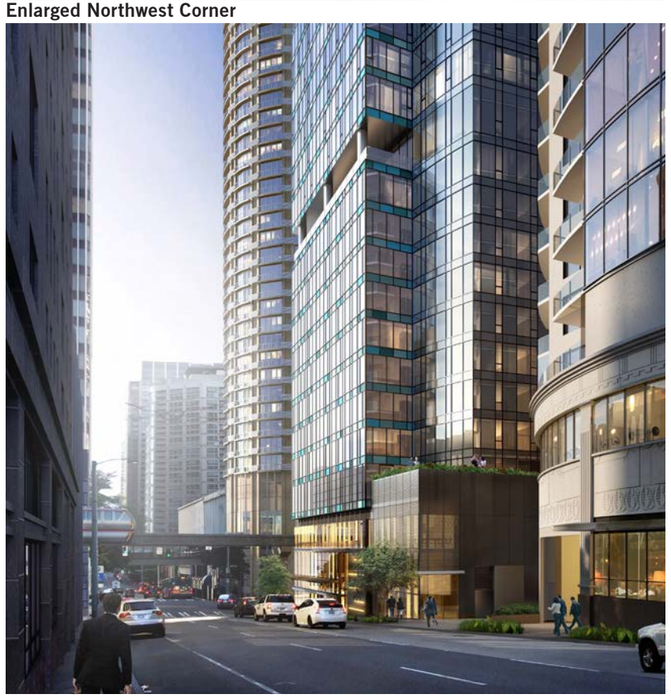
Enlarged North Facade

5th and Virginia

4th and Lenora

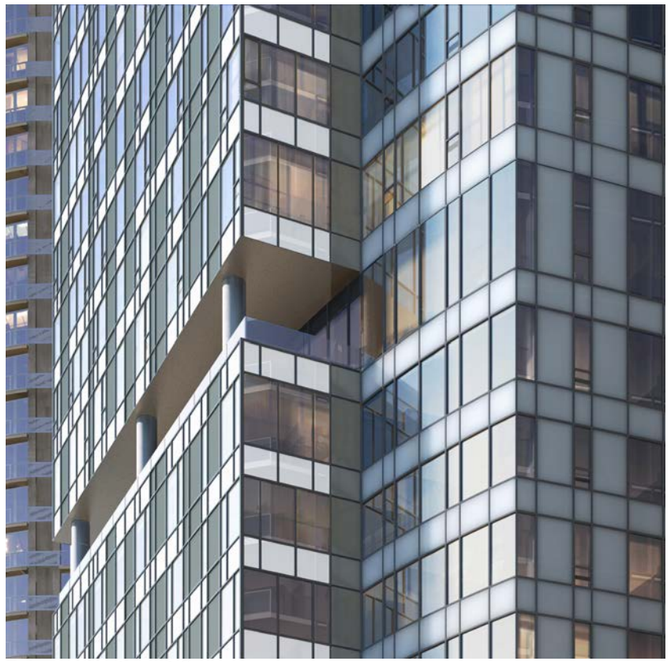


Enlarged Northwest Corner



4th and Virginia

View from Escala Balcony



Enlarged Northwest Corner

4th and Virginia

View from Escala Balcony

SECTION 03.
PREFERRED ALTERNATIVE

MATERIALITY AND REPRESENTATION

The Board requested a very targeted study of the materiality of the design proposal. A range of alternatives was considered for every material in the project. Materials are notoriously difficult to illustrate in two dimensional drawings, especially in orthographic projection, and especially to represent subtle and subjective material qualities like “softness” as requested by the Board.

For this reason each potential material and color alternative was reviewed by SDCI staff to achieve agreement of the alternatives illustrated in this submittal. The illustrations range from technical drawings intended to accurately portray dimensionality and material assignment to renderings intended to capture a sense of ‘realism’. However, ‘realism’ for materials that play with light and shadow are impossible to capture in static views with ink and paper.

All renderings were generated in state of the art software for top visualization companies in the architecture industry. However, as a with any visual simulation, it has limitations. While the renderings provide a basis for comparison between options, they do not and can not capture all of the complex effects of the real materials in a real world installation subject to light and shadow and the play of light across a surface dependent on climate, time of day, and the position and movement of the viewer. Renderings are most therefore useful when evaluated in conjunction with, and not in lieu of, real material samples.

SCALE AND REPRESENTATION

In addition to the challenges of representing material phenomena such as “softness” there is an inherent challenge in representations of a detailed elements of a large building at a greatly reduced scale.

Architectural representations are abstractions, and in the case of tall buildings, highly reduced in scale abstractions. To illustrate the point, consider that the 500’ structure proposed is represented in this submittal by a rendering no more than 10” tall, which is a scale reduction of 1/600x.

Details that are at a human scale in the proposed design are indiscernible in an architectural drawing that is reduced to this extent, therefore we have portrayed the proposed design at various scales and with various techniques and methods to comprehensively describe the design proposal; which is sculptural in form, nuanced in materiality and color, and incorporates a fine grain of details and material effects at many scales.

RECOMMENDATION MEETING 1 / VIEW IN URBAN CONTEXT FROM 4TH AND SENECA /

RECOMMENDATION MEETING 2 ALTERNATE A (PREFERRED) / VIEW IN URBAN CONTEXT FROM 4TH AND SENECA /

RECOMMENDATION MEETING 1 / VIEW IN URBAN CONTEXT FROM 5TH AND OLIVE /

RECOMMENDATION MEETING 1 / VIEW IN URBAN CONTEXT FROM 5TH AND BLANCHARD /

RECOMMENDATION MEETING 1 / VIEW IN URBAN CONTEXT FROM 4TH AND LENORA /

RECOMMENDATION MEETING 1 / VIEW IN URBAN CONTEXT FROM 5TH AND VIRGINIA /


ONE WAY

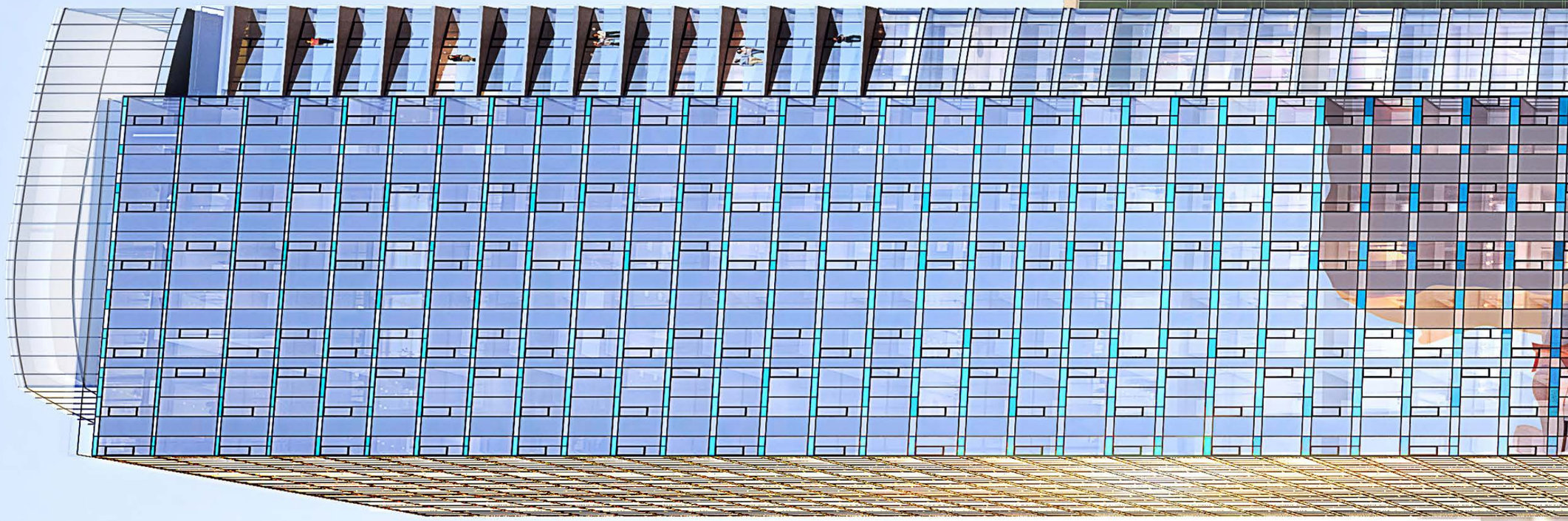
RECOMMENDATION MEETING 1 / VIEW IN URBAN CONTEXT FROM 5TH AND VIRGINIA /

RECOMMENDATION MEETING 2 ALTERNATE A (PREFERRED) / VIEW IN URBAN CONTEXT FROM 5TH AND VIRGINIA /

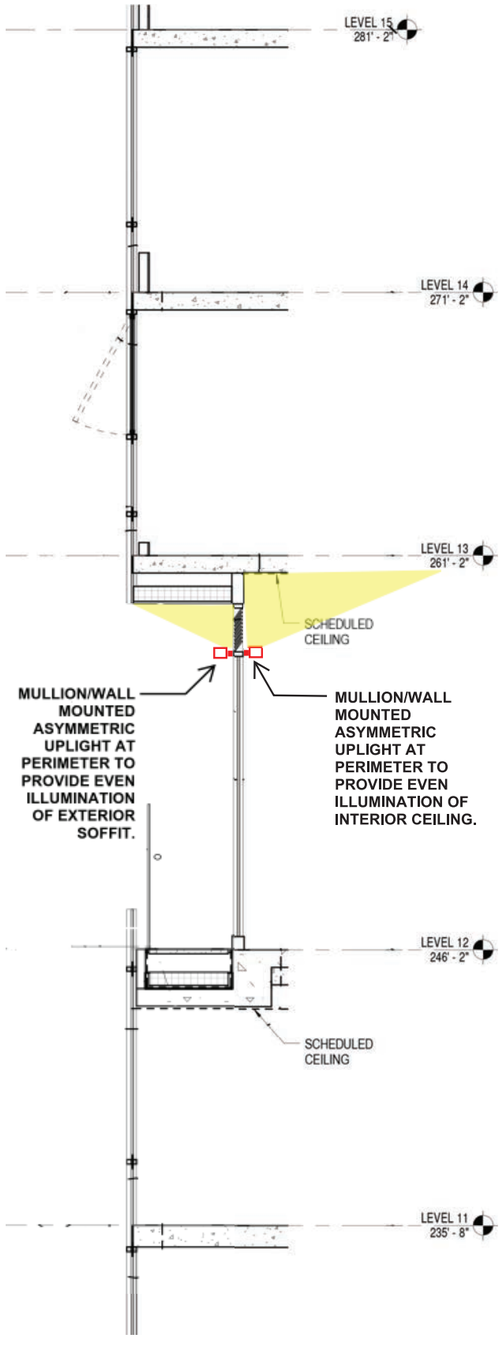
RECOMMENDATION MEETING 1 / VIEW IN URBAN CONTEXT FROM 4TH AND VIRGINIA /

RECOMMENDATION MEETING 2 ALTERNATE A (PREFERRED) / VIEW IN URBAN CONTEXT FROM 4TH AND VIRGINIA /

RECOMMENDATION MEETING 2 ALTERNATE A (PREFERRED) / VIEW IN URBAN CONTEXT FROM ESCALA BALCONY /

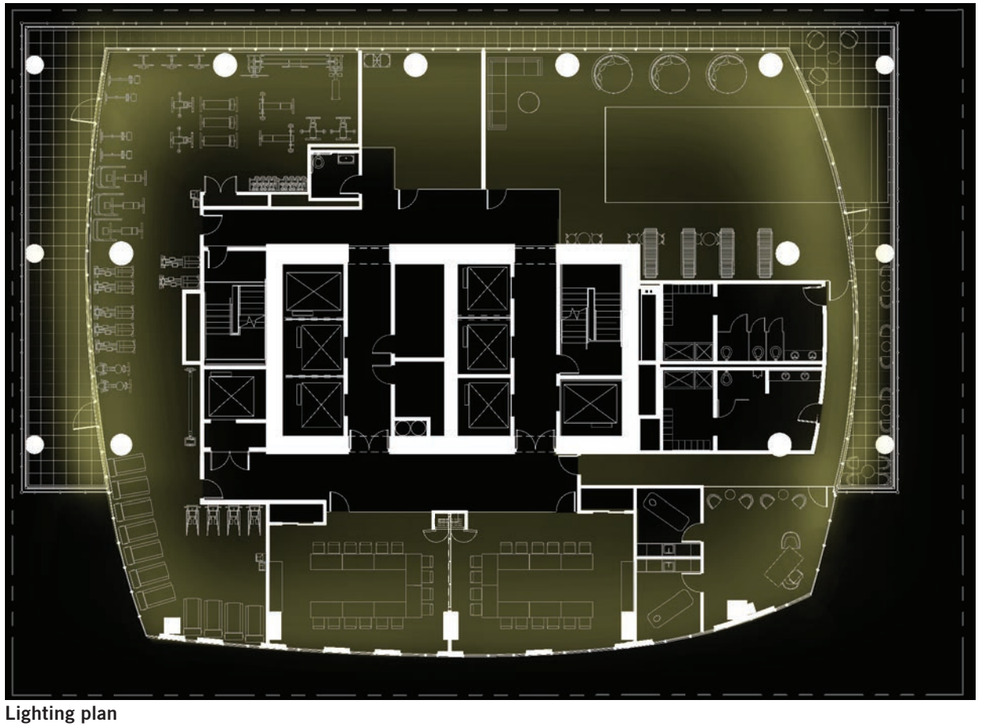


RECOMMENDATION MEETING 2 ALTERNATE A (PREFERRED) / VIEW IN URBAN CONTEXT FROM 5TH AND BLANCHARD /



Exterior wall section

Wall-mounted uplight



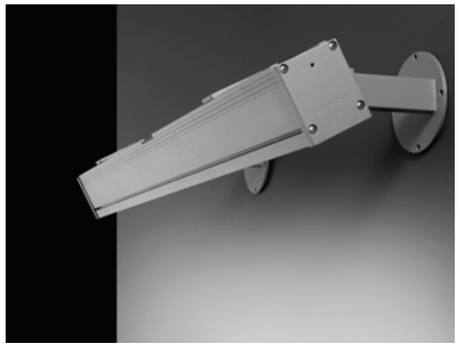
Lighting plan

Details of Level 12 tower lighting (Reveal) at the amenities level indicating lighting effects tailored to Board guidance.

Opposite page: Details of Level 47 tower lighting (Lantern) at the rooftop bar indicating lighting effects tailored to Board guidance.

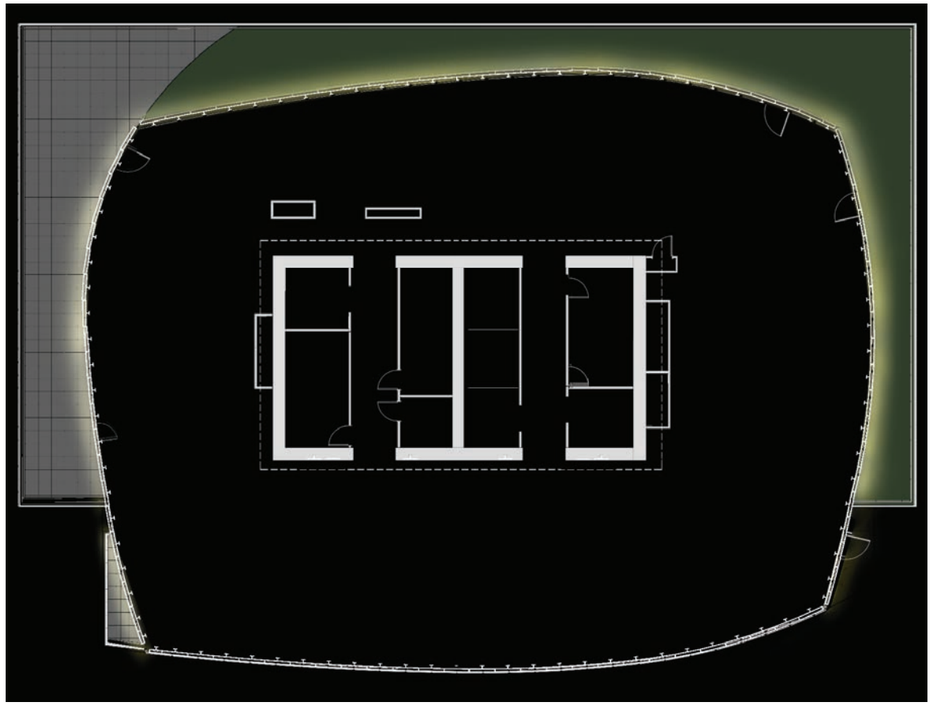
LED tape lighting at ceiling pocket

Recessed downlight

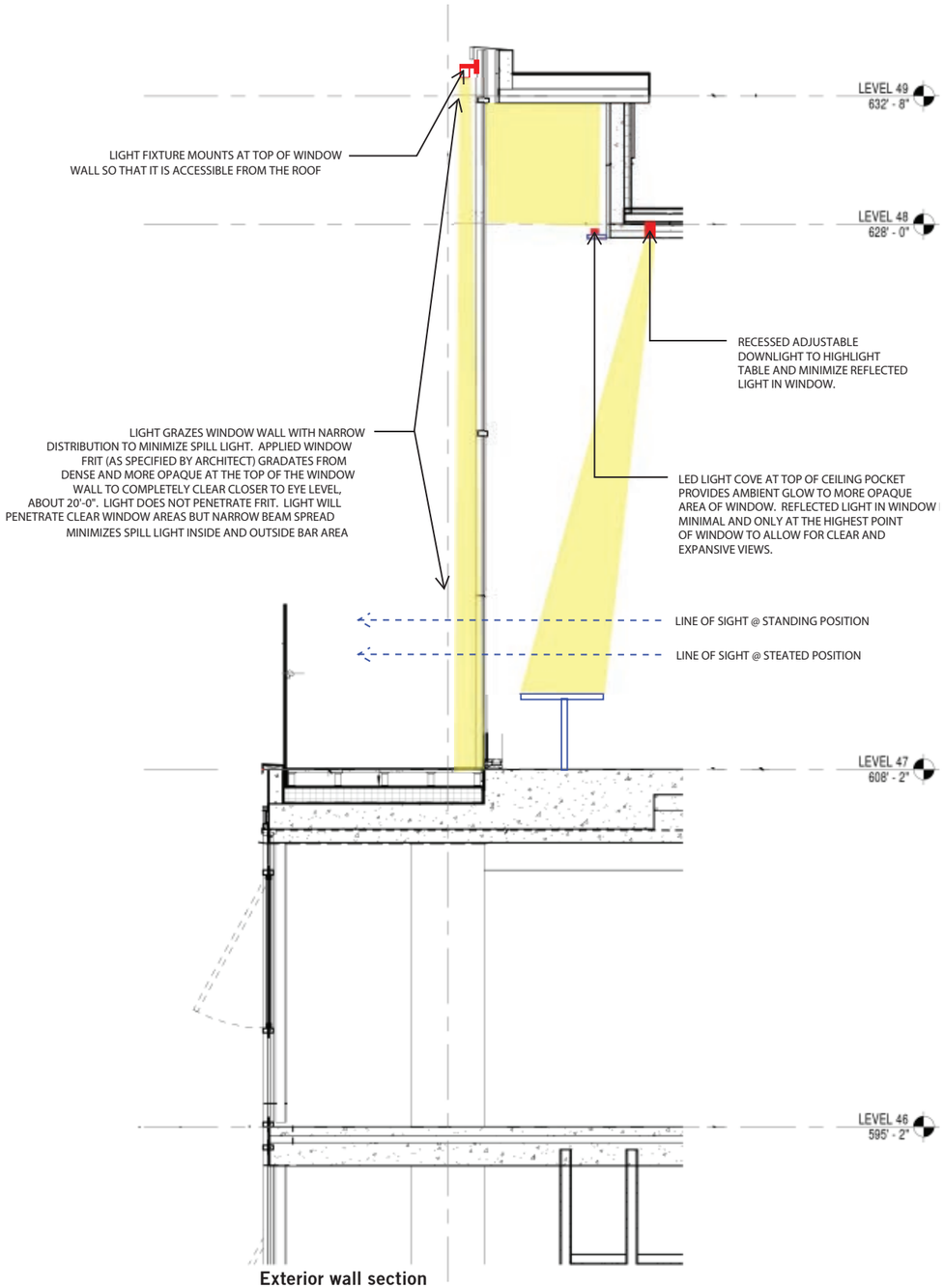


EXA wall-mounted fixture

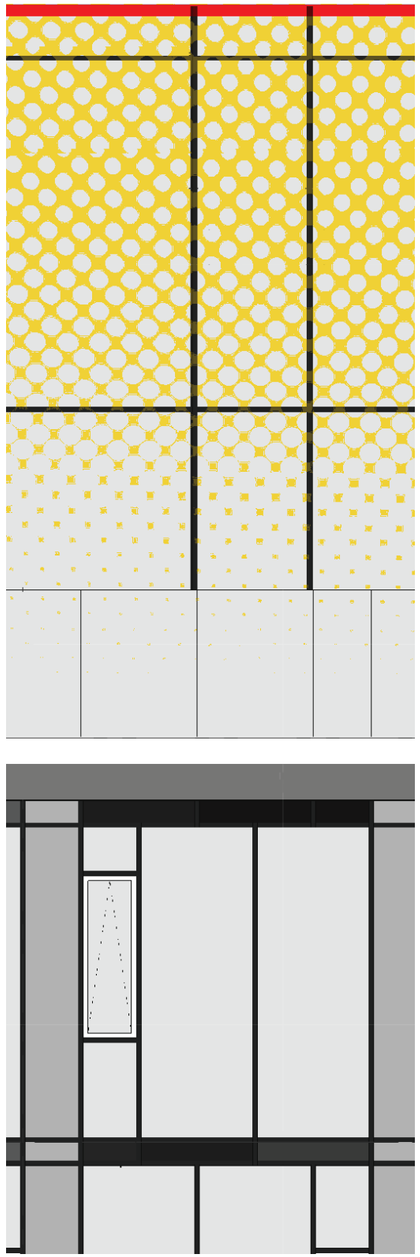
EAS wall-mounted fixture



Lighting plan



Exterior wall section



Exterior elevation

11 LIGHTING / VIEW IN URBAN CONTEXT FROM 5TH AND VIRGINIA /

11 LIGHTING / VIEW IN URBAN CONTEXT FROM 5TH AND OLIVE /

Market sign concept

Hotel sign concept

0 4 8 16 32

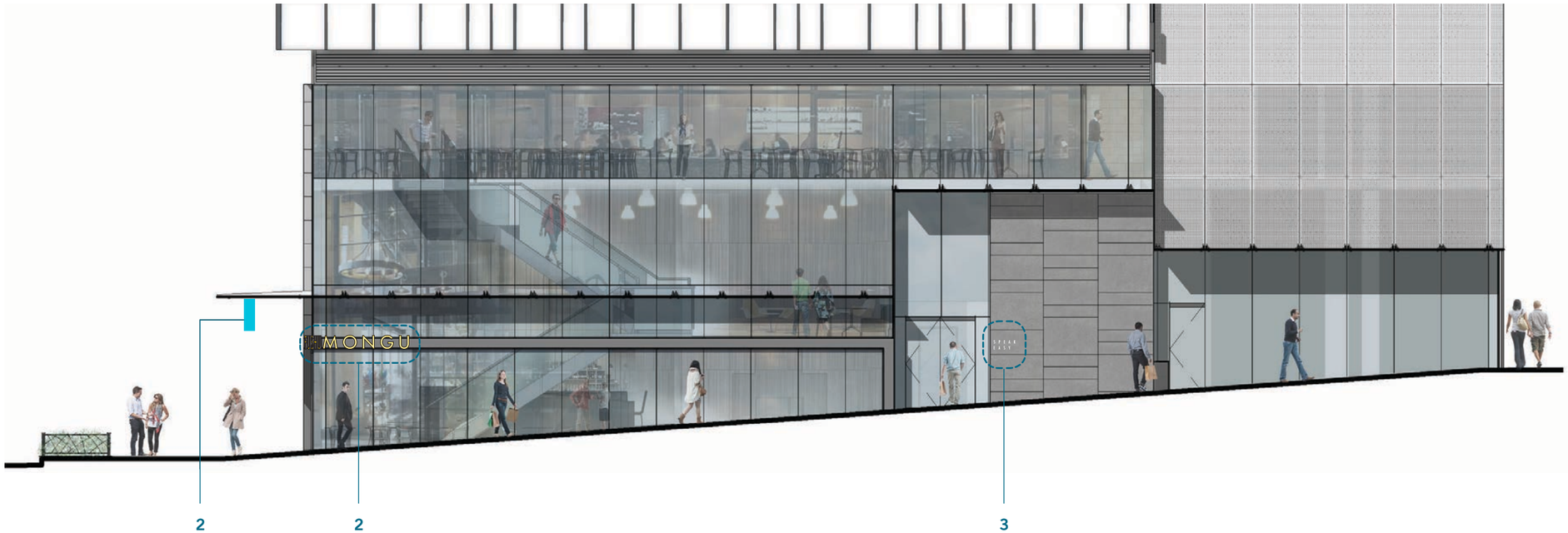
The illustrated signage concepts are intended to portray potential scale and character only. The final signage design concepts and execution will be dependent on the brand identity, design expression, and names of the various businesses, which are not yet determined at this stage.

1 Vinyl ID on Glazing

2 Open Channel Letters with Neon

Restaurant sign concept

Rooftop bar sign concept



0 4 8 16 32

The illustrated signage concepts are intended to portray potential scale and character only. The final signage design concepts and execution will be dependent on the brand identity, design expression, and names of the various businesses, which are not yet determined at this stage.

2 Open Channel Letters with Neon

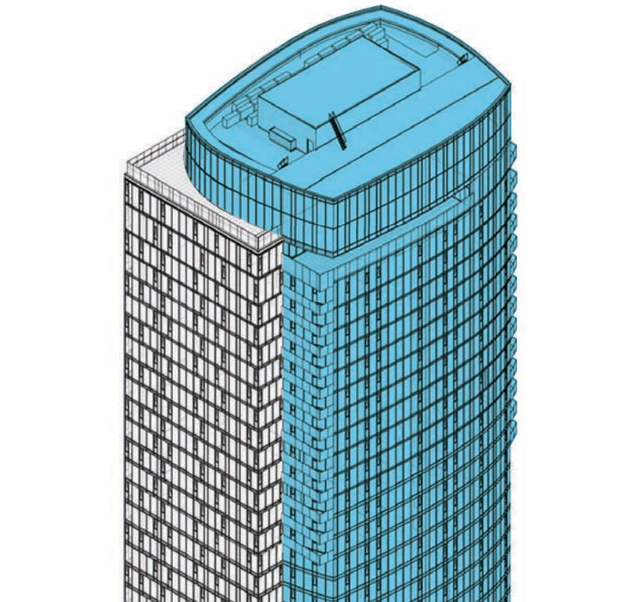
3 Integrated Backlit Aluminum

SECTION 04.
TECHNICAL INFORMATION, PREFERRED ALTERNATIVE

9.A MATERIAL SOFTENING AND OPACITY /

The amount of opaque area on the western mass has been increased as shown at each step of the design review process, thereby reducing the amount of vision glass as shown.

To measure impacts of vision glass area reduction we have indicated the vision glass areas as a percentage of overall exterior area (for REC1 and REC2), and also indicated the net reduction in vision glass area as a percentage of vision glass area from REC1 to REC2. Note that the REC1 vision glass area was already significantly reduced from EDG2 and that the vision glass % opposite Escala is significantly less than the vision glass % of Escala – the proposed development has less than 1/2 the vision glass % of Escala at the hotel, and approximately 2/3 the vision glass % of Escala at the residential apartments.

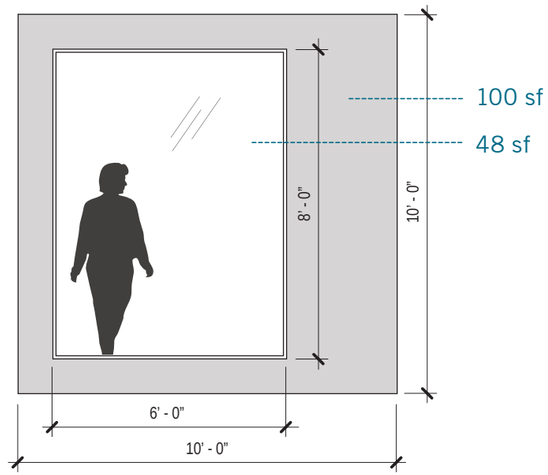


Northwest Axon

Western Volume
(Escala Facing)

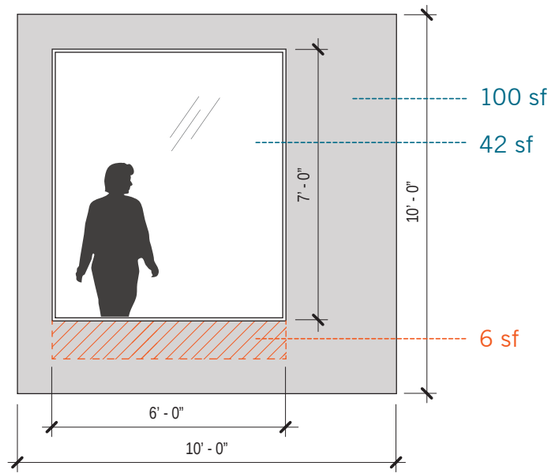
	EDG 2	REC 1	REC 2
Bypass / Sill Height, levels 44-47	10” / 0”	10” / 0”	10” / 0”
Bypass / Sill Height, levels 40-43	10” / 0”	12” / 2”	10” / 0”
Bypass / Sill Height, levels 36-39	10” / 0”	14” / 4”	10” / 0”
Bypass / Sill Height, levels 32-35	10” / 0”	16” / 6”	14” / 4”
Bypass / Sill Height, levels 28-31	10” / 0”	18” / 8”	18” / 8”
Bypass / Sill Height, levels 24-27	10” / 0”	20” / 10”	22” / 12”
Bypass / Sill Height, levels 20-23	10” / 0”	22” / 12”	28” / 18”
Bypass / Sill Height, levels 16-19	10” / 0”	24” / 14”	34” / 24”
Bypass / Sill Height, levels 0 - 15	10” / 0”	26” / 16”	40” / 30”

BYPASS (EXTERIOR) DIMENSION / INTERIOR SILL HEIGHT



EXAMPLE BASELINE/

Glass Area: 48 SF = 48% of 10’x10’ exterior sample



EXAMPLE REDUCTION /

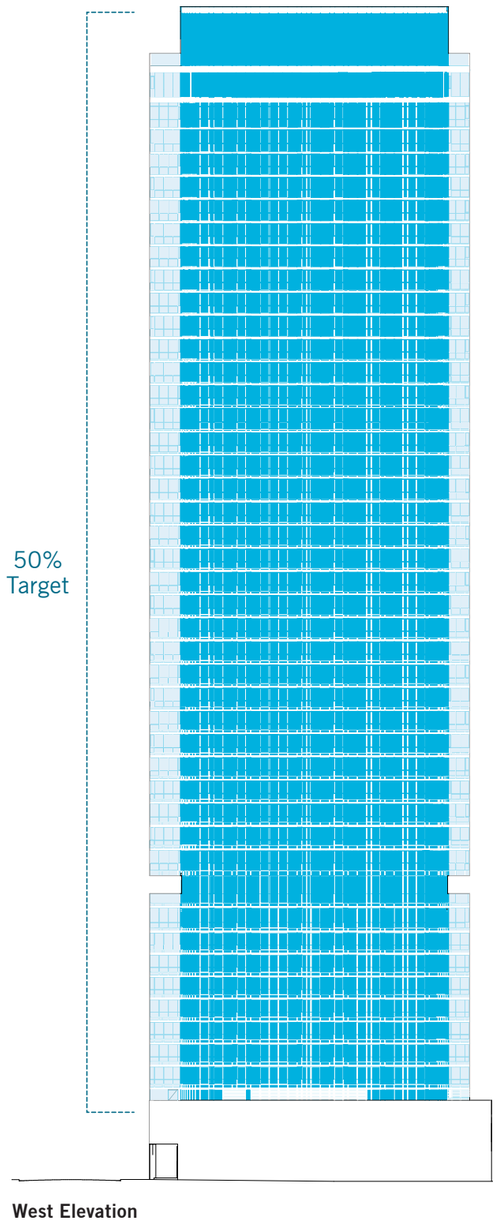
Glass Area: 42 SF = 42% of 10’x10’ exterior sample

42 SF / 48 SF = 12.5% LESS GLASS

EDG 2

12.20.2016

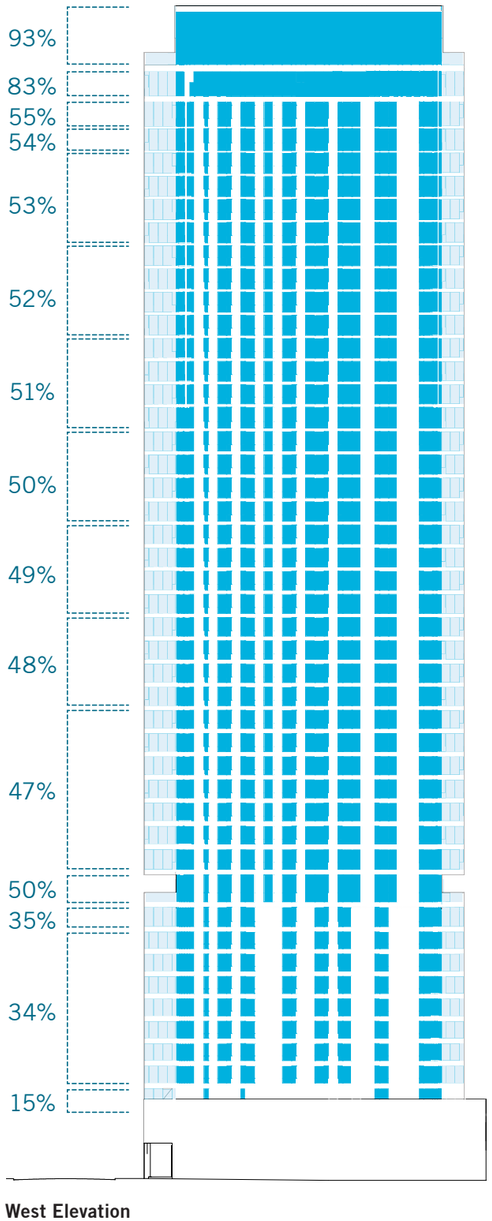
* The vertical opaque panels had not been designed at this phase.



West Elevation

REC 1

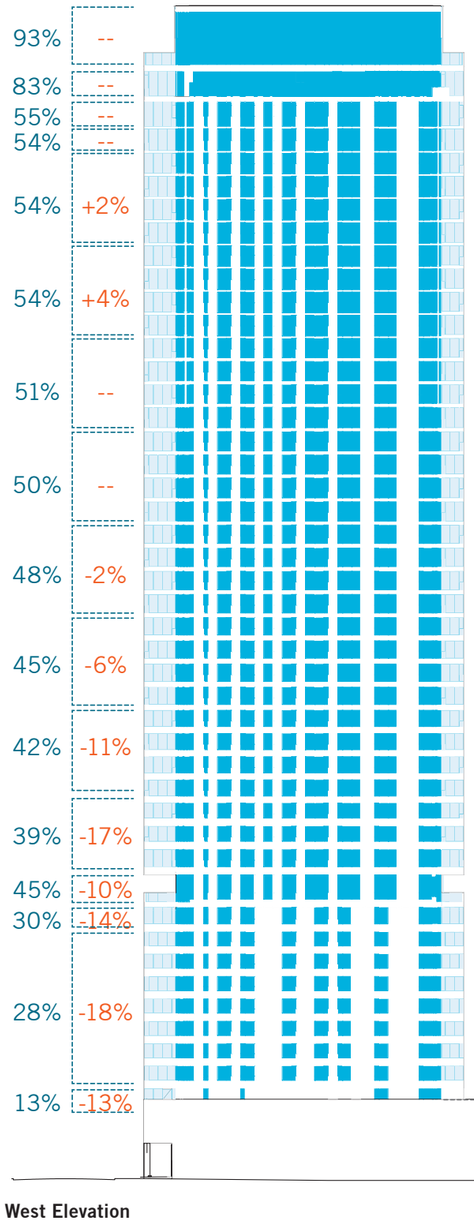
06.28.2016



West Elevation

REC 2

12.20.2016



West Elevation

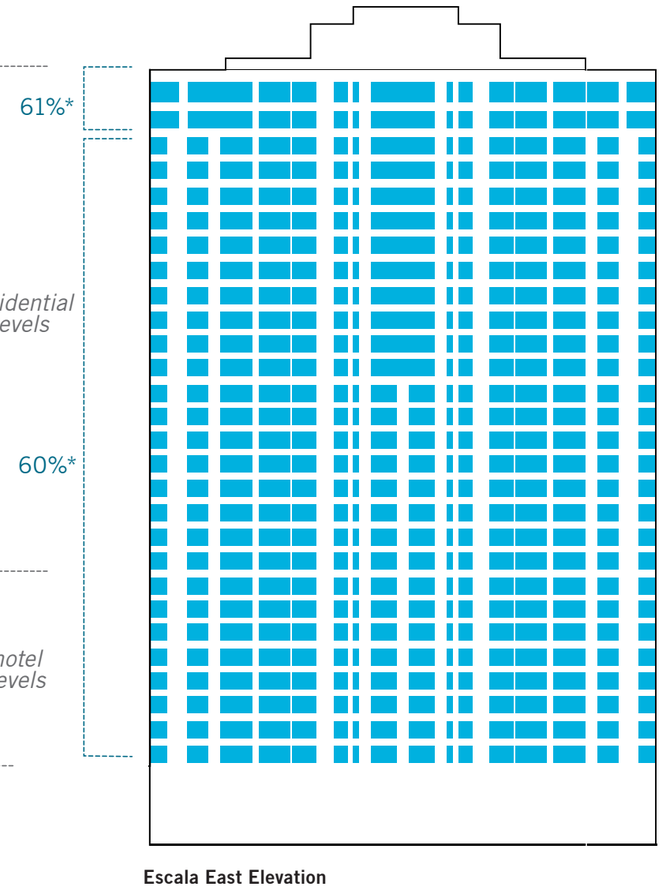
opaque

vision glass

X% vision glass area, expressed as % of overall exterior surface area

X% change in vision glass area, expressed as % of vision glass specified in REC1

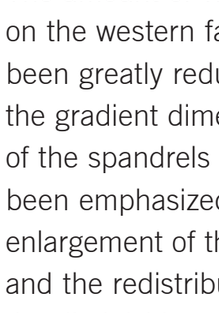
ESCALA

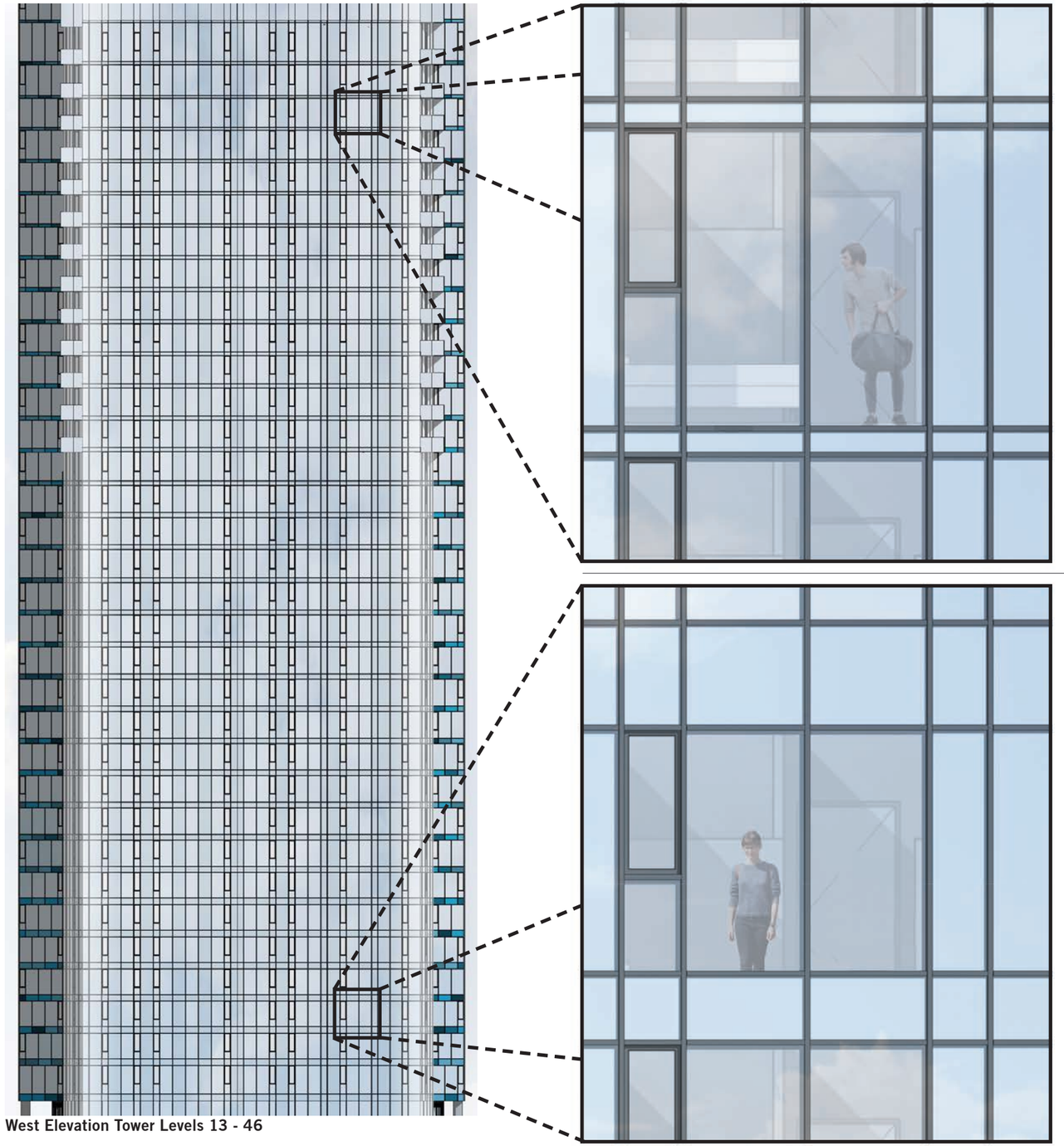


Escala East Elevation

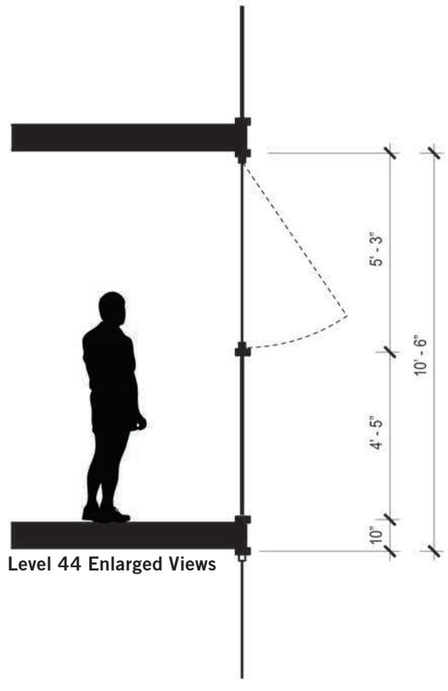
Comparison of sill heights at tower above hotel illustrating reduction in vision glass.

The amount of vision glass on the western façade has been greatly reduced, and the gradient dimension of the spandrels has been emphasized by the enlargement of the spandrels and the redistribution of the diminishing dimensions of the sills across the remaining floors.

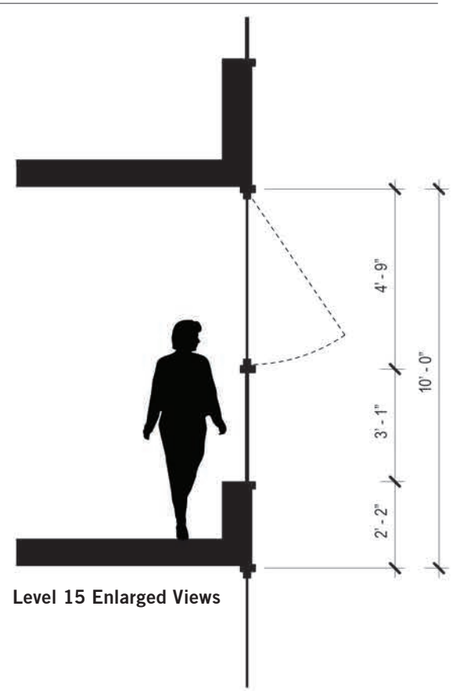




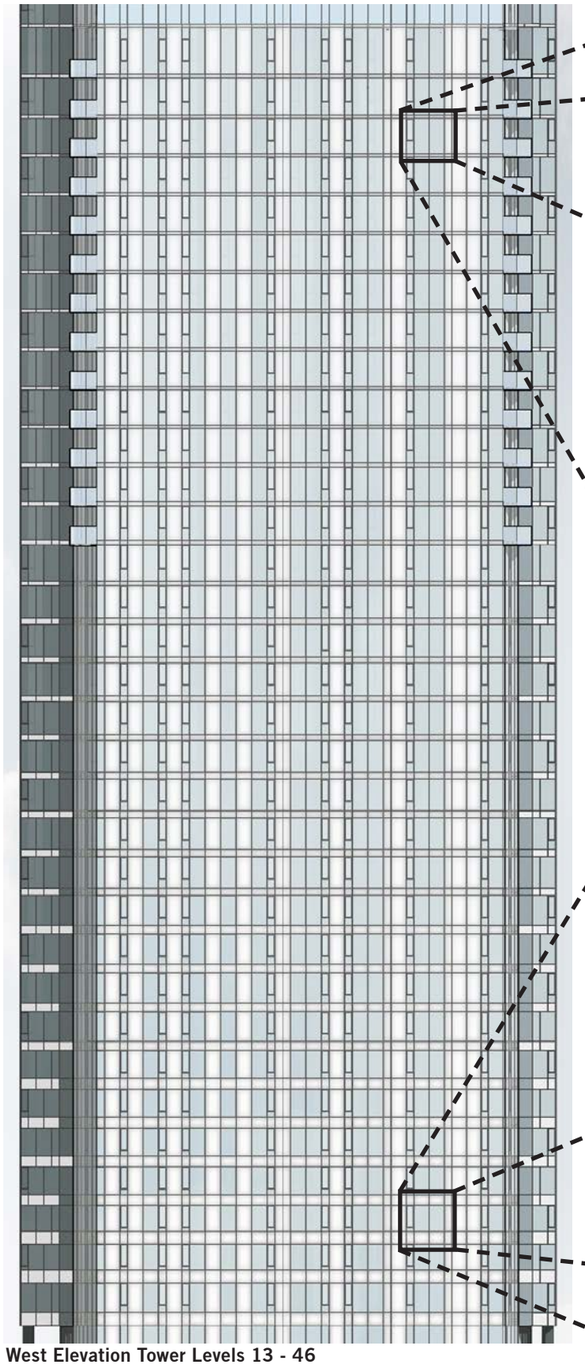
West Elevation Tower Levels 13 - 46



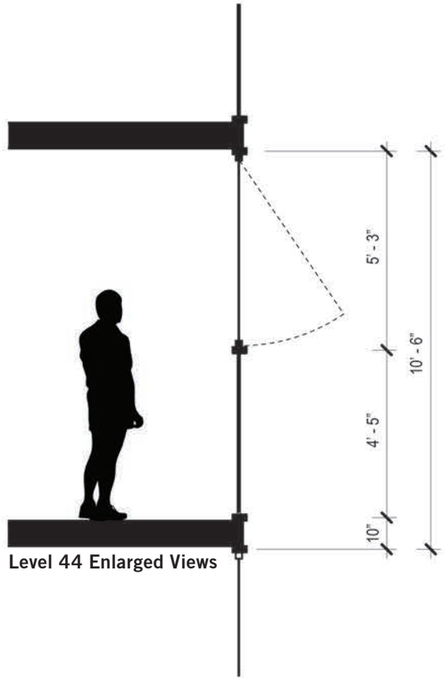
Level 44 Enlarged Views



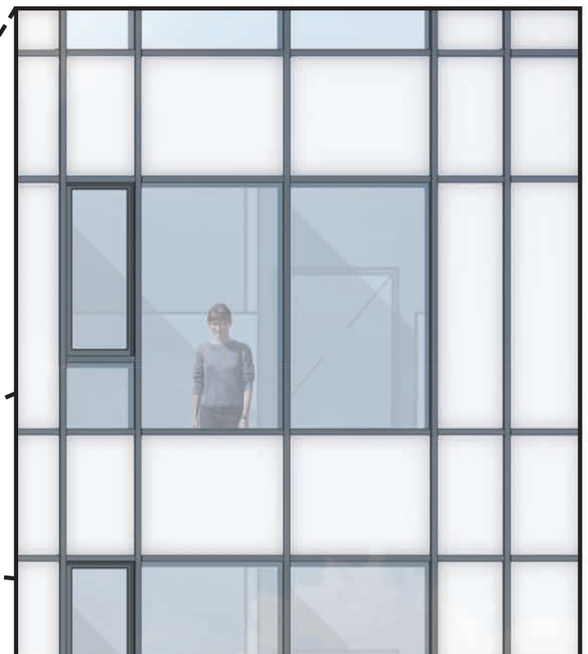
Level 15 Enlarged Views

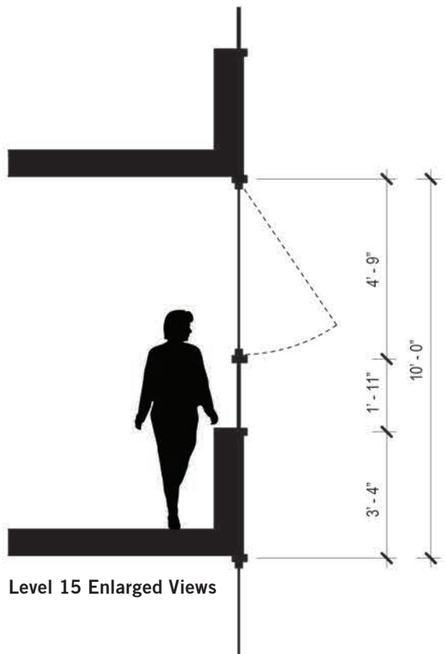


West Elevation Tower Levels 13 - 46

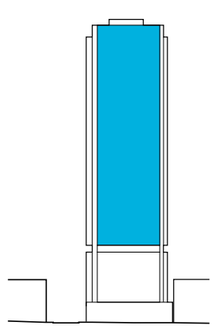


Level 44 Enlarged Views

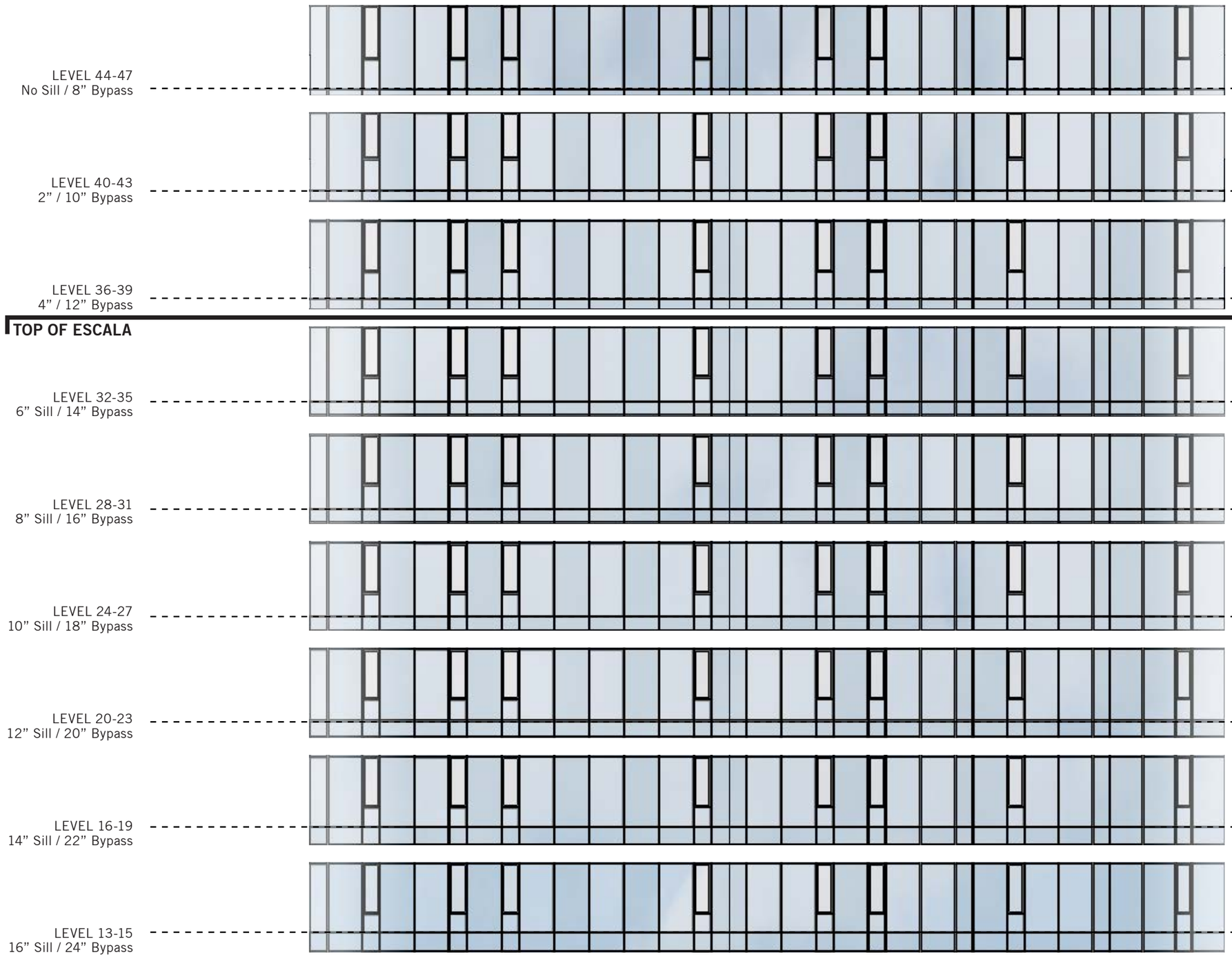


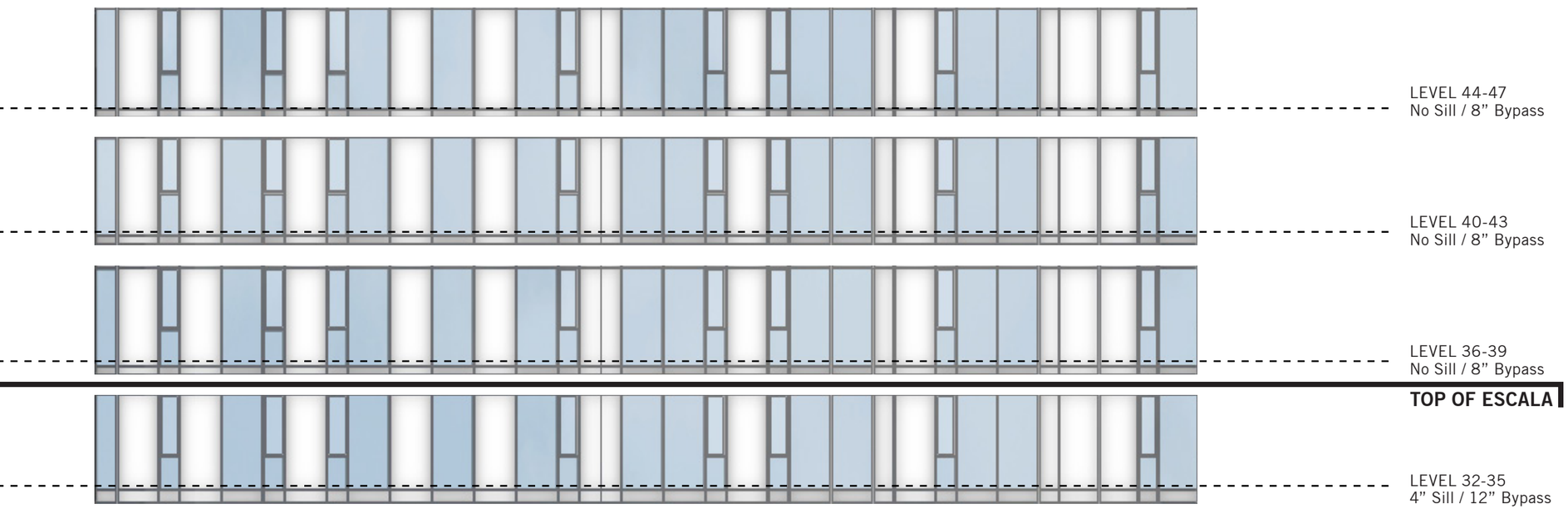


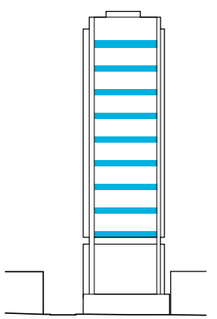
Level 15 Enlarged Views



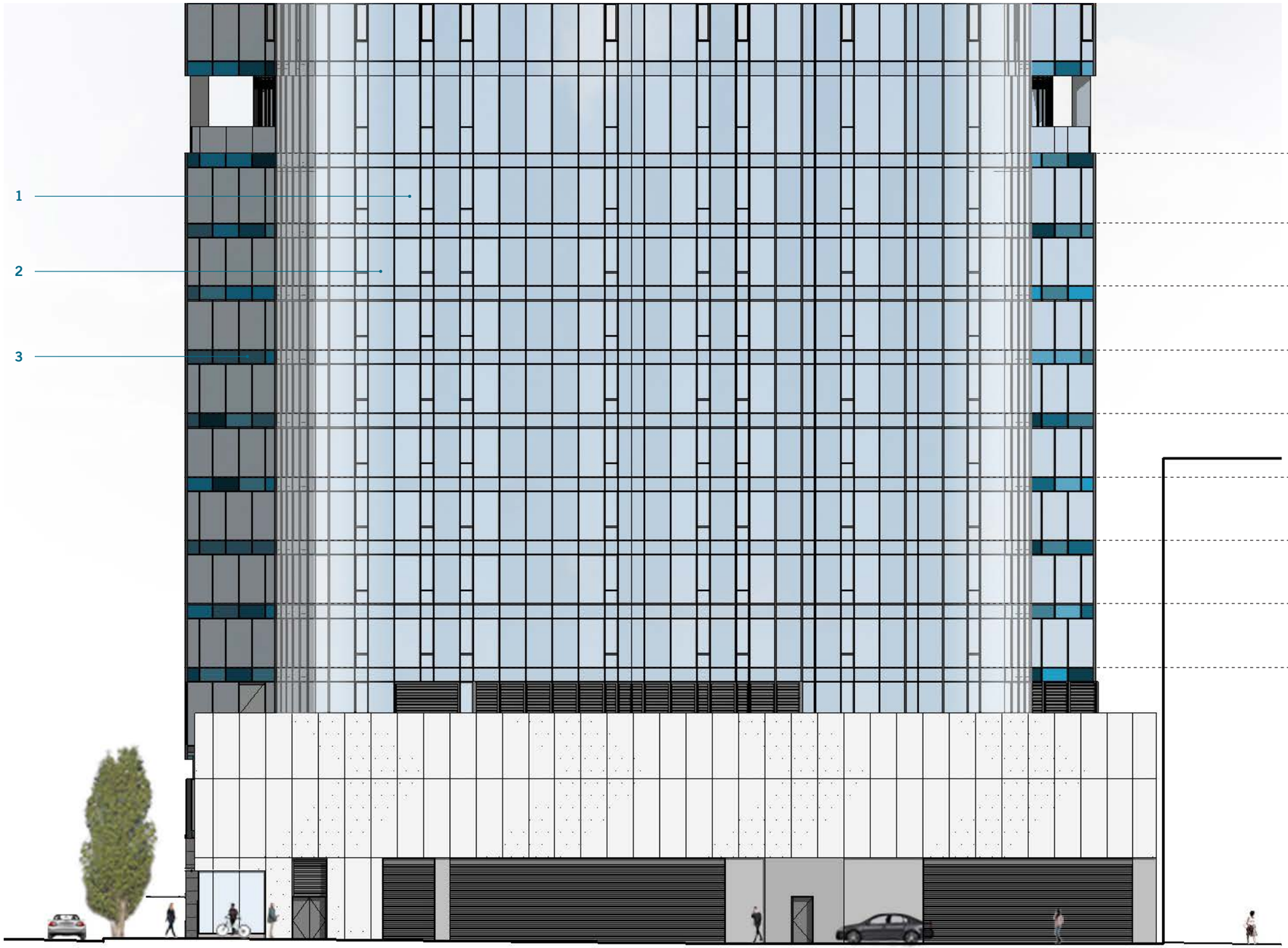
9.A MATERIAL SOFTENING AND OPACITY / RECOMMENDATION MEETING 1 /

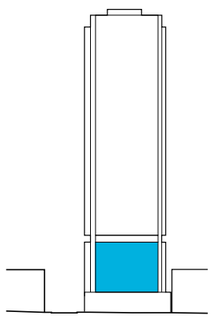



LEVEL 44-47
No Sill / 8” Bypass
LEVEL 40-43
No Sill / 8” Bypass
LEVEL 36-39
No Sill / 8” Bypass
TOP OF ESCALA
LEVEL 32-35
4” Sill / 12” Bypass
LEVEL 28-31
8” Sill / 16” Bypass
LEVEL 24-27
12” Sill / 20” Bypass
LEVEL 20-23
18” Sill / 26” Bypass
LEVEL 16-19
24” Sill / 32” Bypass
LEVEL 13-15
30” Sill / 38” Bypass



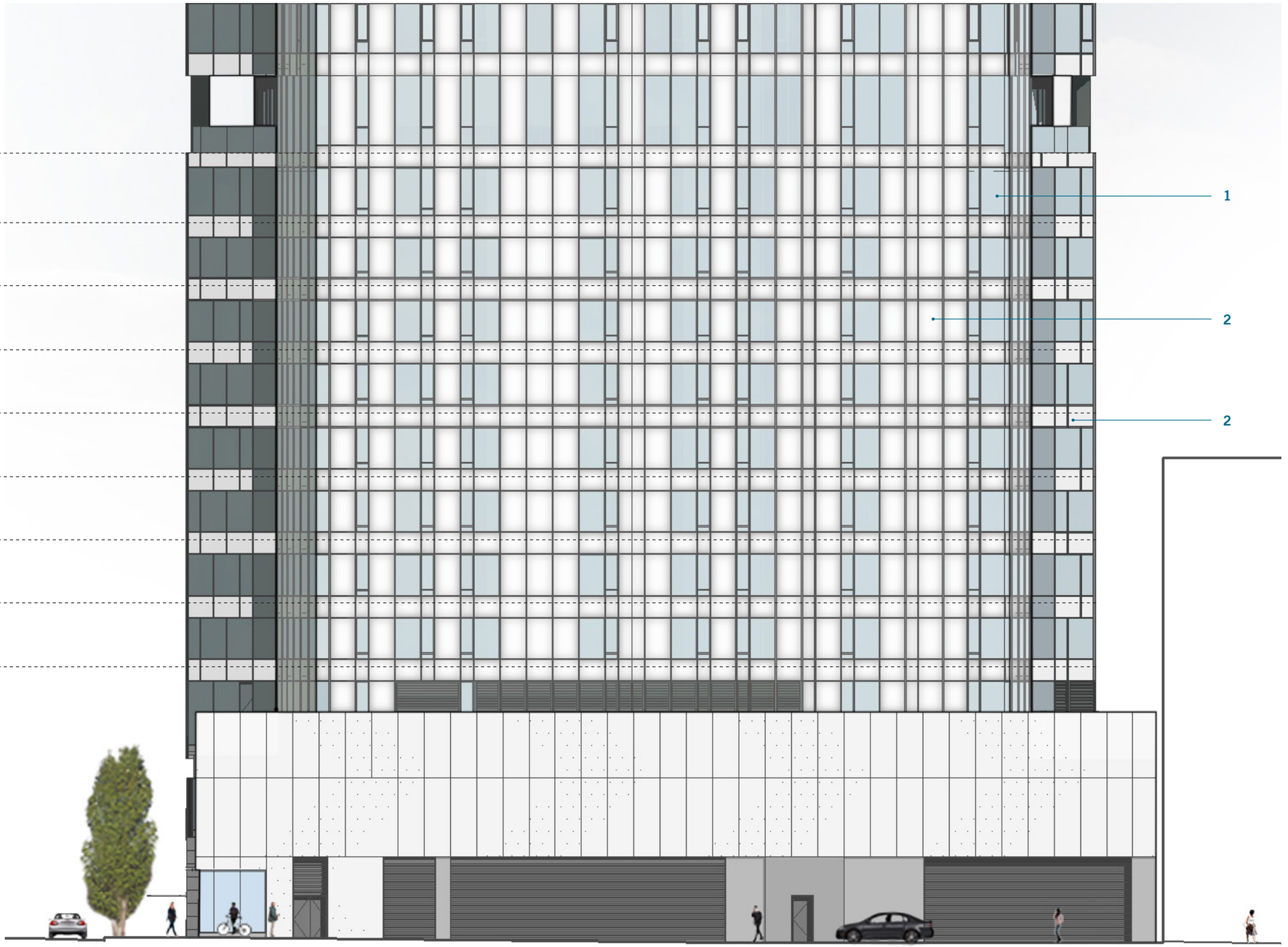
Comparison of sill heights at hotel (levels 3-11) illustrating reduction in vision glass.





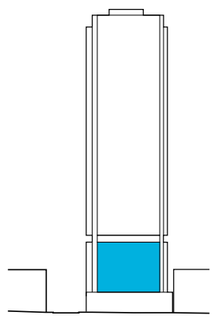
1 Vision glass
2 Vision-matched spandrel glass
3 Colored spandrel glass

West Elevation Hotel Levels 3 - 11



West Elevation Hotel Levels 3 - 11

1 Vision glass
2 Spandrel glass



A potential material palette of sixteen options was evaluated to determine the optimal design response to the Board's guidance.

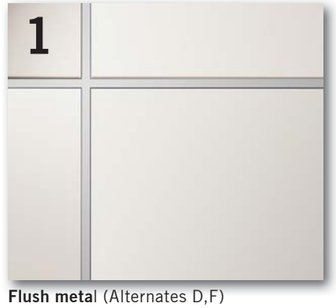
		Opaque materials alternatives	softer	warmer	meets technical criteria*
(Alternates **D**,**F**)	1	**Flush metal**	✗	✓	✓
	~~2~~	~~**Monolithic spandrel**~~	~~✗~~	~~✓~~	~~✓~~
	~~3~~	~~**Textured paint on metal panel**~~	~~✗~~	~~✓~~	~~✓~~
(Alternates **B**,**C**)	4	**Monolithic line frit plus opaci-coat on #2**	✓	✓	✓
(**REC1**)	5	**IGU spandrel**	✗	✓	✓
	~~6~~	~~**Raised metal**~~	~~✗~~	~~✓~~	~~✓~~
(Alternate **E**)	7	**Ribbed metal**	✗	✓	✓
(Alternate **A, PREFERRED**)	8	**IGU Etched #2, Opaci-coat on #4**	✓	✓	✓
	~~9~~	~~**Perforated metal**~~	~~✗~~	~~✓~~	~~✗~~
	~~10~~	~~**Fritted IGU**~~	~~✗~~	~~✓~~	~~✓~~
	~~11~~	~~**Concrete**~~	~~✗~~	~~✓~~	~~✗~~
	~~12~~	~~**High Density Fiber cement**~~	~~✗~~	~~✓~~	~~✗~~
	~~13~~	~~**Terra cotta**~~	~~✗~~	~~✓~~	~~✗~~
	~~14~~	~~**Ultra High Perfomance Concrete**~~	~~✗~~	~~✓~~	~~✗~~
	~~15~~	~~**Porcelain Panel**~~	~~✗~~	~~✓~~	~~✗~~
	~~16~~	~~**Stone**~~	~~✗~~	~~✓~~	~~✗~~

Material considered, evaluated, illustrated in renderings, preferred

Material considered, evaluated, illustrated in renderings

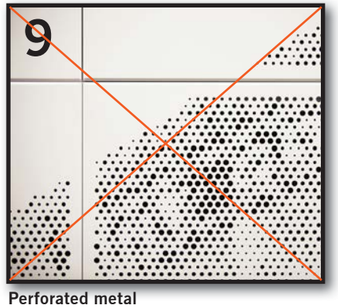
Material considered, evaluated, and ruled out

* Must meet constructibility and performance requirements for selected window wall system including ability to b glazed into system without voiding warranty or requiring additional trades and materials/labor while also meetin Seattle Energy Code, NFRC testing criteria, wind pressure criteria, structural loading capacity.

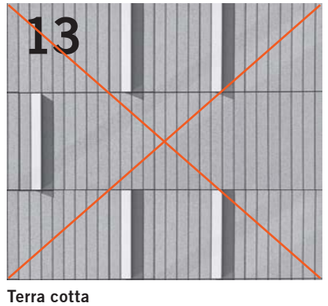


Flush metal (Alternates D,F)

IGU spandrel (REC 1)

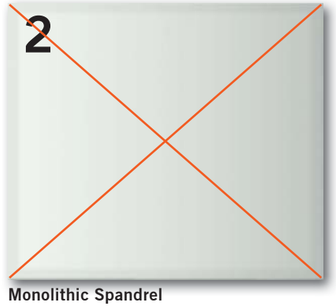


Perforated metal

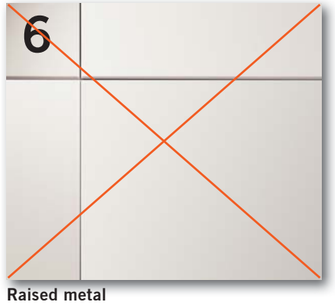


Terra cotta

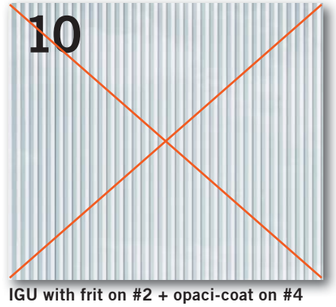
Representative samples of the sixteen materials evaluated, each in warm, light tones.



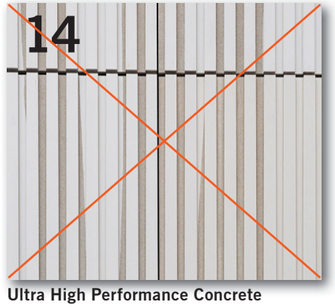
Monolithic Spandrel



Raised metal



IGU with frit on #2 + opaci-coat on #4



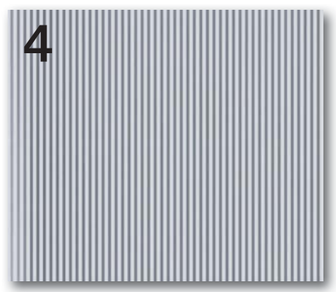
Ultra High Performance Concrete

Textured paint on metal panel

Ribbed metal (Alternate E)

Concrete

Porcelain Panel



Monolithic line frit + opaci-coat on #2 (Alternates B,C)

IGU with etch on #2 + opaci-coat on #4 (Alternate A PREFERRED)

High density fiber cement

Stone

Material considered, evaluated, illustrated in renderings, preferred

Material considered, evaluated, illustrated in renderings

Material considered, evaluated, and ruled out

9.A MATERIAL SOFTENING AND OPACITY / OVERVIEW OF MATERIALS PALETTE /

ID	Material	Location		Specification	Notes
VG-01	Glass, vision	Base	Vision glass, below level 3	PPG Starphire Ultra-clear low iron glass IGU	high performance, low reflectance, high transparency
VG-02	Glass, vision	Tower	Vision glass, east mass	PPG Solarban 60 low-e glass IGU	high performance, low reflectance, high transparency
VG-03	Glass, vision	Tower	Vision glass, west mass	Guardian Sunguard SNX 51/23 IGU	high performance, low reflectance, low transparency
VG-04	Glass, vision w/ frit	Tower	Vision glass at upper portion of rooftop bar "lantern"	Guardian Sunguard SNX 51/23 IGU, frit on #2 surface	fritted vision glass to create glowing effect of "lantern"
SG-01	Glass, opaque	Tower	Spandrel glass, non vision vertical panels, east mass	PPG clear monolithic plate glass w/ opaci-coat-300 on #2 surface, color #2 - 743 "Harmony Solex"	opaque colored glass - dark
SG-02	Glass, opaque	Tower	Spandrel glass, bypass zone, east mass	PPG clear monolithic plate glass w/ opaci-coat-300 on #2 surface, color #0 - 1672 "Snow White"	opaque colored glass - light
SG-03	Glass, opaque	Tower	Spandrel glass, all spandrel locations the west mass	PPG IGU w/ opaci-coat-300 on #4 surface, color #0 - 1672 "Snow White" and etch on clear glass #2 surface	etched glass ‘shadow box’ IGU
GL-01	Glass, canopy	Base	Canopy glass, all locations	Laminated glazing with ceramic frit	safety glass at canopies
M-01	Mullion	Tower	Mullions, tower	Window wall system profile with warm finish	exterior mullion with shadow line
M-02	Mullion	Base	Mullions, base	Window wall system profile with warm finish	interior mullion with flush SSG glazing
MP-01	Perforated metal	Base	alley and portion of Virgina above glazed zone	3/16” thick plate metal with warm finish (match mullion)	layered rainscreen system, open joints
MP-02	Metal panel	Soffits	soffits at tower below levels 4 and 13	Metal Panel with warm finish (match mullion)	with integral lighting
P-01	Panel material	Base	panel elements along Fifth Avenue and Virgina	NeoLith strongfix ventilated façade system	warm light finish

VG-01

VG-02

VG-03

VG-04

SG-01

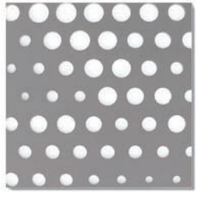
SG-02

SG-03

GL-01

M-01

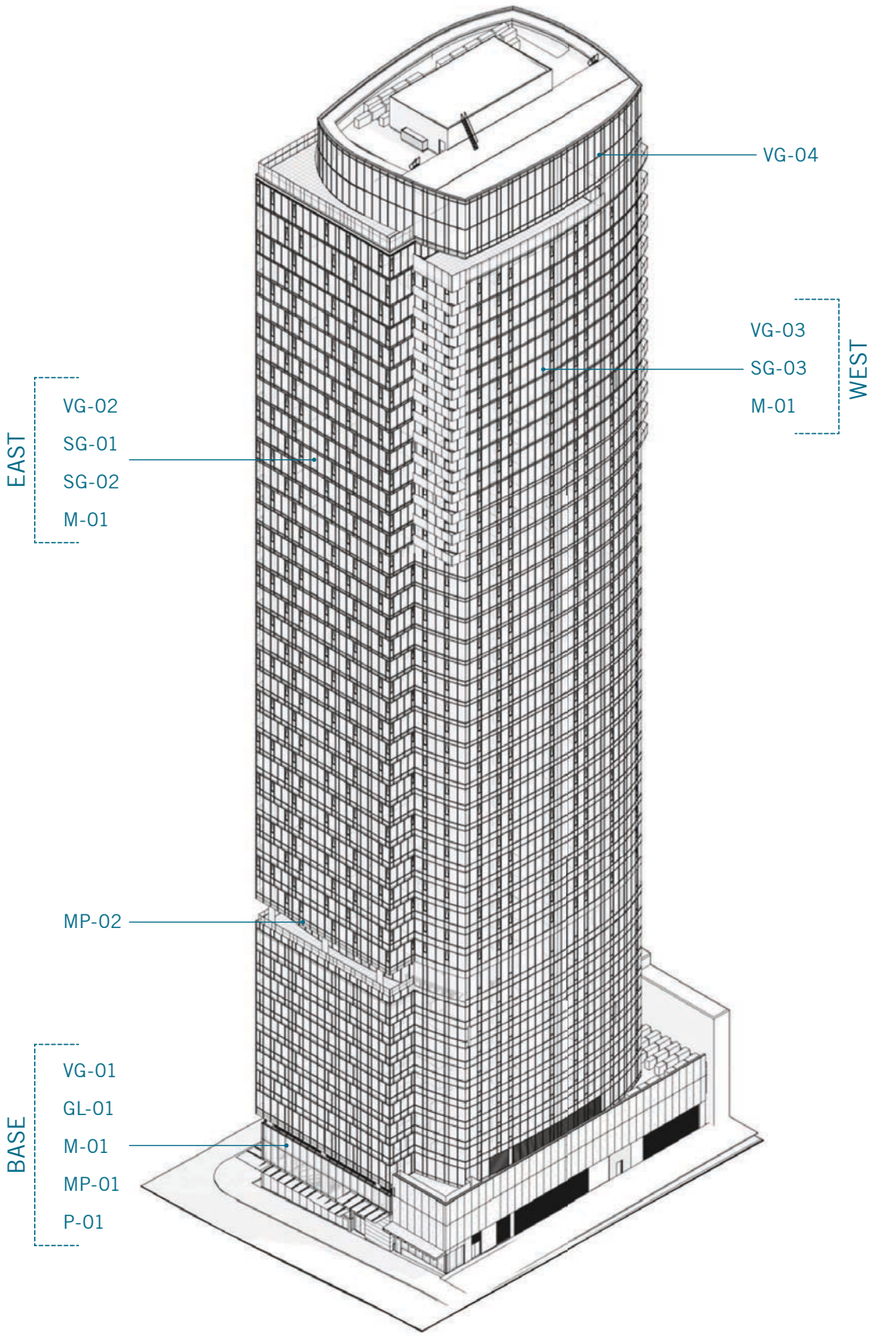
M-02

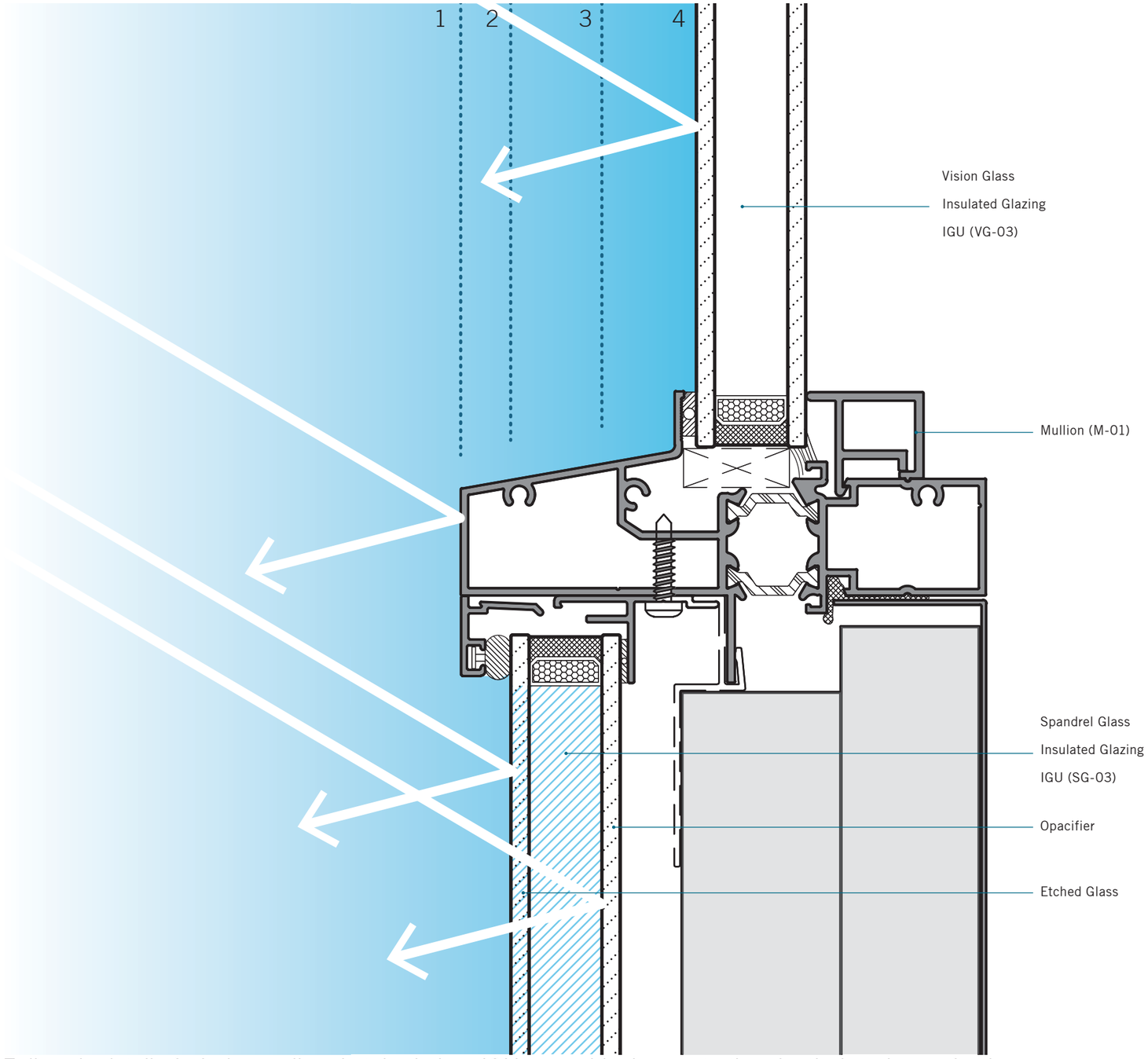


MP-01

MP-02

P-01





Full scale detail of window wall and etched glass IGU assembly demonstrating depth, layering, softening

OVERVIEW

A rigorous and exacting scientific process was used to evaluate glass alternatives and validate the proposed glass types, which are different on the east and west volumes in response to Board guidance.

The glass performance characteristics were observed and verified in a state of the art controlled laboratory setting at the Integrated Design Lab under the direction of Christopher Meek, AIA, Associate Professor, Director of the Integrated Design Lab, and the region's leading expert qualified to perform such verification.

As noted in the accompanying letter,

"Viewing glass samples in isolation, absent the environmental conditions of the proposed application and including the effect of sky illuminance and a connected interior volume will not provide a meaningful or comparable approximation of its ultimate appearance when implemented in an exterior building application."

UNIVERSITY OF WASHINGTON
INTEGRATED DESIGN LAB
DEPARTMENT OF ARCHITECTURE
COLLEGE OF BUILT ENVIRONMENTS

1501 EAST MADISON STREET
SUITE 200
SEATTLE, WA 98122

23 November 2016

To: Mr. Erik Mott, AIA, NCARB, LEED AP BD+C
Principal
Perkins+Will
1221 2nd Ave #200
Seattle, WA 98101

From: Christopher Meek, AIA, Associate Professor + Director
UW Integrated Design Lab
1501 E. Madison St. #200
Seattle, WA 90122

Re: *Glass Performance/Appearance Comparison Study*

The University of Washington Integrated Design Lab (IDL) has extensive experience providing daylighting consulting, evaluation of glare, solar shading, light re-direction, and simulation of sunlight and skylight using digital and physical simulation methods. The IDL operates a 1,200 SF Materials and Daylighting (MAD Lab) Laboratory at the University of Washington, Seattle Campus, in Gould Hall. This lab includes a mirror-box overcast sky simulator (test chamber), digital and analog data acquisition system, heliodon direct sun simulator, camera equipment calibrated to collect high dynamic range (HDR) imaging, and a beam-splitter for sampling visible light transmission (Tvis) and shading coefficient (SC) of glazing (glass) components. This test facility provides the capability for repeatable physical simulations and evaluation in an environment that is calibrated to typical overcast sky conditions and sunlight exposure present in Seattle.

Perkins and Will indicated that the Seattle Department of Construction and Inspection (SDCI) had requested information on the performance of a proposed glazing assembly and comparison to other glazing types proposed for use in a project under review in Downtown Seattle (5th Avenue & Virginia Street). In this comparison, issues of privacy, glare, and visible light transmission (VLT) have been identified as important considerations. Previous to the study in the mirror-box overcast simulator at UW, Perkins+Will performed an initial empirical study in Seattle under real-world daylight conditions with a single glass type using a simple mock up light box (mock-up box). Some information on the mock-up box test was provided to the City's design review process. However, the mock-up box did not provide the opportunity for controlled, repeatable tests of different glass assemblies in varying light conditions.

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T 206 616 6566

At the request of Perkins + Will, the IDL facilitated the testing of a physical model in our mirror-box sky model under simulated overcast daytime (typical median annual daylight illuminance at noon in Seattle – 1421 lux[1]) and night-time ambient (5 lux urban sky glow) sky conditions. The intent of this test was to document the physical appearance of a range of glazing assemblies under repeatable environmental conditions.

Perkins+Will expressed that they would like to use this physical model evaluation to extend the study to include: (1) seven glazing (glass) assemblies; (2) 50 lux of interior illumination (3) both daytime and nighttime conditions; (4) calibration to known, repeatable, controlled, and relevant illuminance levels; (5) scientifically verifiable means, methods, data. The physical model studies conducted by the IDL were facilitated to accomplish these goals, and were documented through the use of calibrated photography to capture comparable results. We provided these studies and their results to Perkins + Will to utilize in the ongoing permit review process for the subject project.

Absent a full scale mock-up on site, it is my opinion that a physical model tested in a controlled environment – such as the referenced study conducted in the mirror-box overcast simulator at the IDL -- is the best tool to capture the visual character and appearance of a proposed glass assembly. Viewing glass samples in isolation, absent the environmental conditions of the proposed application and including the effect of sky illuminance and a connected interior volume will not provide a meaningful or comparable approximation of its ultimate appearance when implemented in an exterior building application.

Sincerely,

Christopher Meek, AIA, IES
Associate Professor + Director

Integrated Design Lab
University of Washington Department of Architecture

[1] Robbins, Claude L.; *Daylighting Design and Analysis*, Daylight and Sunlight Availability Tables; 1986

WORKING WITH IDL AND SDCI

Following the laboratory and software modeling verifications, results and recommendations were reviewed in detail with SDCI staff, including review of methodology, findings, conclusions, and review of physical samples of alternatives.

A summary of the process and conclusions follows:

PURPOSE AND METHODOLOGY:

In response to the DRB's request to evaluate the proposed vision glass a two part study was conducted to compare visual performance characteristics of several glass alternatives. The focus of the study was the performance of the glass as viewed from the exterior of a simulated installation to determine how best privacy could be achieved with glass capable of meeting other performance requirements including Seattle Energy Code and acceptable Visible Light Transmittance.

The study builds on the previously conducted "T-Rex" empirical evaluation of a single glass type by establishing a controlled baseline of interior and exterior illumination levels, comparing six additional glass types, introducing night scenes and interior privacy shades to each glass type, and by quantifying performance per industry standards.

The objective of the study was to provide a calibrated basis for comparison between the appearance and performance of glass alternatives under appropriate exterior and interior lighting conditions for day and night, and to compare and these performance characteristics through computational and empirical means:

SOFTWARE VALIDATION

First, a comparison of the alternative glass types was conducted using state of the art industry glass evaluation software ("Optics 6" software is provided by Lawrence Berkeley National Labs, and reflects NFRC (National Fenestration Rating Council) lab-certified glass properties) to directly compare transmittance and reflectance performance characteristics based on material physical/optical characteristics per an international database of glazing and coating assemblies. The performance of each alternative was graphed to indicate three key characteristics correlated to transparency from exterior including light transmittance, reflectance, and reflectance as a function of angle of view.

LABORATORY VALIDATION

Second, a comparison of the alternative glass types was conducted at the Integrated Design Lab at the University of Washington. The study was performed within controlled laboratory conditions under the supervision of Prof. Chris Meek, a nationally renowned expert in daylighting, electric lighting, and building materials.

The "sky box" simulator at the Integrated Design Lab was used to evaluate alternatives with a simulated overcast sky dome and controlled exterior illuminance of 12,350 lux (1,147 fc) for exterior daylight and 5 lux (0.5 fc) for exterior night ambient light with a constant interior ambient electric light within the "T-Rex" box of 50 lux (5 fc). These illuminance values reflect median Seattle overcast daylight environmental conditions (at noon at the September equinox, and a typical urban night sky) and a typical interior residential illuminance when electric lights are on.

A high resolution digital camera was used to capture images at a fixed setting of ISO 200 with shutter speeds constant at 1/6 second for daytime and 8 seconds for nighttime.

GLASS TYPES COMPARED:

The study evaluated alternative glass types selected for performance characteristics including ability to meet Seattle Energy Code while exhibiting minimal exterior reflectance (to minimize glare potential), a midrange of darkness (to enhance privacy from the exterior), and a midrange of Visible Light Transmittance (to preserve interior daylight and view), and in the cool neutral range, ranging in color from grey to blue.

1. PPG Z75 (Glass reviewed at DRB REC 1)
2. Guardian AG50
3. Guardian AG43
4. Guardian SNX 51-23
5. Guardian Neutral 61
6. Guardian SNR 43
7. Guardian Super neutral 68

OBSERVATIONS:

The qualitative and quantitative findings of the two performance evaluation methods (digital and empirical simulation) are presented on the following pages. The glass alternatives exhibit a range of transparency and reflectance which is most perceptible during daylight conditions. During night time conditions, the visible differences in transparency between glass alternatives is less pronounced due to reduced contrast between interior and exterior. However, during nighttime conditions, privacy shades, in this case a 90% opacity interior woven fabric roller shade) demonstrably provide complete opacity.

It should be noted that the night time views do not take into account interior reflectance that would be experienced by an observer looking through a window from an interior space with the lights on – the recorded views represent the equivalent of standing on an exterior balcony. From an interior vantage point visibility would be significantly mitigated (reduced due to interior reflection) by the lighting levels within the observer's interior space. Although this phenomenon would be the predominant "real world" condition it was not simulated in order to isolate, demonstrate, and record the performance of the subject glass alternatives.

CONCLUSIONS:

A range of performance characteristics was observed including a wide range of daytime transparencies and a virtually imperceptible range of night time transparencies. However, privacy shades demonstrated the ability to create complete opacity.

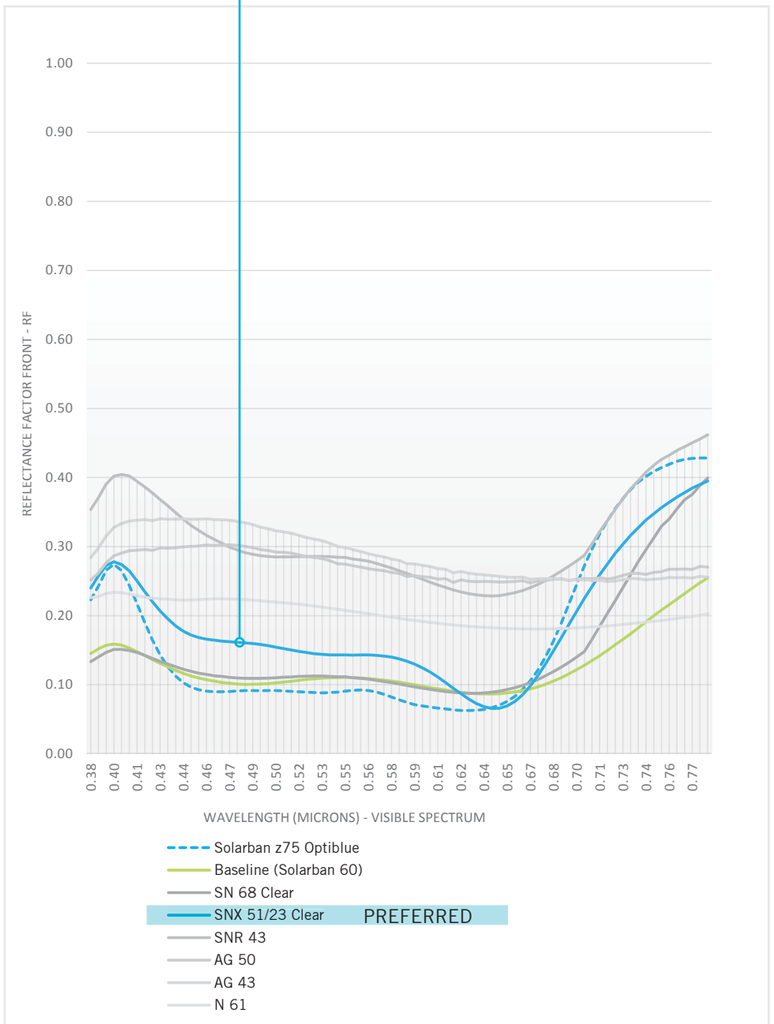
"Guardian SNX 51/23 exhibited desirable performance with respect to visible light transmittance and reflectance, and is lighter in color than Z75; therefore Guardian SNX 51/23 is the preferred and recommended glass type for all sides of the western volume."

9.C GLASS VERIFICATION / PREFERRED GLASS COMPARISON /

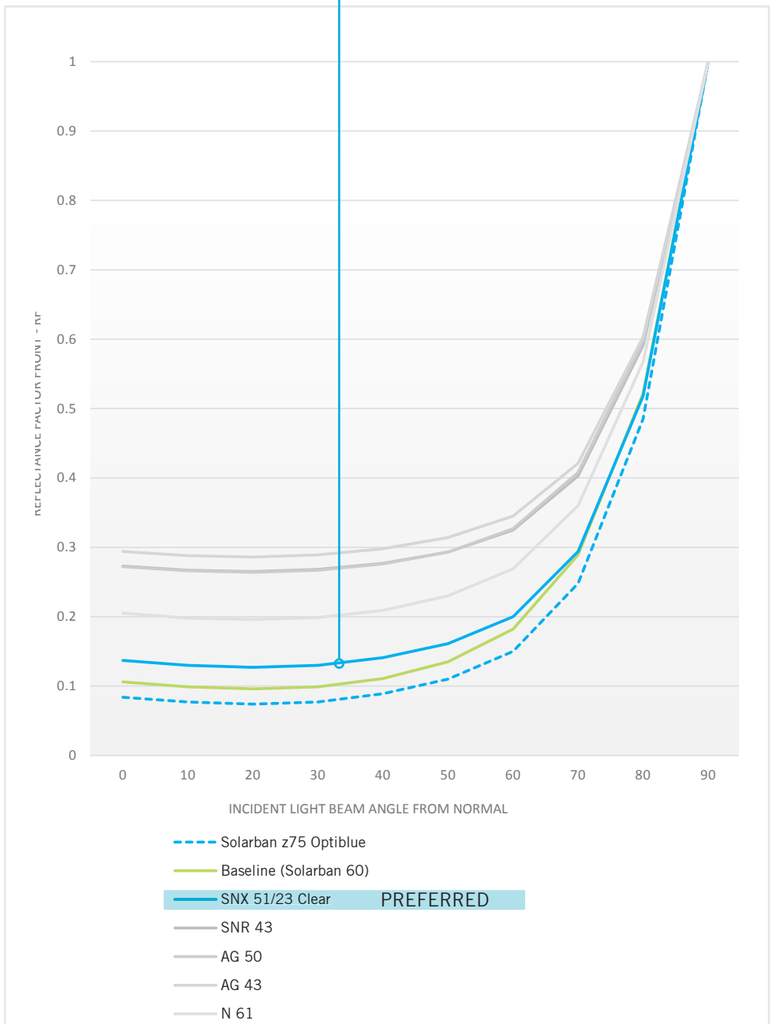
	Z75 (REC1 EAST & WEST)	SNX51/23 (RECOMMENDED WEST MASS)	SNR43 (ALTERNATE)
DAYLIGHT NO SHADE			
DAYLIGHT W/ SHADE			
NIGHTLIGHT NO SHADE			
NIGHT LIGHT W/ SHADE			
VISIBLE LIGHT TRANSMITTANCE	48%	51%	43%
EXTERIOR REFLECTANCE	9%	14%	28%
EXTERIOR APPEARANCE	blue/gray (dark)	neutral/blue (light)	silver/blue (light)

Glass performance data is reported per manufacturer's published data. Photographic observations performed at the Integrated Design Lab at the University of Washington under controlled lighting levels. Software analysis performed with Laurence Berkley Labs "Optics 6".

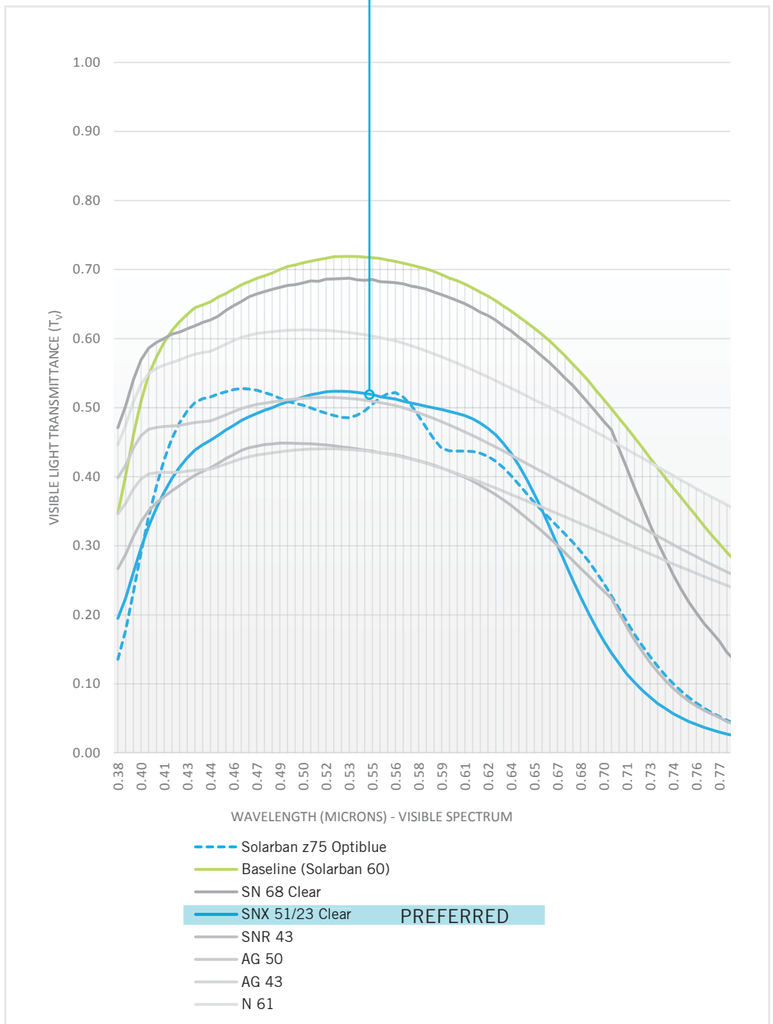
The proposed glass for the western volume is low reflectance.



The proposed glass for the western volume is less transparent at oblique viewing angles.



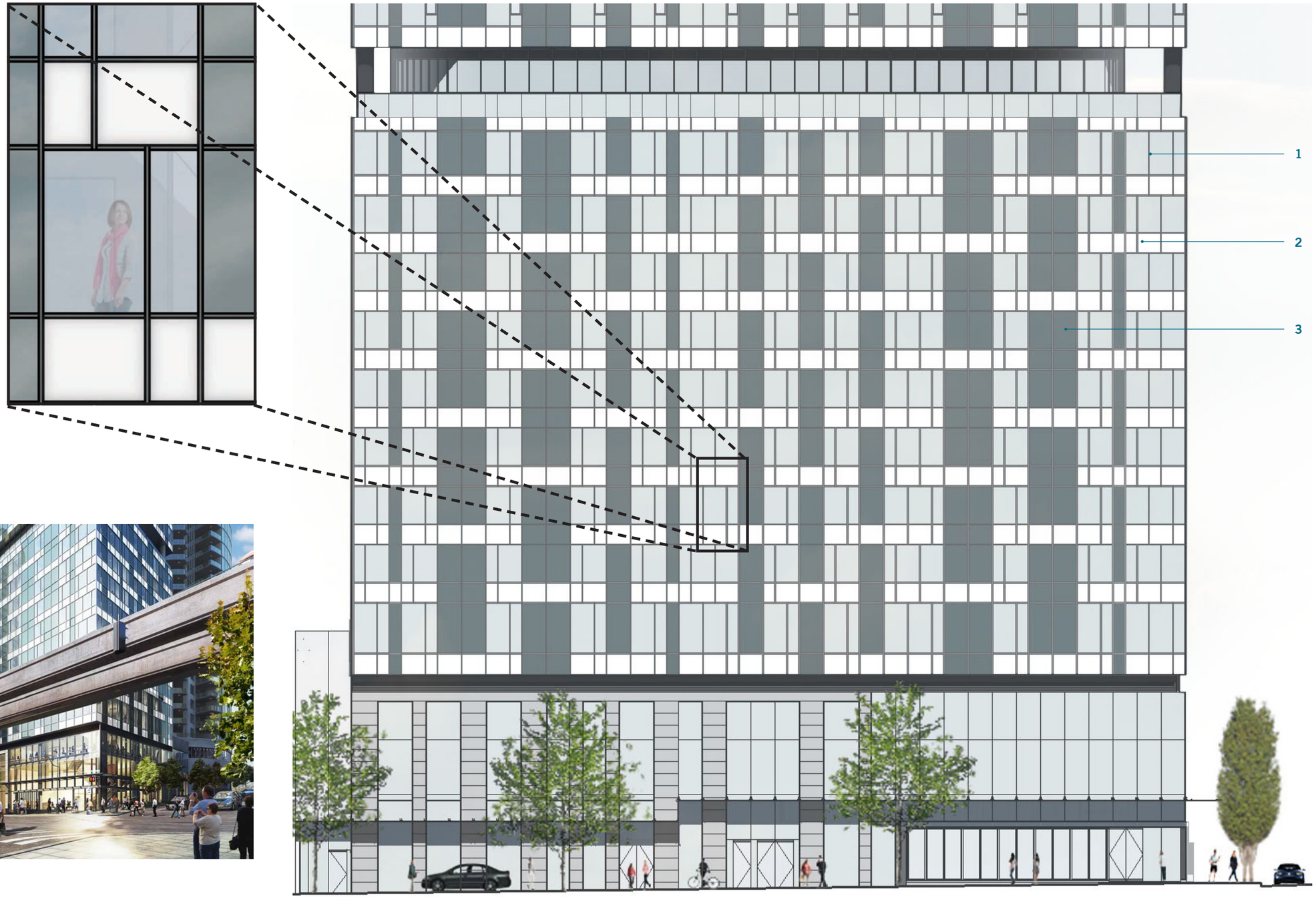
The proposed glass for the western volume balances the need for light transmittance with the desire for less exterior transparency.



10.A PODIUM SCALE AND DIFFERENTIATION / RECOMMENDATION MEETING 1 /

East Elevation Hotel Levels 3 - 11

1 Vision glass
2 Vision-matched spandrel glass
3 Colored spandrel glass



1 Vision glass
2 Spandrel glass, bypass zone
3 Spandrel glass, non-vision verticals

East Elevation Hotel Levels 3 - 11

10.A PODIUM SCALE AND DIFFERENTIATION / RECOMMENDATION MEETING 1 /

North Elevation Hotel Levels 3 - 11

1 Vision glass
2 Vision-matched spandrel glass
3 Colored spandrel glass

1 Vision glass
2 Spandrel glass, bypass zone
3 Spandrel glass, non-vision verticals

North Elevation Hotel Levels 3 - 11

SECTION 05.
ADDITIONAL ALTERNATIVES

REC 1

A range of different material alternatives were evaluated in response to Board guidance. Through numerous reviews with SDCI staff the design team reduced the number of alternatives to six potential alternatives.

The preferred alternative incorporates more opaque area, less vision glass and is matte finish with depth and a diffuse treatment of daylight.

REC 2 ALTERNATIVES

A

PREFERRED

Etched IGU

D

Light metal panel

B

Neutral frit

E

Mid-tone ribbed panel

C

Warm frit

F

Dark metal panel

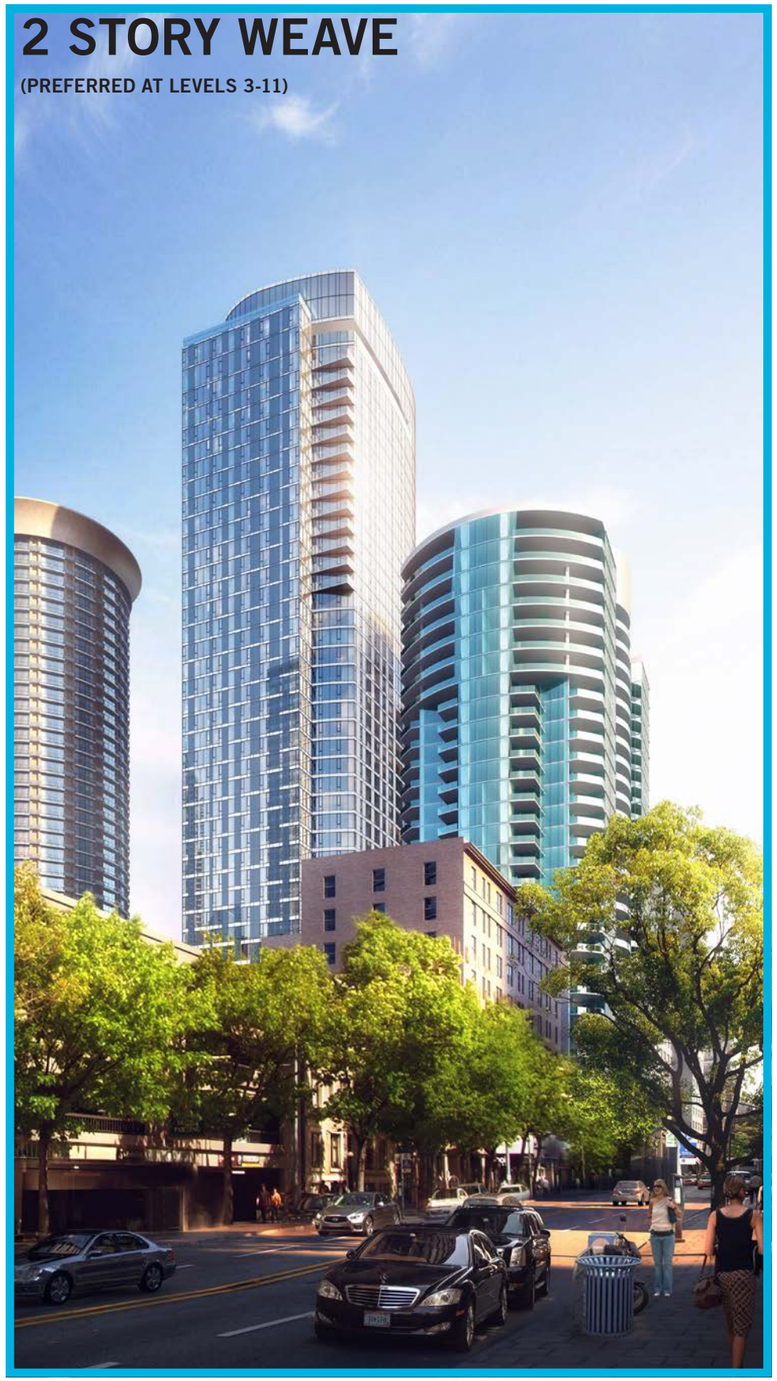

REC 1


VERTICAL BANDS


HORIZONTAL BANDS

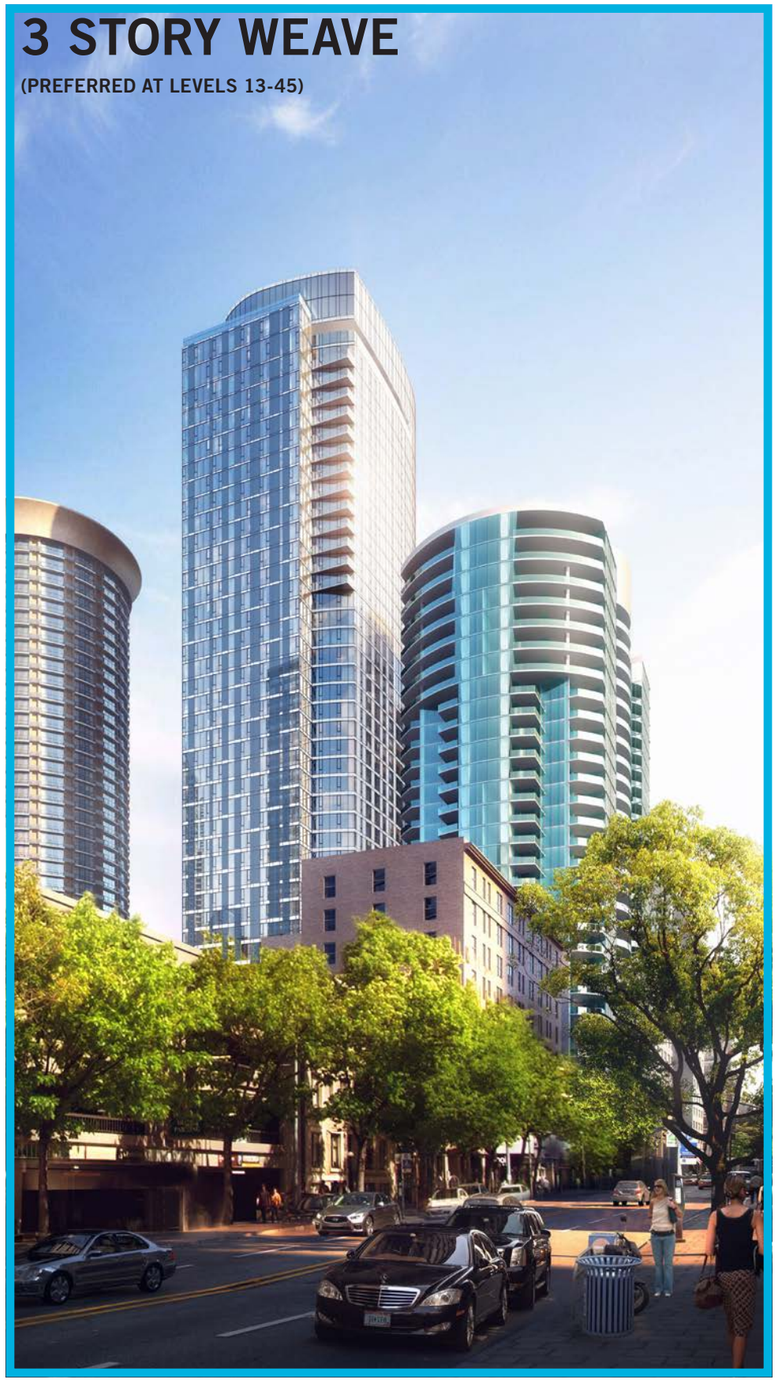
2 STORY WEAVE

(PREFERRED AT LEVELS 3-11)



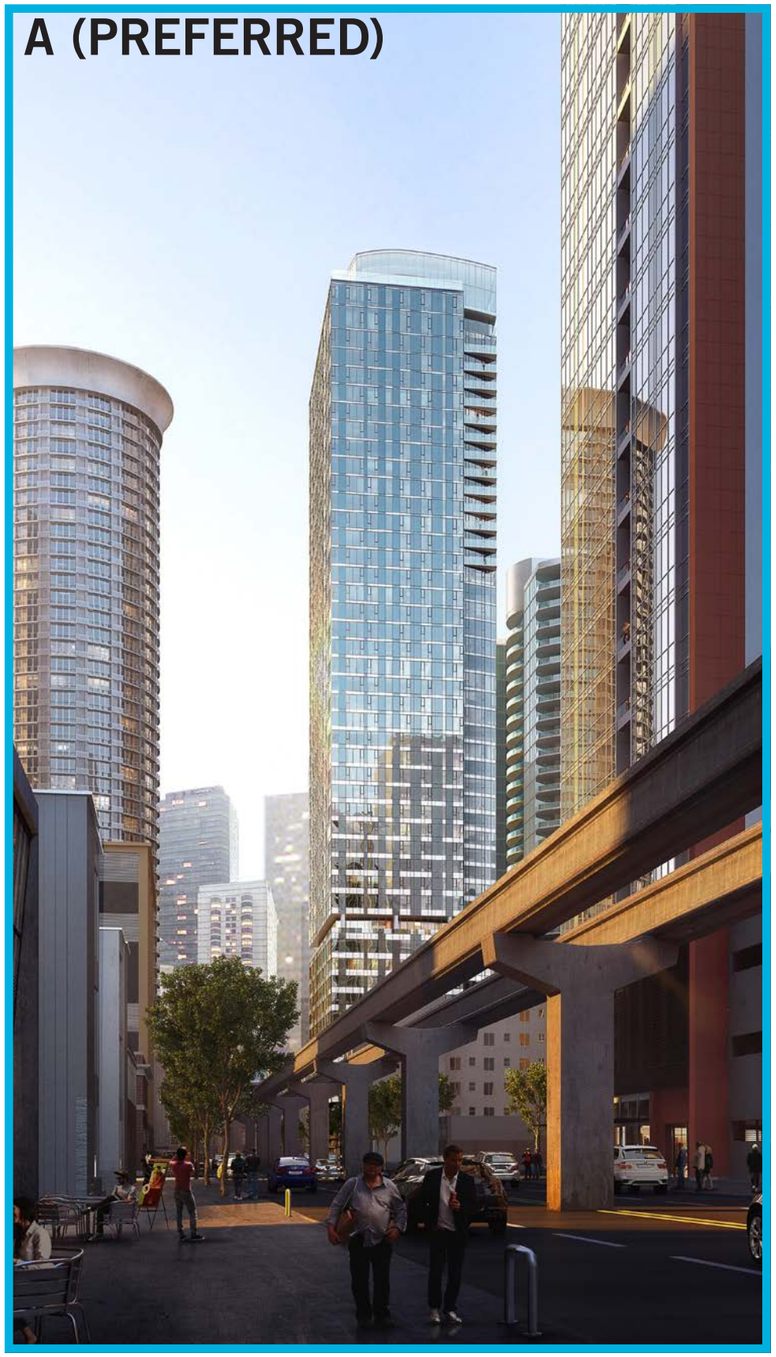
3 STORY WEAVE

(PREFERRED AT LEVELS 13-45)



4 STORY WEAVE

A (PREFERRED)



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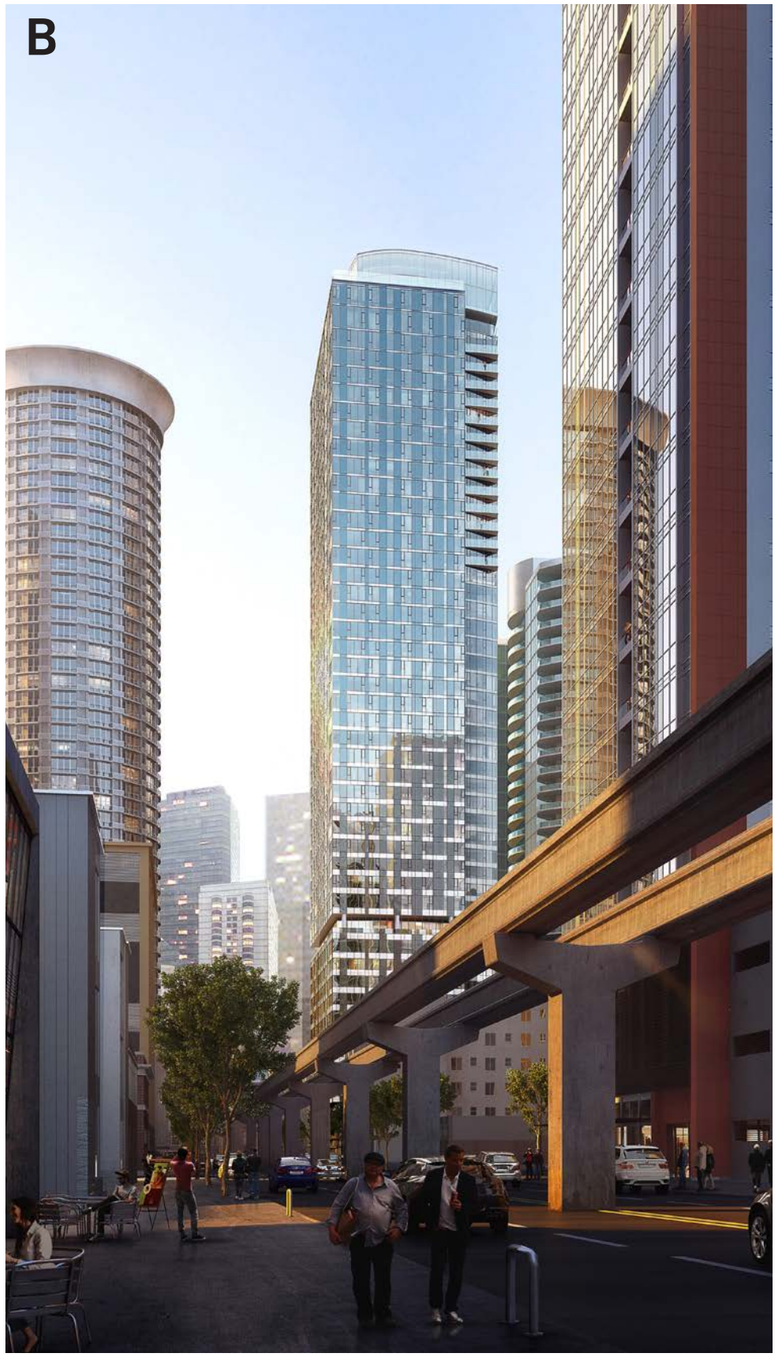

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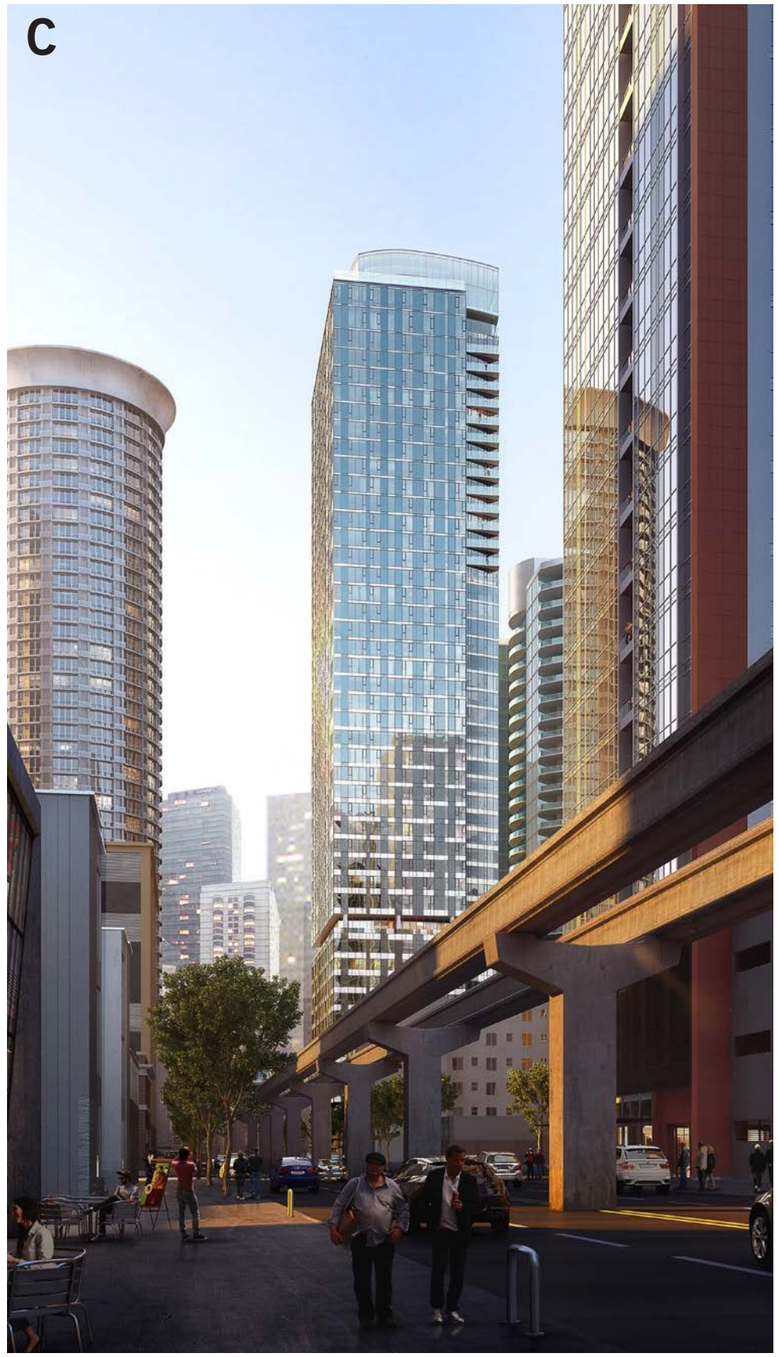

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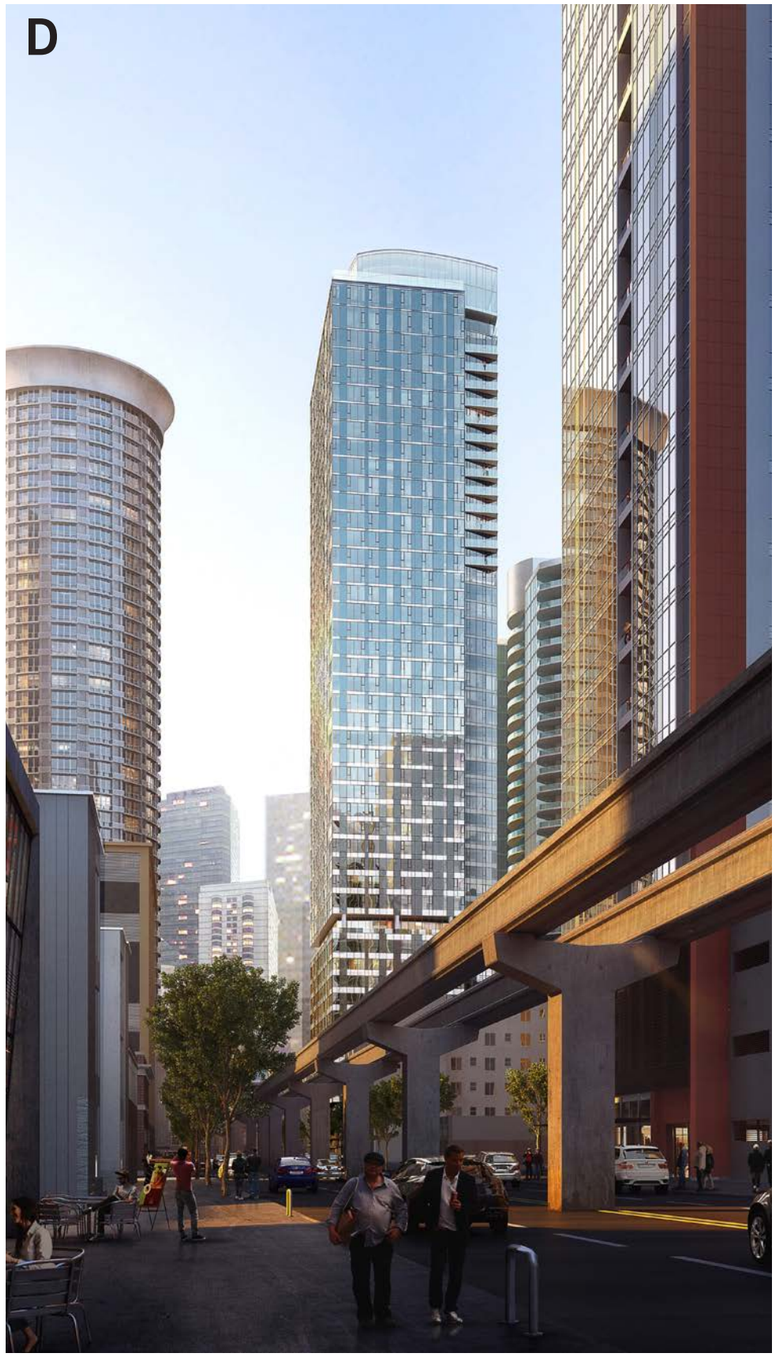

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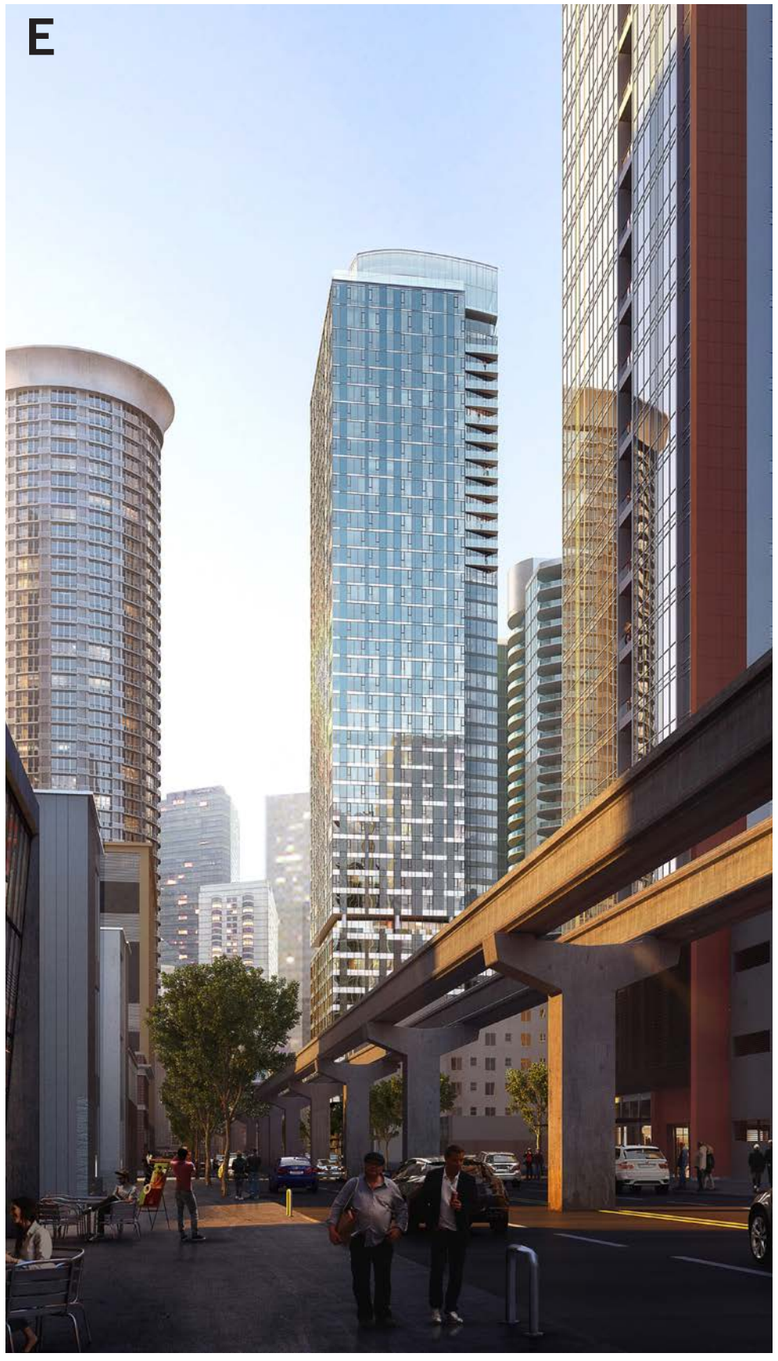

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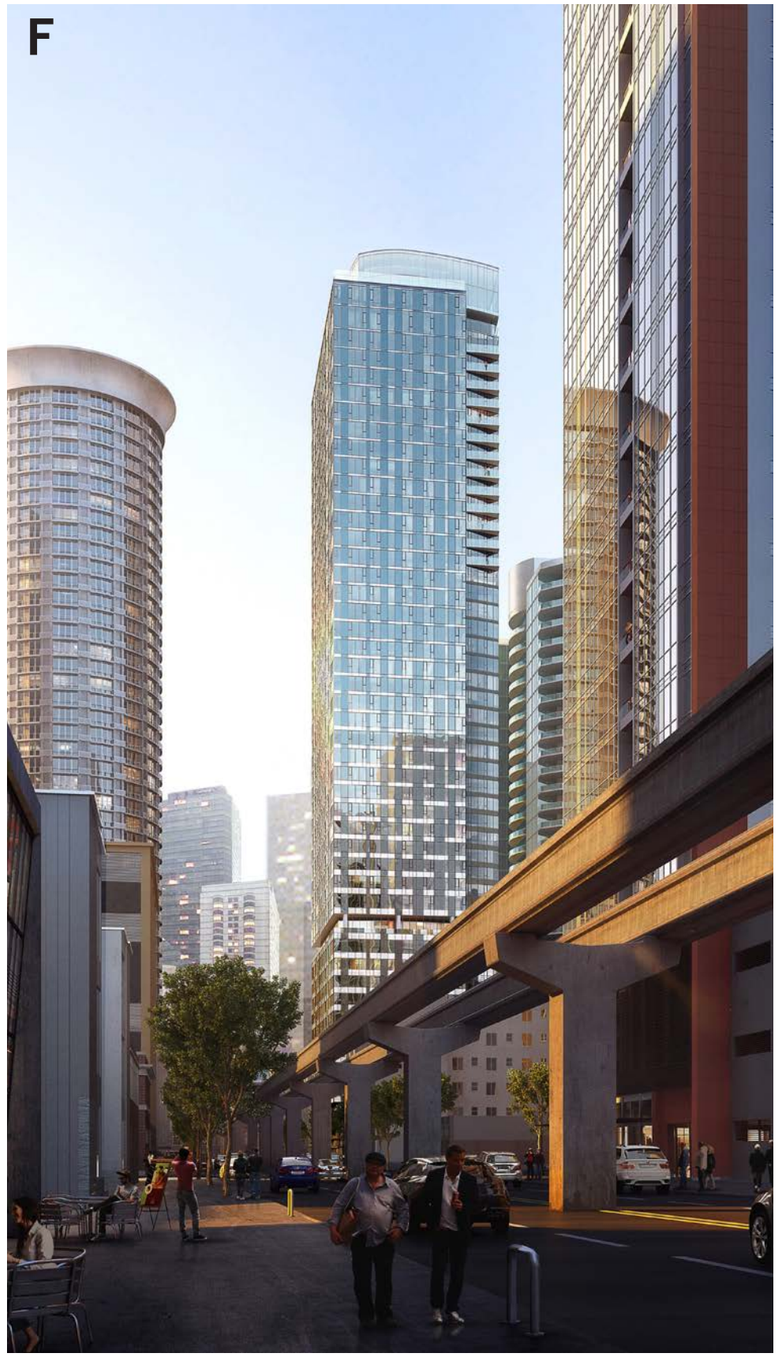



A (PREFERRED)

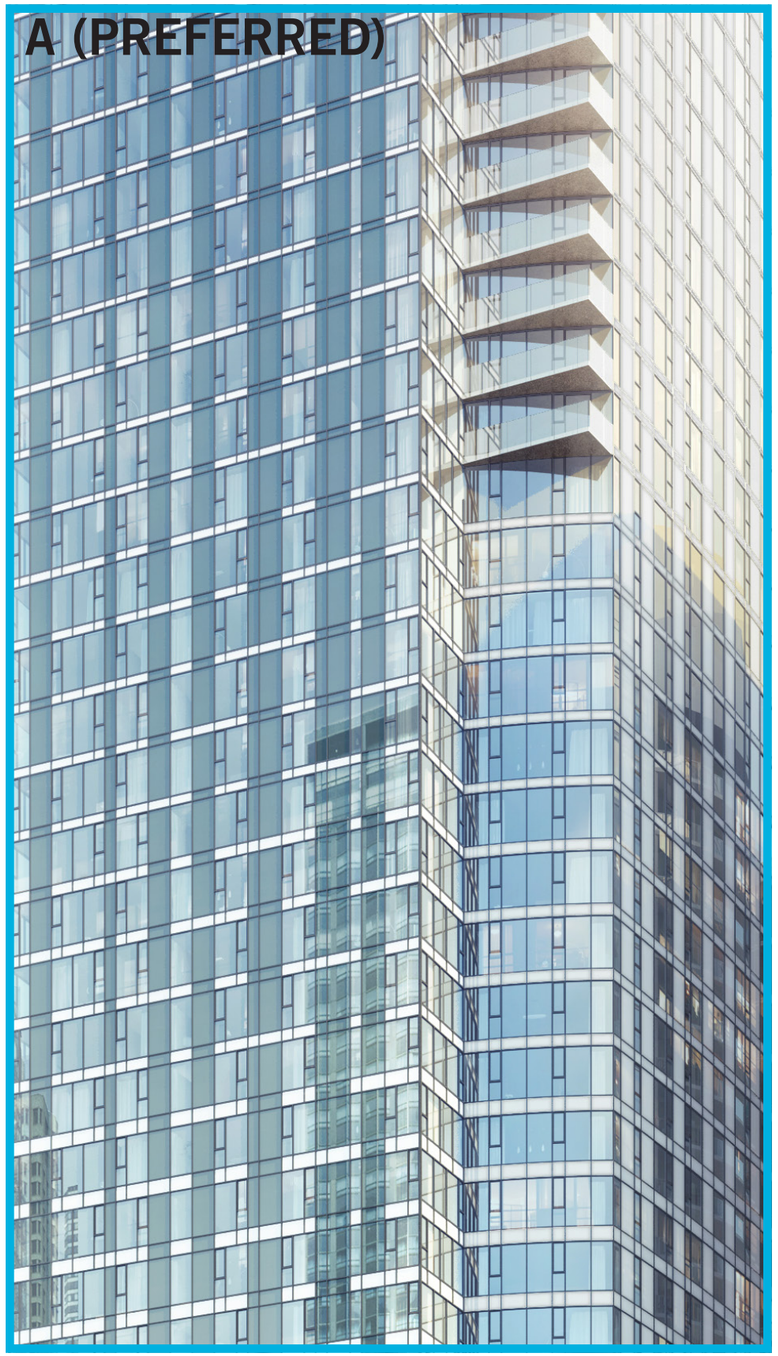

B


C


D


E


F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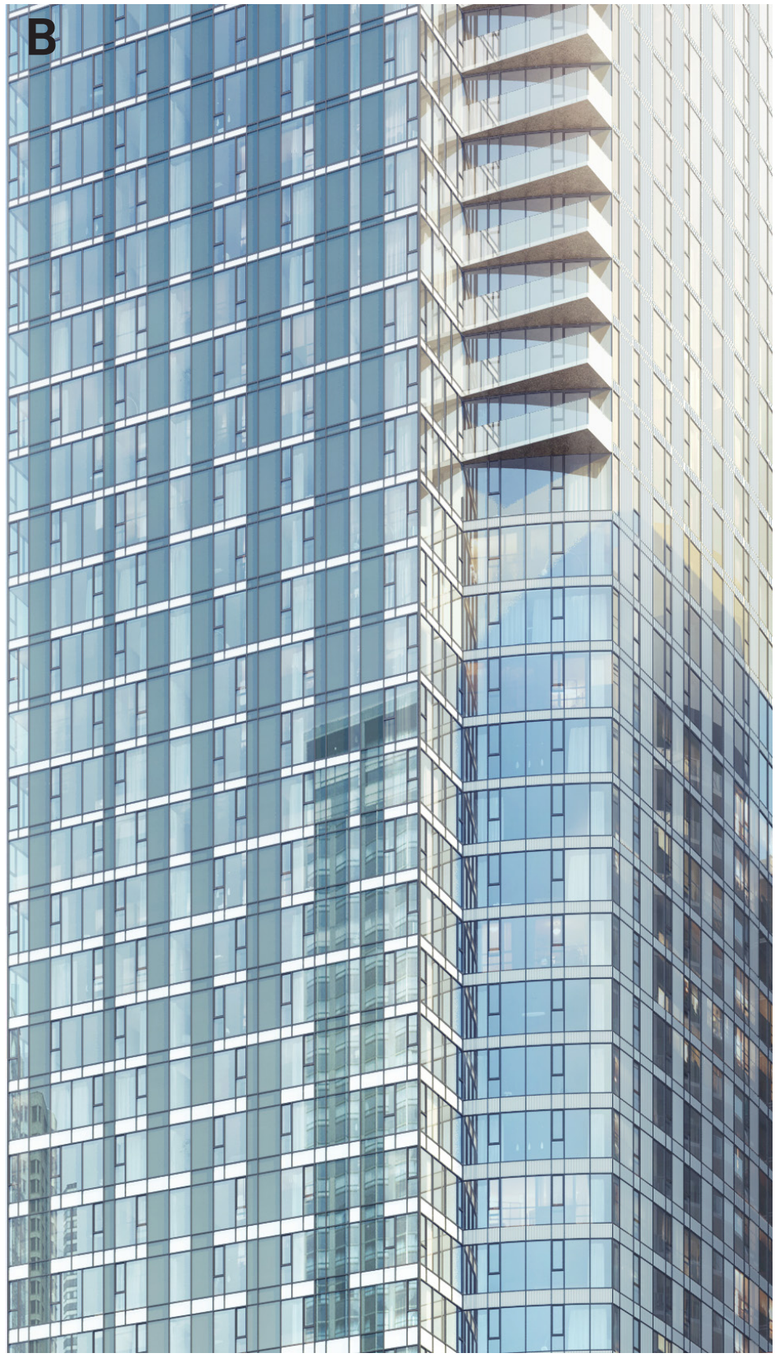
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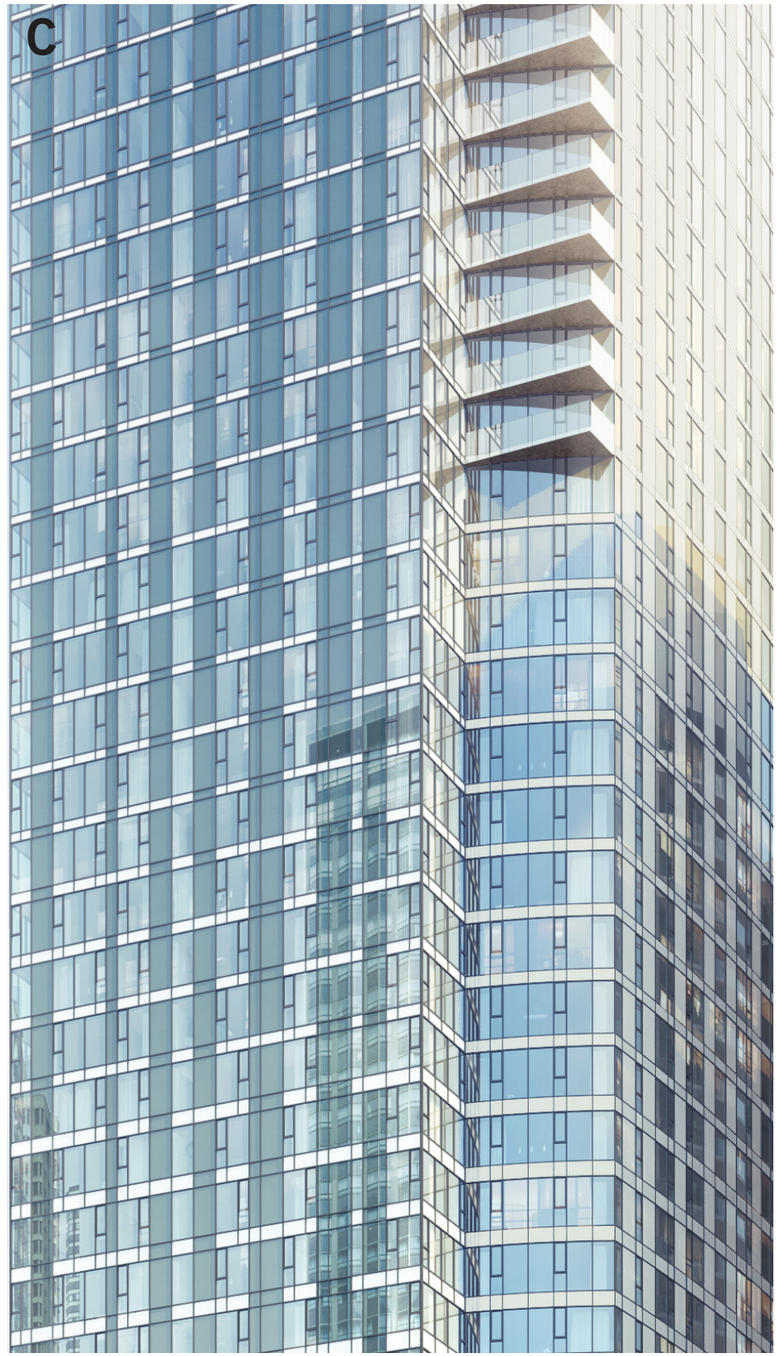
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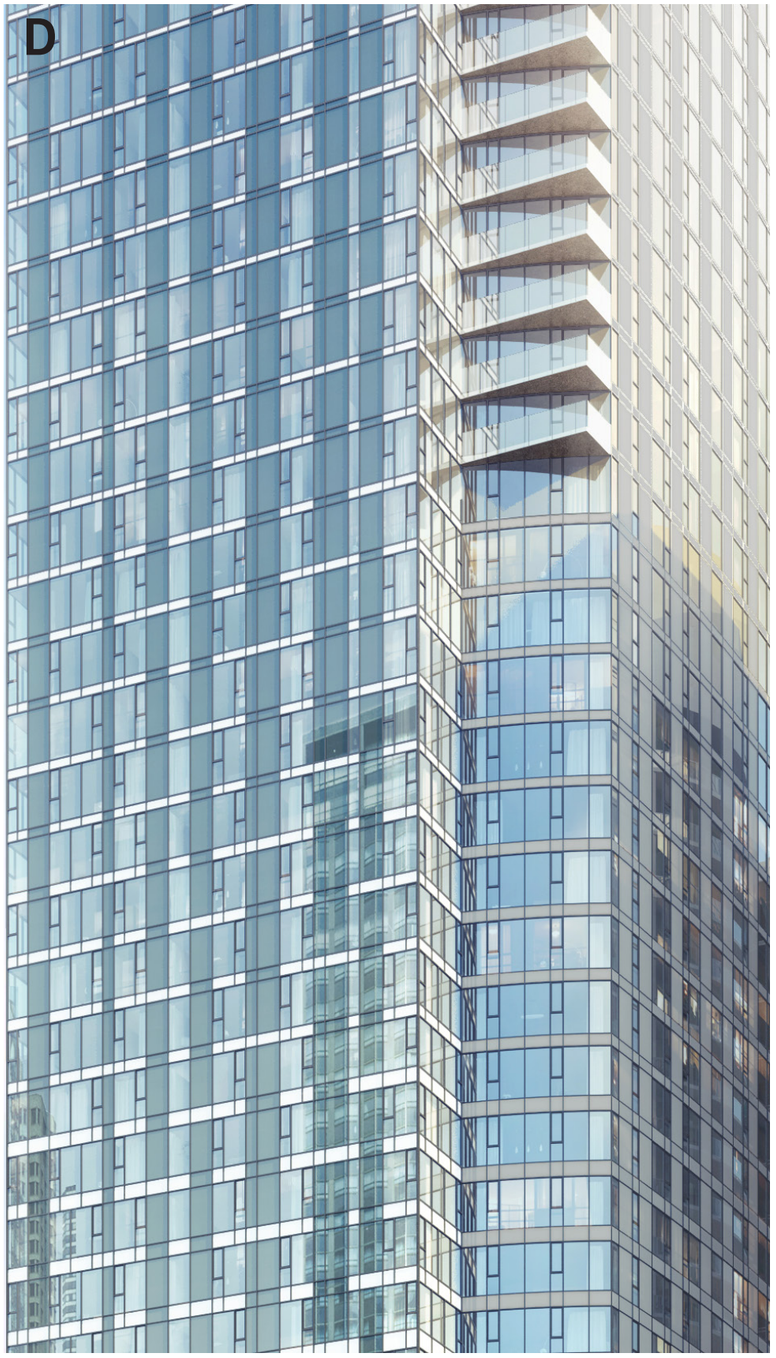

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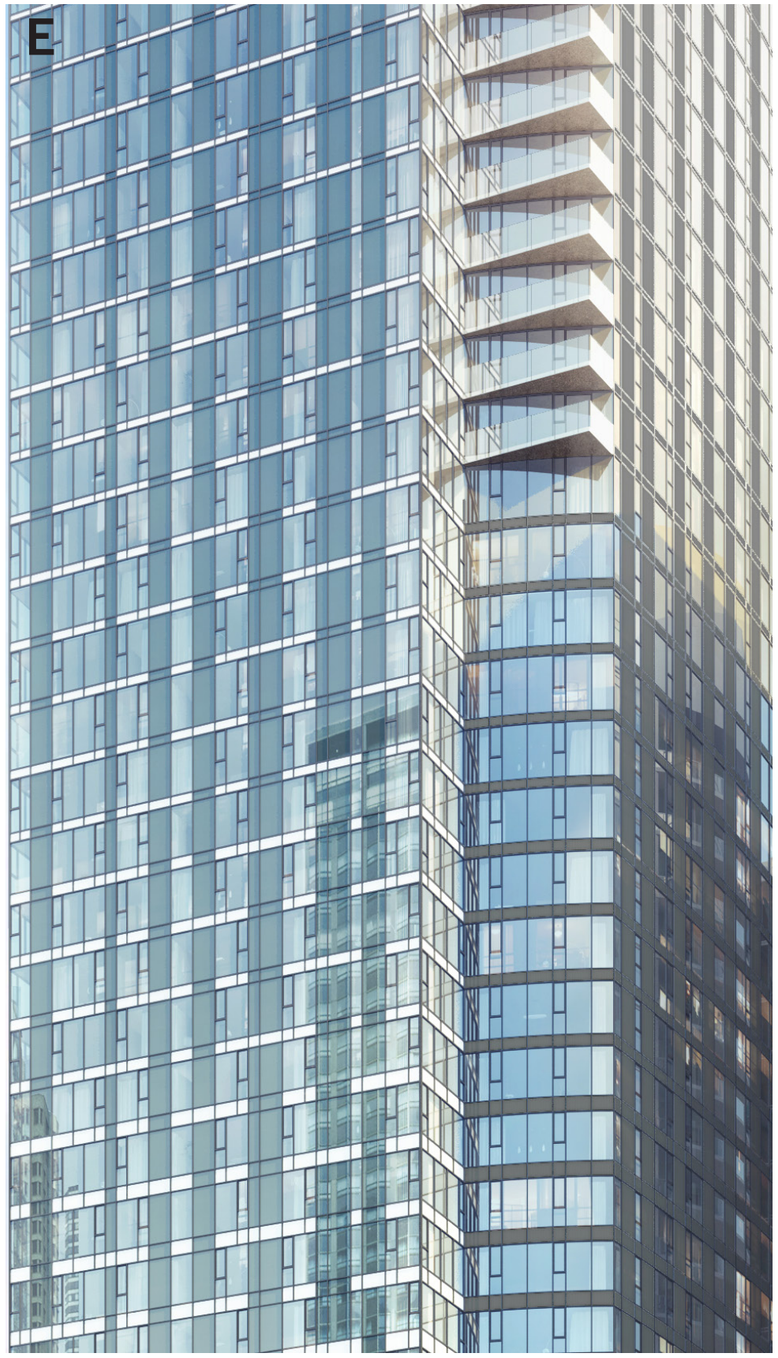

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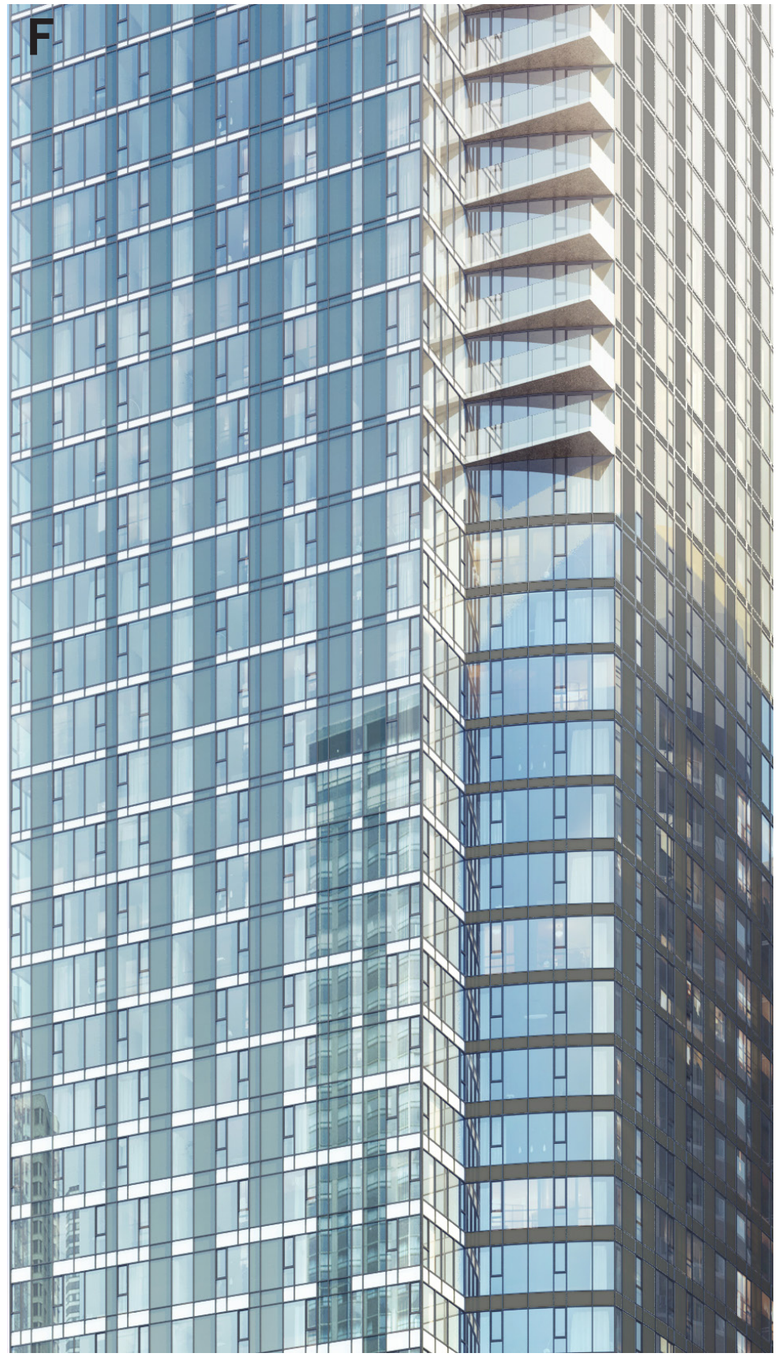

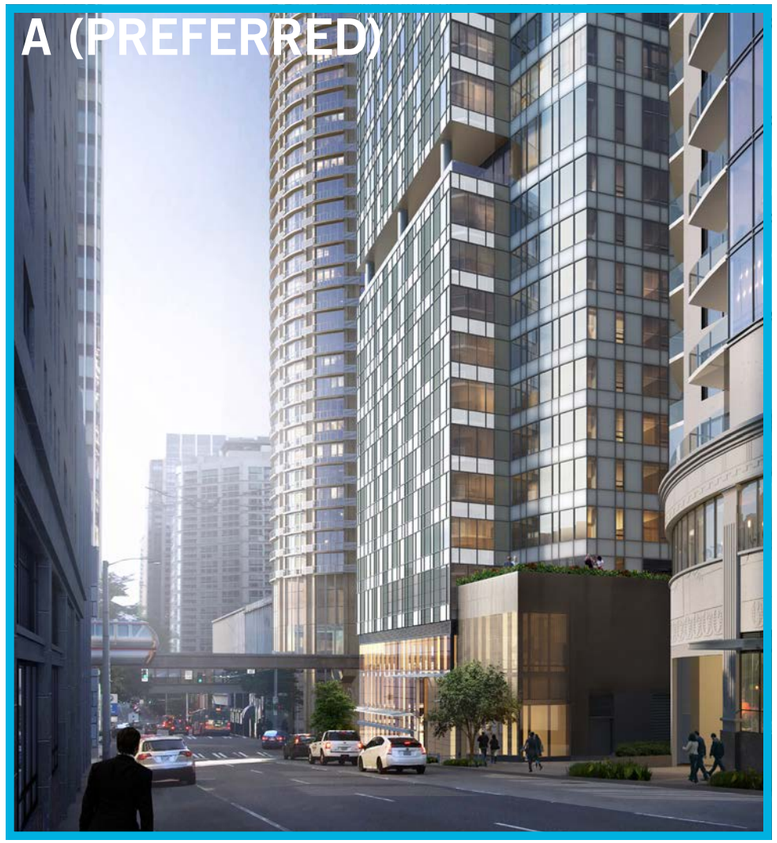
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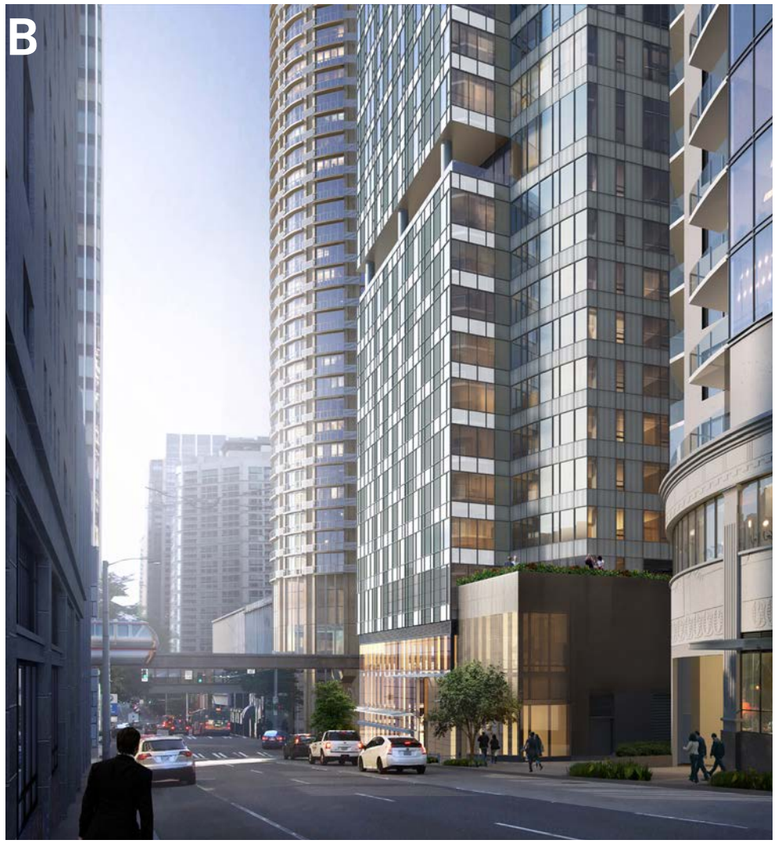
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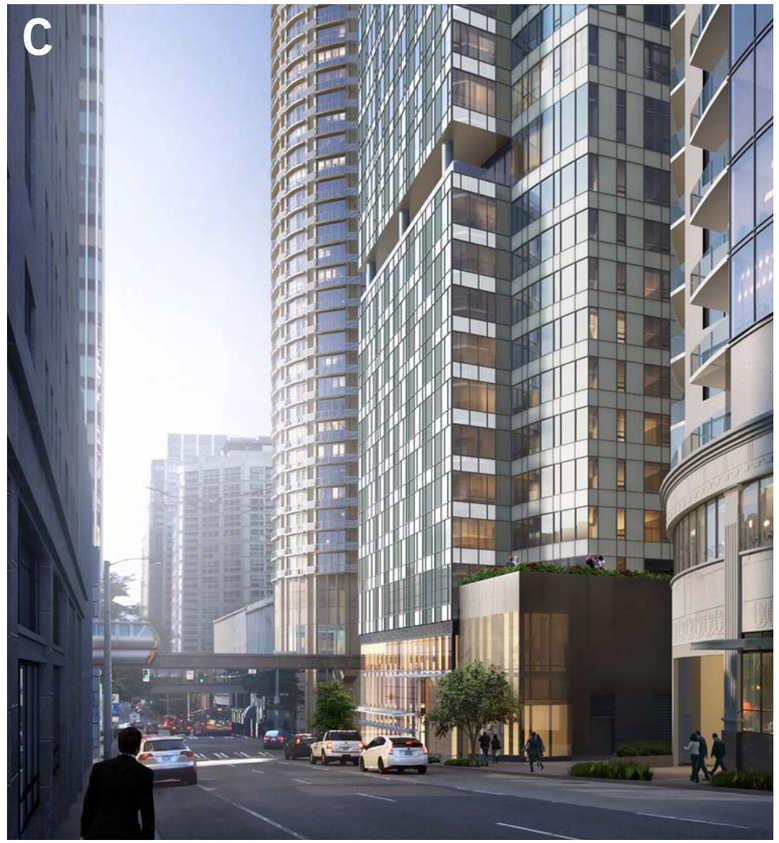
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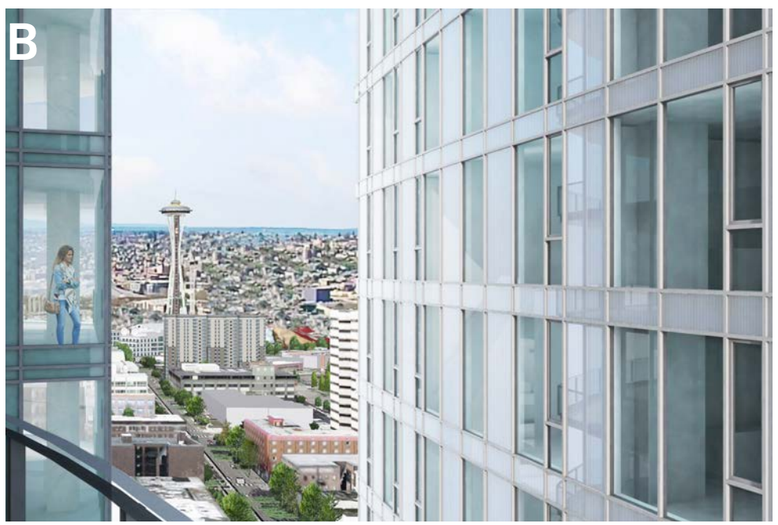
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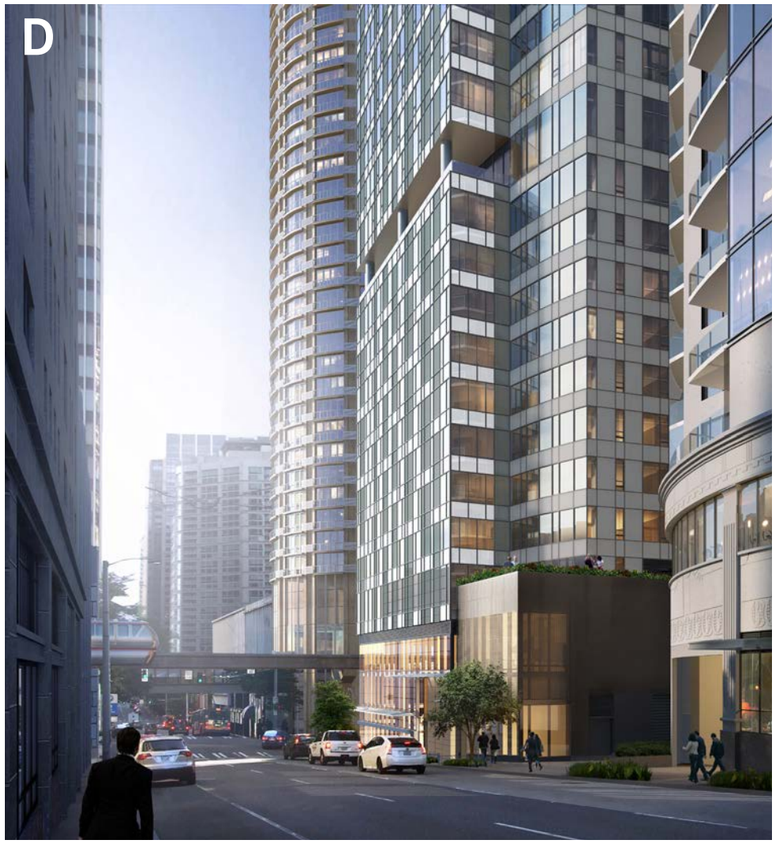
C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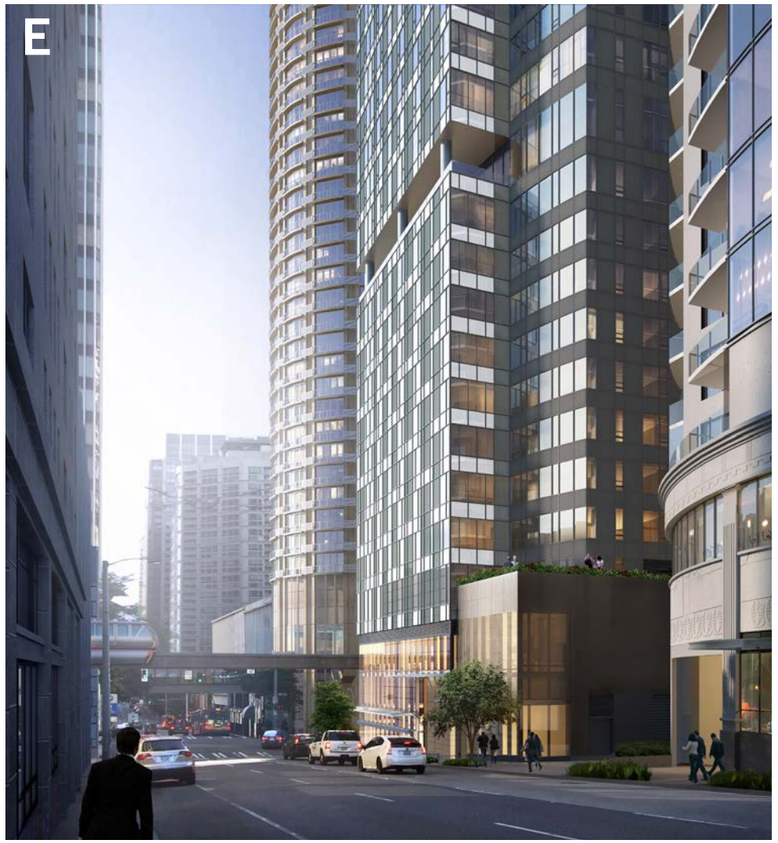
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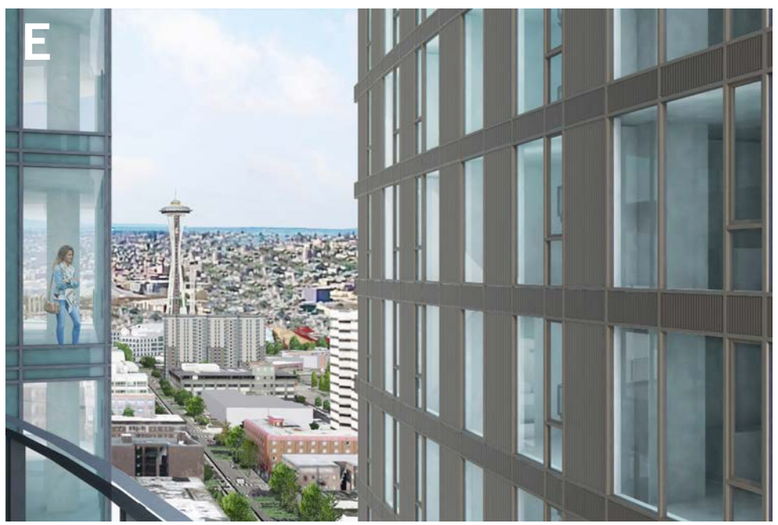
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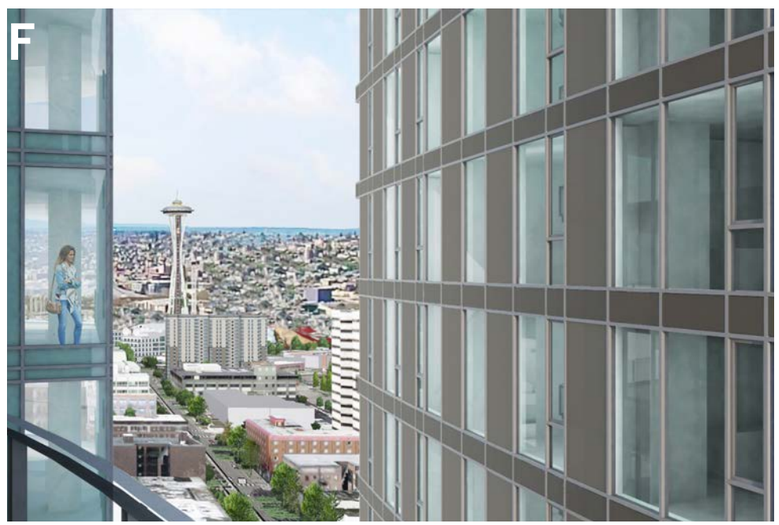

F

9.B/10.B MULTIPLE PERSPECTIVE STUDIES / ALTERNATE B - NEUTRAL FRIT /

See pages 94-95 for elevations and samples

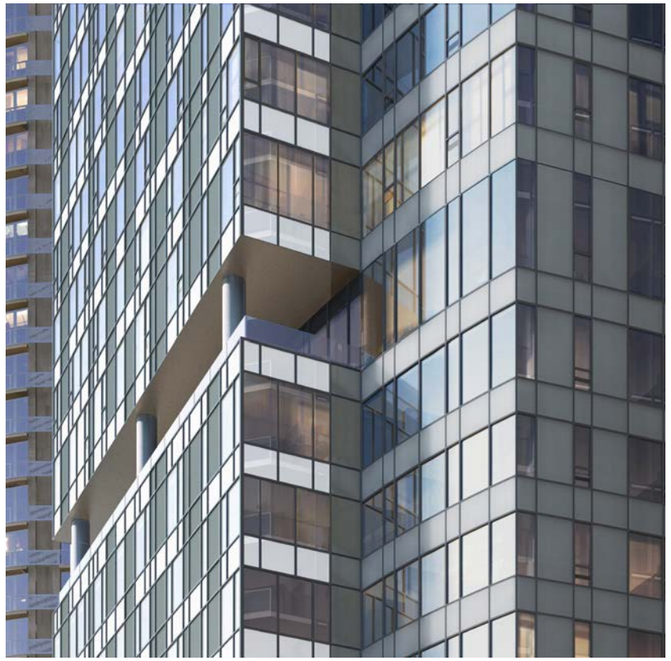
5th and Blanchard

Enlarged North Facade

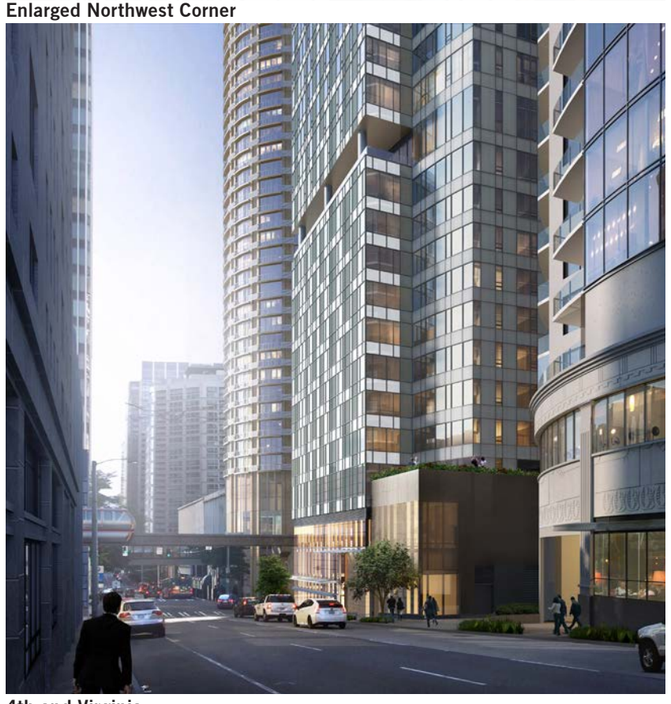
5th and Virginia

4th and Lenora

See pages 94-95 for elevations and samples



Enlarged Northwest Corner



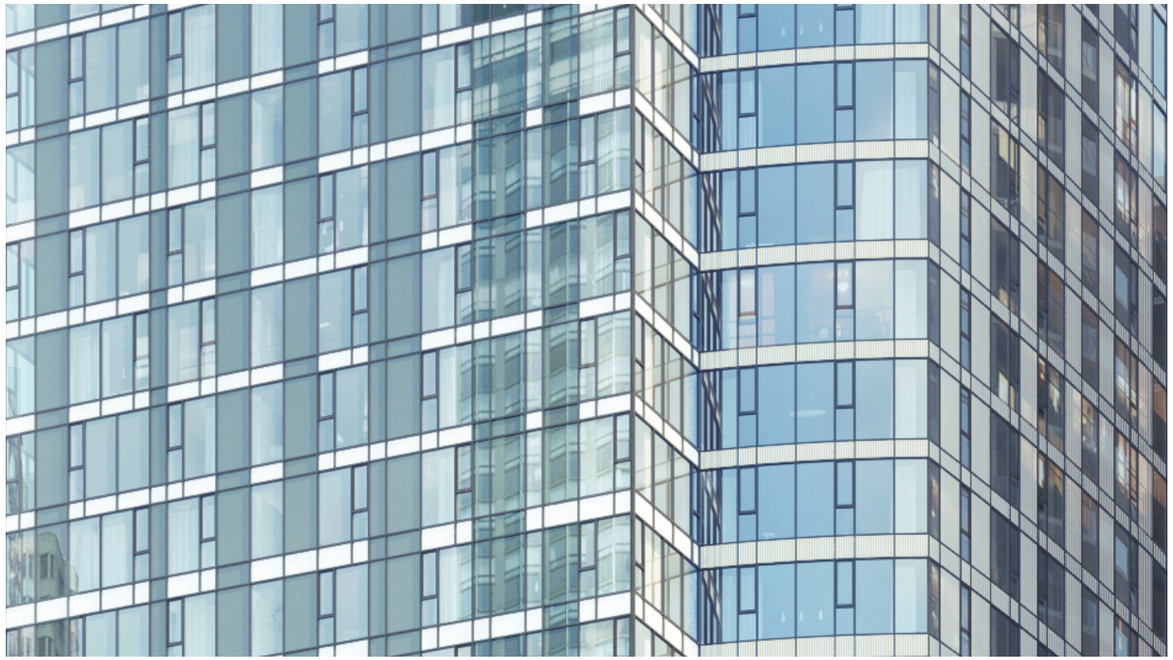
4th and Virginia

View from Escala Balcony

9.B/10.B MULTIPLE PERSPECTIVE STUDIES / ALTERNATE C - WARM FRIT /

See pages 96-97 for elevations and samples

5th and Blanchard

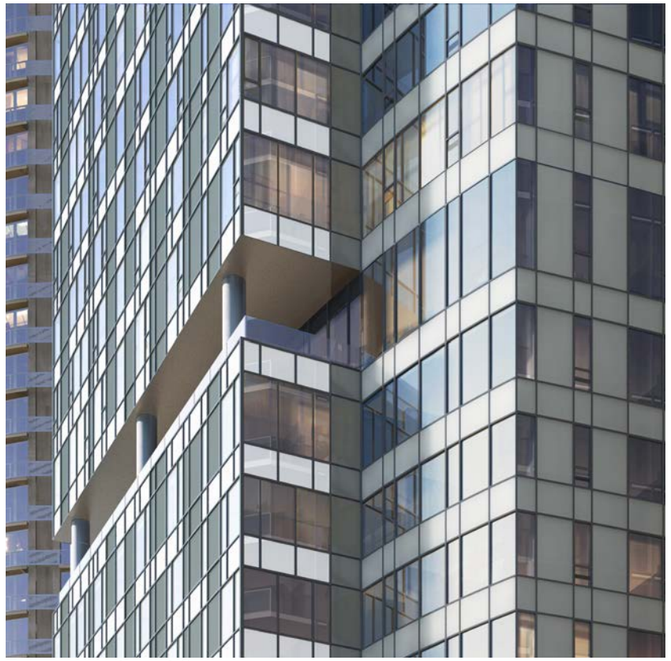


Enlarged North Facade

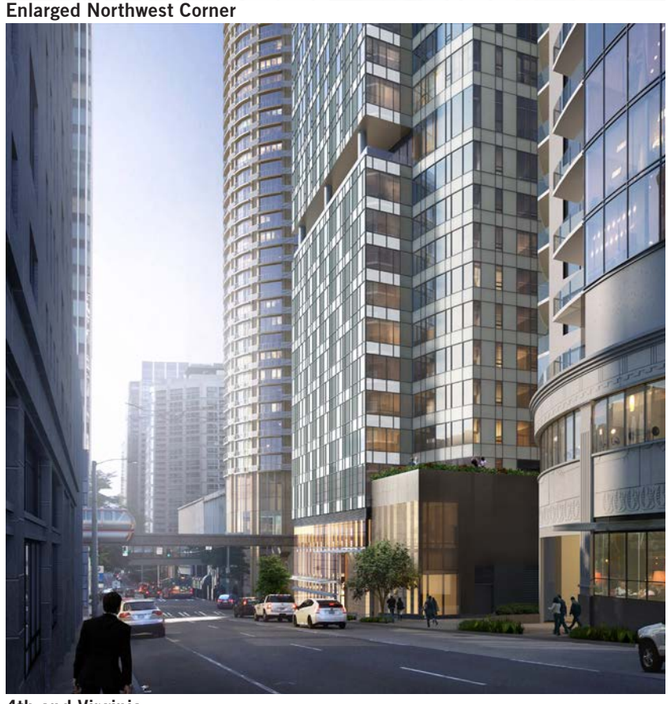
5th and Virginia

4th and Lenora

See pages 96-97 for elevations and samples



Enlarged Northwest Corner



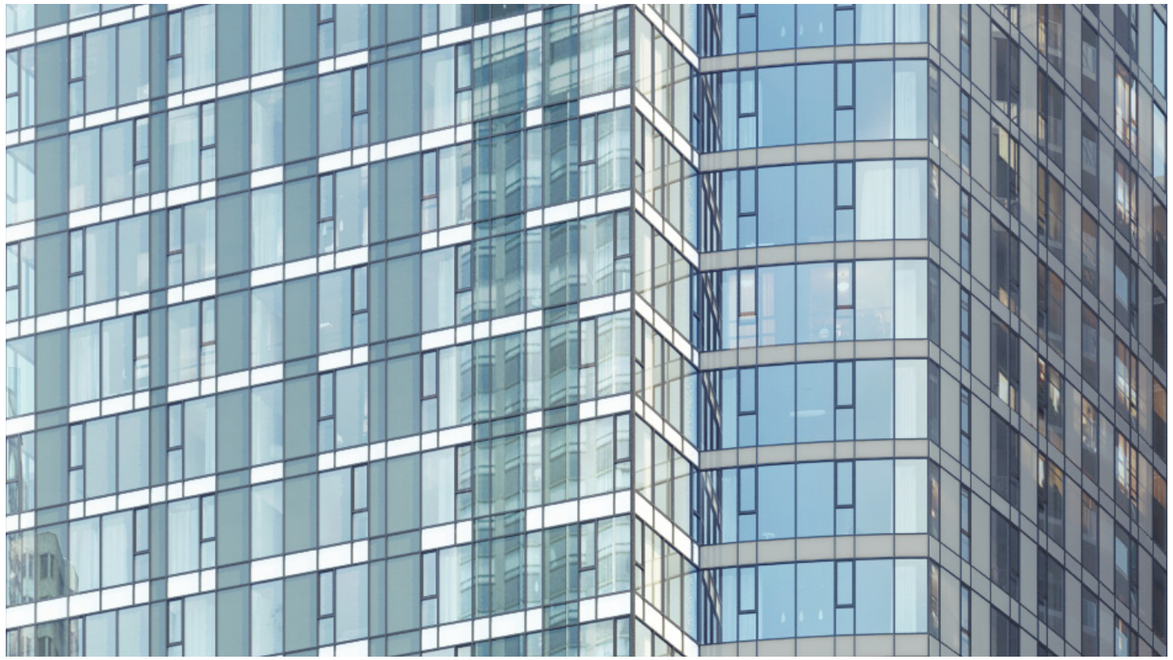
4th and Virginia

View from Escala Balcony

9.B/10.B MULTIPLE PERSPECTIVE STUDIES / ALTERNATE D - LIGHT METAL PANEL /

See pages 98-99 for elevations and samples

5th and Blanchard

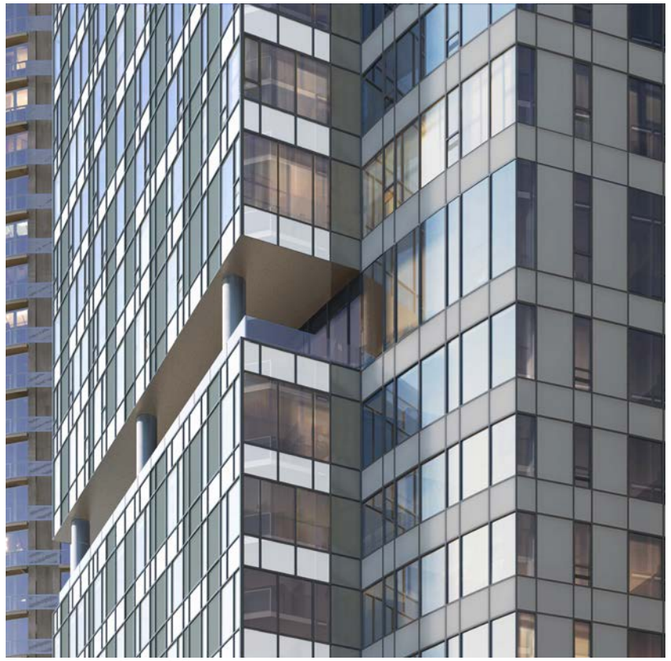


Enlarged North Facade

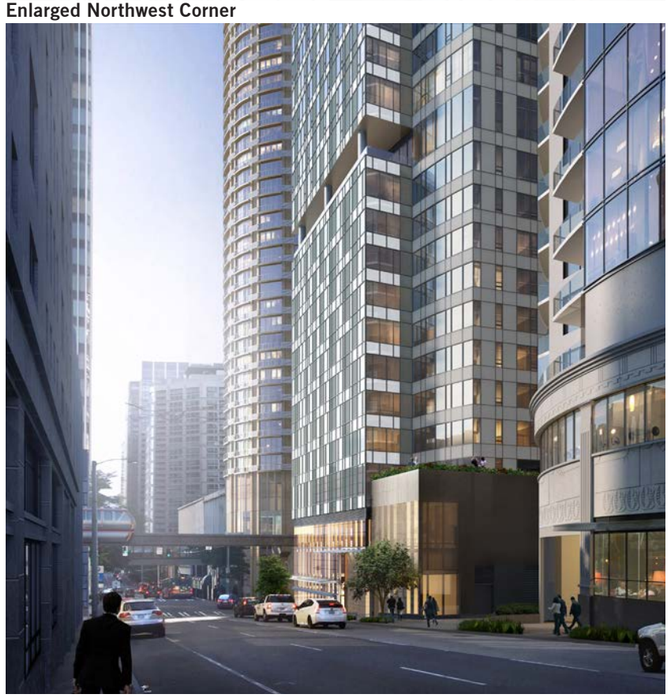
5th and Virginia

4th and Lenora

See pages 98-99 for elevations and samples



Enlarged Northwest Corner



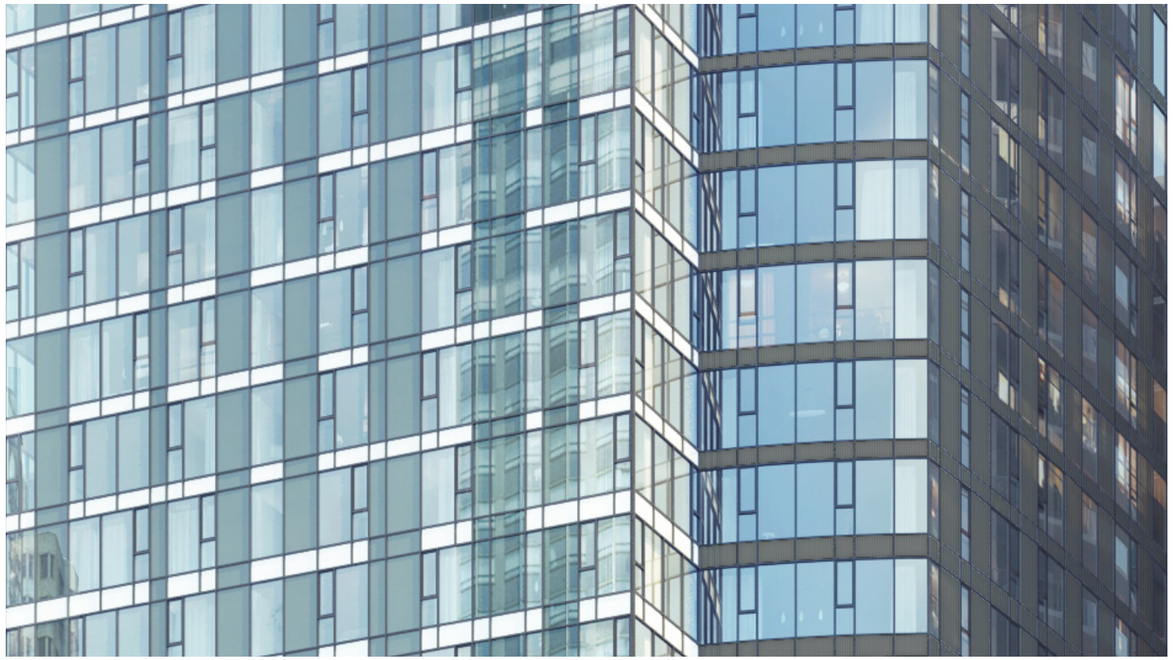
4th and Virginia

View from Escala Balcony

9.B/10.B MULTIPLE PERSPECTIVE STUDIES / ALTERNATE E - MID-TONE RIBBED METAL PANEL /

See pages 100-101 for elevations and samples

5th and Blanchard

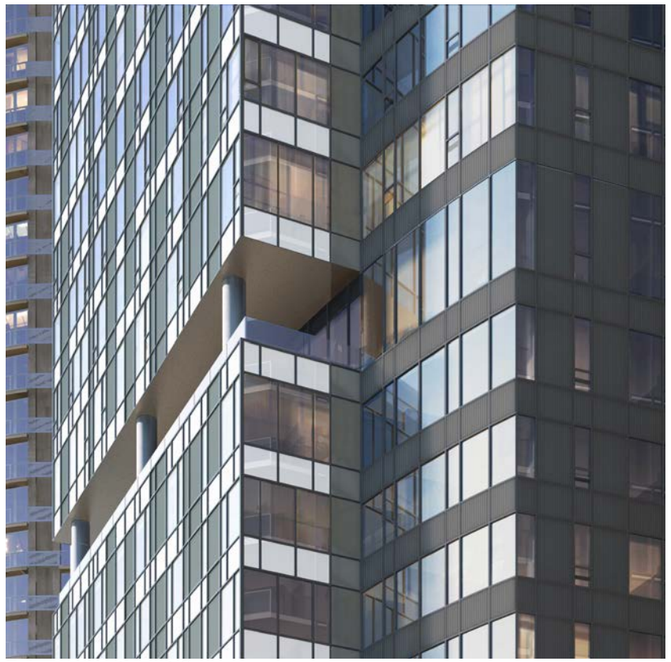


Enlarged North Facade

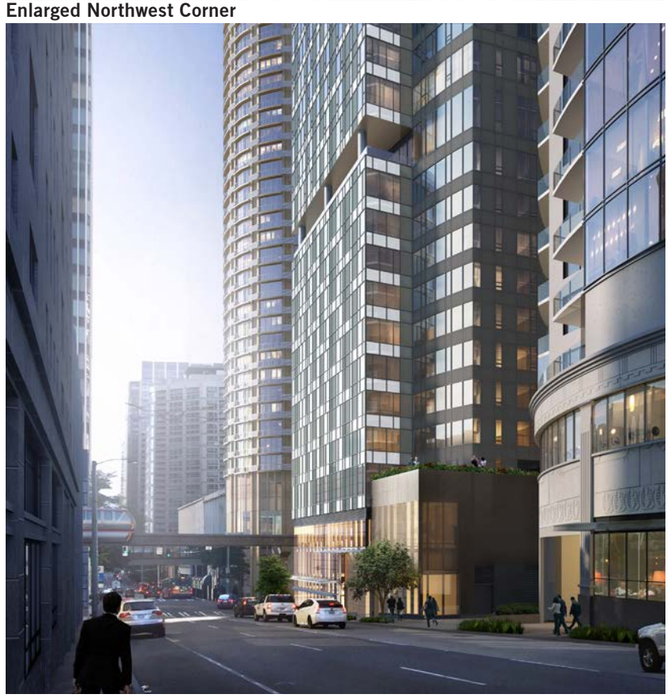
5th and Virginia

4th and Lenora

See pages 100-101 for elevations and samples



Enlarged Northwest Corner



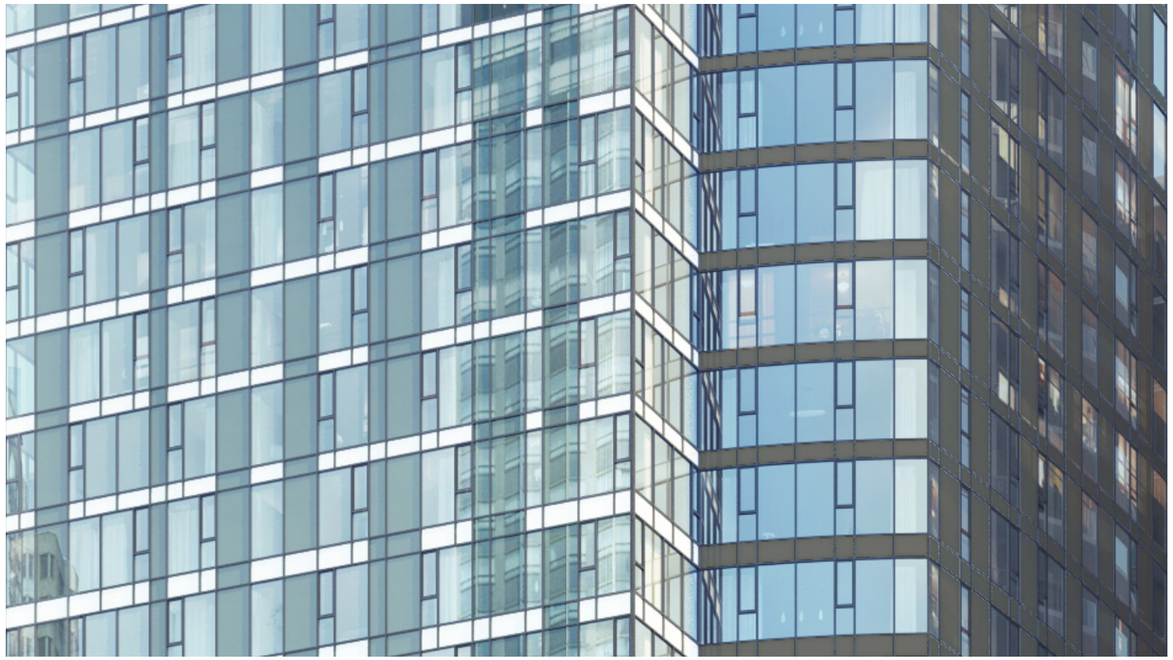
4th and Virginia

View from Escala Balcony

9.B/10.B MULTIPLE PERSPECTIVE STUDIES / ALTERNATE F - DARK METAL PANEL /

See pages 102-103 for elevations and samples

5th and Blanchard

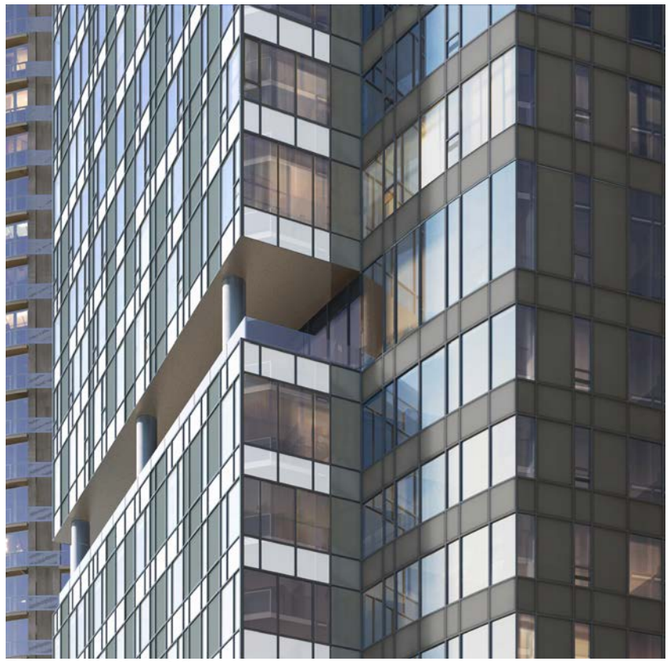


Enlarged North Facade

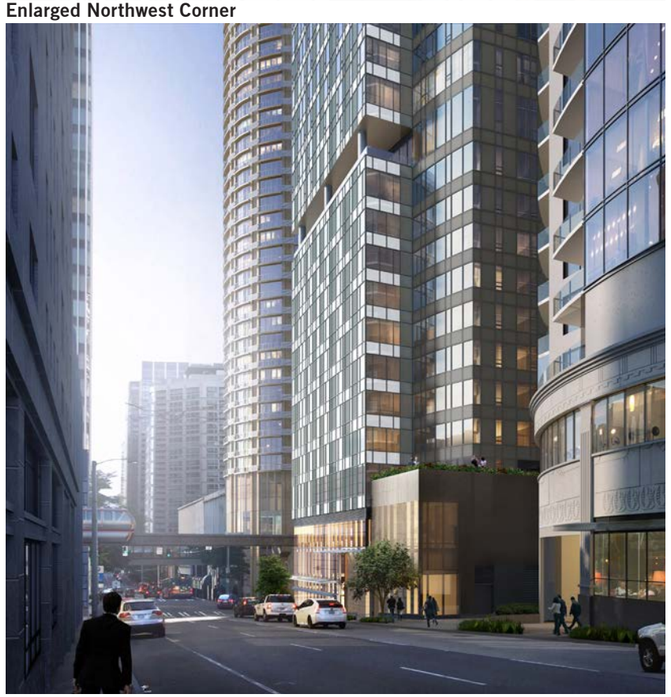
5th and Virginia

4th and Lenora

See pages 102-103 for elevations and samples



Enlarged Northwest Corner



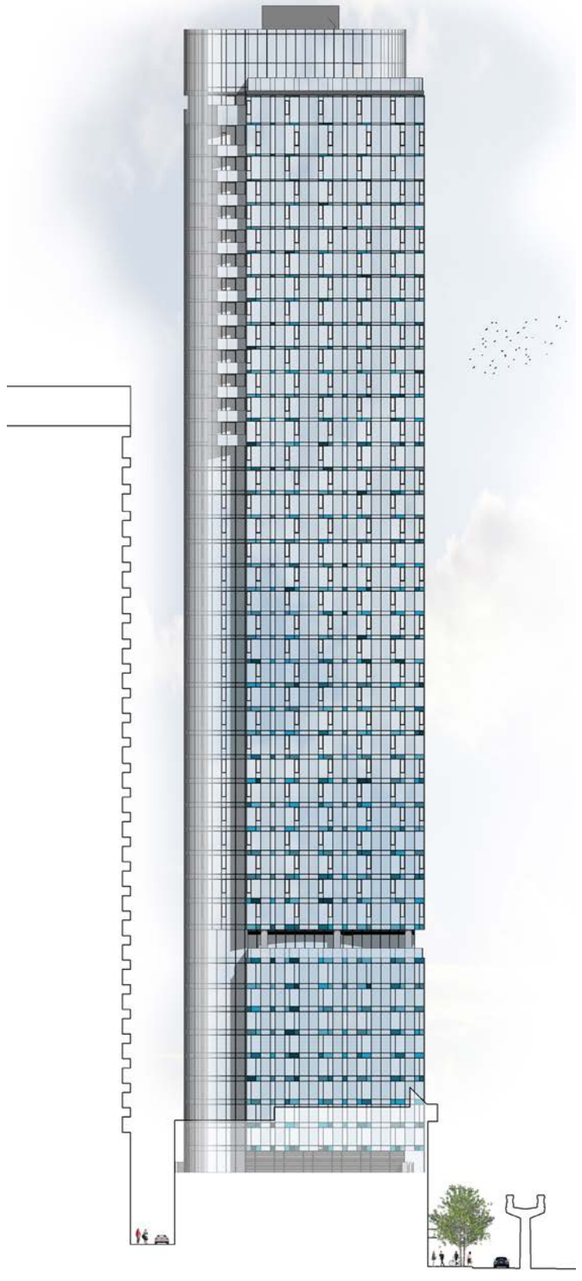
4th and Virginia

View from Escala Balcony

SECTION 06.
ADDITIONAL INFORMATION

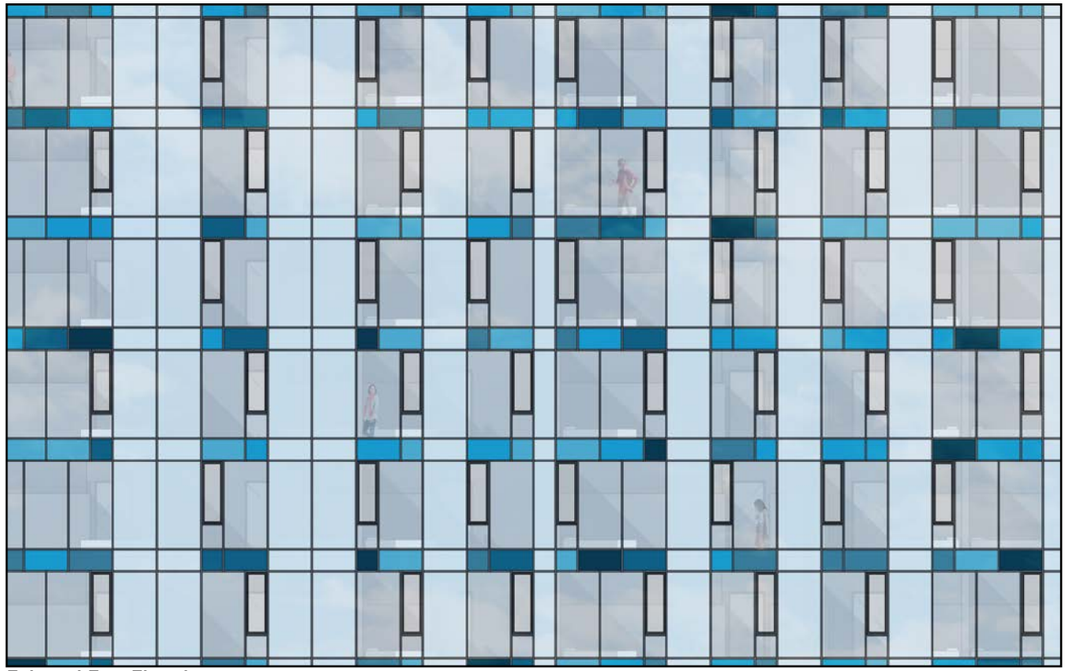
North Elevation

East Elevation



South Elevation

West Elevation

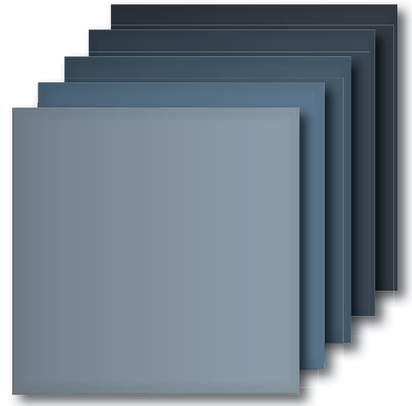


Enlarged East Elevation

Enlarged West Elevation

Enlarged East Elevation Window Wall Modules

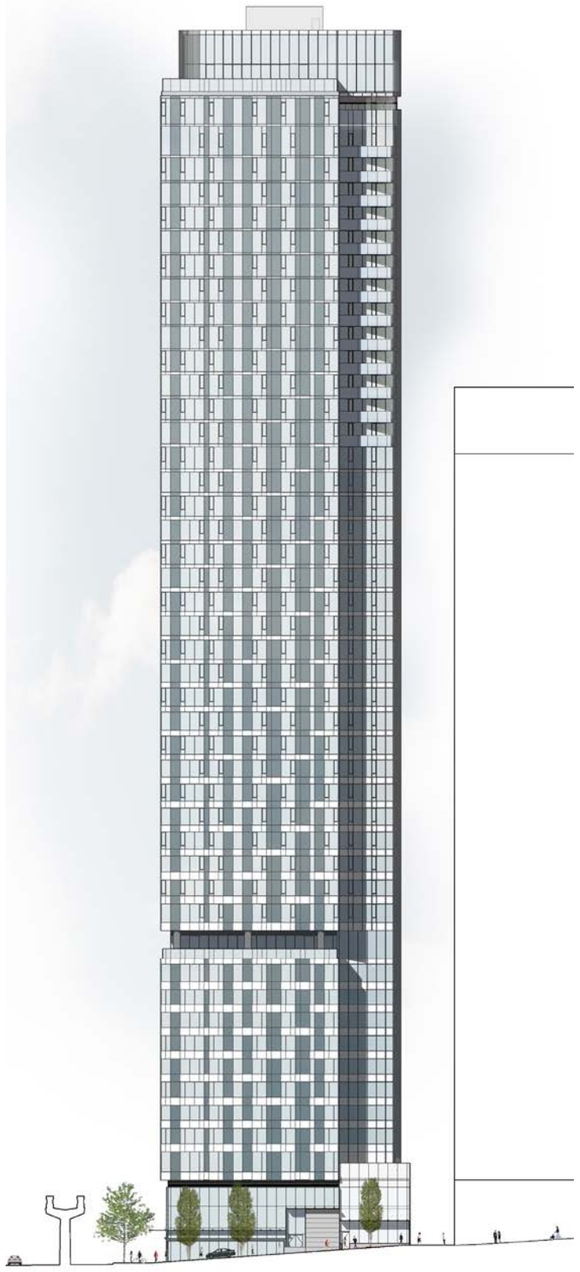
Enlarged West Elevation Window Wall Modules



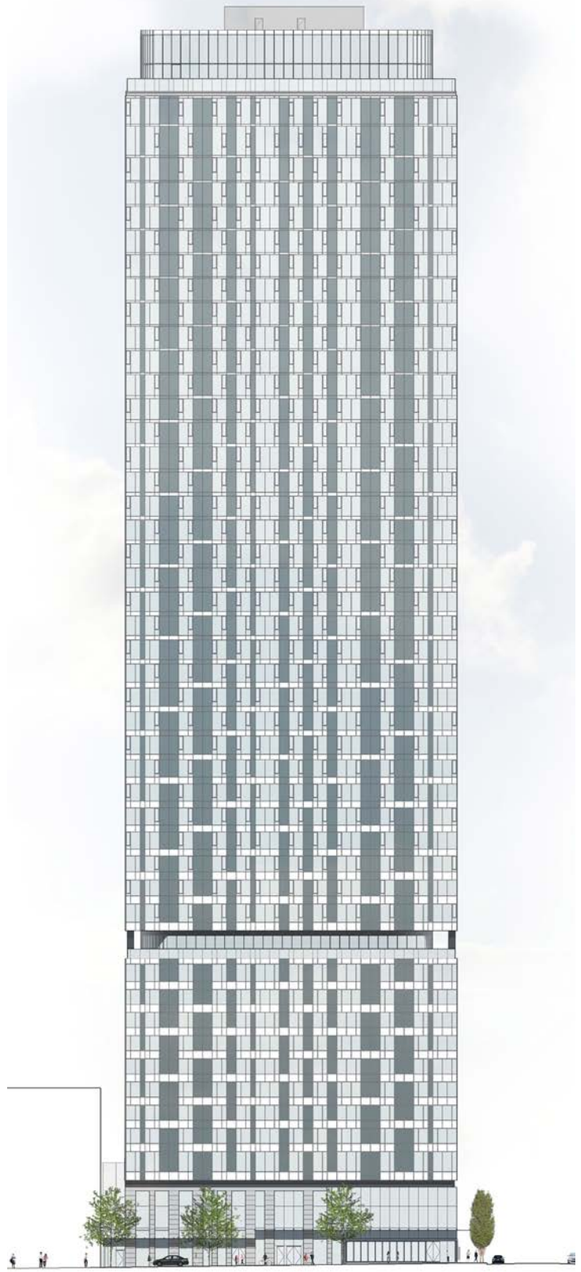
Spandrel Glass (east mass, bypass zone)
PPG, monolithic,
0025 - Harmony Blue
3270 - Loyal Blue
2294 - Georgian Blue
1232 - Secure Blue
1231 - Resolute Blue

IGU Spandrel Glass (east and west mass opaque) *PPG, Solarban z75*

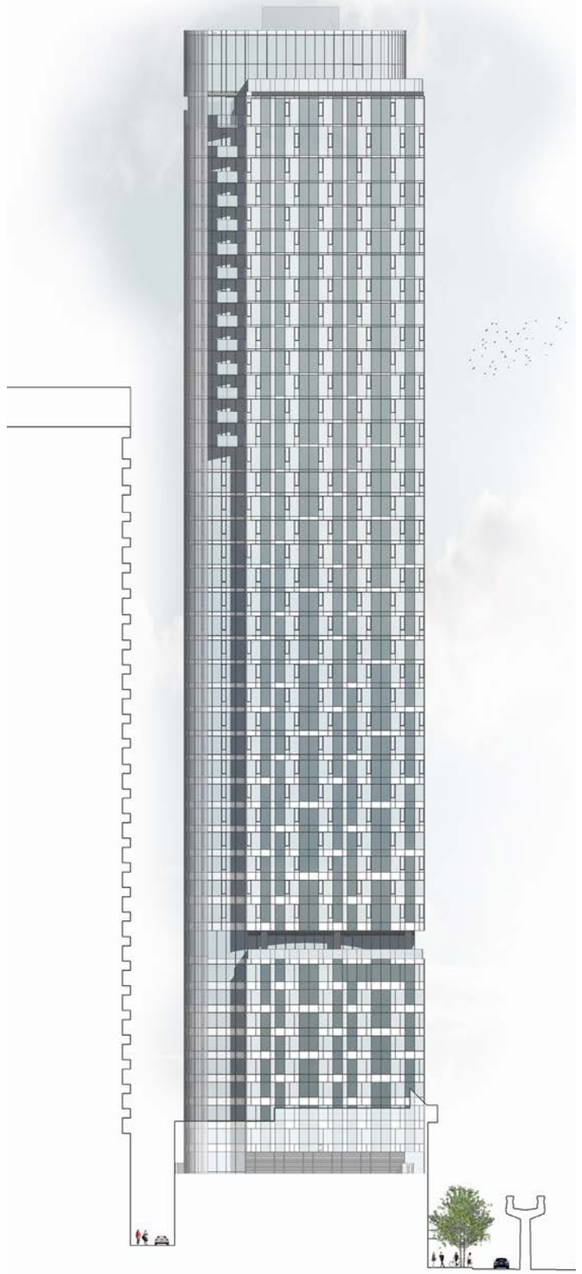
9.B/10.B MULTIPLE PERSPECTIVE STUDIES / ALTERNATE A (PREFERRED) - ETCHED IGU /



North Elevation

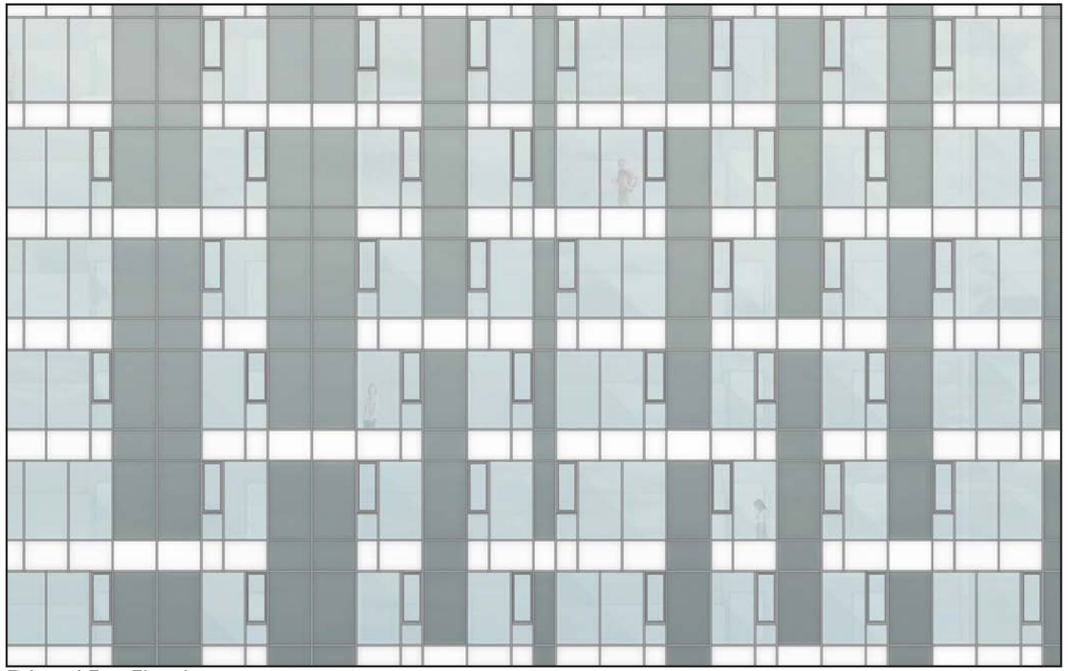


East Elevation

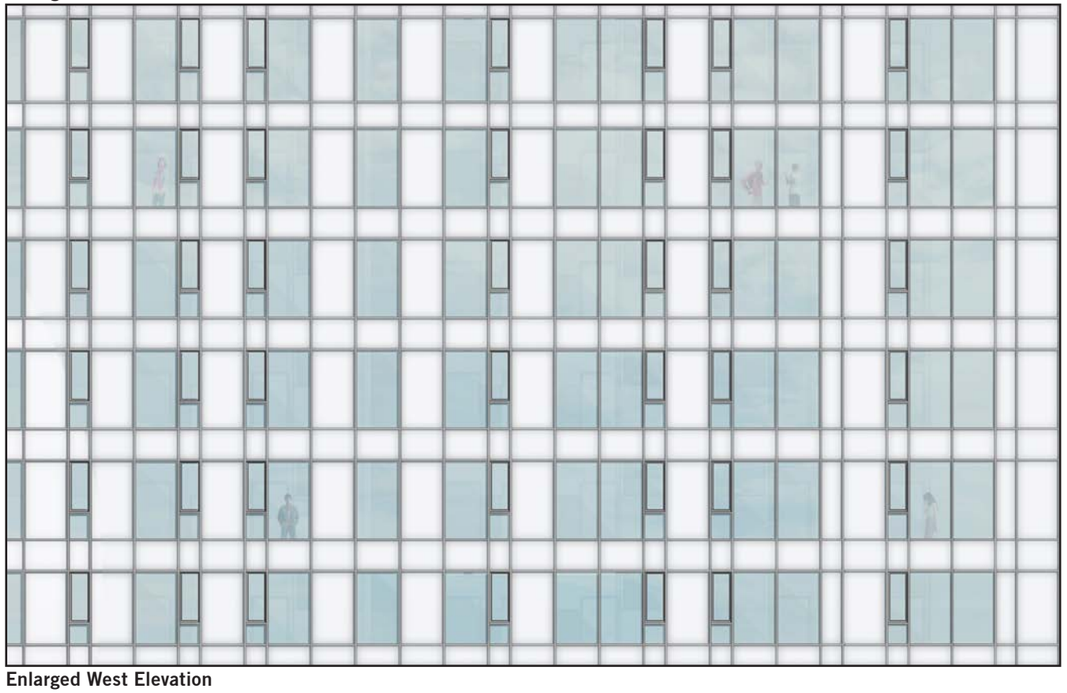


South Elevation

West Elevation



Enlarged East Elevation



Enlarged West Elevation

Enlarged East Elevation Window Wall Modules

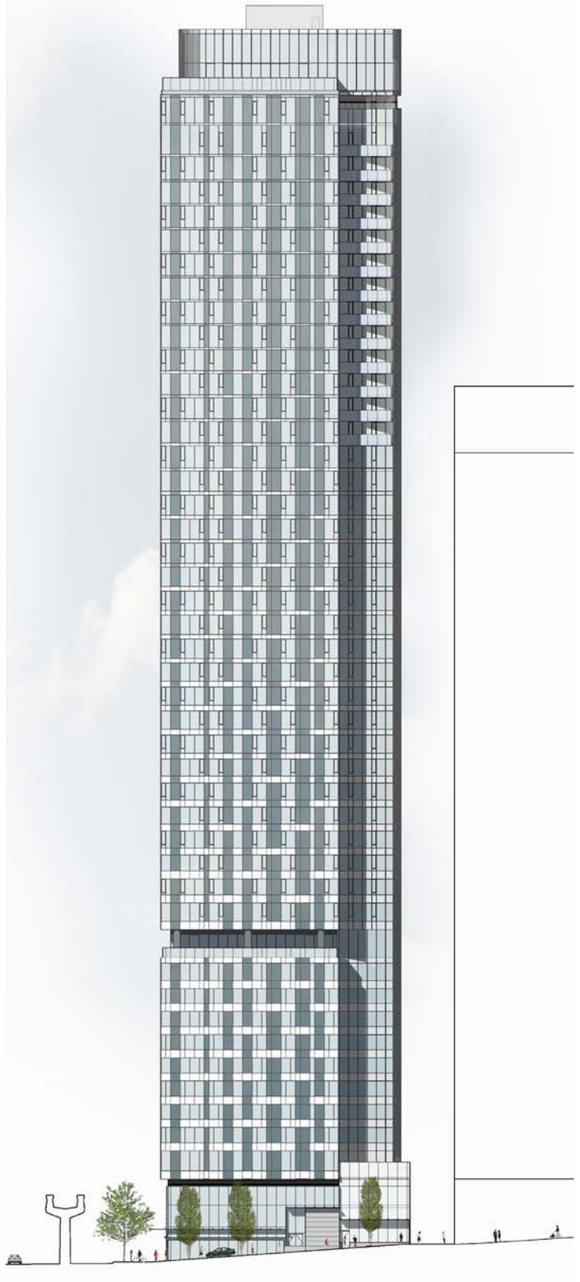
Enlarged West Elevation Window Wall Modules

Spandrel Glass (east mass, vertical)
PPG, monolithic, 2-743 - Harmony Solex

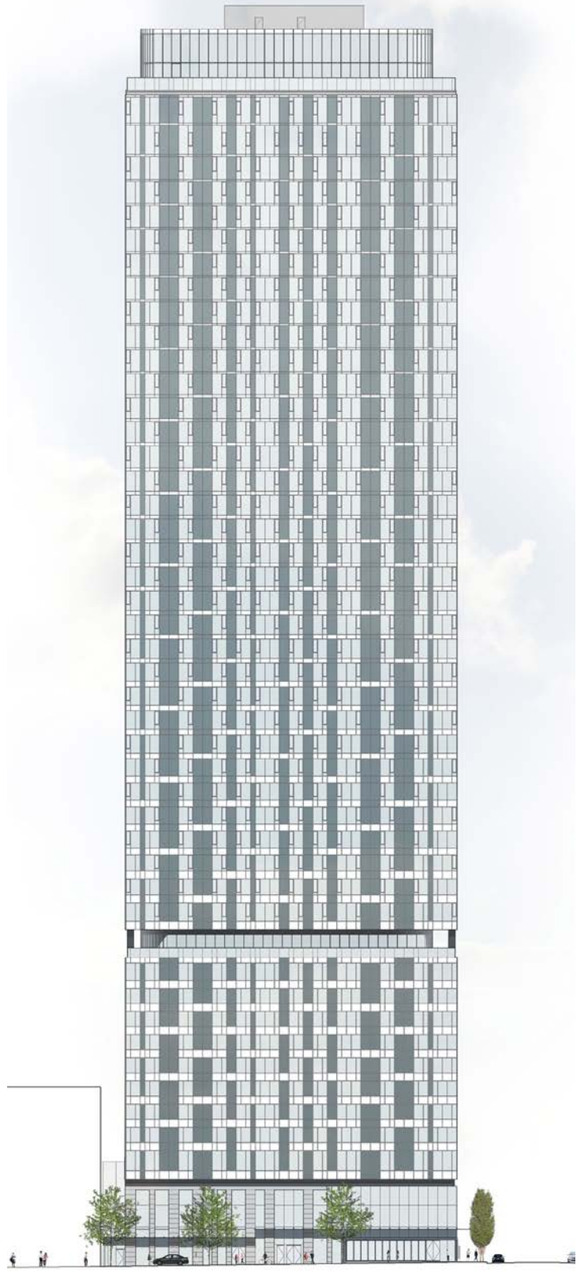
Spandrel Glass (east mass, bypass zone)
PPG, monolithic, 0-1672 - Snow White

Spandrel Glass (west mass)
PPG, IGU, 0-1672 - Snow White

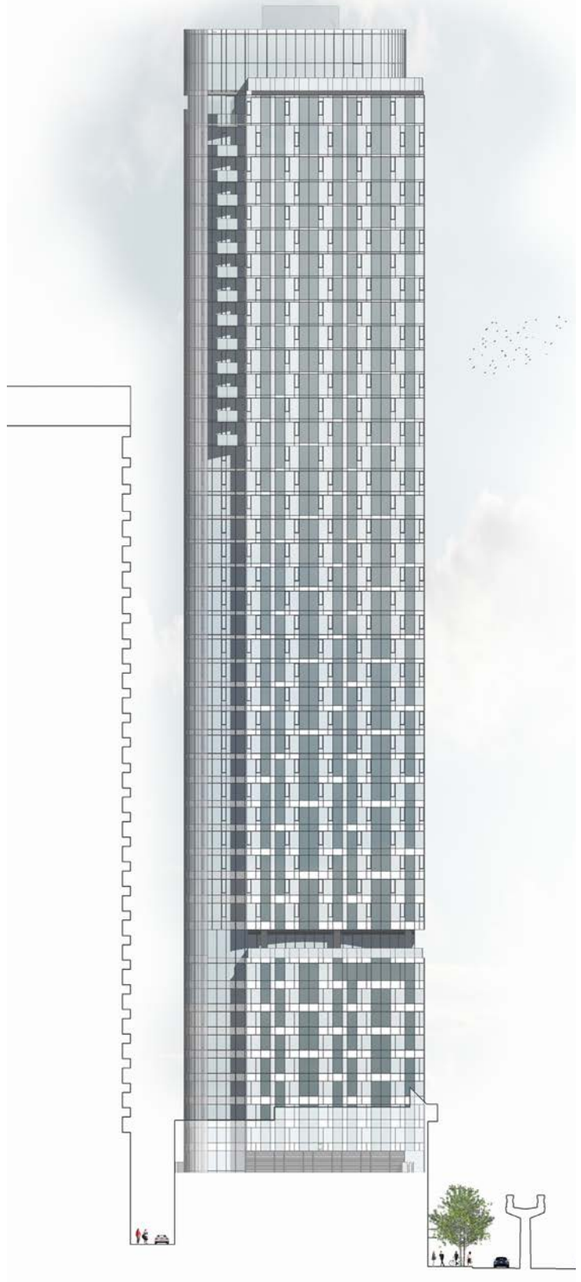
9.B/10.B MULTIPLE PERSPECTIVE STUDIES / ALTERNATE B - NEUTRAL FRIT /



North Elevation

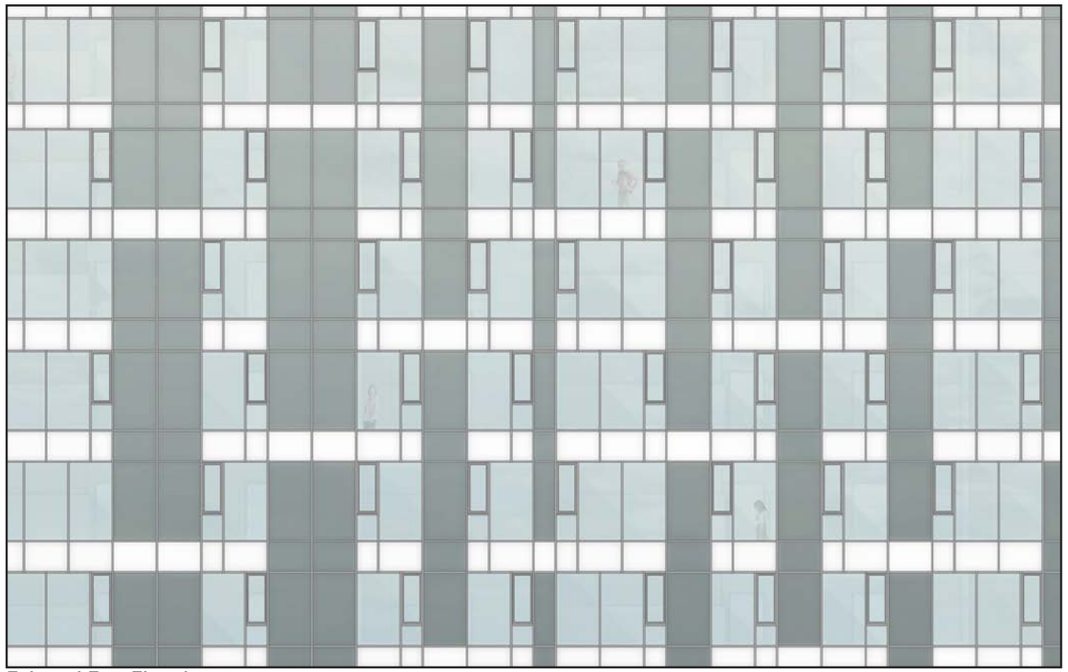


East Elevation

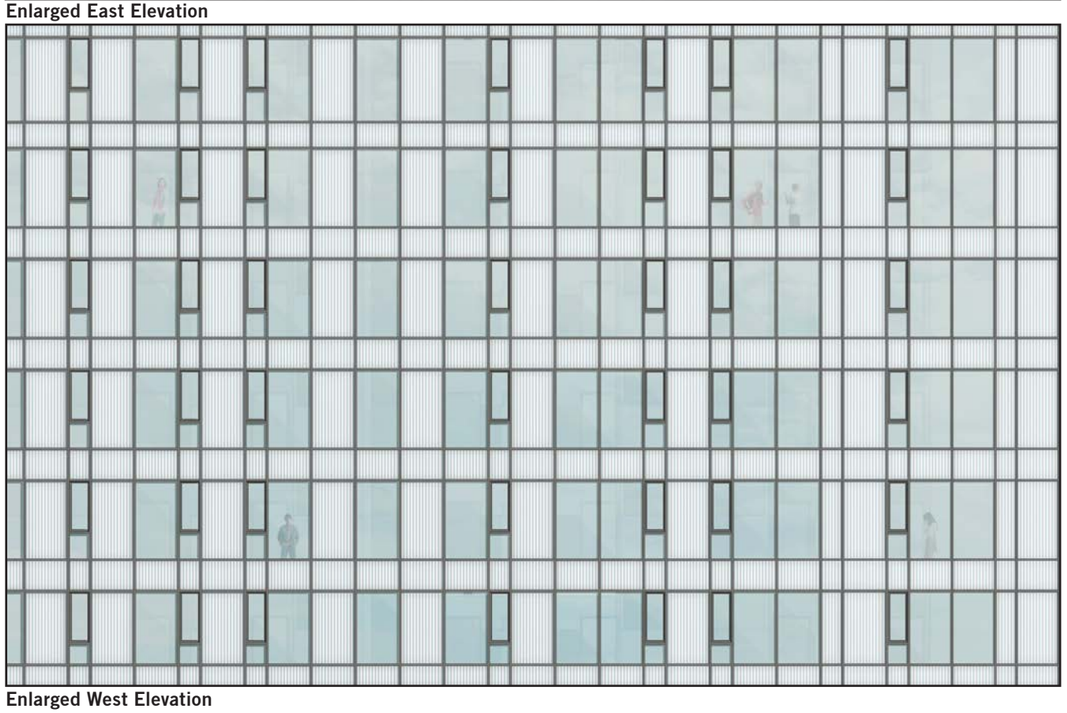


South Elevation

West Elevation



Enlarged East Elevation



Enlarged West Elevation

Enlarged East Elevation Window Wall Modules

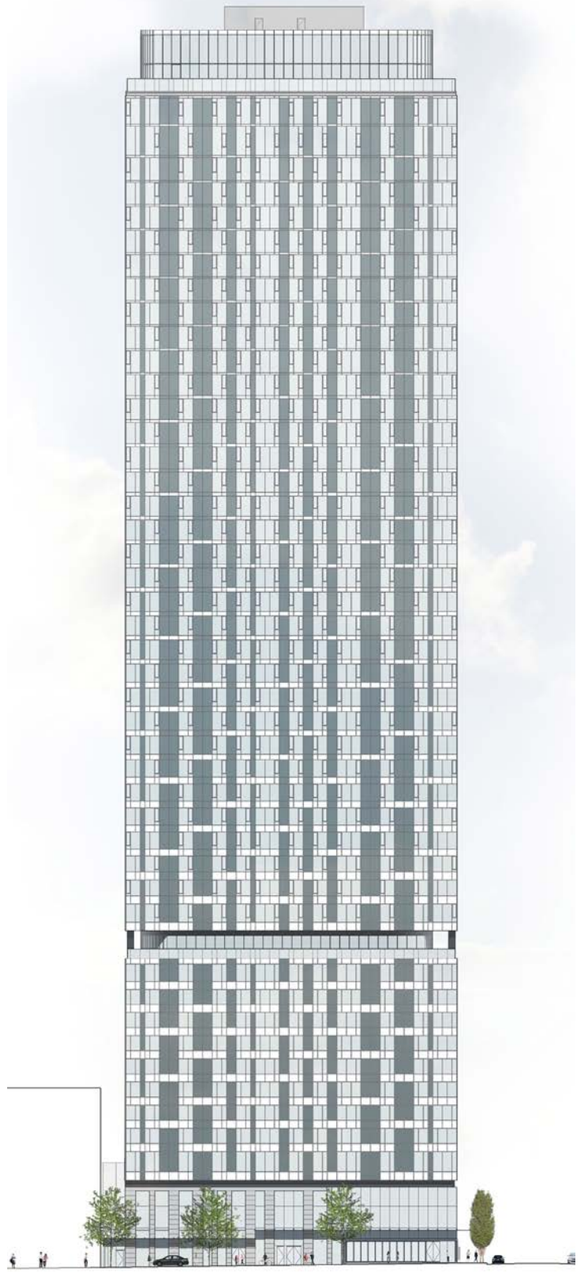
Enlarged West Elevation Window Wall Modules

Spandrel Glass (east mass, vertical)
PPG, monolithic, 2-743 - Harmony Solex

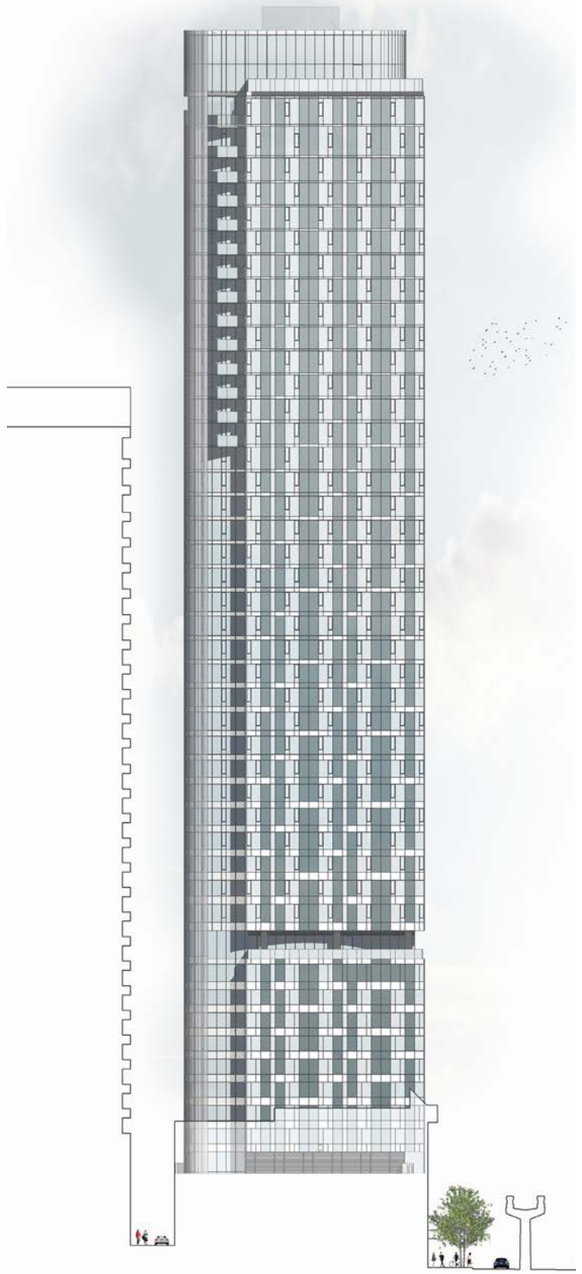
Spandrel Glass (east mass, bypass zone)
PPG, monolithic, 0-1672 - Snow White

Spandrel Glass (west mass)
Custom Color, frit

North Elevation

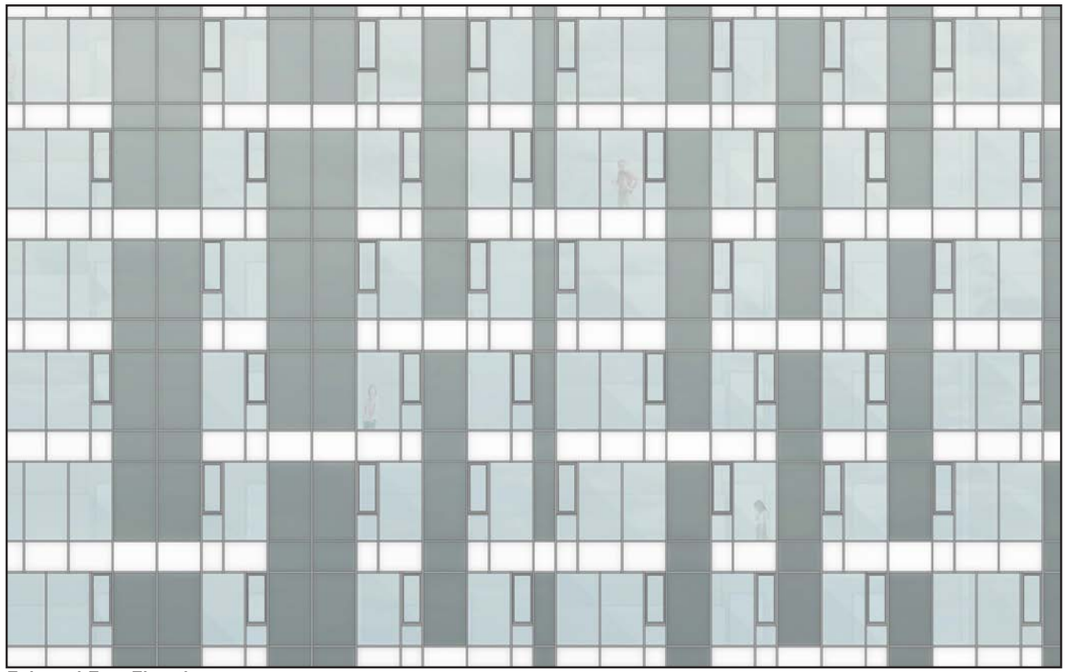


East Elevation

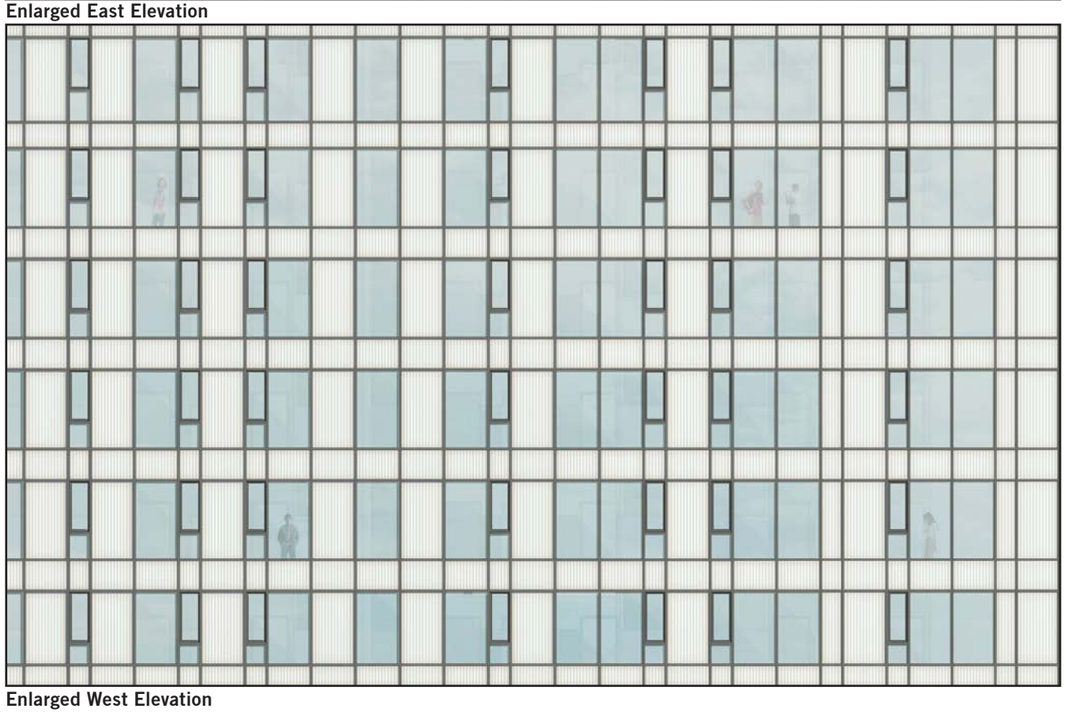


South Elevation

West Elevation



Enlarged East Elevation



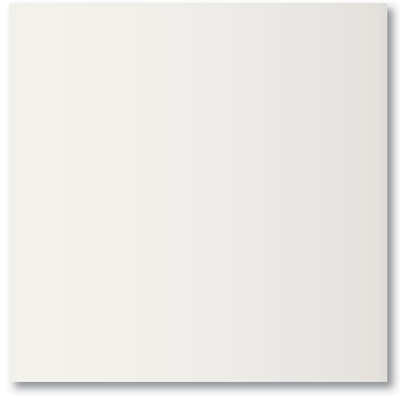
Enlarged West Elevation

Enlarged East Elevation Window Wall Modules

Enlarged West Elevation Window Wall Modules

Spandrel Glass (east mass, vertical)
PPG, monolithic, 2-743 - Harmony Solex

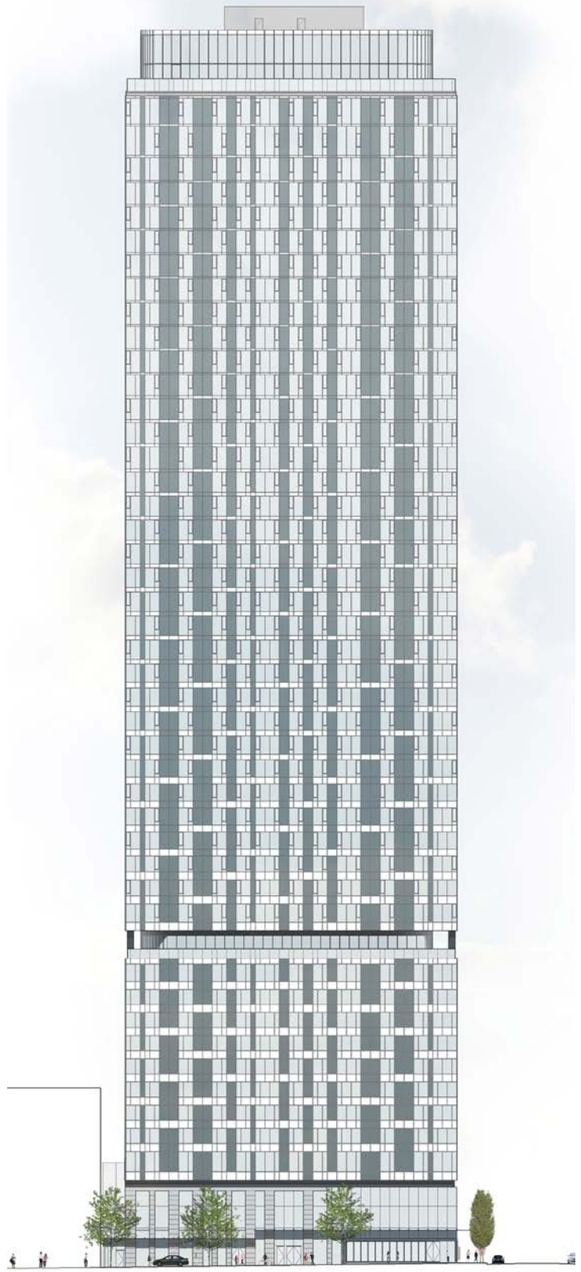
Spandrel Glass (east mass, bypass zone)
PPG, monolithic, 0-1672 - Snow White



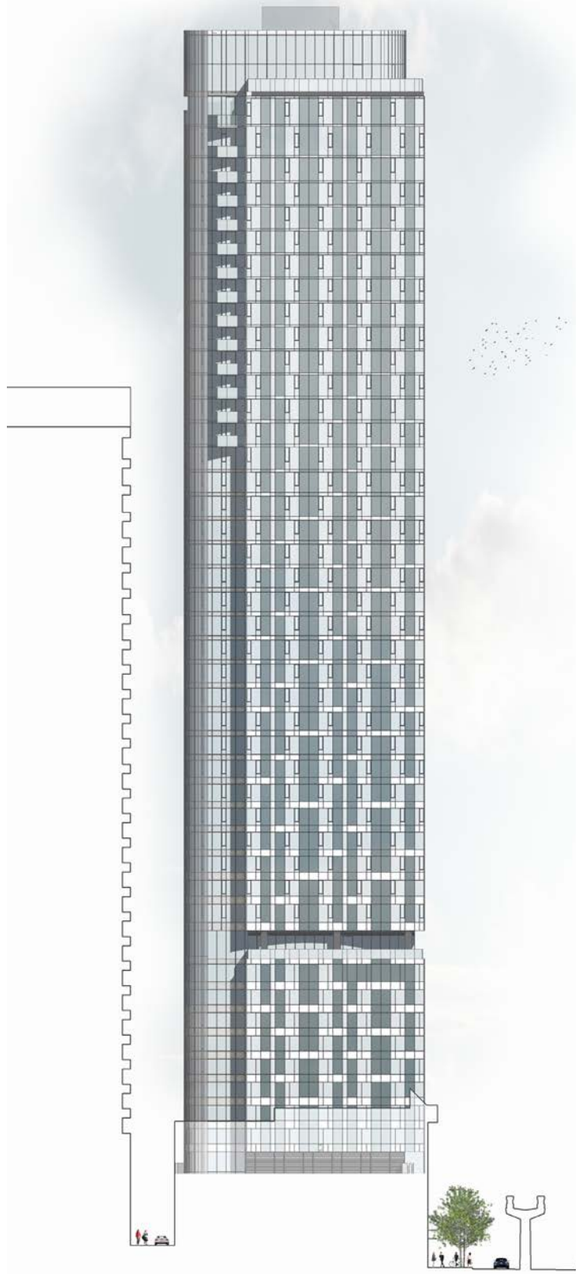
Spandrel Glass (west mass)
Custom Color, frit

9.B/10.B MULTIPLE PERSPECTIVE STUDIES / ALTERNATE D - LIGHT METAL PANEL /

North Elevation

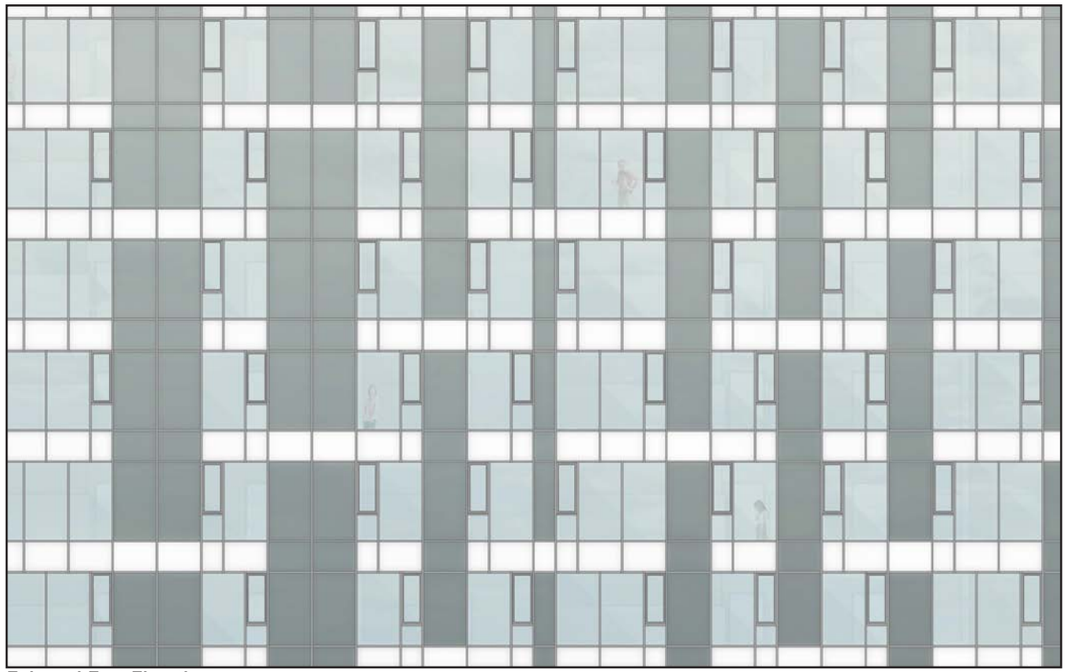


East Elevation

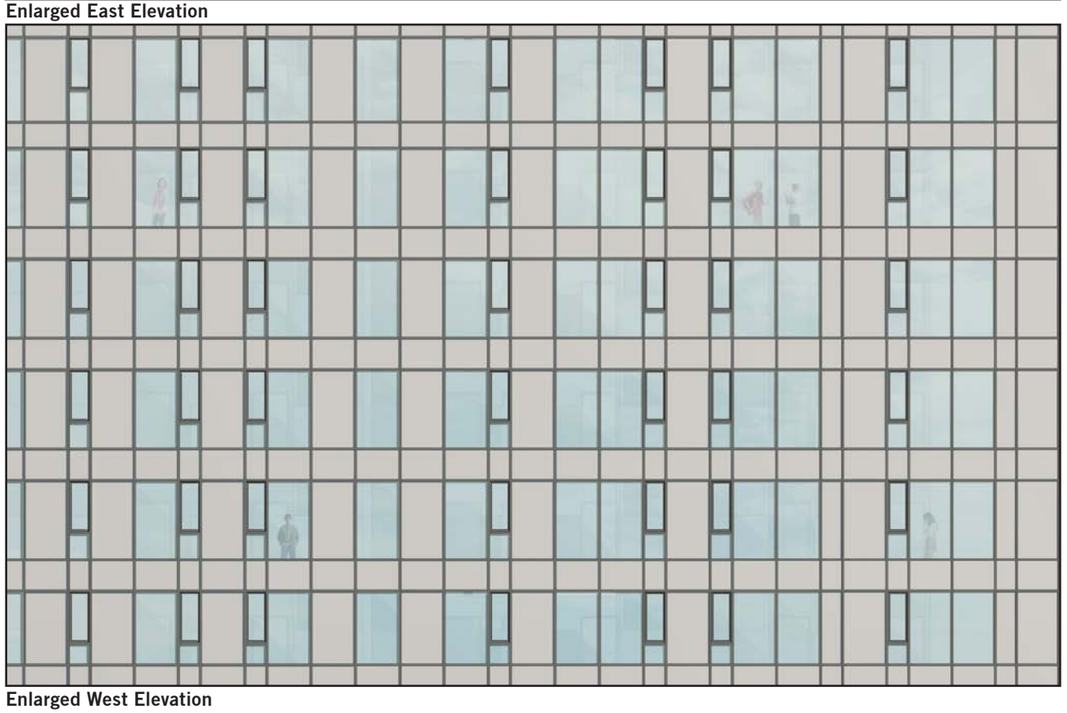


South Elevation

West Elevation



Enlarged East Elevation



Enlarged West Elevation

Enlarged East Elevation Window Wall Modules

Enlarged West Elevation Window Wall Modules

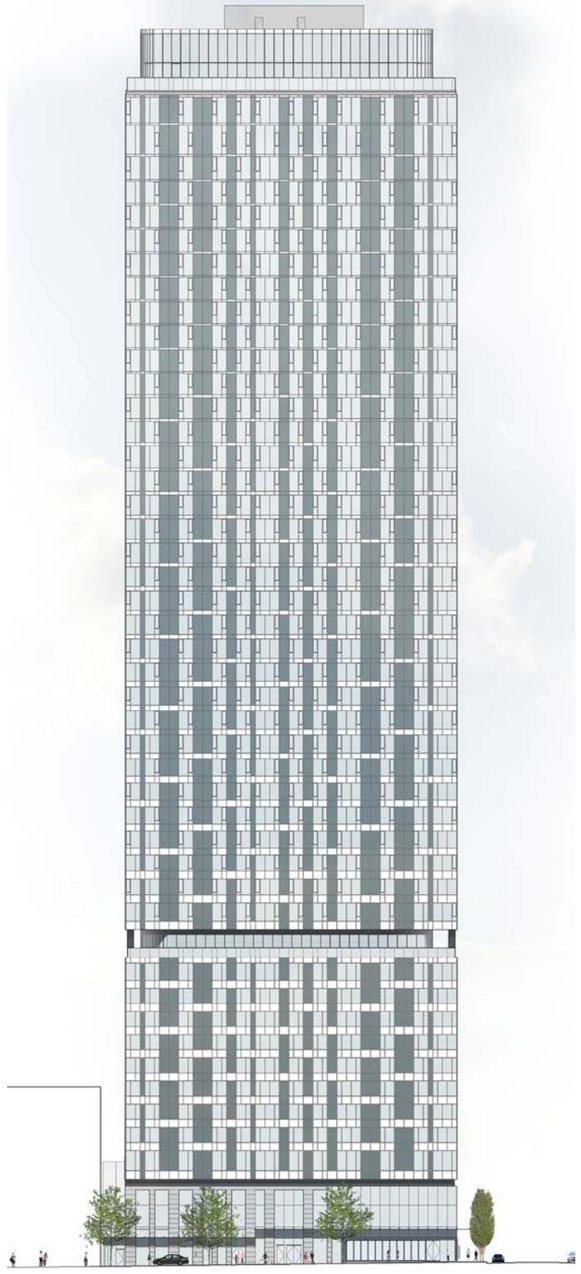
Spandrel Glass (east mass, vertical)
PPG, monolithic, 2-743 - Harmony Solex

Spandrel Glass (east mass, bypass zone)
PPG, monolithic, 0-1672 - Snow White

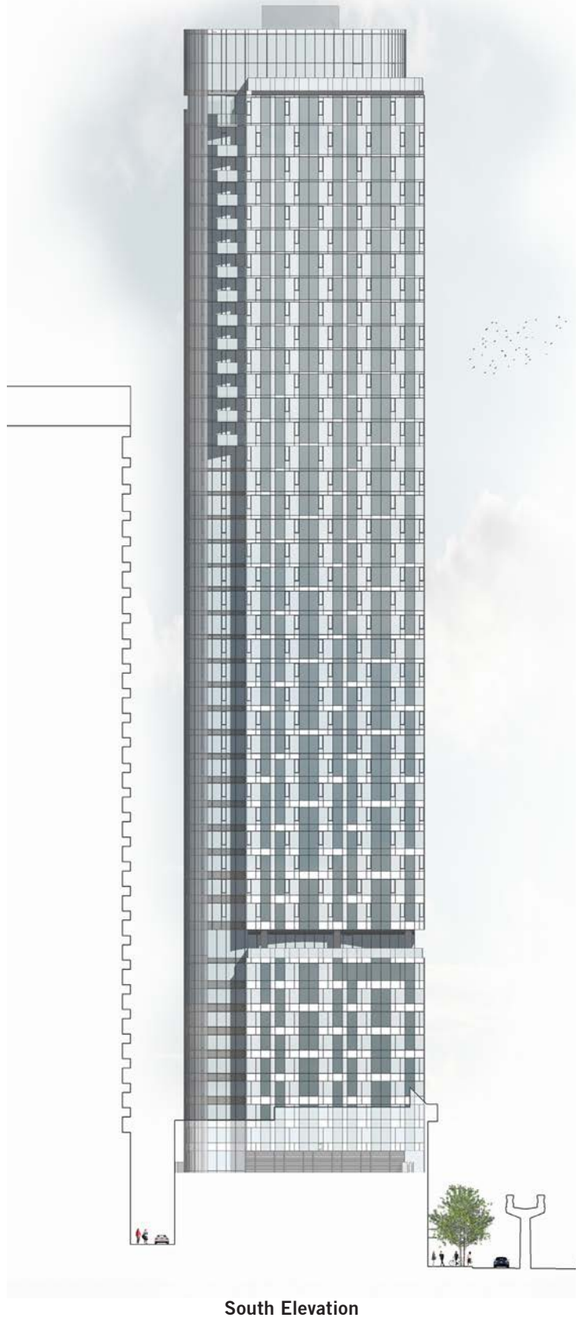
Metal Panel (west mass)
Custom Color

9.B/10.B MULTIPLE PERSPECTIVE STUDIES / ALTERNATE E - MID-TONE RIBBED METAL PANEL /

North Elevation

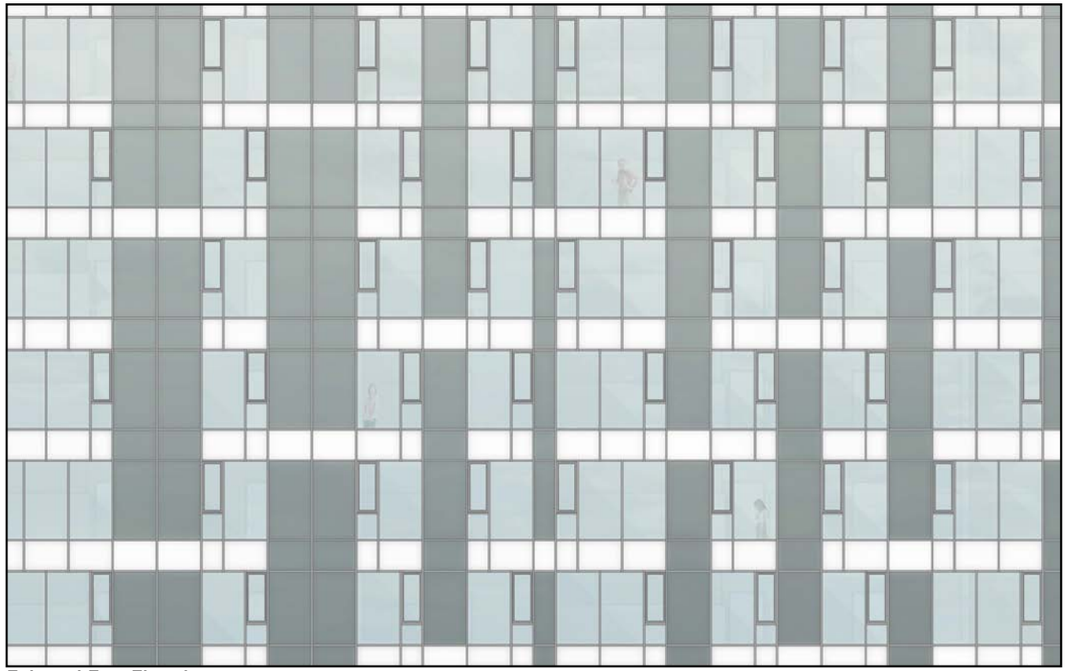


East Elevation



South Elevation

West Elevation



Enlarged East Elevation

Enlarged West Elevation

Enlarged East Elevation Window Wall Modules

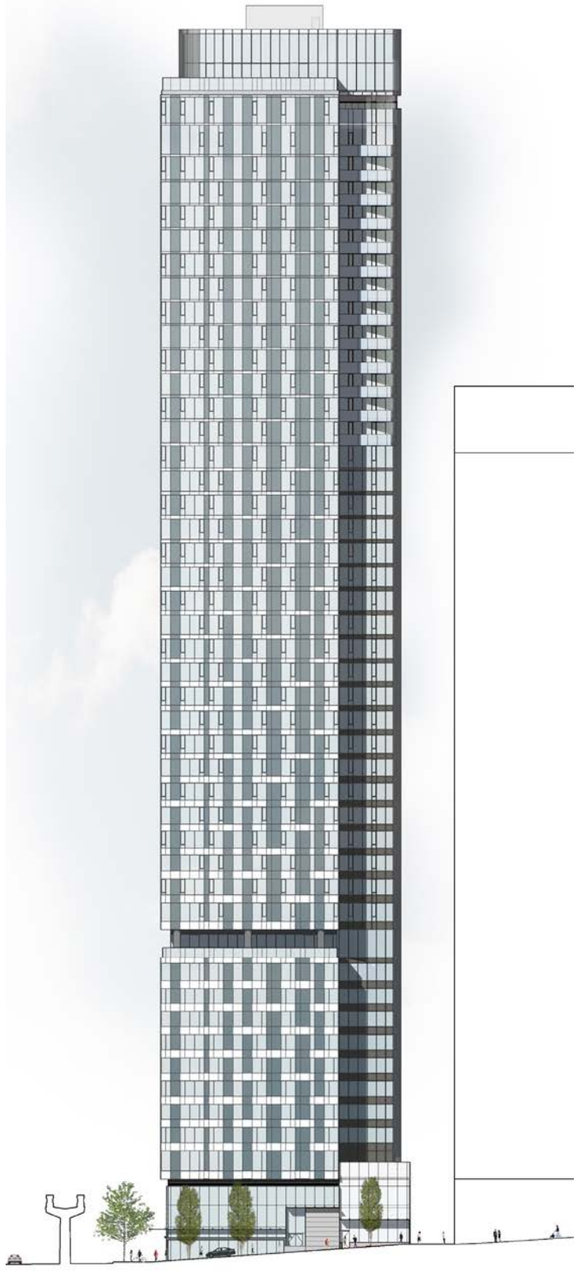
Enlarged West Elevation Window Wall Modules

Spandrel Glass (east mass, vertical)
PPG, monolithic, 2-743 - Harmony Solex

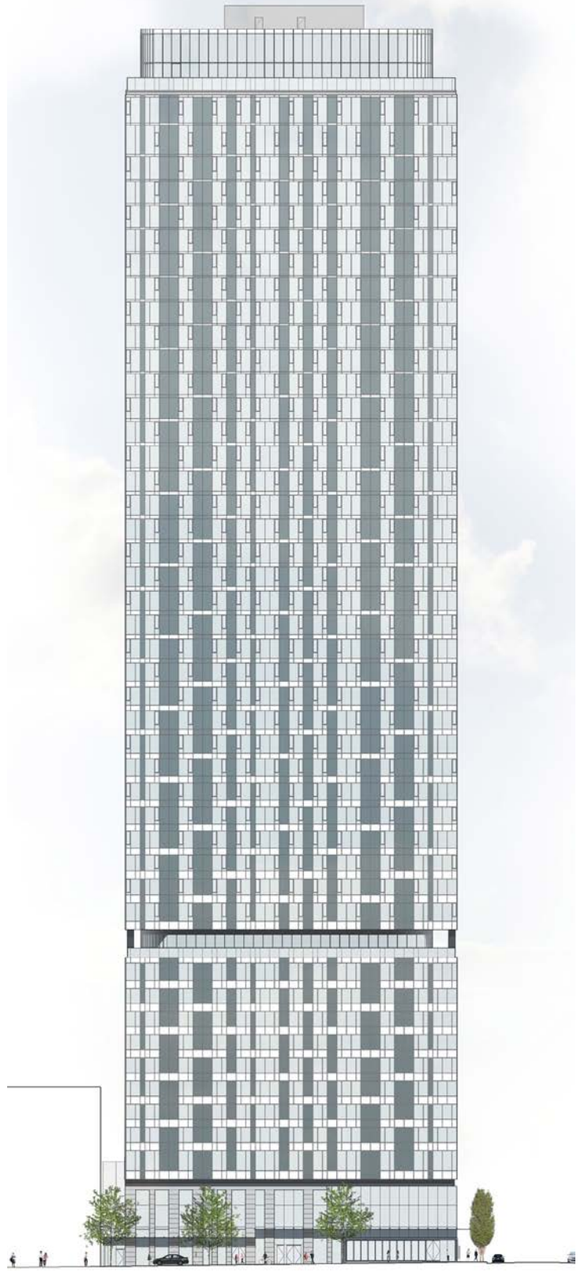
Spandrel Glass (east mass, bypass zone)
PPG, monolithic, 0-1672 - Snow White

Metal Panel (west mass)
Custom Color, ribbed

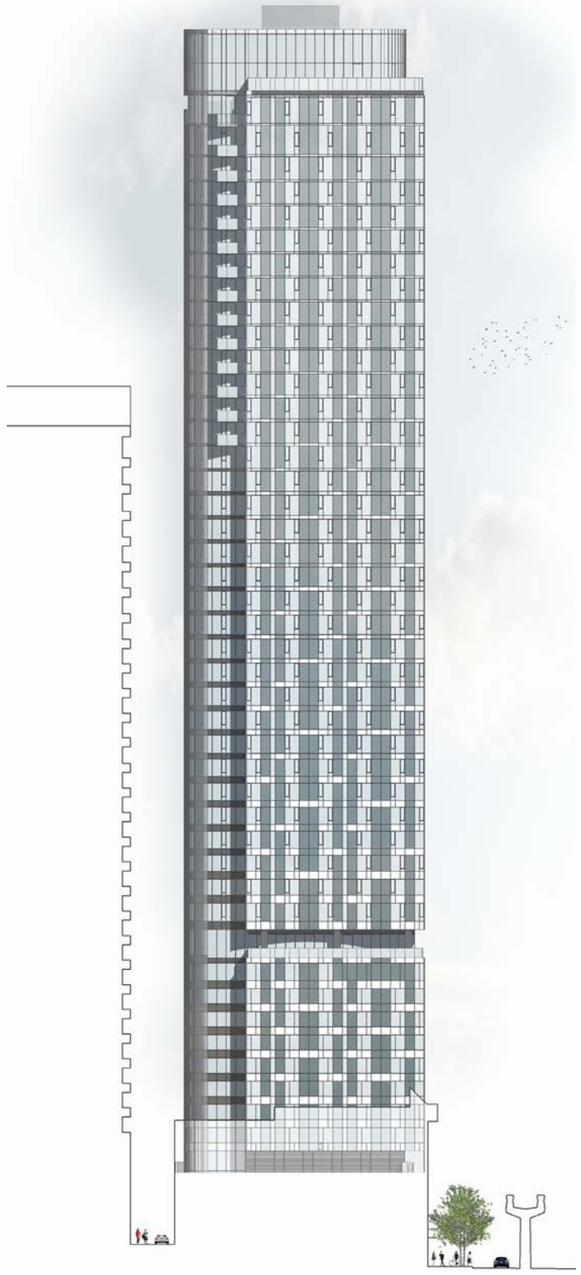
9.B/10.B MULTIPLE PERSPECTIVE STUDIES / ALTERNATE F - DARK METAL PANEL /



North Elevation

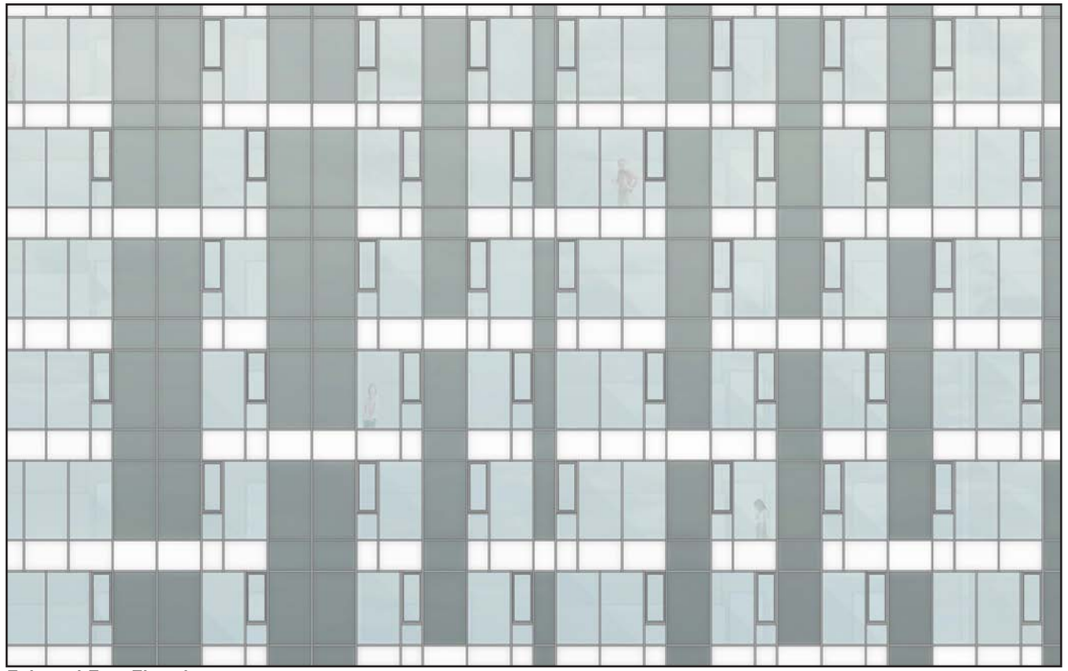


East Elevation



South Elevation

West Elevation



Enlarged East Elevation

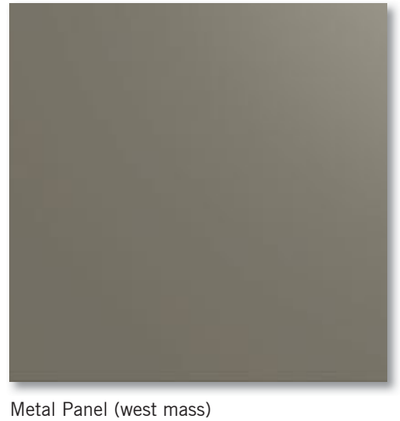
Enlarged West Elevation

Enlarged East Elevation Window Wall Modules

Enlarged West Elevation Window Wall Modules

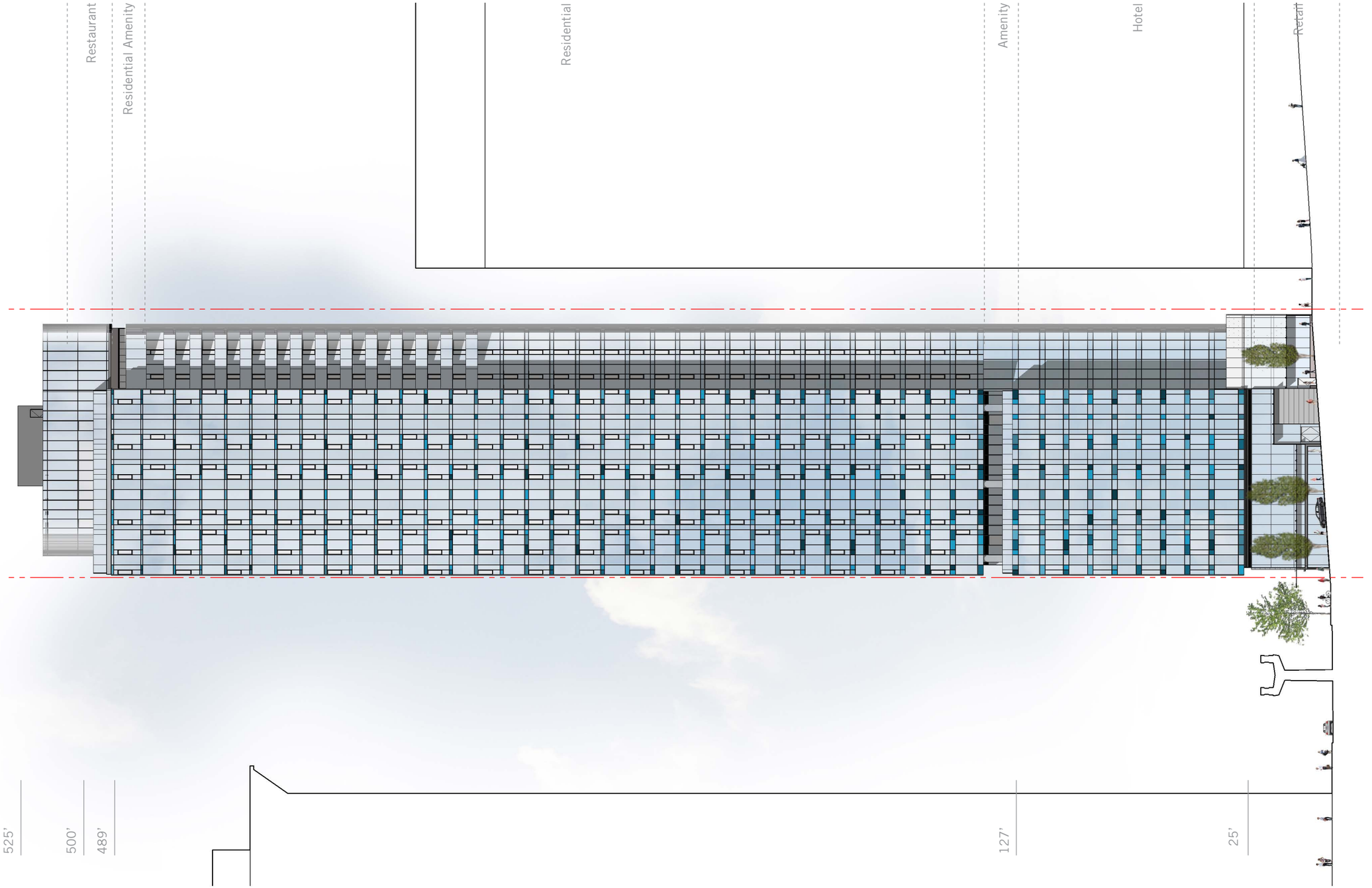
Spandrel Glass (east mass, vertical)
PPG, monolithic, 2-743 - Harmony Solex

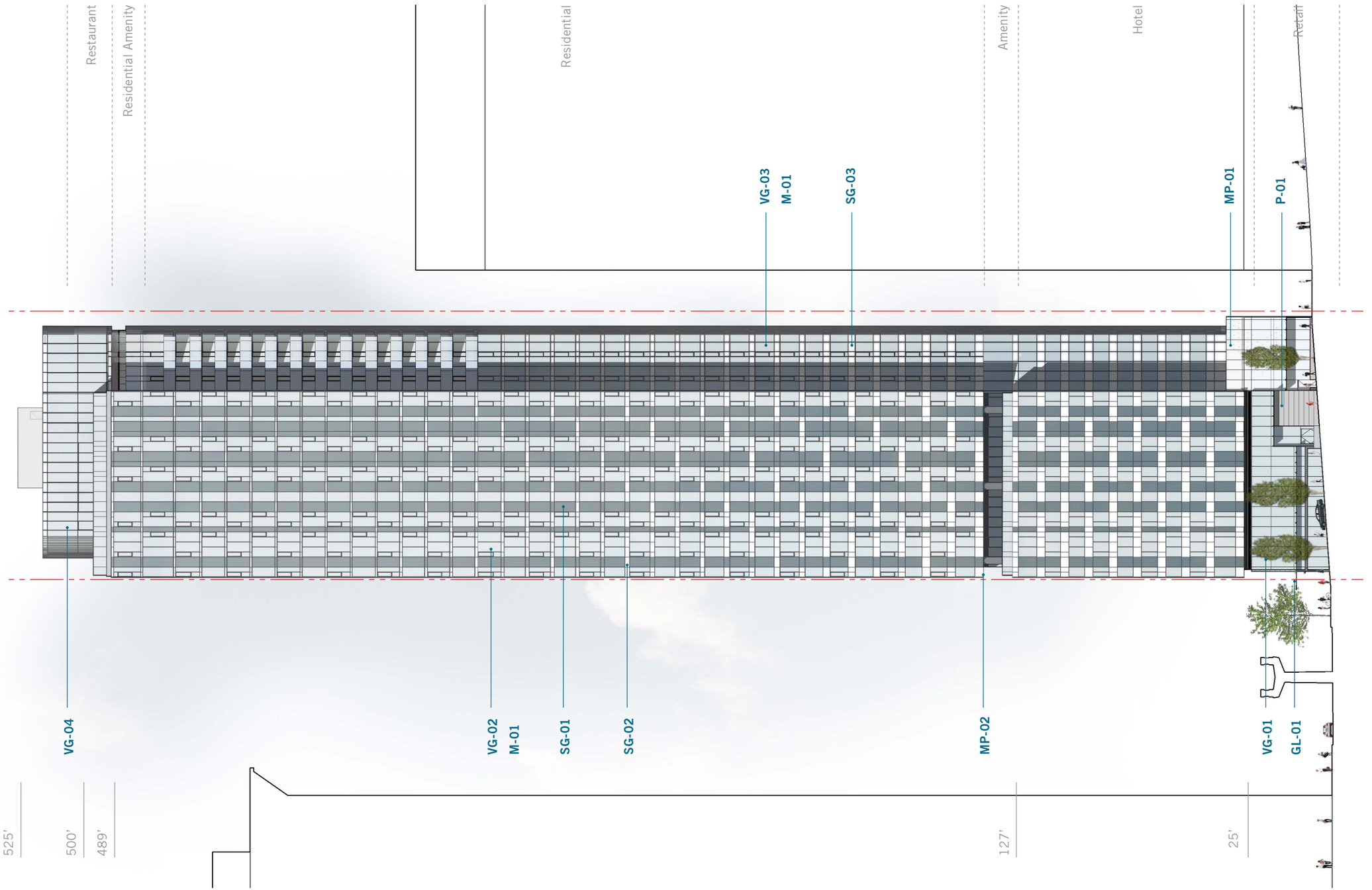
Spandrel Glass (east mass, bypass zone)
PPG, monolithic, 0-1672 - Snow White



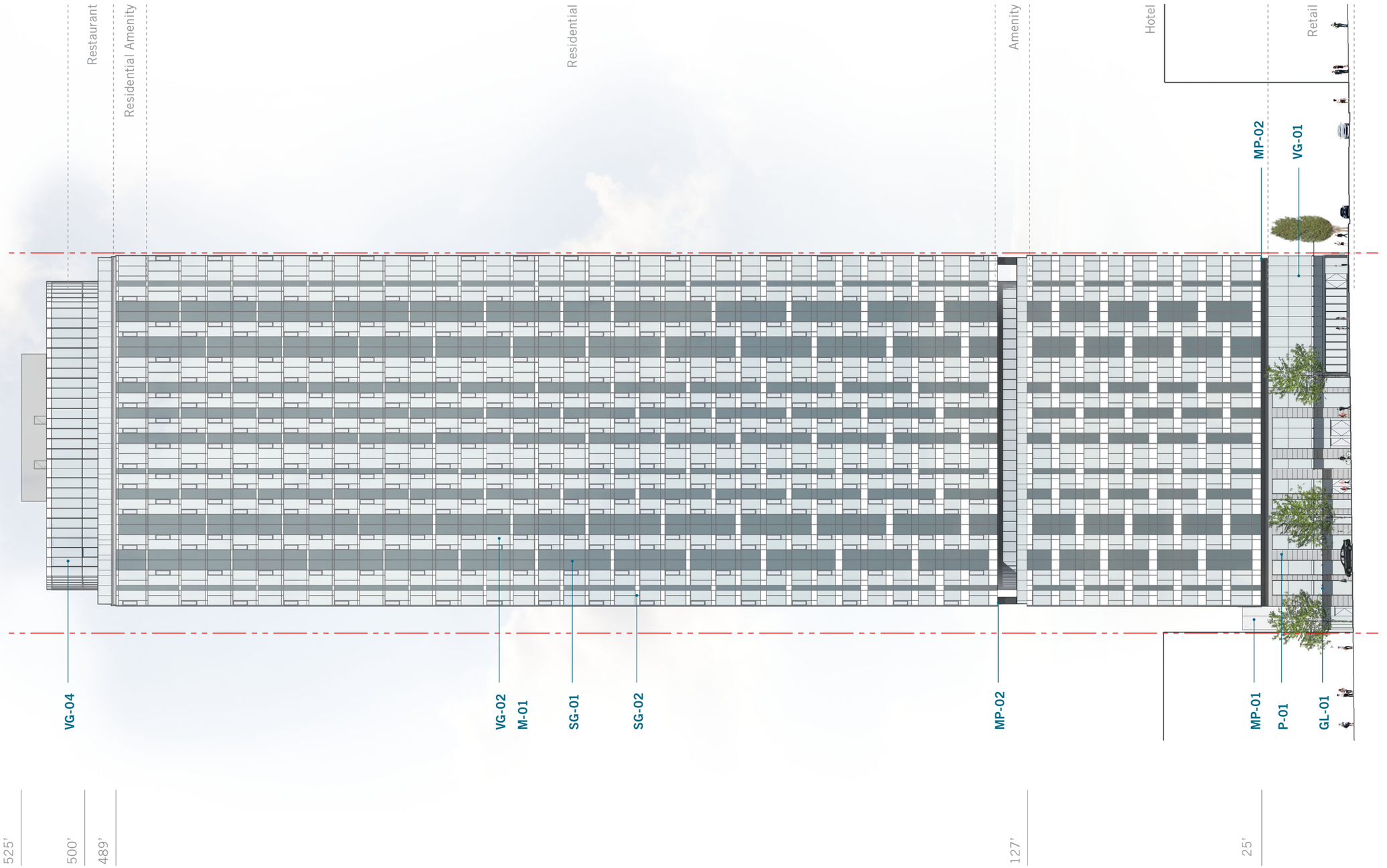
Metal Panel (west mass)
Custom Color

RECOMMENDATION MEETING 1 / NORTH ELEVATION /

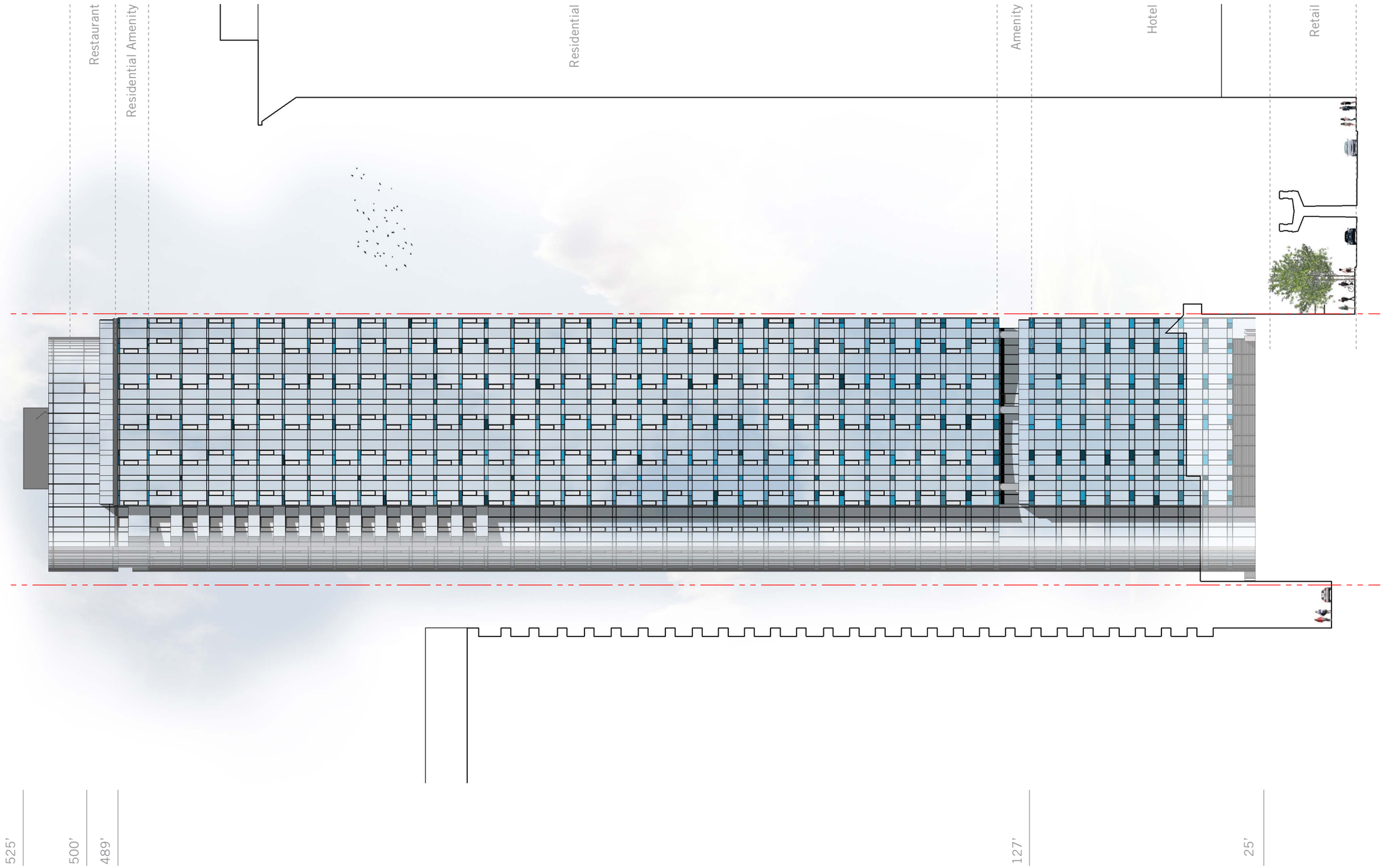


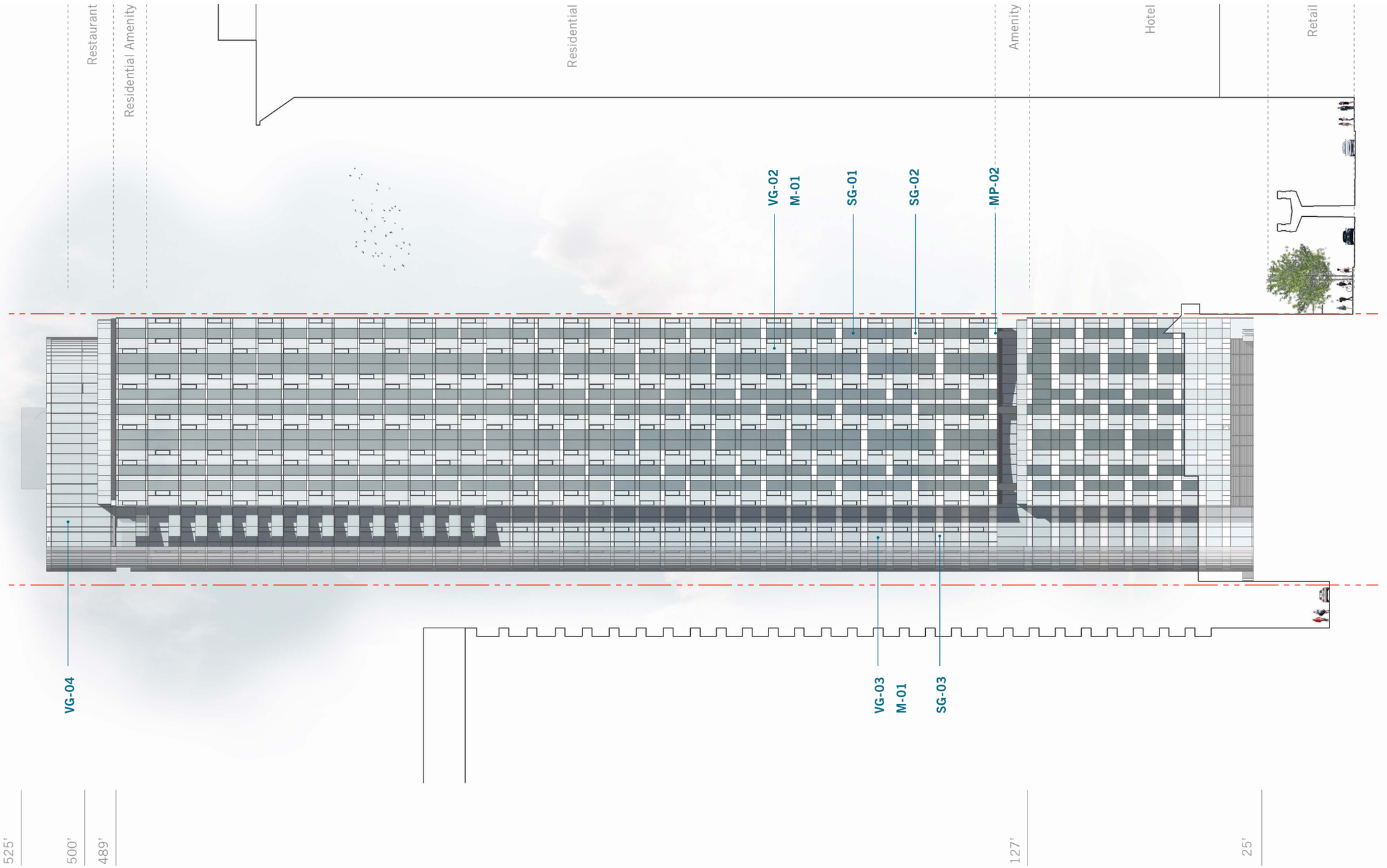

Restaurant
Residential Amenity
Residential
Amenity
Hotel
Retail
VG-03
M-01
SG-03
MP-01
P-01
VG-04
VG-02
M-01
SG-01
SG-02
MP-02
VG-01
GL-01
525'
500'
489'
127'
25'

RECOMMENDATION MEETING 1 / EAST ELEVATION /

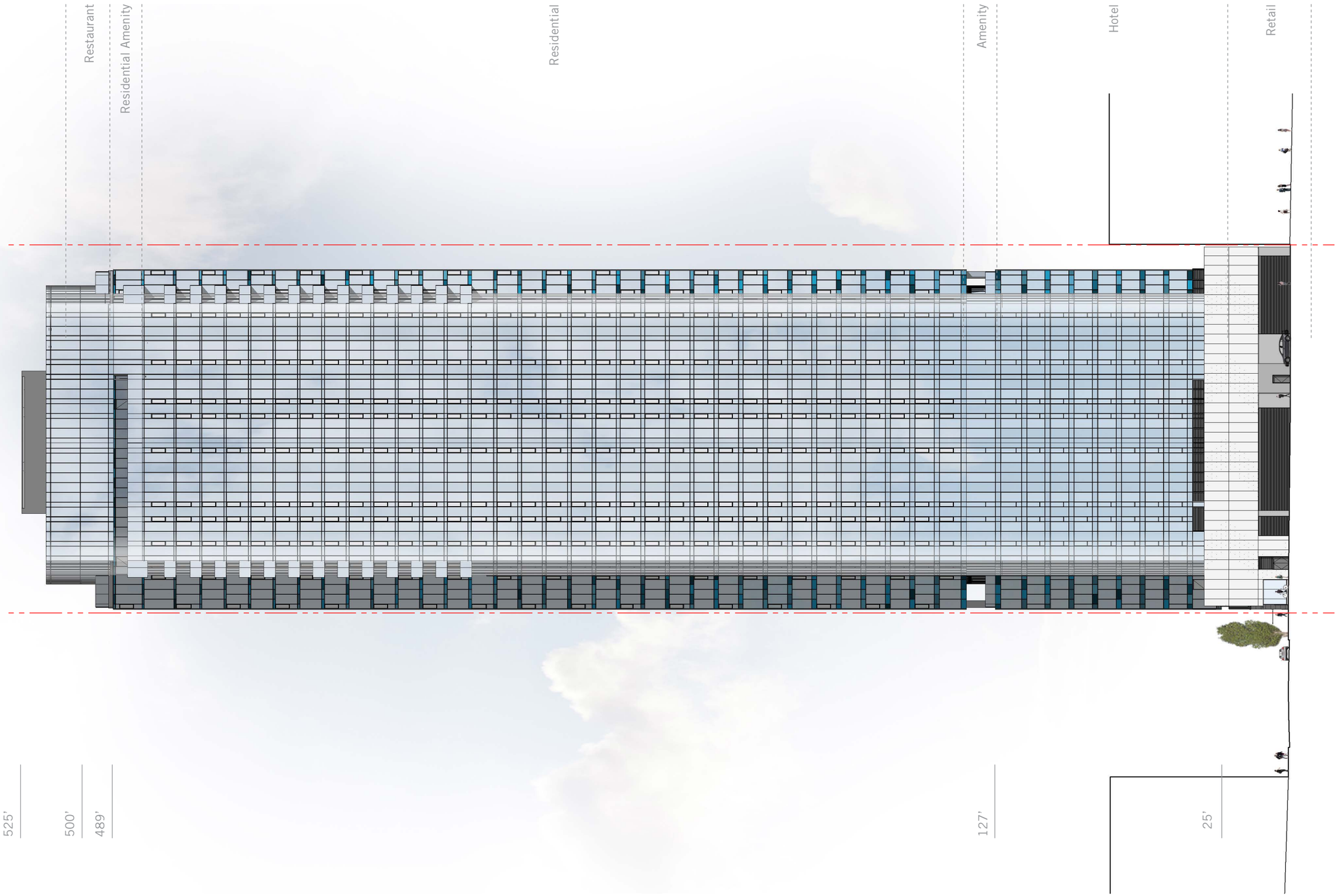

Restaurant
Residential Amenity
Residential
Amenity
Hotel
Retail
MP-02
VG-01
VG-04
VG-02
M-01
SG-01
SG-02
MP-02
MP-01
P-01
GL-01
525'
500'
489'
127'
25'

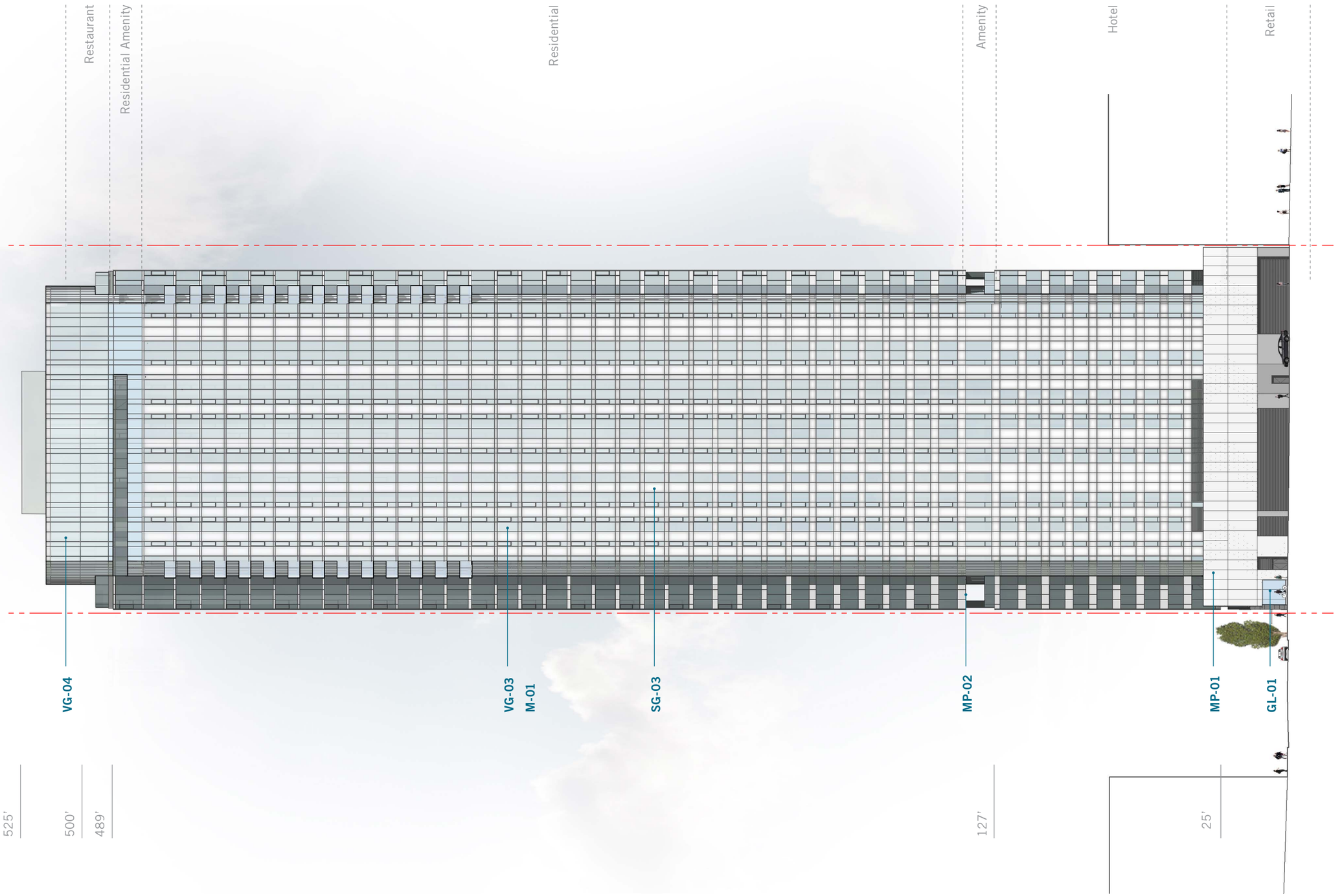
RECOMMENDATION MEETING 1 / SOUTH ELEVATION /




Restaurant
Residential Amenity
Residential
Amenity
Hotel
Retail
VG-02
M-01
SG-01
SG-02
MP-02
VG-04
VG-03
M-01
SG-03
525'
500'
489'
127'
25'

RECOMMENDATION MEETING 1 / WEST ELEVATION /

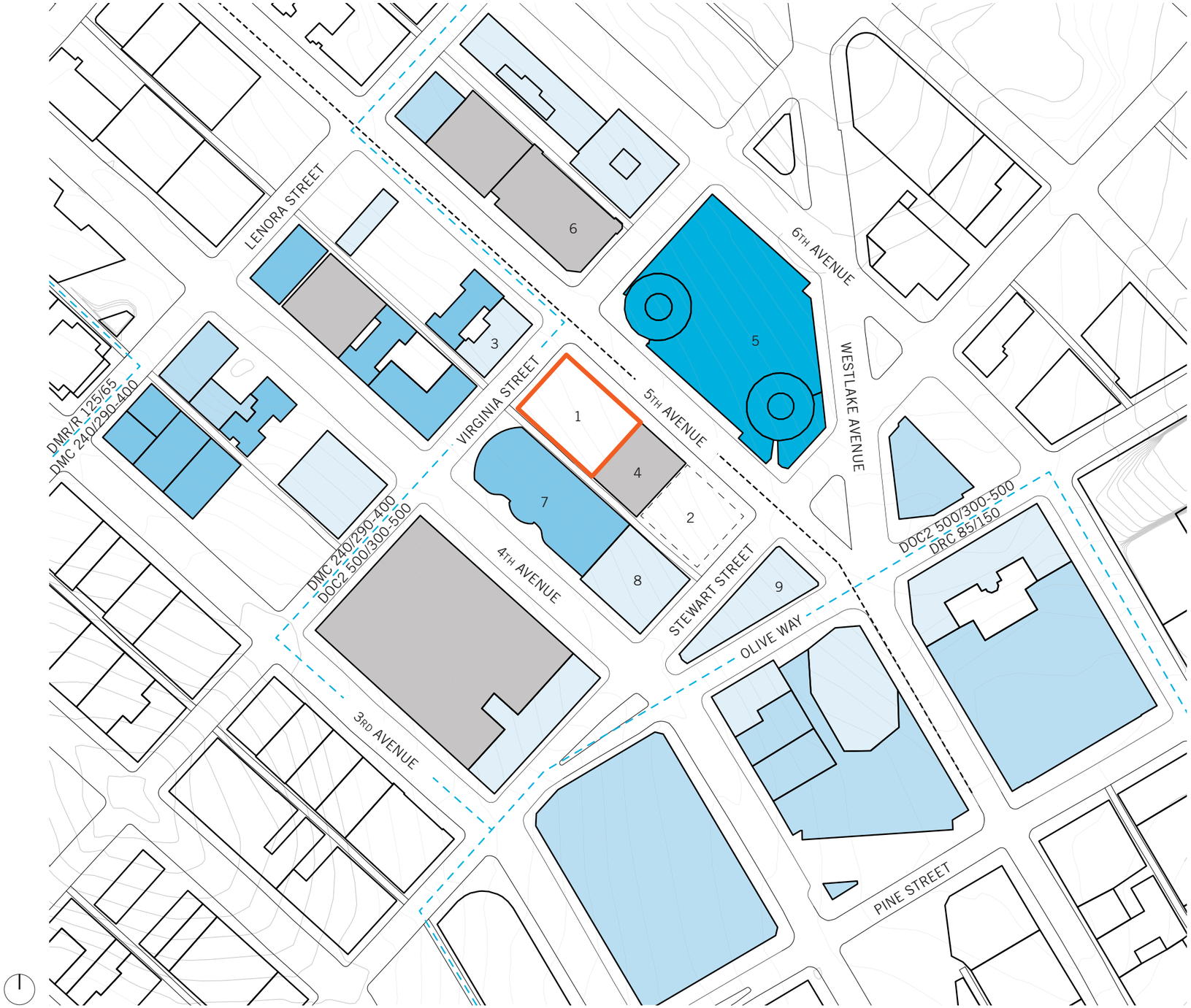



Restaurant
Residential Amenity
Residential
Amenity
Hotel
Retail
VG-04
VG-03
M-01
SG-03
MP-02
MP-01
GL-01
525'
500'
489'
127'
25'

VICINITY MAP /

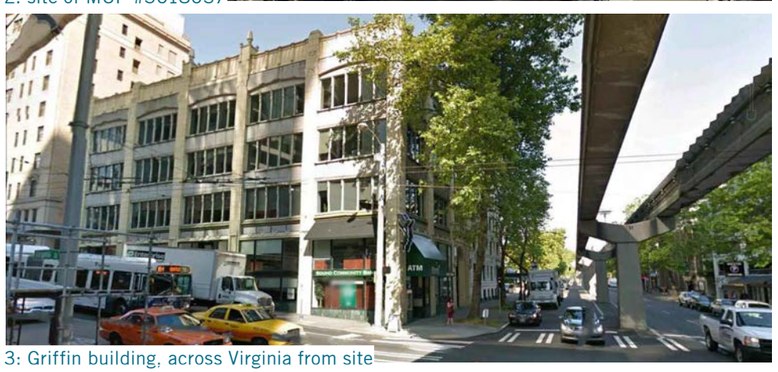
1 Project Site
2 Future Tower Development
3 Griffin Building
4 Avis Building
5 Westin Hotel
6 Westin Parking Garage
7 Escala Condominiums
8 Centennial Building
9 Times Square Building

Hotel
Residential
Retail
Office
Parking
Project Site
Zoning Boundary
Monorail



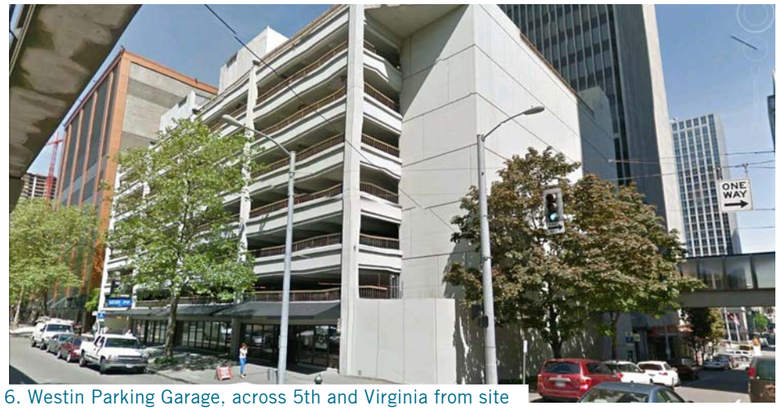

1: project site, buildings to be demolished


2: site of MUP #3018037


3: Griffin building, across Virginia from site


4: Avis garage, adjacent to south of site


5. Westin Hotel, across 5th Avenue from site


6. Westin Parking Garage, across 5th and Virginia from site


7. The Escala, across alley from site


PARK
24 HRS
PARK
Stewart St
THE WESTIN

1


Budget
AVIS
Budget
55
ONLY

2

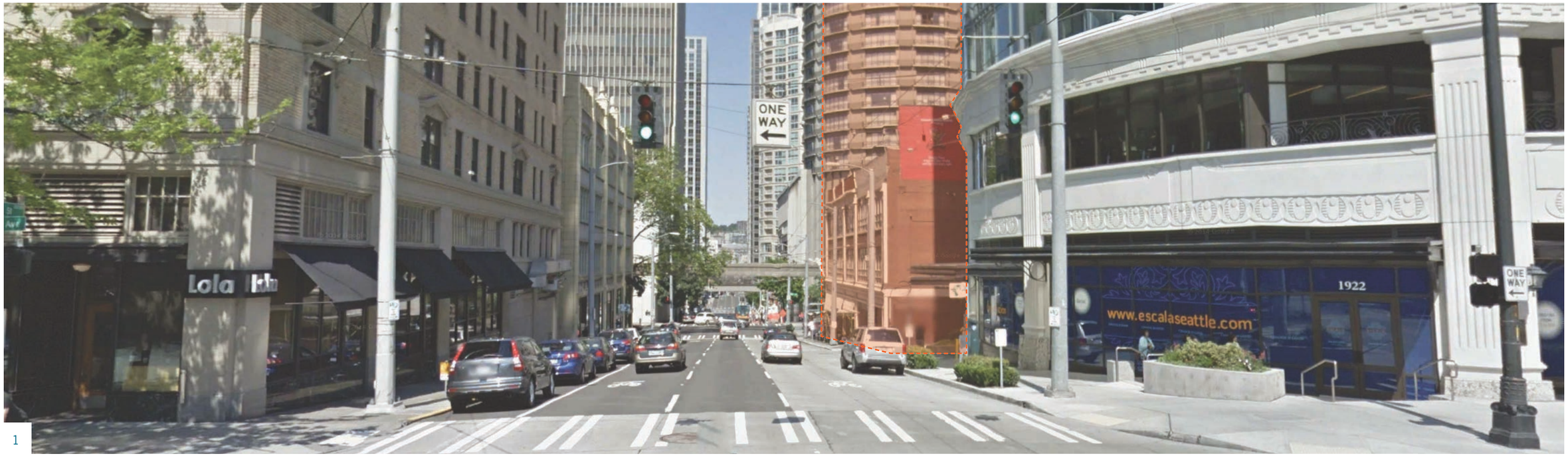

AVIS
Budget
MONTHLY
PARKING
623-8700
54
ONLY
Yellow
Cab

3


GRILL
OPEN 8AM
EVERYDAY
TASTY
COMFORT FOOD
53

4

VIRGINIA STREET VIEWS /



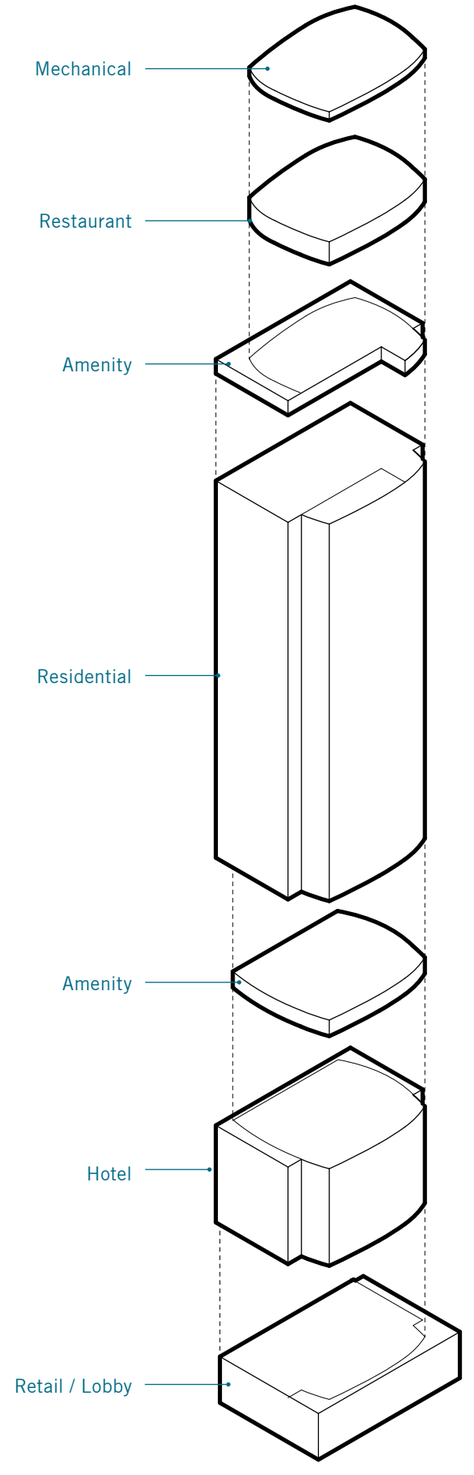
1

2

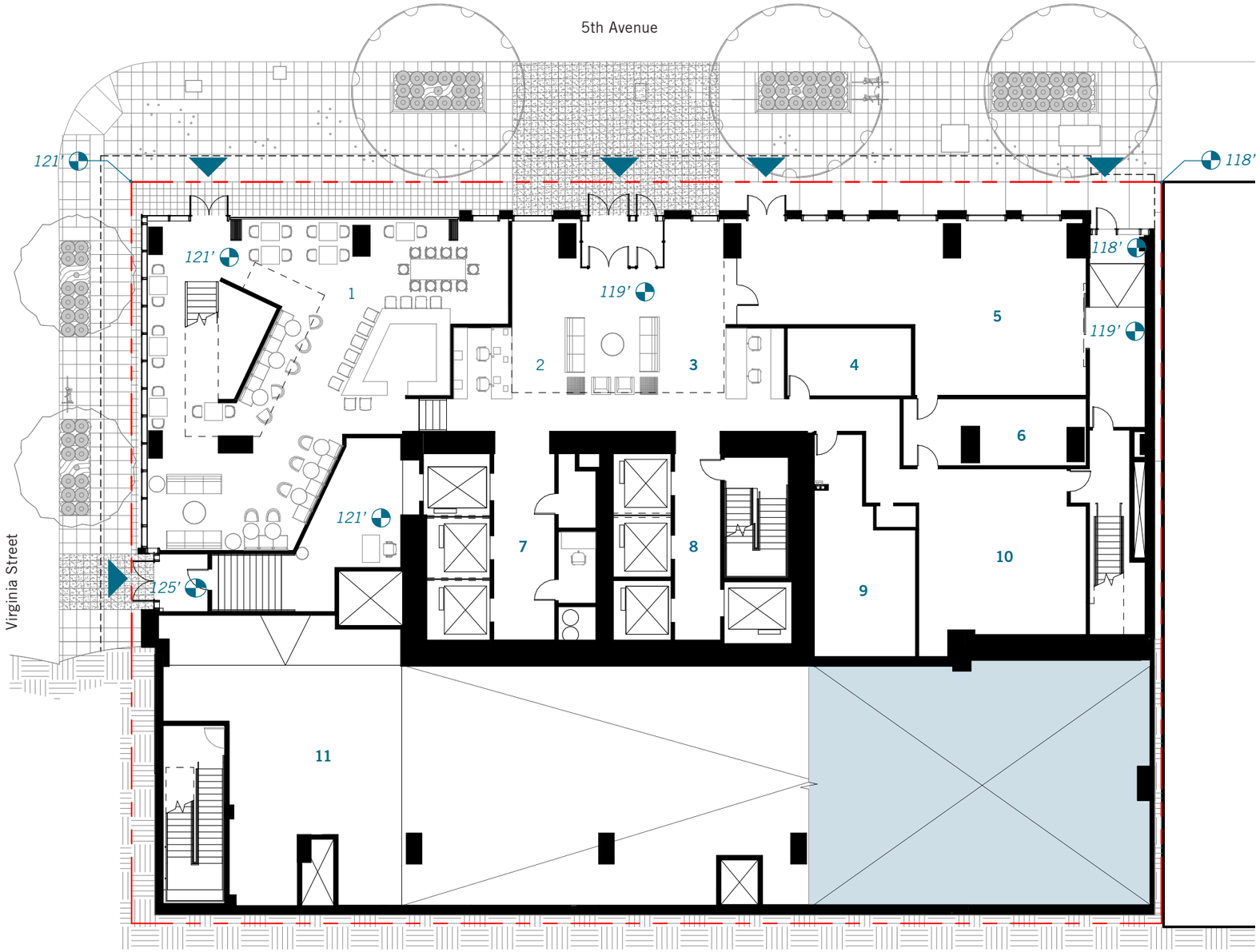
3

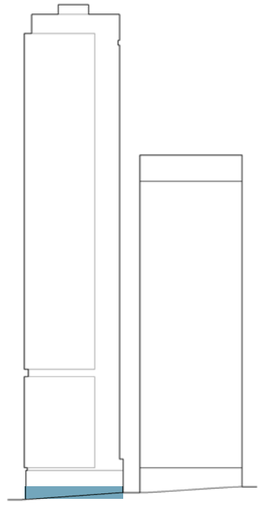
4

SECTION 07.
PLANS, SECTIONS



PLAN, LEVEL 01, FIFTH AVENUE ENTRY LEVEL /





- Pedestrian Entry
- Open to Below

1 Hotel Bar and Restaurant
2 Hotel Front Desk
3 Residential Front Desk
4 Package Room
5 Retail
6 Retail Kitchen
7 Hotel Elevators
8 Residential Elevators
9 Fire Command Center
10 Mail room
11 Ramp Down to Parking Garage

0 4 8 16 32

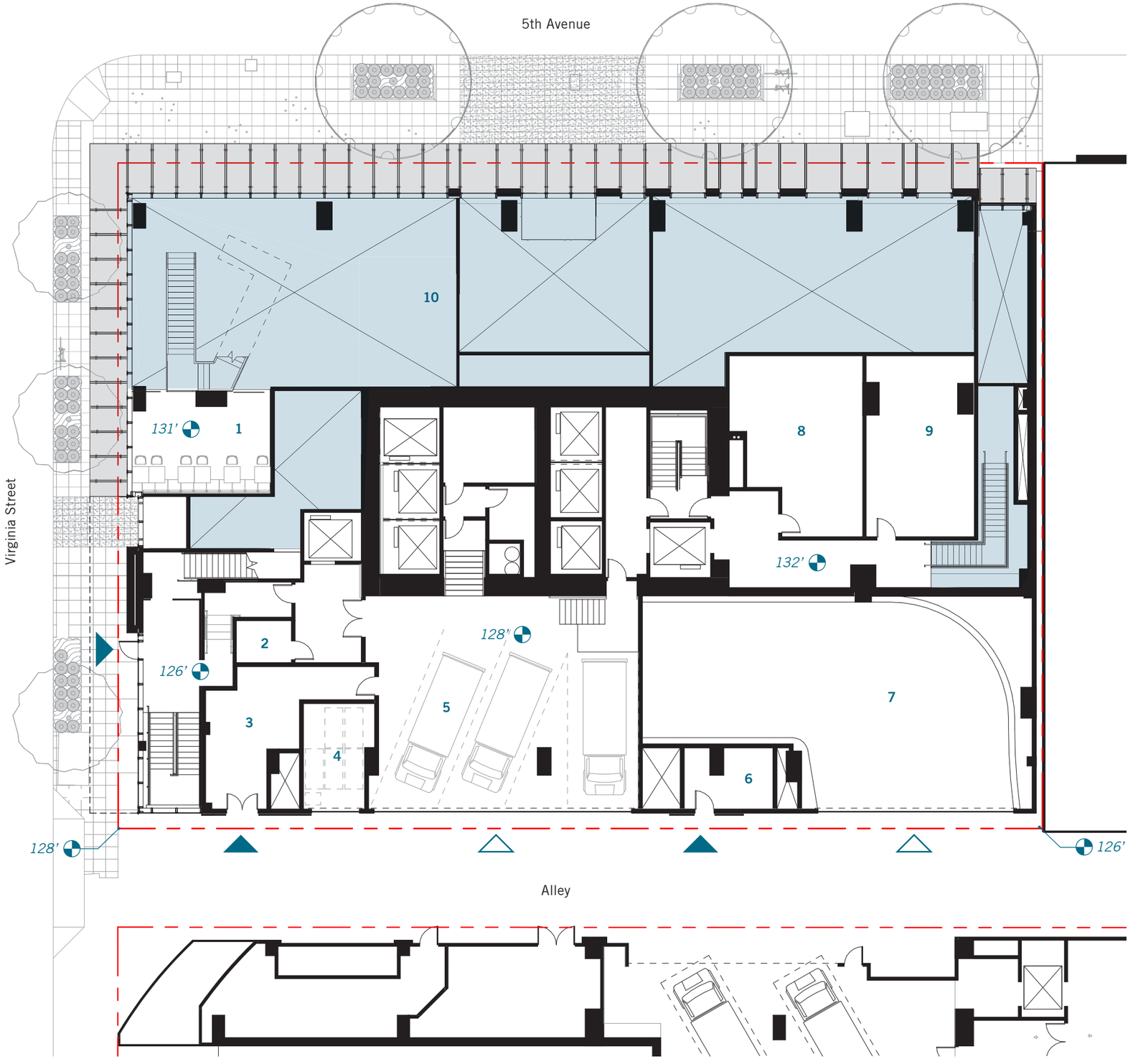
PLAN, LEVEL 1.5 ALLEY SERVICE LEVEL /

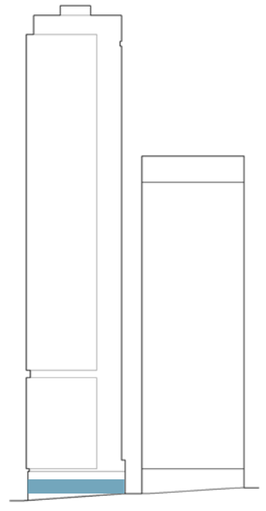
Pedestrian Entry

Vehicle Entry

Open to Below

1 Restaurant Alcove
2 Building Security
3 Commercial Trash
4 Residential Trash
5 Loading Dock
6 Gas Meters
7 Ramp Down to Parking Garage
8 Domestic Hot Water Room
9 Telecommunications Room

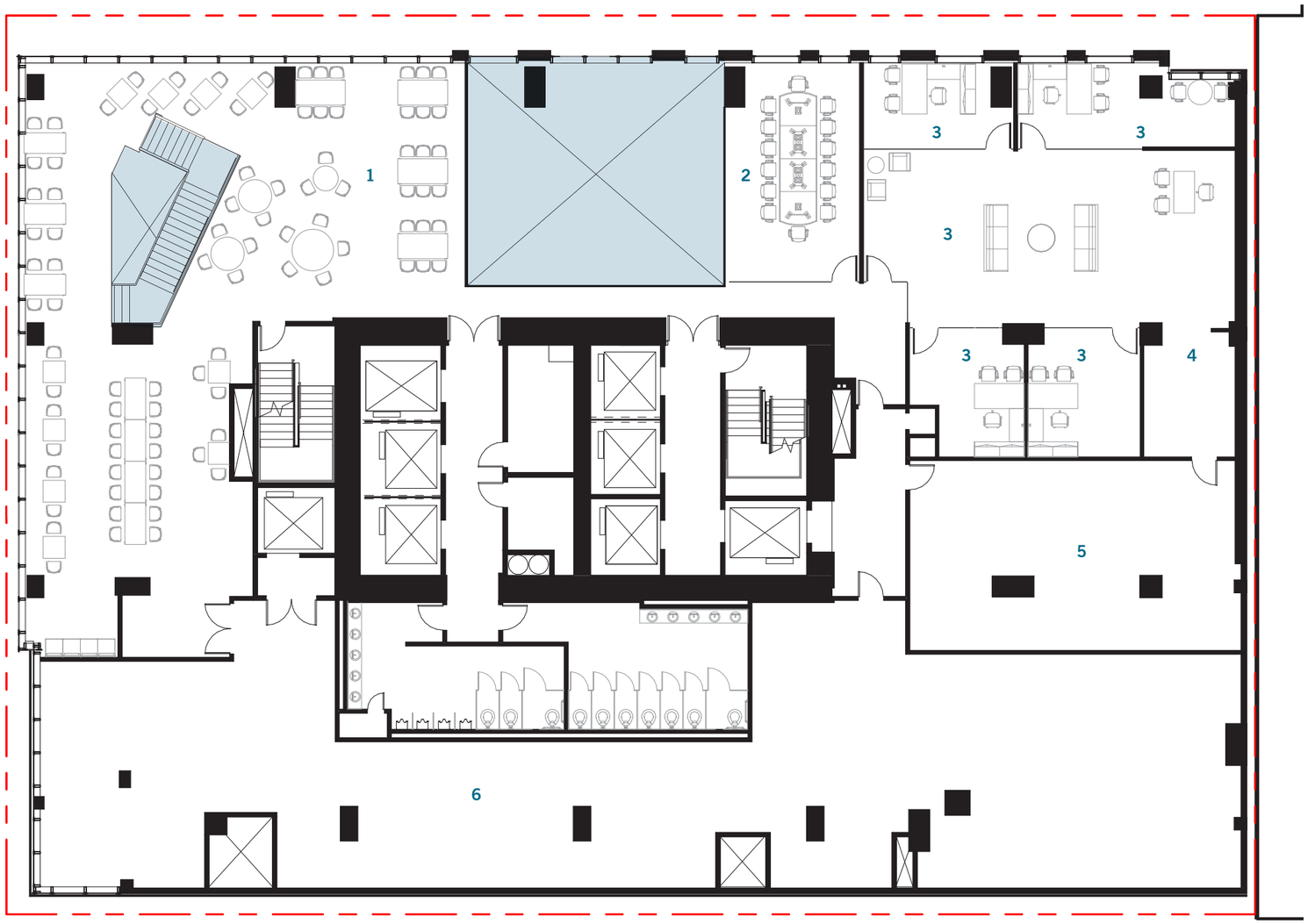


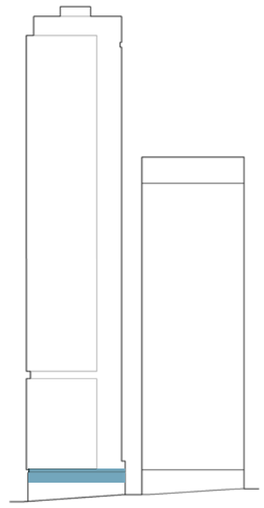


0 4 8 16 32

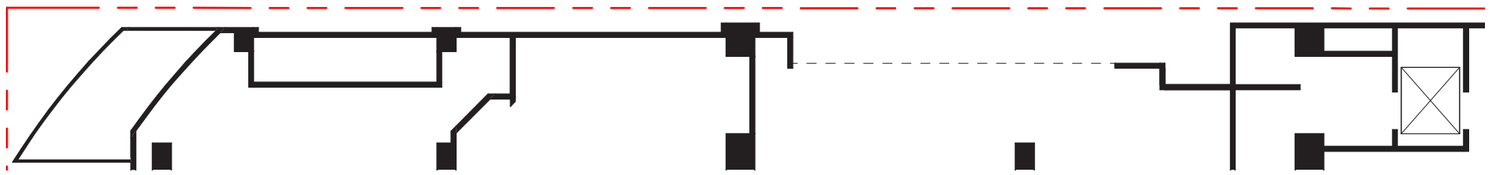
Open to Below

1 Restaurant
2 Meeting / Dining
3 Leasing Office
4 Support
5 Package Room
6 Kitchen





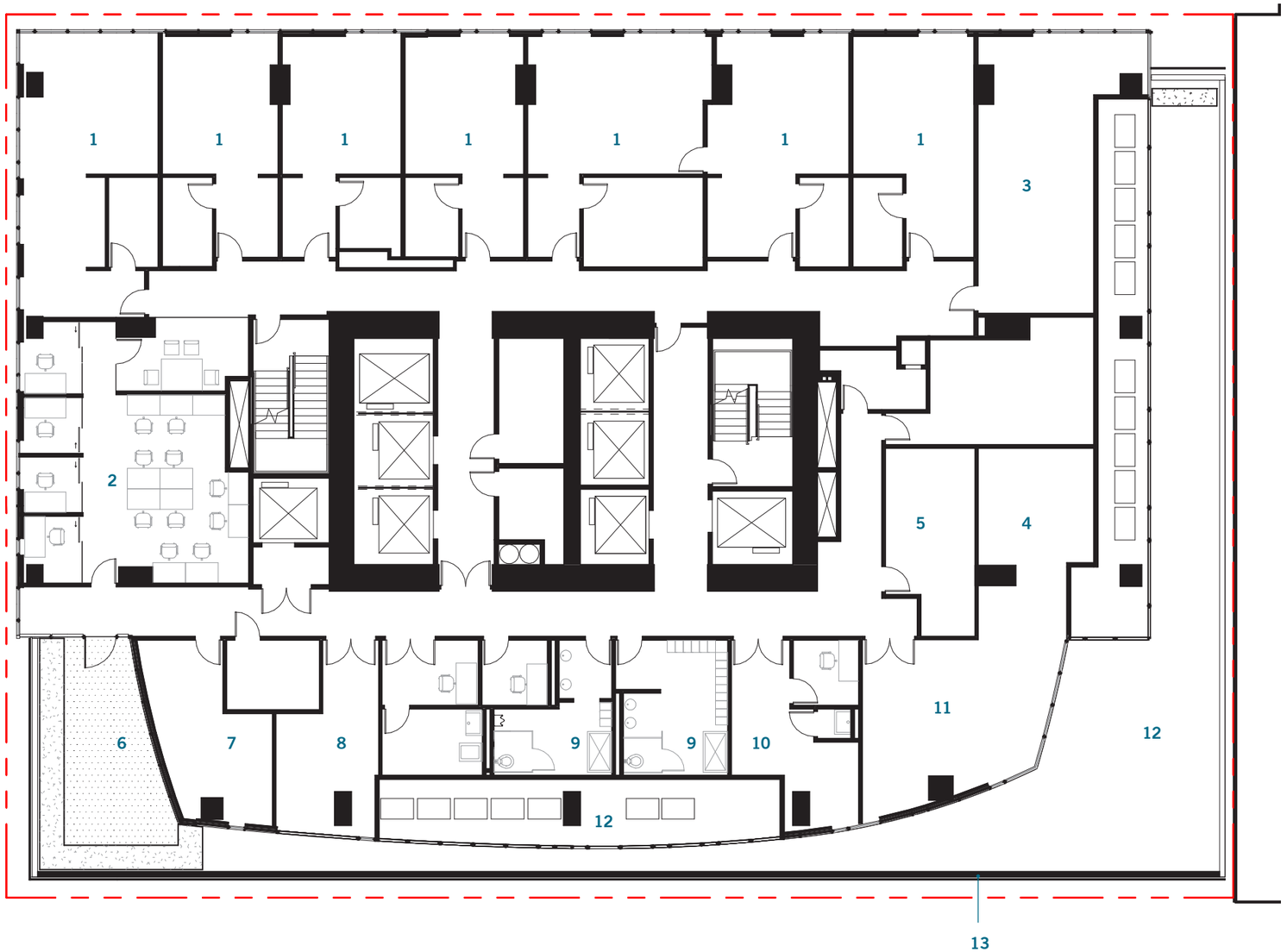
0 4 8 16 32

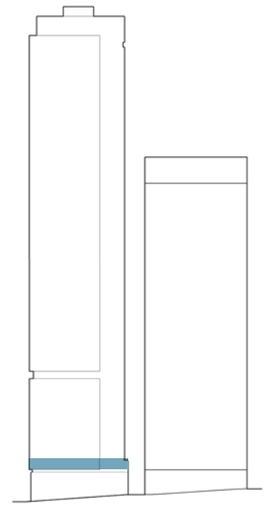


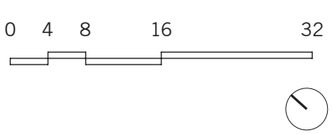
PLAN, LEVEL 03, HOTEL /

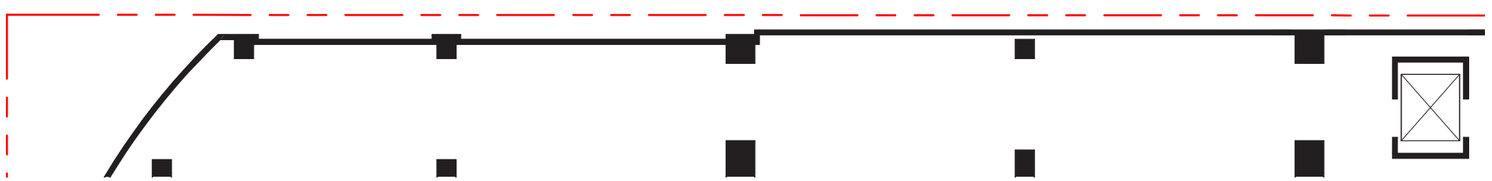
Open to Below

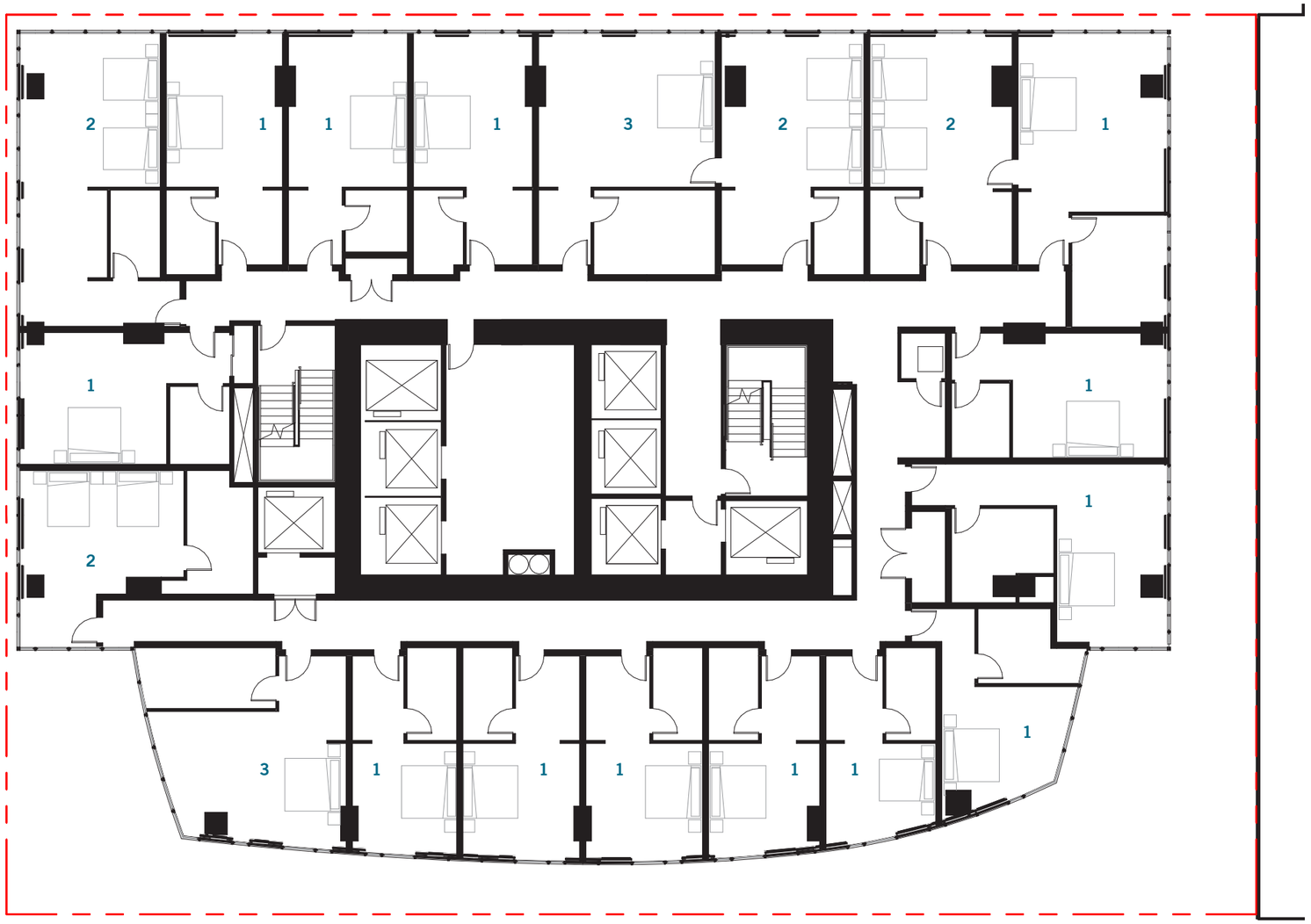
1 Hotel Guest Room
2 Hotel Office
3 Residential Storage
4 Residential Engineering
5 Residential Laundry
6 Dog walk
7 Housekeeping
8 Break Room
9 Locker Room
10 Hotel Engineering
11 Hotel Storage
12 Terrace (changed from Mechanical at REC1)
13 Mechanical Screen wall

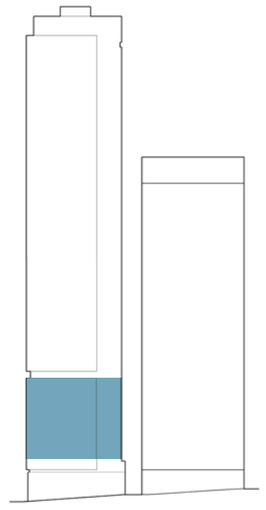






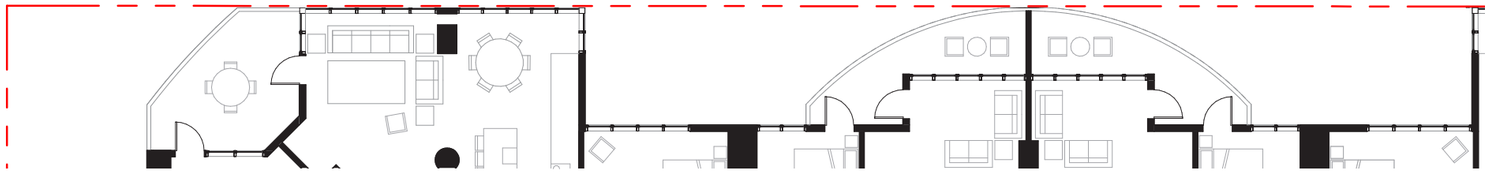




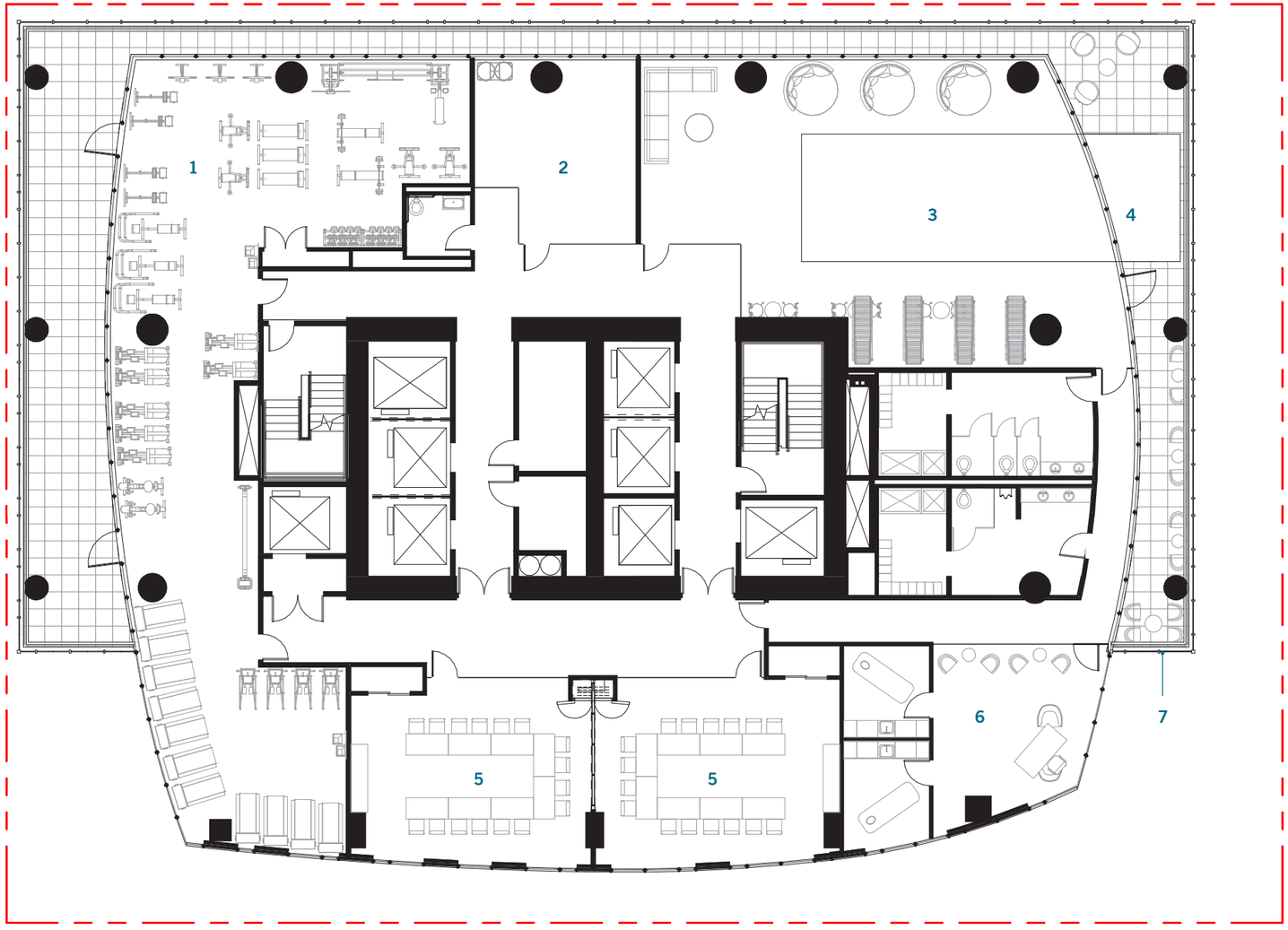


1 King Bed Hotel Room
2 Queen / Queen Hotel Room
3 Suite Hotel Room

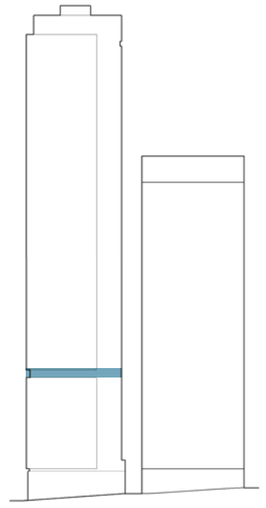
0 4 8 16 32



PLAN, LEVEL 12, SHARED AMENITIES /



1 Fitness Room
2 Yoga Room
3 Pool
4 Hot Tub
5 Meeting Room
6 Spa
7 6' Glass Privacy Wall



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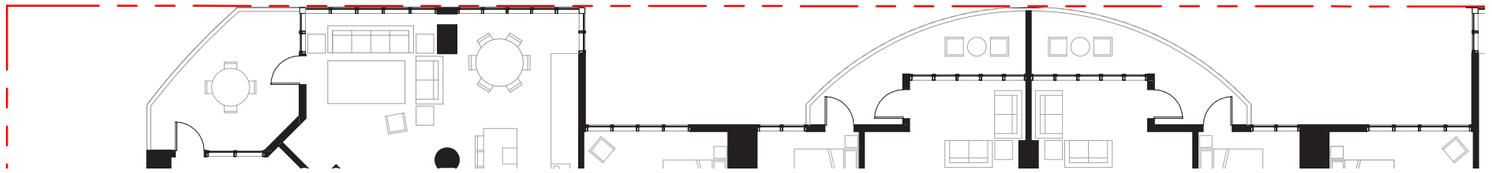
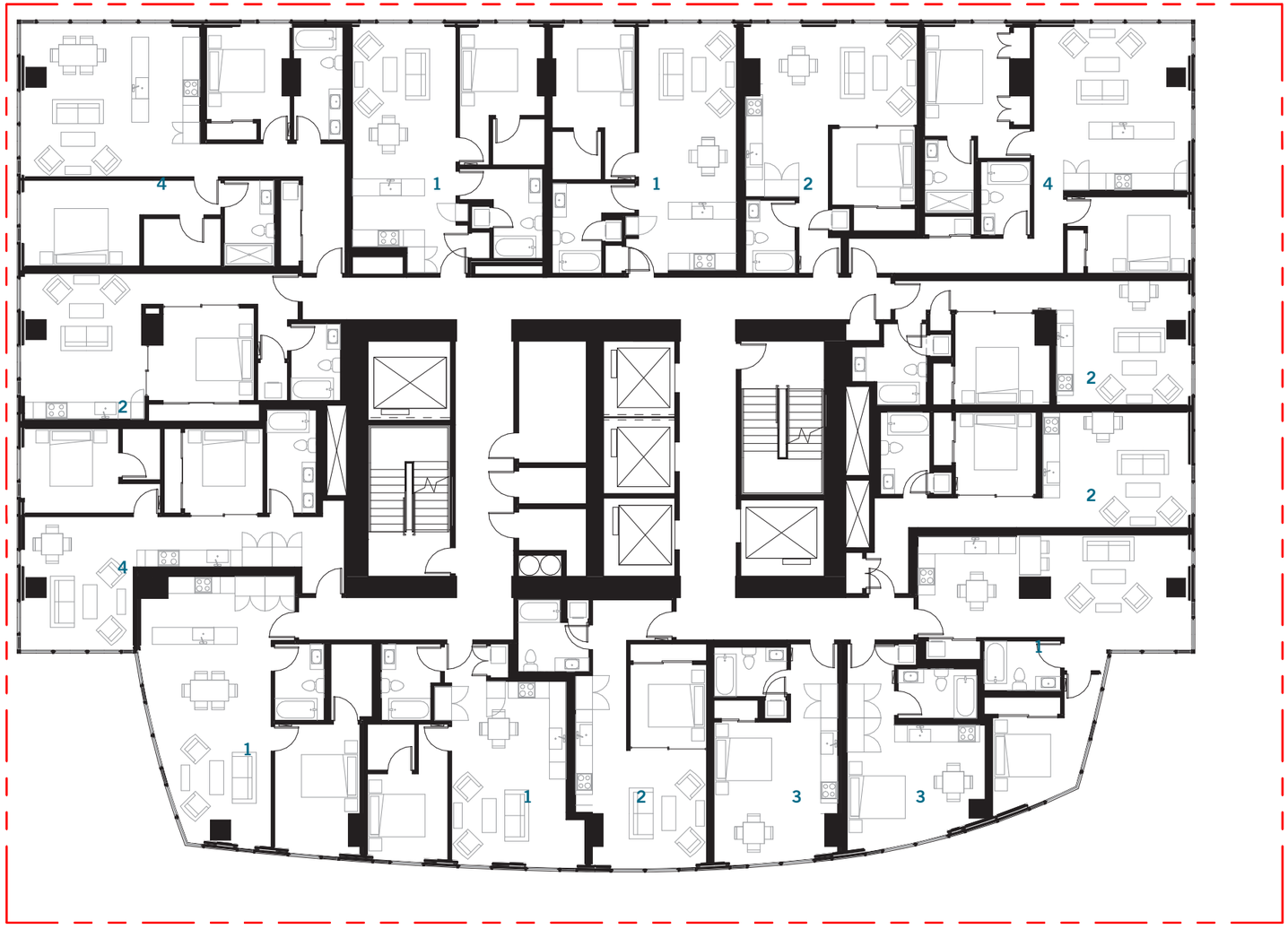
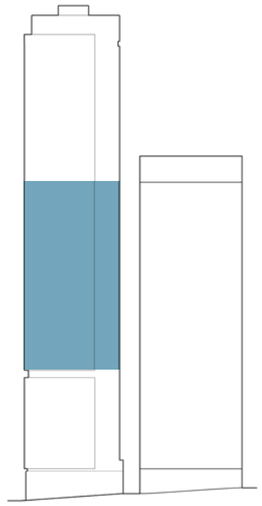




1 One Bedroom Unit
2 Open One Bedroom Unit
3 Studio
4 Two Bedroom Unit



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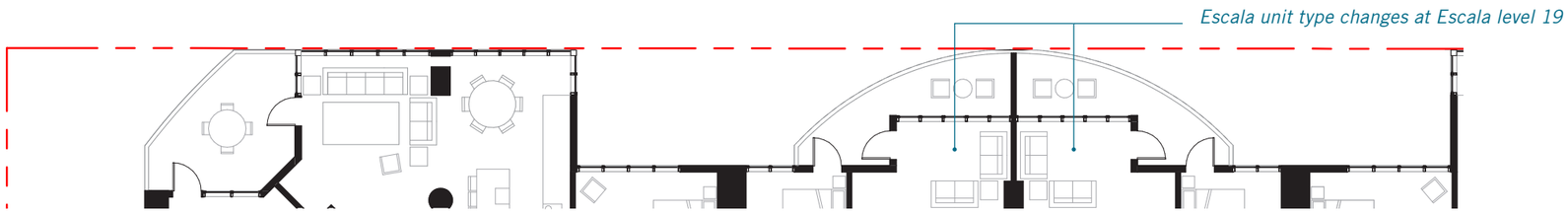
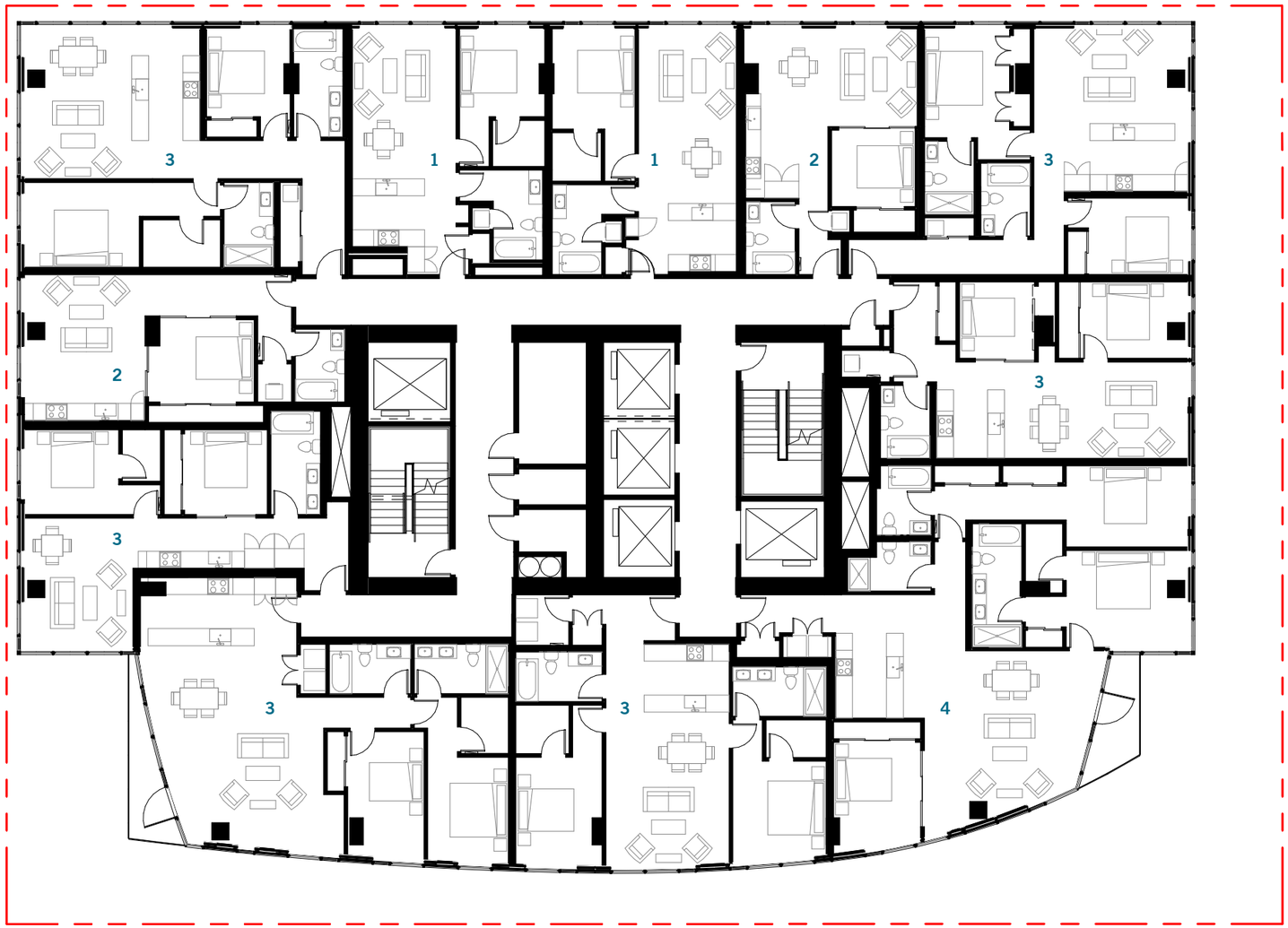
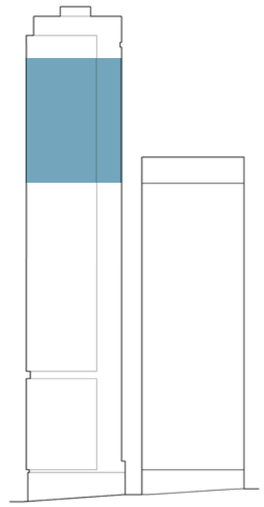


PLAN, LEVELS 33-43, RESIDENTIAL /

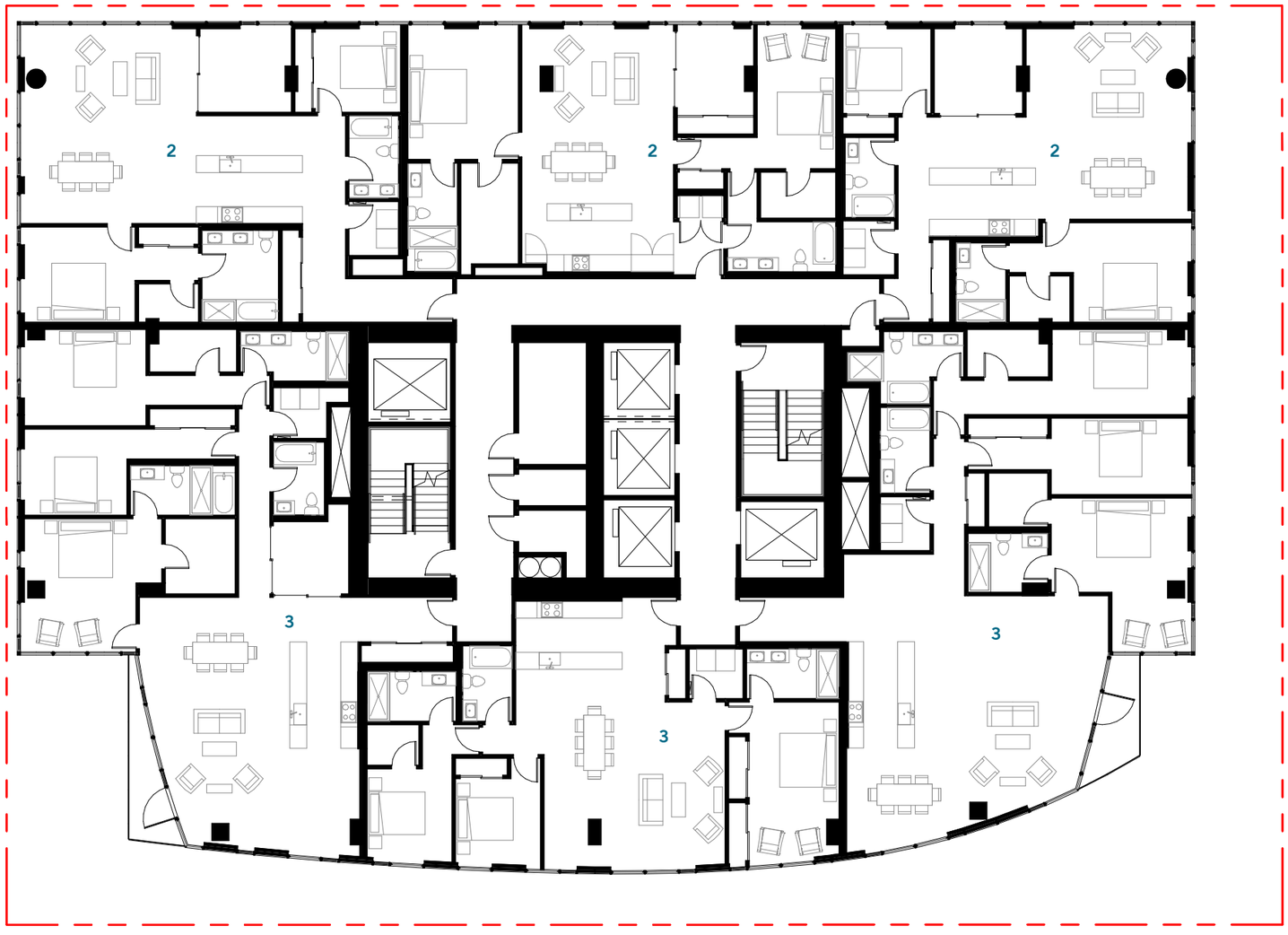
1 One Bedroom Unit
2 Open One Bedroom Unit
3 Two Bedroom Unit
4 Three Bedroom Unit

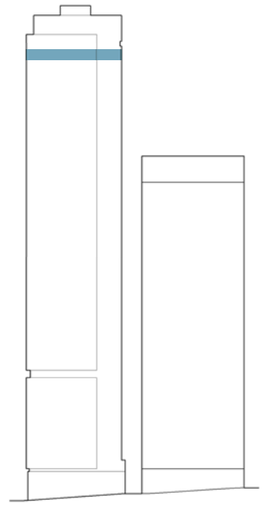




0 4 8 16 32

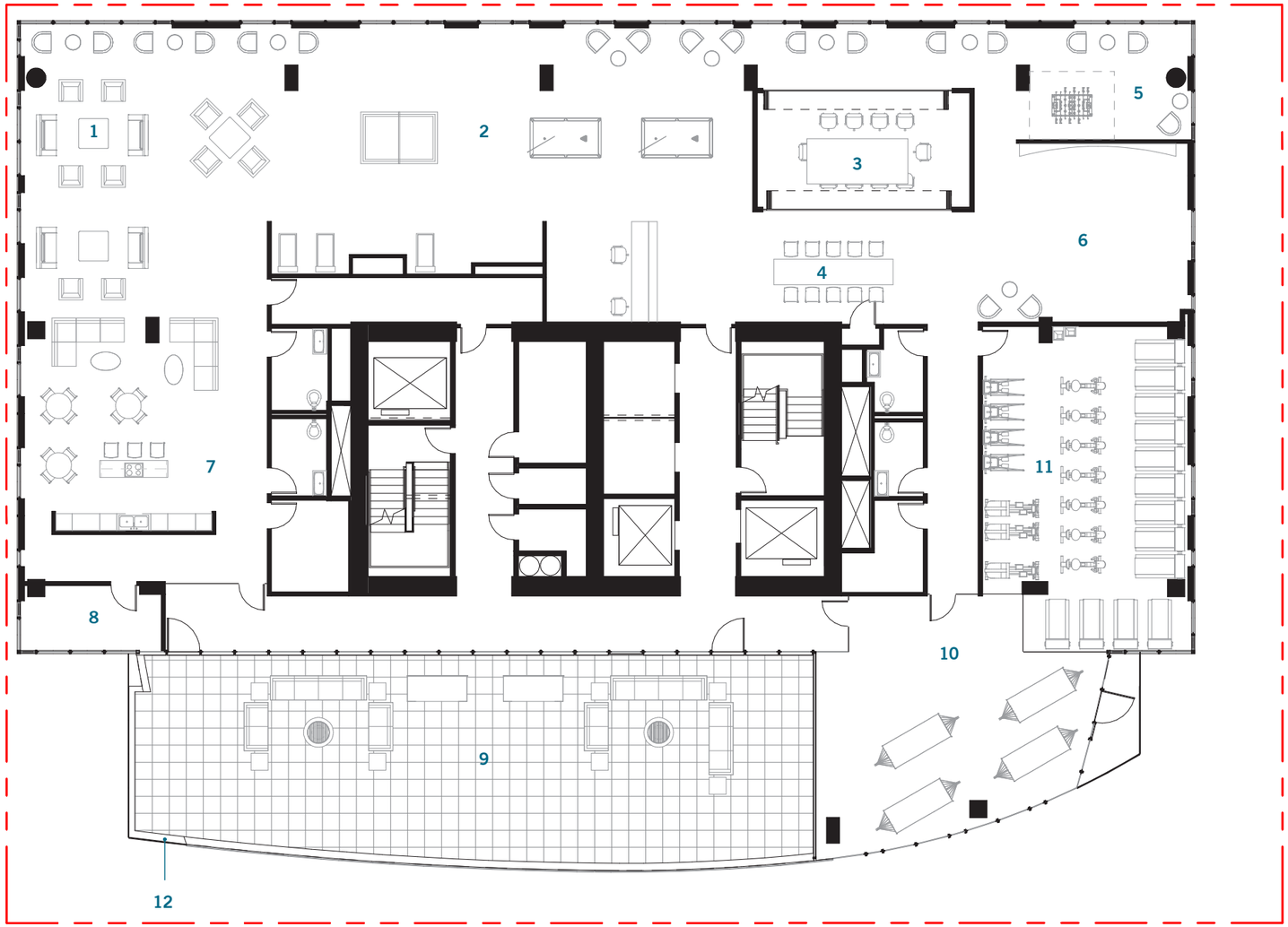
1 One Bedroom Unit
2 Two Bedroom Unit
3 Three Bedroom Unit



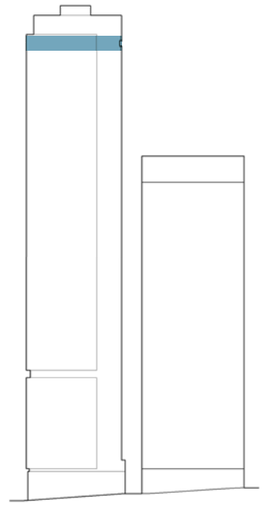


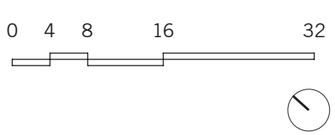
0 4 8 16 32

PLAN, LEVEL 46, RESIDENTIAL AMENITY /

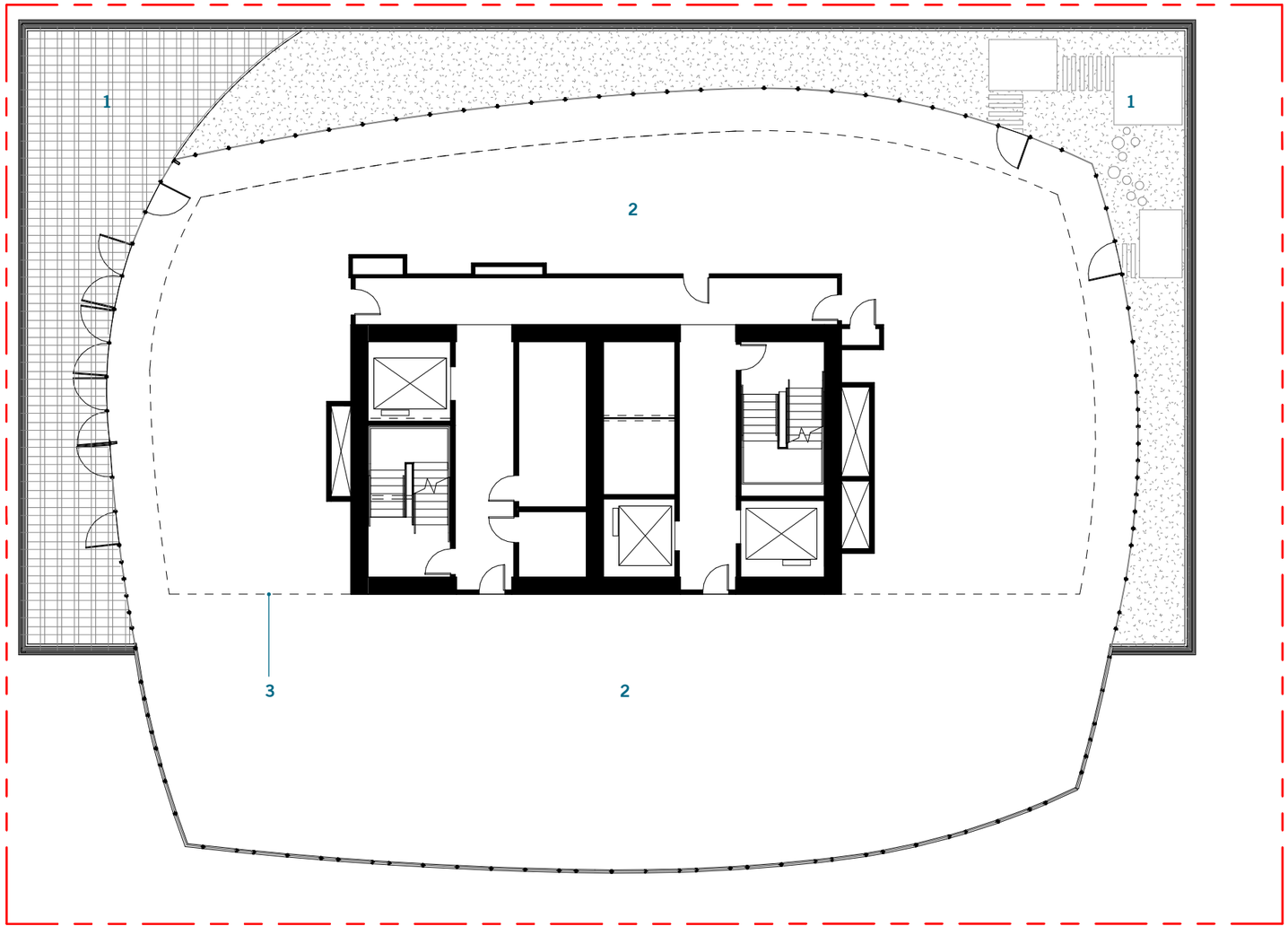


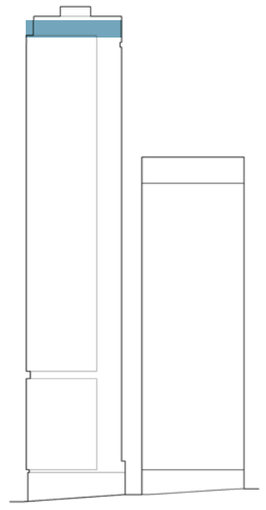
1 Lounge
2 Game Area
3 Meeting Room
4 Bar Seating
5 Foosball
6 Golf Simulator
7 Demo Kitchen
8 Catering Kitchen
9 Outdoor Terrace
10 Meditation Hammock Park
11 Cardio
12 6' Glass Privacy Wall





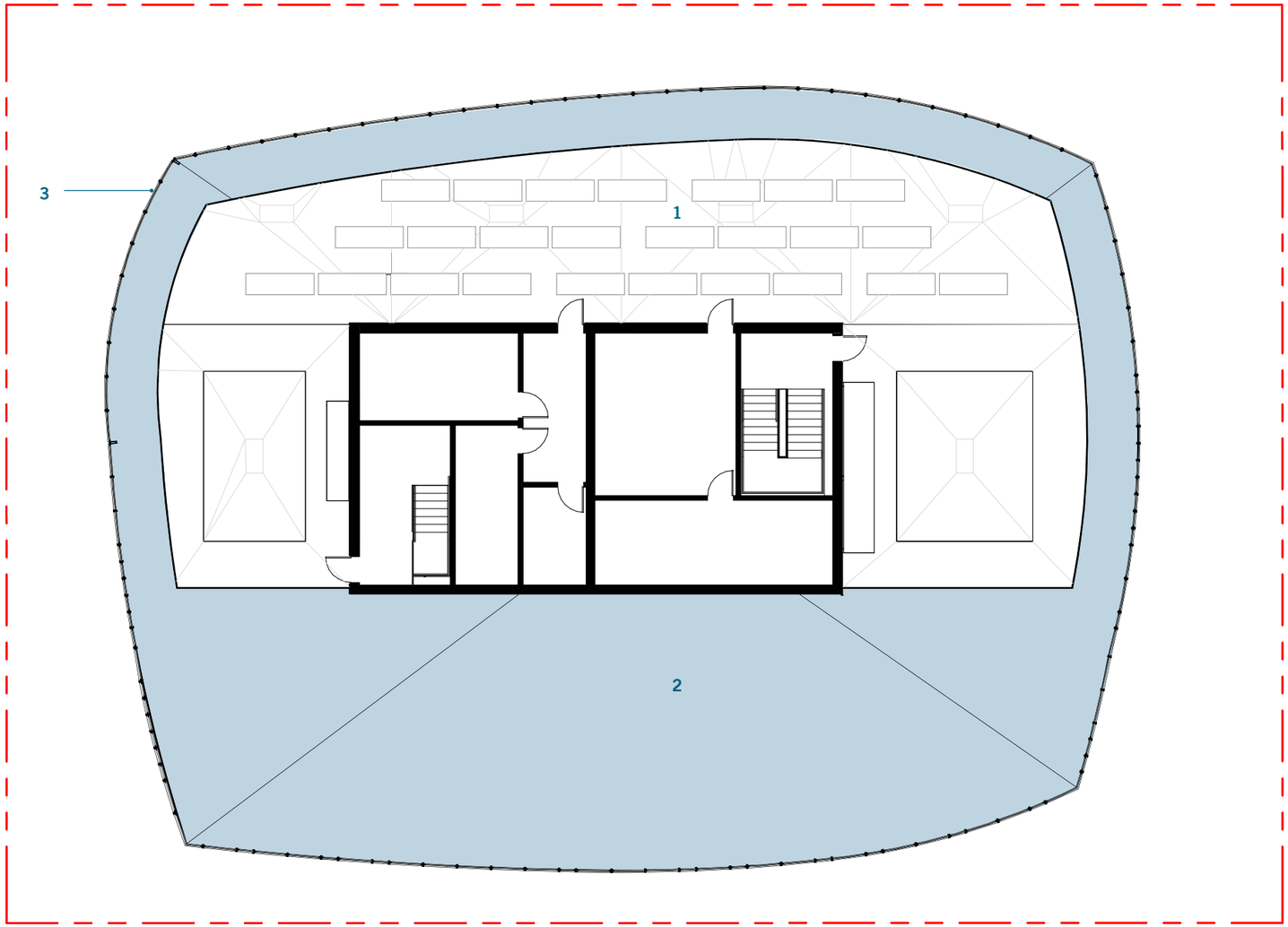
1 Outdoor Terrace
2 Bar and Restaurant
3 Line of soffit above

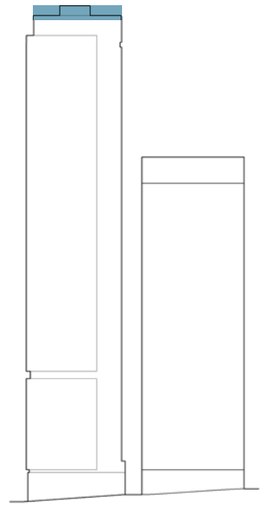




0 4 8 16 32

LEVEL 48, ROOFTOP MECHANICAL /





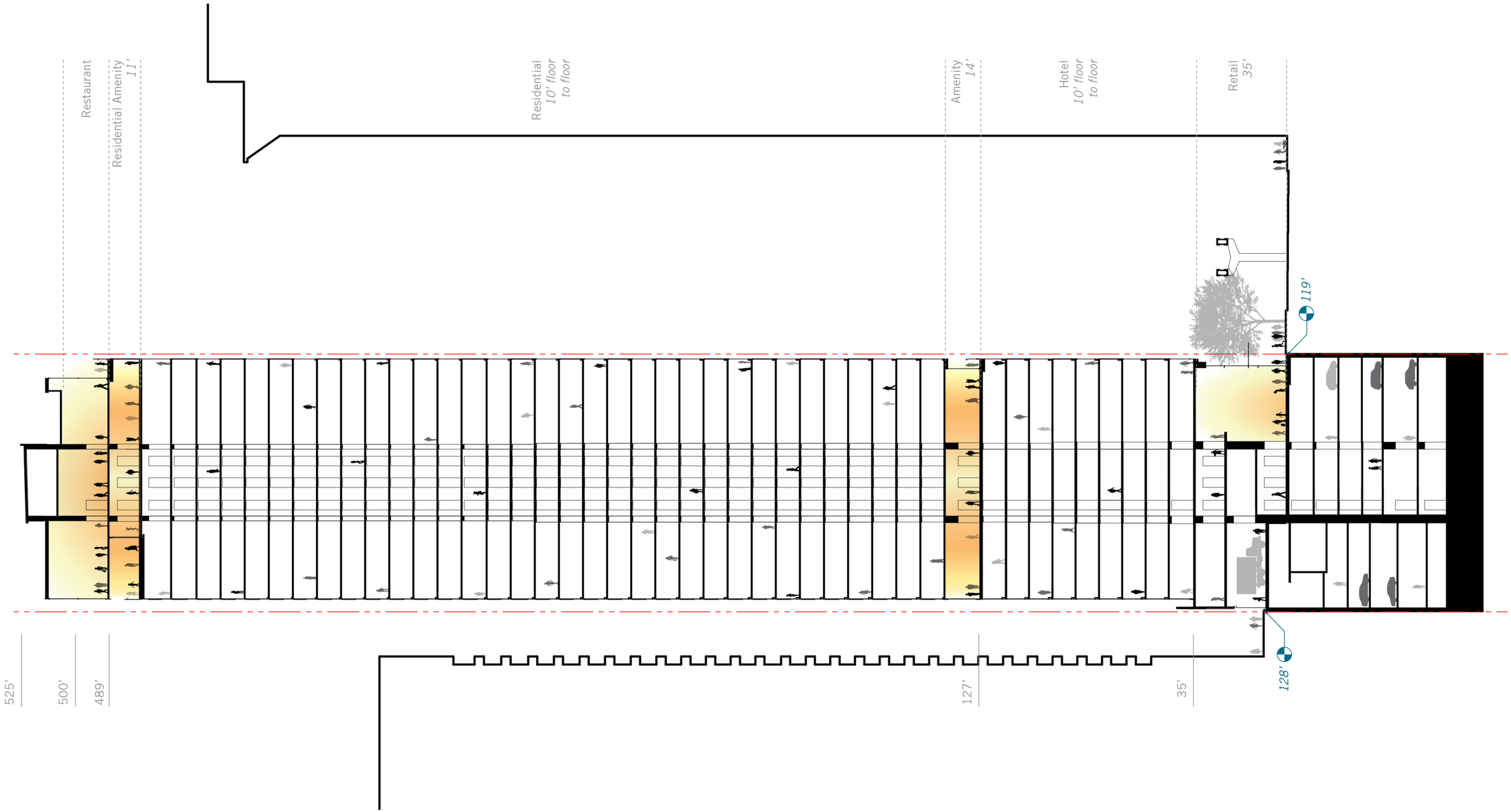
1 Screened mechanical equipment

2 Open to below

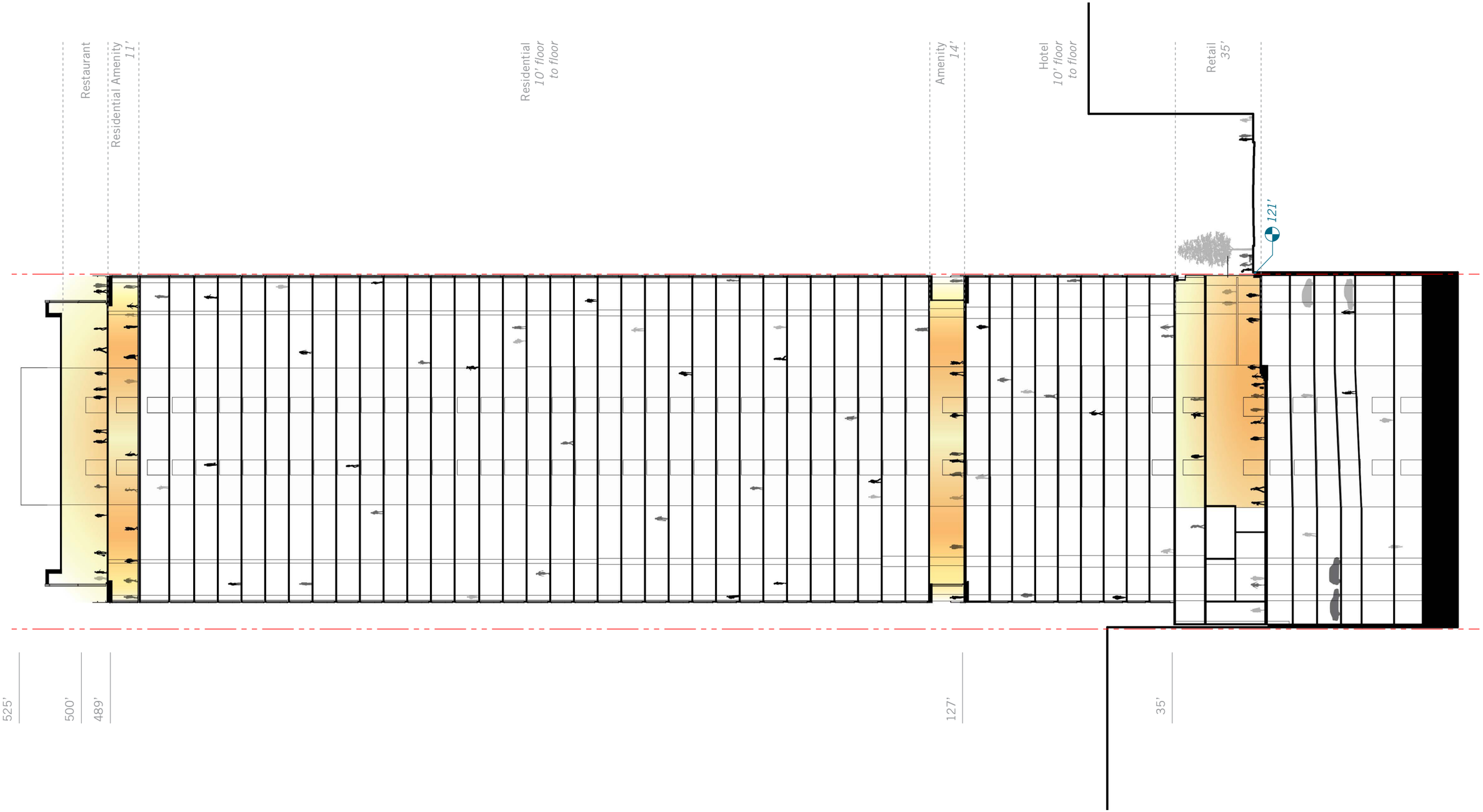
3 Two-layer mechanical enclosure

0 4 8 16 32

SECTION, EAST-WEST /



SECTION, NORTH-SOUTH /



SECTION 08.
DEPARTURES

DEPARTURE 01 /

Code Citation & Requirement

SMC 23.49.056.B

FACADE SETBACK LIMITS:

1. Setback limits for property line facades. The following setback limits apply to all streets designated on Map 1H as requiring property line facades, except as specified in subsection 23.49.056.B.1.d.

b. Structures greater than 15 feet in height are governed by the following criteria:

1) No setback limits apply up to an elevation of 15 feet above sidewalk grade.

2) Between the elevations of 15 and 35 feet above sidewalk grade, the facade shall be located within 2 feet of the street lot line, except that:

a) Any exterior public open space that satisfies the Downtown Amenity Standards, whether it receives a bonus or not, and any outdoor common recreation area required for residential uses, is not considered part of the setback.

b) Setbacks between the elevations of 15 and 35 feet above sidewalk grade at the street lot line are permitted according to the following standards, as depicted in Exhibit B for 23.49.056:

i. The maximum setback is 10 feet.

ii. The total area of a facade that is set back more than 2 feet from the street lot line shall not exceed 40 percent of the total facade area between the elevations of 15 and 35 feet.

iii. No setback deeper than 2 feet shall be wider than 20 feet, measured parallel to the street lot line.

iv. The facade of the structure shall return to within 2 feet of the street lot line between each setback area for a minimum of 10 feet. Balcony railings and other non-structural features or walls are not considered the facade of the structure.

Proposed Departure

Request departure to allow the 5th Avenue facade to be setback beyond the dimensions set forth by code.
Departed setback for the 5th Avenue facade, from grade to an elevation of 35' above grade, is proposed as follows:

One (1) face of the facade, measuring 9' 4", would be setback 6' 10" from the property line. This length amounts to 6.3% of the total facade length. This setback would create a 24' 4" wide sidewalk.

One (1) face of the facade, measuring 91' 10", would be setback 4' 2" to 4' 10" from the property line. This length amounts to 62.3% of the total facade length. This setback would create a 21' 8" to 22' 10" wide sidewalk.

One (1) face of the facade, measuring 46' 4", would be setback 4' 10" from the property line. This length amounts to 31.4% of the total facade length. This setback would create a 22' 10" wide sidewalk.

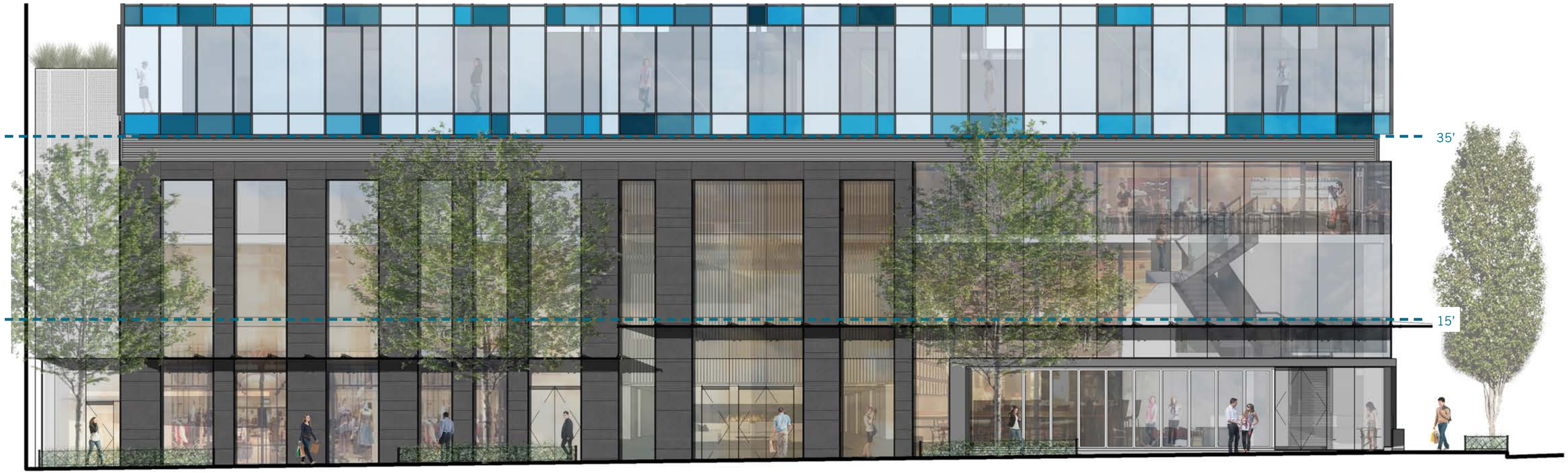
Rationale

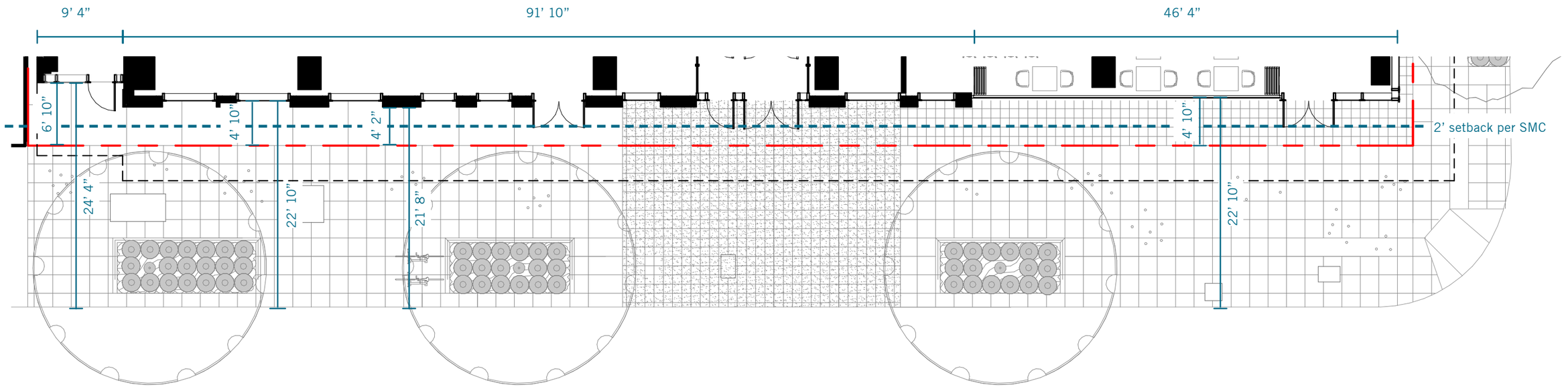
Per direction from the Board and Early Design Guidance Meeting Notes, dated November 3, 2015:

6B: "The Board strongly supported the 3 ft setback shown (more encouraged)..."

The departure would provide for between 4'-2" to 6'-10" of additional building setback and sidewalk width for a total dimension of between 21'-8" to 24'-4" between building and curb and thus would provide approximately 728 SF of sidewalk area to enhance opportunities for outdoor restaurant and retail.

Dimensional Clarifications





DEPARTURE 02 /

Code Citation & Requirement

SMC 23.49.018.D

OVERHEAD WEATHER PROTECTION D.
The lower edge of the overhead weather protection must be a minimum of ten (10) feet and a maximum of fifteen (15) feet above the sidewalk.

Proposed Departure

Request departure to allow a portion of the Virginia Street continuous overhead weather protection to be higher above the sidewalk than the dimensions set forth by code.

One (1) segment of continuous overhead weather protection, measuring approximately 22' in length, would be approximately 17' 8" above the sidewalk at the west side and 18' 11" above grade at the east side. As proposed, the continuos overhead weather protection would be 2' 8" to 3' 11" above the height prescribed by code.

Rationale

The unique conditions of the program and site suggest this slight departure. A double height bar and restaurant space with mid-level mezzanine is provide in this area, and the Virginia Street entry to the express rooftop bar elevator is here. By elevating the canopy to the proposed height, these interior uses are made more visible to activate and engage at the street level. Additionally, the higher canopy creates increased visibility and signifies entry more clearly from the corner of 5th and Virginia and from the uphill approach along Virginia from the west.

Dimensional Clarifications

Area of enlarged detail