the fir

Owner / Developer
KAMIAK
1700 Westlake Ave N
Suite 200
Seattle, WA 98109

Architect
PUBLIC47 Architects, LLC
232 7th Ave. N., Suite 200
Seattle, WA 98109

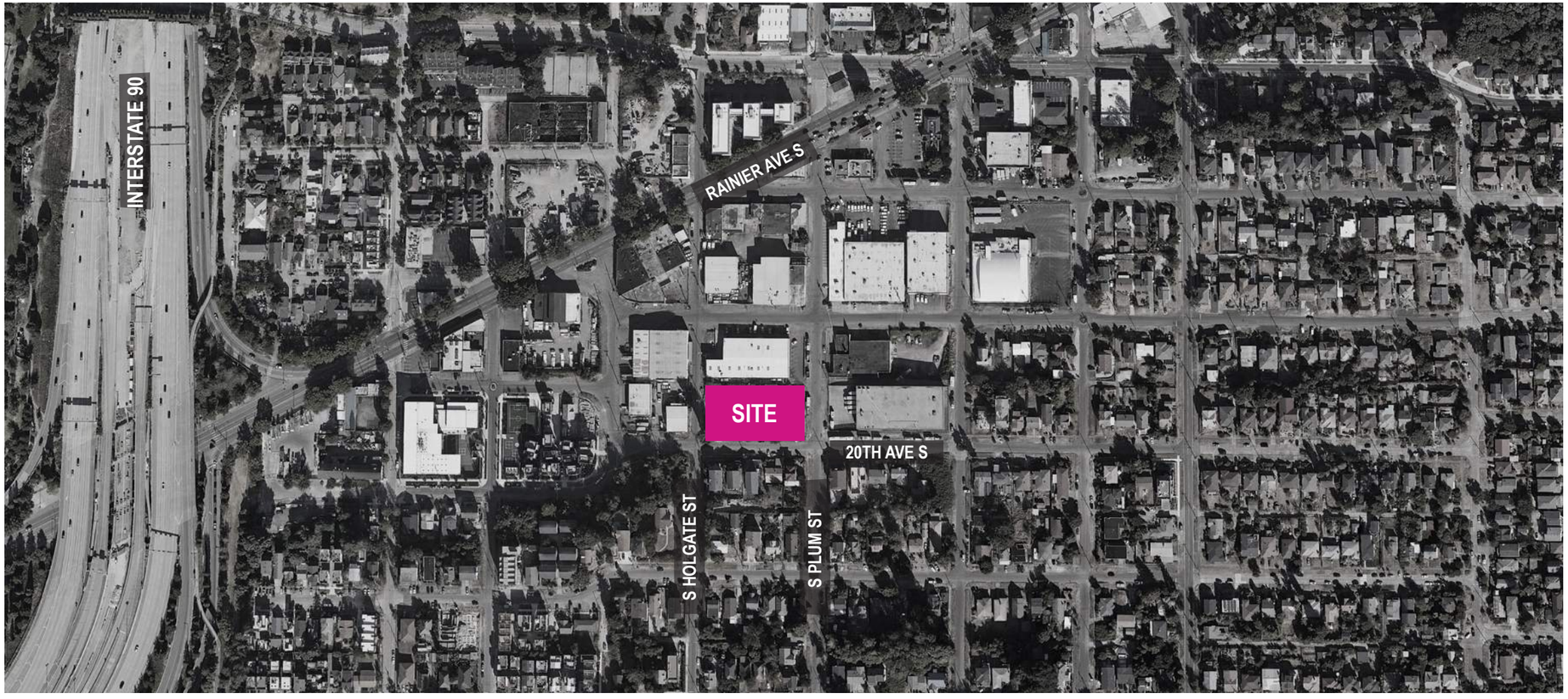
Landscape Architect
HEWITT
101 Stewart Street, Suite 200
Seattle, WA 98101

1906 20TH AVE S
SDCI #3037697-LU
Design Review Board Recommendation Meeting
June 28, 2022

PUBLIC47ARCHITECTS

KAMIAK

CONTENTS

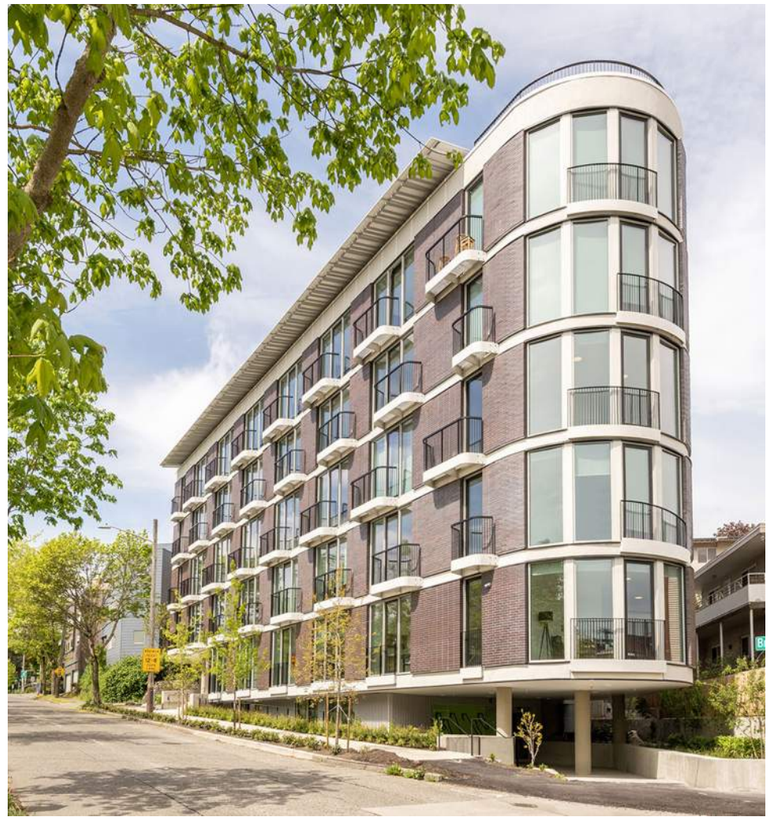


DEVELOPMENT OBJECTIVES

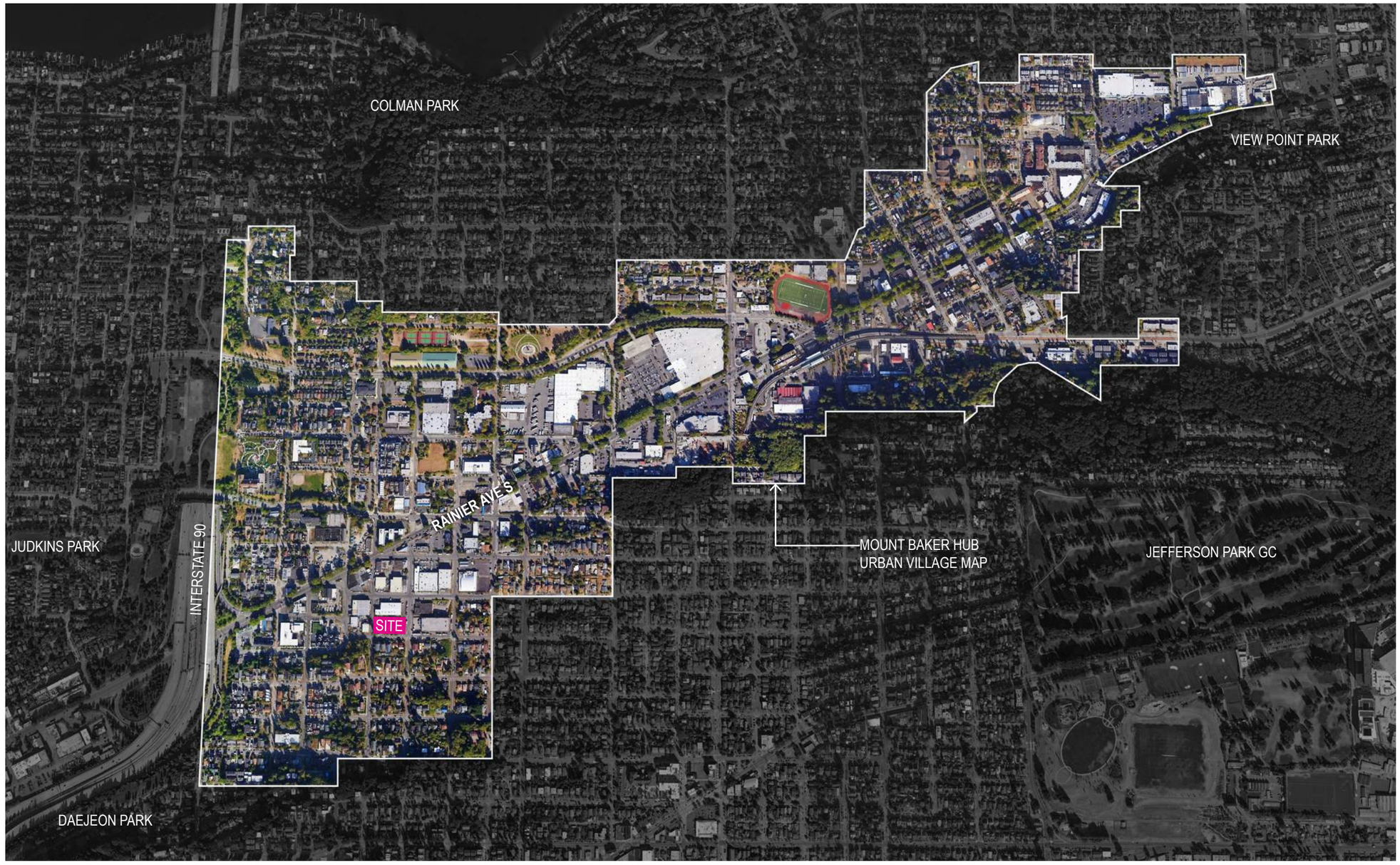
Provide +/- 204 Apartment Units
Provide +/- 2,000 SF of Street Level Commercial Space
Underground Parking for Approximately 80 Vehicles

Site Specific Response
The project seeks to respond appropriately to site conditions - working with the existing mature trees on site and breaking up the scale of the building in a visually interesting manner while providing a transition to the less intensive zones to the west.

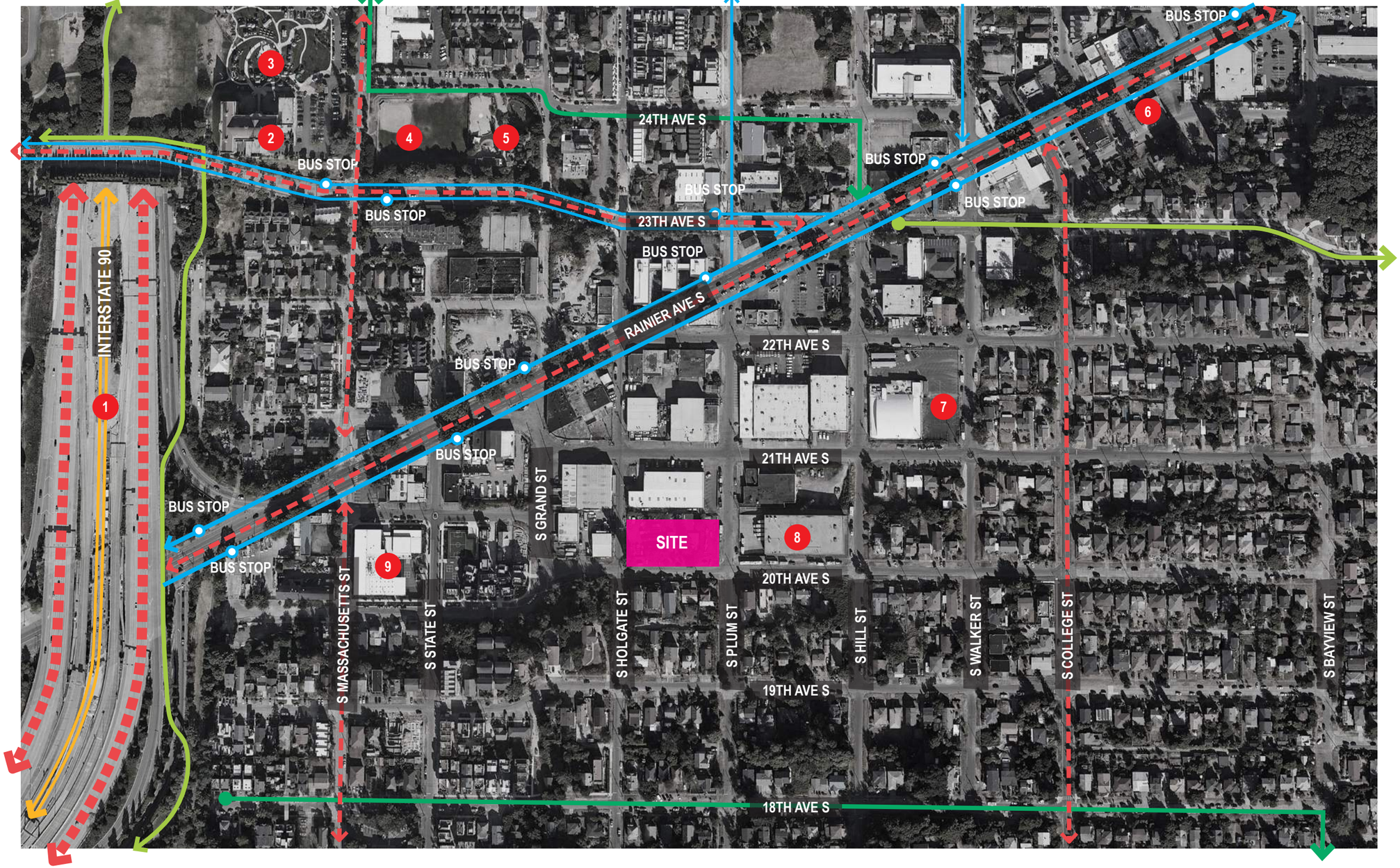
Pedestrian Connection and Interest
The project seeks to create a dynamic and layered pedestrian experience integrating lush landscaping, seating and new street level commercial spaces.



Sustainability
The project is exploring high-performance building strategies.



MOUNT BAKER HUB URBAN VILLAGE MAP



1. Future Judkins Park Link Station
2. Northwest African American Museum
3. Jimi Hendrix Park
4. Colman Playground
5. Seattle Children's PlayGarden
6. Lazarus Center
7. Giddens School
8. Borracchini Foods
9. Hamlin Robinson School

BUS

MAIN VEHICLE ROUTES

LINK *(future)*

BIKE PATH

NEIGHBORHOOD GREENWAY

AERIAL PHOTOGRAPH

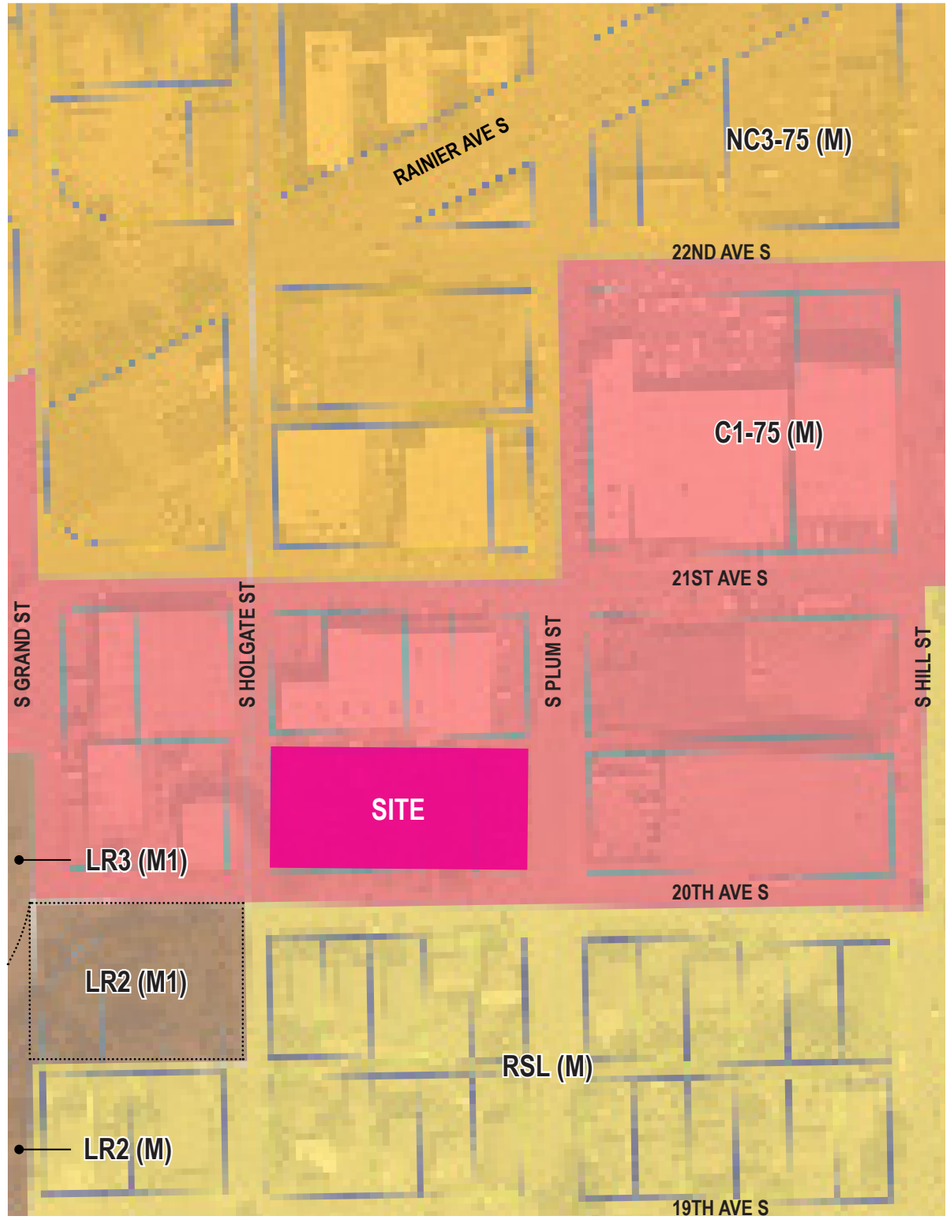
URBAN DESIGN ANALYSIS

The subject property is located in Seattle's North Beacon Hill neighborhood near Interstate 90.

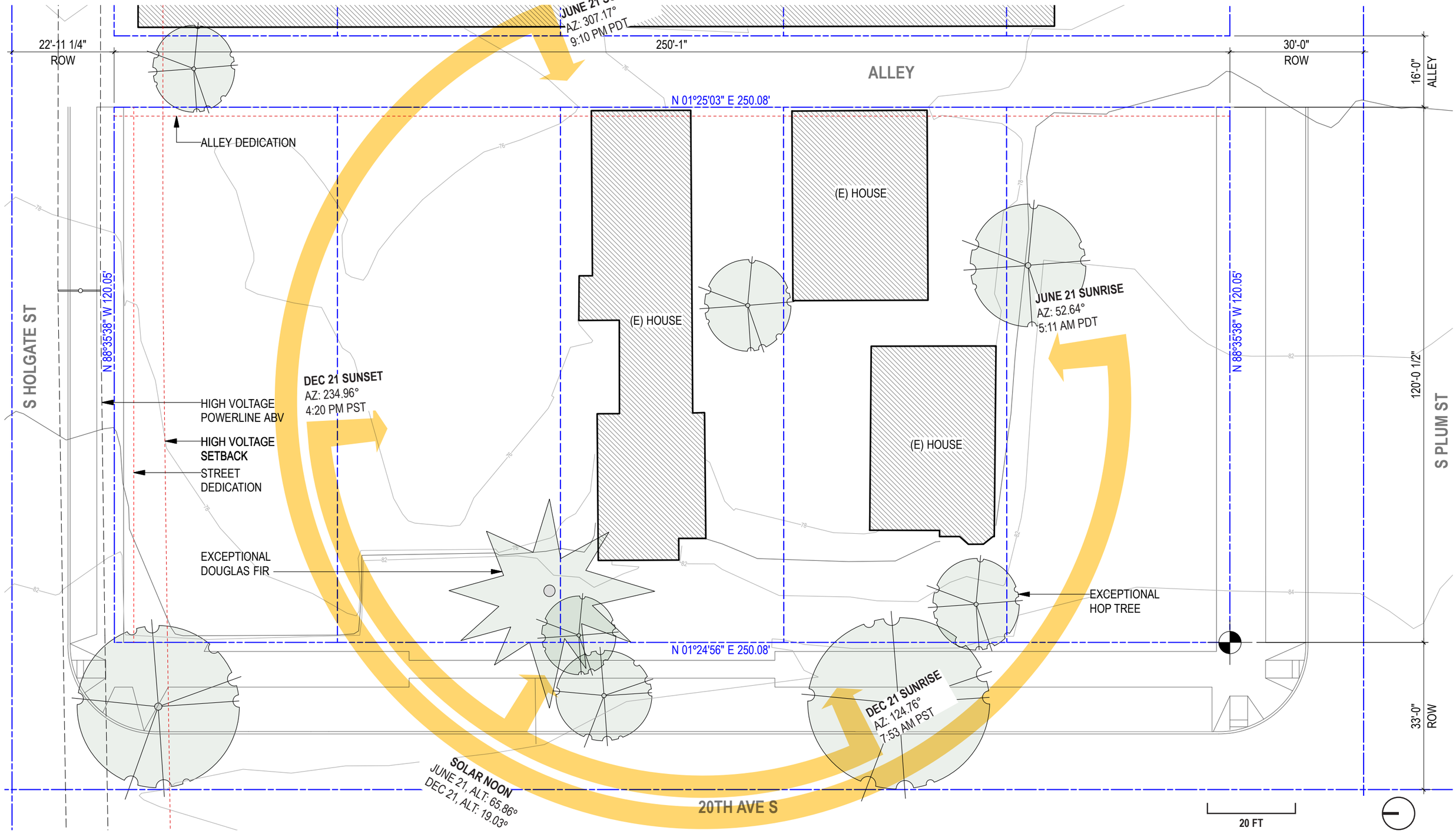
-Wide mix of zoning in the immediate vicinity
-Predominantly single-family residential to the West of site, while mainly commercial to the East.
-Residential, commercial, and institutional uses on surrounding blocks.
-Future Judkins Park Link Station to be located a few blocks away to the north.
-Zoning changes have stimulated redevelopment with several townhouses and apartment buildings replacing single-family residences.

Multi Family
Single Family
Institutional
Commercial
Mixed-Use

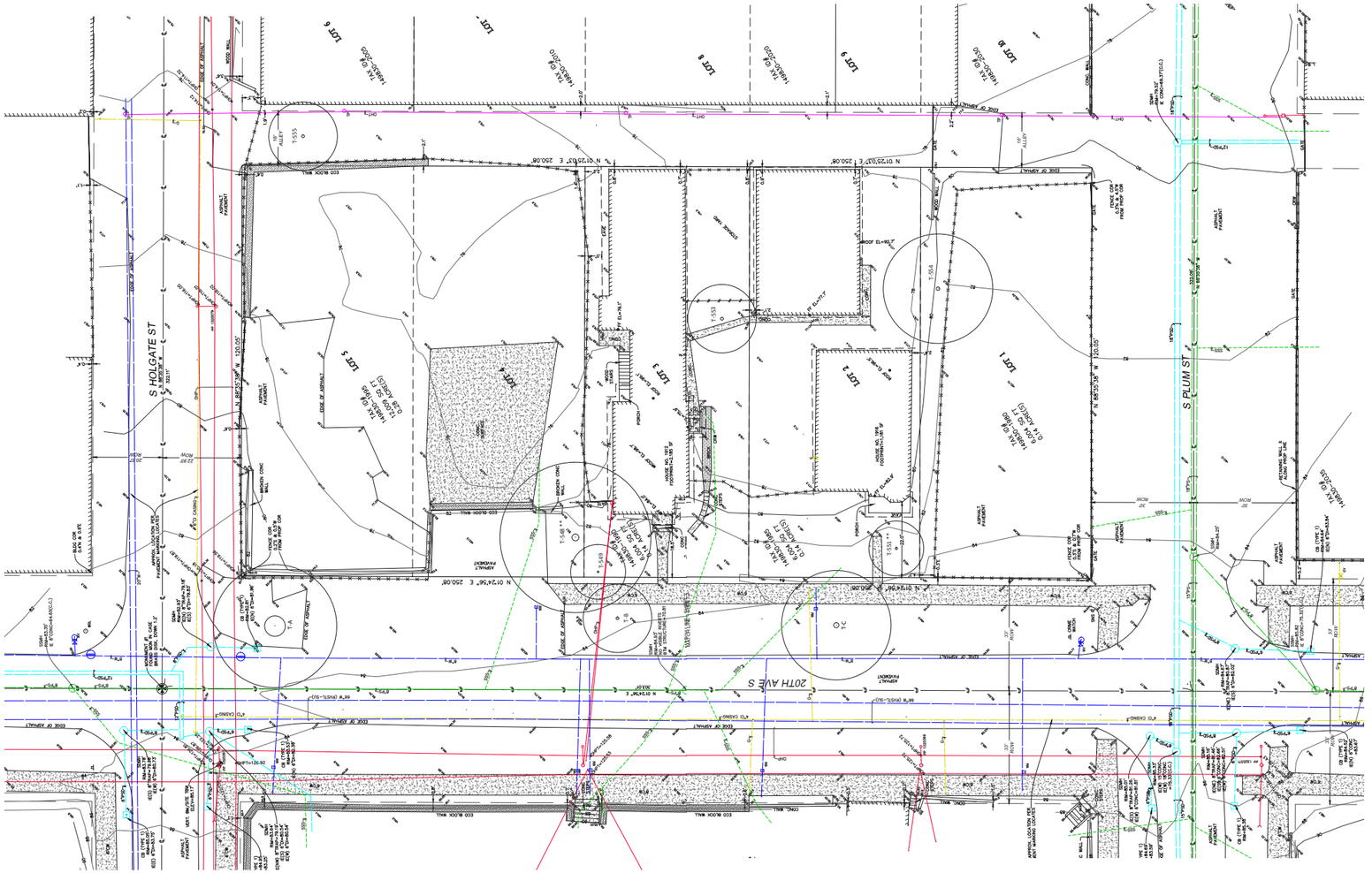
EXISTING LAND USE MAP



ZONING MAP


JUNE 21 SUNSET
AZ: 307.17°
9:10 PM PDT
22'-11 1/4"
ROW
250'-1"
ALLEY
30'-0"
ROW
16'-0"
ALLEY
N 01°25'03" E 250.08'
ALLEY DEDICATION
(E) HOUSE
(E) HOUSE
(E) HOUSE
JUNE 21 SUNRISE
AZ: 52.64°
5:11 AM PDT
S HOLGATE ST
N 88°35'38" W 120.05'
N 88°35'38" W 120.05'
120'-0 1/2"
S PLUM ST
DEC 21 SUNSET
AZ: 234.96°
4:20 PM PST
HIGH VOLTAGE
POWERLINE ABV
HIGH VOLTAGE
SETBACK
STREET
DEDICATION
EXCEPTIONAL
DOUGLAS FIR
EXCEPTIONAL
HOP TREE
N 01°24'56" E 250.08'
DEC 21 SUNRISE
AZ: 124.76°
7:53 AM PST
SOLAR NOON
JUNE 21, ALT: 65.86°
DEC 21, ALT: 19.03°
33'-0"
ROW
20TH AVE S
20 FT

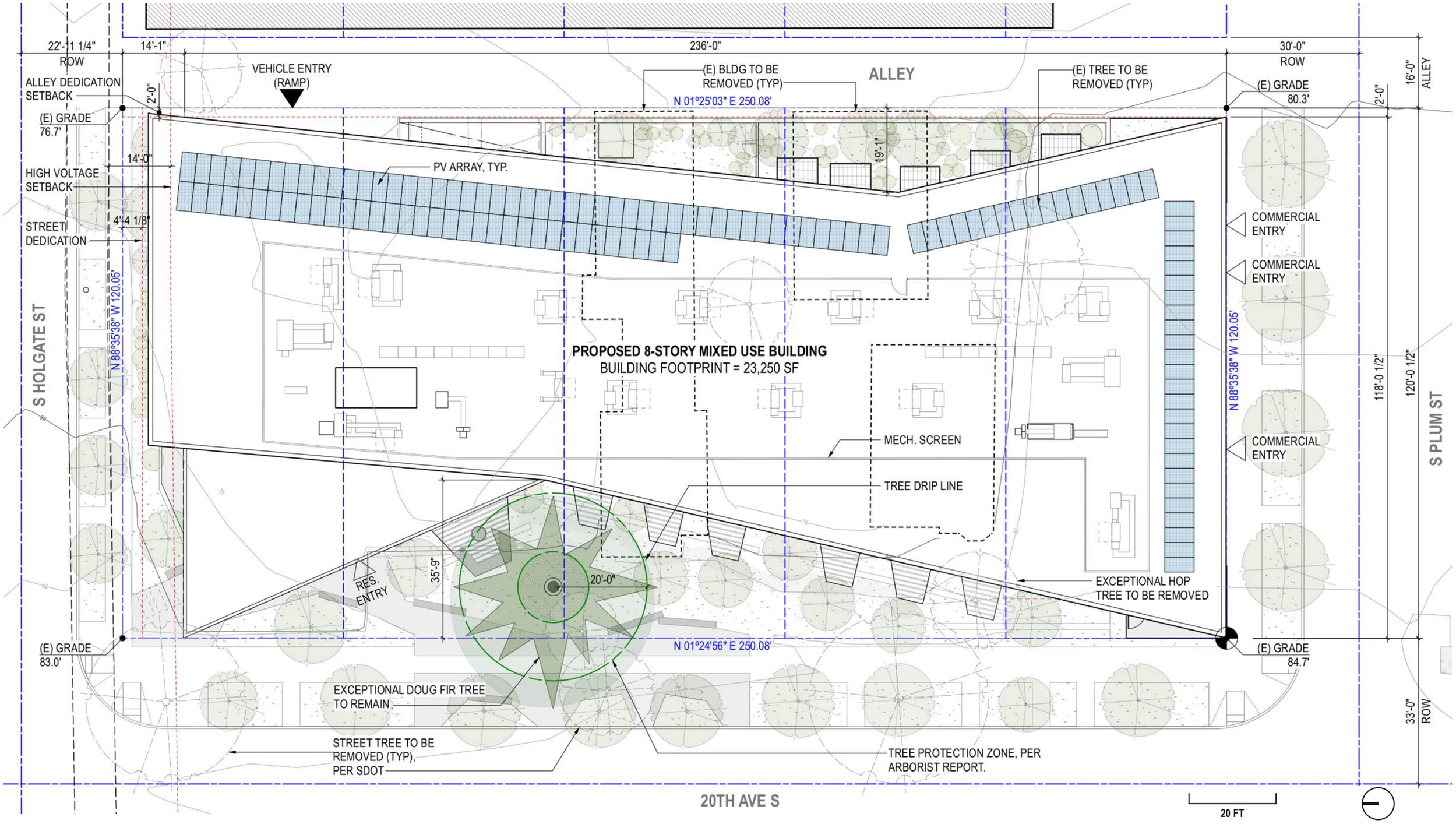
ZONING SUMMARY



SURVEY

Address:	1906 20th Ave S
Legal Description:	LOTS 1, 2, 3, 4, AND 5, BLOCK 34, CENTRAL SEATTLE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 1 OF PLATS, PAGE 57, IN KING COUNTY, WASHINGTON. SITUATE IN THE CITY OF SEATTLE, COUNTY OF KING, STATE OF WASHINGTON
Associated APN:	1498301980, 1498301985, 1498301990, 1498301995
Zoning:	C1-75 (M)
Overlay:	Mount Baker Hub Urban Village
Pedestrian Zone:	N/A
Site Area:	30.022 SF
FAR:	5.5
MHA Fee Area:	M (Medium)
Amenity:	5% total gross floor area in residential use
Green Factor:	0.3
Height Limit:	75’-0”
Zoning Setbacks:	Yes 4’ Street Dedication
Upper Level Setback:	Portions of structures above 65ft must be setback from the front lot line 8’ avg. 14’ High Voltage Setback
Dedications:	4.345’ Street Dedication on S Holgate St 2’ Alley Dedication
Parking:	Not Req’d (Urban hub + Frequent Transit)
Parking Location and Access:	Access to parking is not permitted from principal pedestrian street; there are no principal pedestrian streets adjacent to project site, parking proposed to be accessed from Alley. Parking stalls not permitted between principal structure and street lot line.
Street Level Standards:	Yes
Blank Facades:	Limited to 20’ segments / 40% of overall facade length
Non-Residential Depth:	15’ min; 30’ min avg.
Non-Residential Height:	13’ floor to floor
Bicycle Parking:	1 long term per 1 unit; 1 short term per 20 units

SITE PLAN


22'-11 1/4"
ROW
14'-1"
236'-0"
30'-0"
ROW
16'-0"
ALLEY
VEHICLE ENTRY
(RAMP)
(E) BLDG TO BE
REMOVED (TYP)
ALLEY
(E) TREE TO BE
REMOVED (TYP)
N 01°25'03" E 250.08'
ALLEY DEDICATION
SETBACK
2'-0"
(E) GRADE
76.7'
(E) GRADE
80.3'
2'-0"
14'-0"
19'-1"
PV ARRAY, TYP.
HIGH VOLTAGE
SETBACK
STREET
DEDICATION
4'-4 1/8"
COMMERCIAL
ENTRY
COMMERCIAL
ENTRY
S HOLGATE ST
N 88°35'38" W 120.05'
PROPOSED 8-STORY MIXED USE BUILDING
BUILDING FOOTPRINT = 23,250 SF
N 88°35'38" W 120.05'
118'-0 1/2"
120'-0 1/2"
S PLUM ST
MECH. SCREEN
COMMERCIAL
ENTRY
TREE DRIP LINE
RES.
ENTRY
35'-9"
20'-0"
EXCEPTIONAL HOP
TREE TO BE REMOVED
(E) GRADE
83.0'
N 01°24'56" E 250.08'
(E) GRADE
84.7'
EXCEPTIONAL DOUG FIR TREE
TO REMAIN
33'-0"
ROW
STREET TREE TO BE
REMOVED (TYP),
PER SDOT
TREE PROTECTION ZONE, PER
ARBORIST REPORT.
20TH AVE S
20 FT

PRIORITY GUIDELINES

Design Cue: Natural Systems and Site Features

CS-1
Natural Systems and Site Features
Use natural systems and features of the site and its surroundings as a starting point for project design | Plants + Habitats: On-Site Features

Response: The project seeks to respond to the existing 80' tall Exceptional Douglas Fir, using it as a point of departure and focus of the site and massing concepts.

CS-2
Urban Pattern and Form
For projects located at the edge of different zones, provide an appropriate transition or complement to the adjacent zone(s). Strive for a successful transition between zones where a project abuts a less intense zone. It may be appropriate in areas to differ from the scale of adjacent buildings but preserve natural systems or existing features, enable better solar exposure or site orientation, and/or make for more interesting urban form.

Response: The half-block proposal pulls back from the western edge, creating a large landscaped courtyard that provides a transition to the less intensive zones to the west in alternatives 2 and 3.

Design Cue: Street Level Interaction

PL-1
Connectivity
Design the building and open spaces to positively contribute to a broader network of open spaces throughout the neighborhood.

Response: The east and west courtyards provide unexpected and engaging landscaped spaces that are intended to enhance the neighborhood and provide cues for future development.

PL-2
Walkability
Create a safe and comfortable walking environment that is easy to navigate and well-connected to existing pedestrian walkways and features.

Response: The proposed commercial space will feature a highly transparent façade while the proposed residential building entrance engages the courtyard and Douglas Fir, creating an interesting semi-public zone that provides privacy while connecting the interior building uses to the surrounding ROW with clear sight lines improving security.

PL-3
Street-Level Interaction
Encourage human interaction and activity at the street-level with clear connections to building entries and edges. Engage passerby with opportunities to interact visually with the building interior using glazing and transparency.

Response: The project will present highly transparent edges, with commercial spaces on Plum Street and a clear primary building entry that is inviting, secure, and experienced through the landscaped courtyard with the mature Fir tree.

Design Cue: Detailing + Texture using sustainably sourced products

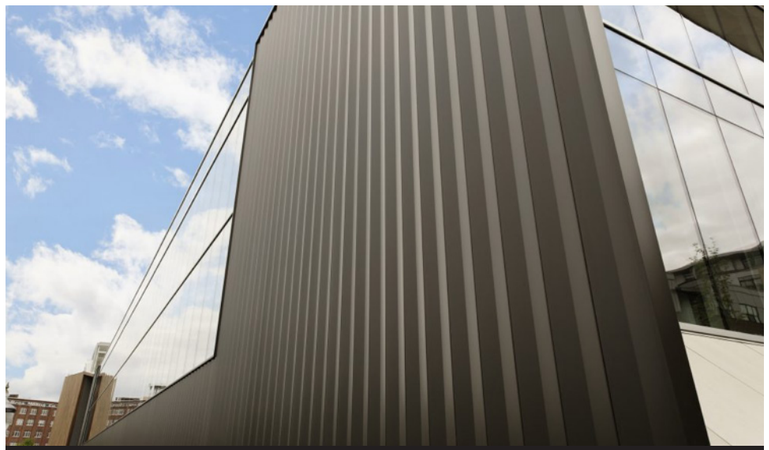
DC-2
Architectural Concept
Arrange the mass of the building taking into consideration the characteristics of the site and the proposed uses of the building and its open space.

Response: The massing concept takes its inspiration from the Exceptional Fir tree on site, which becomes the organizing element for the block.

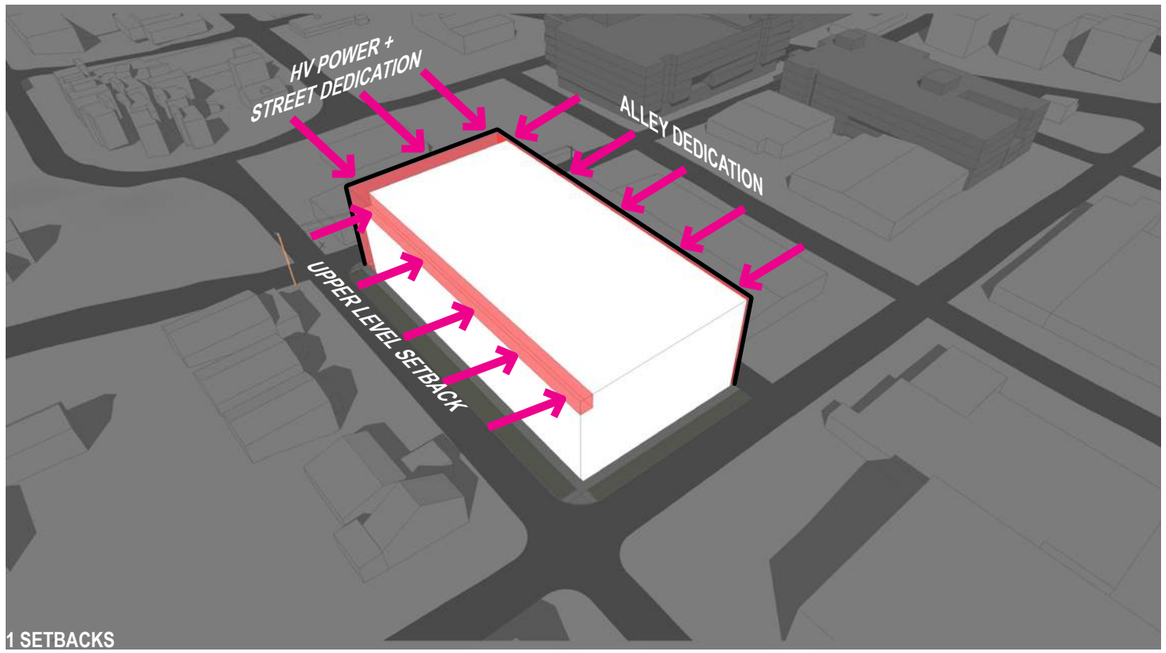
Design Cue: High Quality Exterior Materials

DC-4
Exterior Elements and Finishes
Use appropriate and high-quality elements and finishes for the building and its open spaces | Building Materials: Exterior Finish Materials + Trees, Landscape, and Hardscape Materials: Choice of Plant Materials.

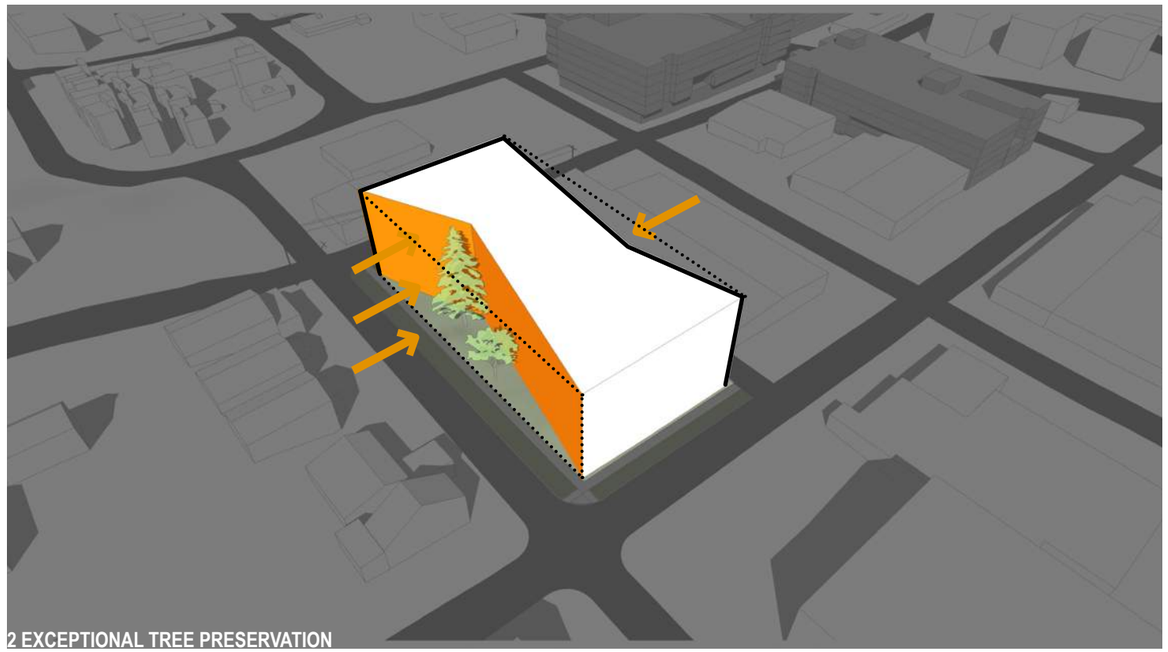
Response: The building will be well detailed, high quality, and durable. Low-level lighting will be used to provide a safe and attractive building entry sequence, while avoiding glare into the units and adjacent properties. Landscaping will include drought-tolerant plants and native species and be thoughtfully integrated into the project.



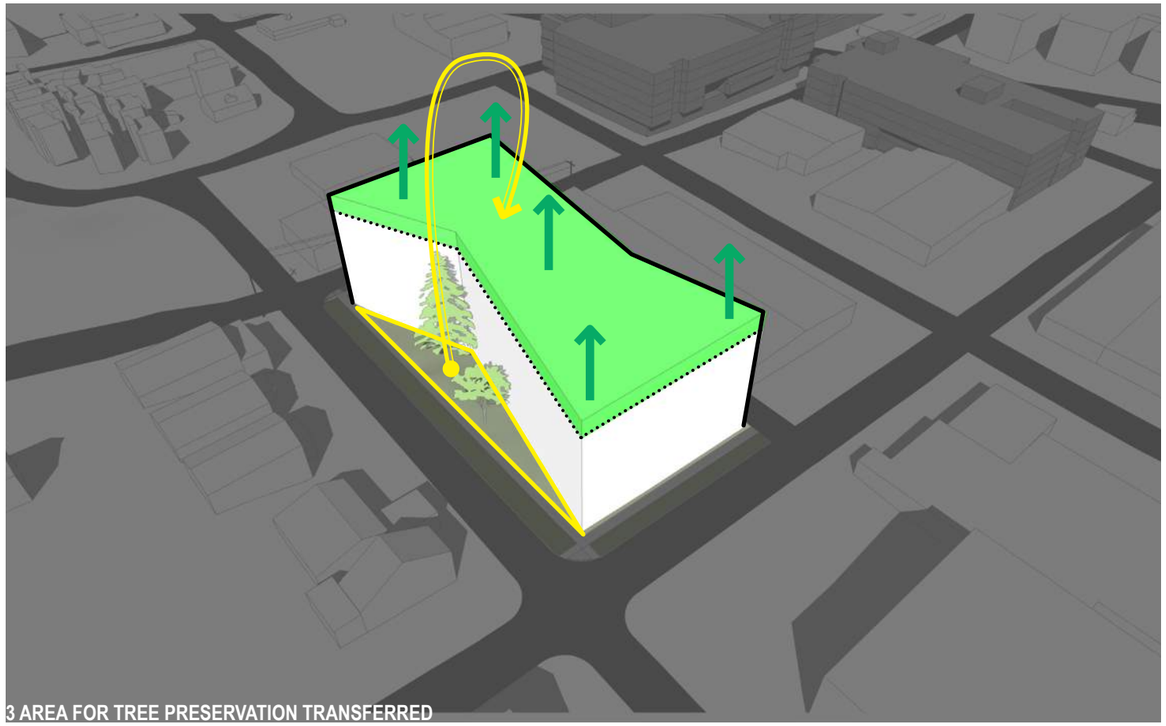
Design Cue: High Quality Exterior Materials



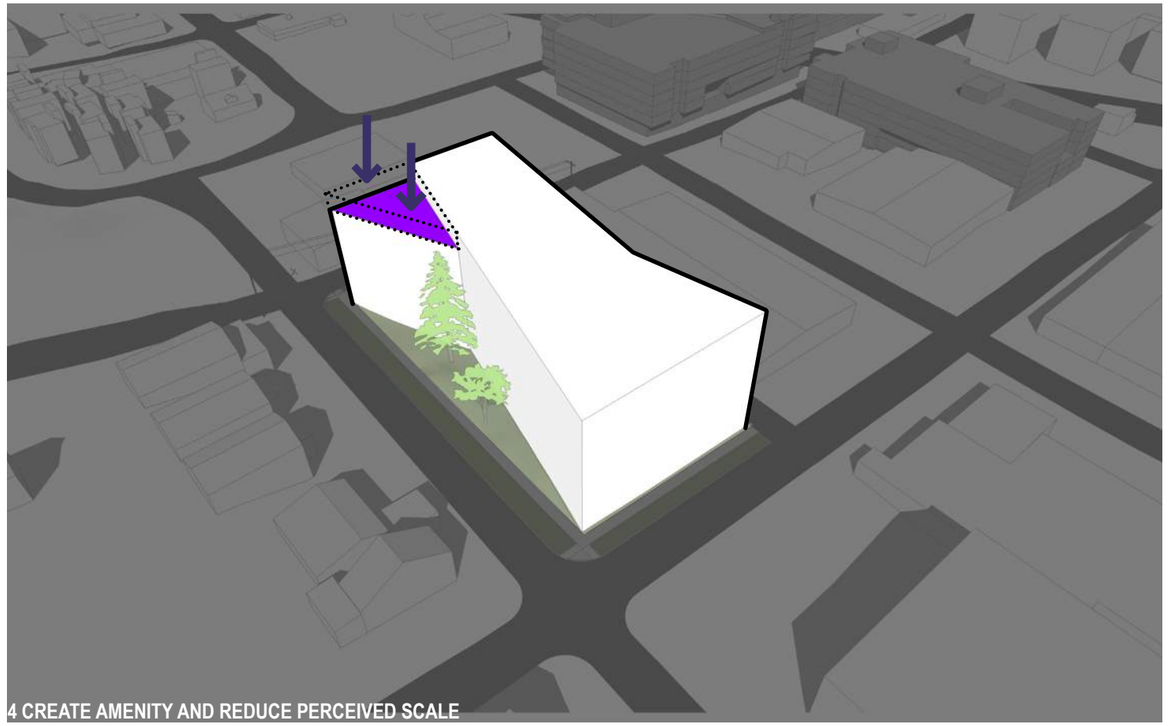
1 SETBACKS



2 EXCEPTIONAL TREE PRESERVATION



3 AREA FOR TREE PRESERVATION TRANSFERRED



4 CREATE AMENITY AND REDUCE PERCEIVED SCALE

Alternative 1

Description
Alternative 1 proposes a 7-story building composed of street level commercial and residential units. Below grade garage accessed from Alley.

GSF
156,447 SF

Advantages
- -Code-compliant scheme does not require development standard departures
- -Functional ground floor commercial space
- -Raised Courtyard for units off of Alley

Challenges
- -Requires removal of exceptional Douglas Fir tree & Hop tree on property
- -Results in bulky massing along 20th Ave S
- -Elevation facing RSL(M) zone does not provide a gentle zone transition
- -Upper level setback does not provide adequate zone transition to West

Alternative 2

Description
Alternative 2 proposes a 8-story building composed of street level commercial and ground level residential units. Below grade garage accessed from Alley.

GSF
182,935 SF

Advantages
- -Maintains Exceptional Doug Fir and Hop Tree (relocated) on site
- -Protecting On-site exceptional trees allows for extra level of units
- -Functional ground floor commercial space
- -Raised Terrace for Units off of Alley
- -Push/Pull strategy on 20th Ave S provides relief to single family homes
- -Location of Amenity Deck Space on SW corner reduces bulk
- -Courtyard on West provides zone transition

Challenges
- -Many units located along the alley, with little relief to future development on the adjacent parcel
- -Departure Required for height & FAR for retaining Exceptional Trees on site

Board Recommendation at EDG

Alternative 3 (Preferred Scheme)

Description
Alternative 3 proposes a 8-story building composed of street level commercial and ground level residential units. Below grade garage accessed from Alley.

GSF
188,741 SF

Advantages
- -Maintains Exceptional Doug Fir and Hop Tree (relocated) on site
- -Protecting On-site exceptional trees allows for extra level of units
- -Functional ground floor commercial space
- -Raised Terrace for Units off of Alley
- -Residential Units off of alley face courtyard and are pulled back from alley
- -Angled elevation on 20th Ave S creates generous courtyard for Doug Fir and provides relief to single family homes
- -Location of Amenity Deck Space on NE corner reduces bulk

Challenges
- -Departure Required for height & FAR for retaining Exceptional Trees on Site
- -Complex geometry potentially increases construction costs

EDG RESPONSE

1. Massing:

EDG Guidance

1a. The Board supported massing Alternative 3 over the other massing alternatives due to its use of existing exceptional trees as organizing features, its massing differentiation of residential and commercial front-ages, its, and its stronger massing response to the zone transition to the east compared to the other al-ternatives (CS2- D. Height, Bulk, and Scale, CS1-D-1. On-Site Features, PL3-B-1. Security and Privacy, PL3-B-4. Interaction, DC2-A-1. Site Characteristics and Uses, DC3-A-1. Interior/Exterior Fit).

1b. The Board supported the conceptual massing intent to organize courtyard spaces on the east and west sides of the site, to provide space for gathering and to buffer residential uses from street frontages and to reduce the presence of building mass along the zone transition to the west (CS2-D-3. Zone Transitions, PL3-B-1. Security and Privacy, DC3-A-1. Interior/Exterior Fit, DC3-B-4. Multifamily Open Space).

1c. The Board supported the placement of the upper-floor outdoor amenity space in the northwest corner of the site, stating that the one-story massing height reduction in this location aids in the zone transition to the west of the site by reducing the perceived building height (CS2-D. Height, Bulk, and Scale, DC2-A-2. Reducing Perceived Mass).

1d. The Board supported the intent for varied ground-level residential and non- residential uses along all street and alley frontages and provided guidance related to specific concerns of legibility, wayfinding, and scale:

i. The Board expressed concern that the legibility of the residential entry along 20th Avenue S. would be minimized due to its location adjacent to smaller- scaled ground-level residential units. The Board emphasized the need for a legible residential entry that is differentiated from adjacent residential units (PL3-A. Entries, PL3-B-2. Ground-level Residential, DC2-A-1. Site Characteristics and Uses, DC2-E-1. Legibility and Flexibility).

ii. The Board recognized the potential for numerous changes of scale along the ground-level façades on all sides of the building, with the with regular shifts between commercial and residential uses and other elements like the residential entry, parking entry, and fire stairs. The Board stated that the Recommendation packet should show these transitions are addressed to achieve a cohesive design, while expressing the distinct uses and functions to promote wayfinding (PL2-D-1. Design as Wayfinding, DC2-B-1. Façade Composition, DC2-D-1. Human Scale, DC2-E-1. Legibility and Flexibility).

iii. The Board expressed concern about the visibility of the commercial space along the S. Plum Street frontage with the presence of a fire stairway at the southeast corner of the building and the placement of new street trees along the frontage. The Board promoted strengthening the vis-ibility of the commercial frontage within the ground-level massing and using a street tree species that will promote visibility. The Board requested perspective views along the street frontage at the Recommendation phase of review to show that the commercial space will be visible along the S. Plum Street frontage (CS2-B-2. Connection to the Street, PL2-D-1. Design as Wayfinding, PL3-C-1. Porous Edge, DC1-A. Arrangement of Interior Uses.

Design Response:

1a. Alternative 3 supported at EDG has been carried forward and further developed.

1b. Alternative 3 supported at EDG has been carried forward and further developed.

1c. Alternative 3 supported at EDG has been carried forward and further developed.

1d. Please see Facade Design response 2a. and 2b. (pages 16-25) for more information about legibility of building entries, scale changes, and visibility of commercial spaces.

View Looking SE

Overview Looking NW

EDG RESPONSE

Birdseye Looking NW


the fir
FUTURE LINK STATION
I-90
(N) SCHOOL
HAMLIN ROBINSON
FUTURE 186 UNIT MULTIFAMILY
DEVELOPMENT
FUTURE 550 UNIT MULTIFAMILY
DEVELOPMENT
(N) 186 UNIT MULTIFAMILY
DEVELOPMENT
PROJECT SITE 204 UNIT MIXED-USE
MULTIFAMILY DEVELOPMENT
S HOLGATE ST
(N) 85 UNIT AFFORDABLE
MULTIFAMILY DEVELOPMENT
20TH AVE S
S PLUM ST
21ST AVE S
RAINIER AVE S

EDG RESPONSE

2. Façade Design:

EDG Guidance

2a. The Board supported residential expression along the west façade where the project faces a residential zone and commercial expression along the north and south street frontages where ground-level commercial spaces are currently proposed. The Board requested examination at the Recommendation phase of review to show how the distinct residential and commercial scales are expressed within the building design through materials and secondary architectural features (PL2-D-1. Design as Wayfinding, DC2-C-1. Visual Depth and Interest, DC2-D-1. Human Scale, DC2-E-1. Legibility and Flexibility).

2b. Related to the guidance above for the design of ground-level uses, the Board requested ground-level perspective drawings along the street frontages to show the character of street frontages, the building design relationship to wayfinding, and the relationships of ground-floor uses to each other and the street frontage (PL2-D-1. Design as Wayfinding, PL3-C-1. Porous Edge, DC1-A. Arrangement of Interior Uses, DC2-D-1. Human Scale).

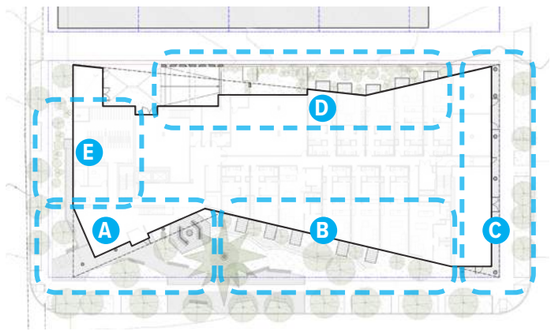
Design Response:

2a. The residential portions of the building are proposed have a distinctly different facade treatments and scales, in contrast to the commercial portion of the building. See plans, sections, and ground level renderings showing the different street level uses in this project. Ⓐ Residential Entry Ⓑ Residential Units Ⓒ Commercial Spaces Ⓓ Alley and Ⓔ Bike Entry.

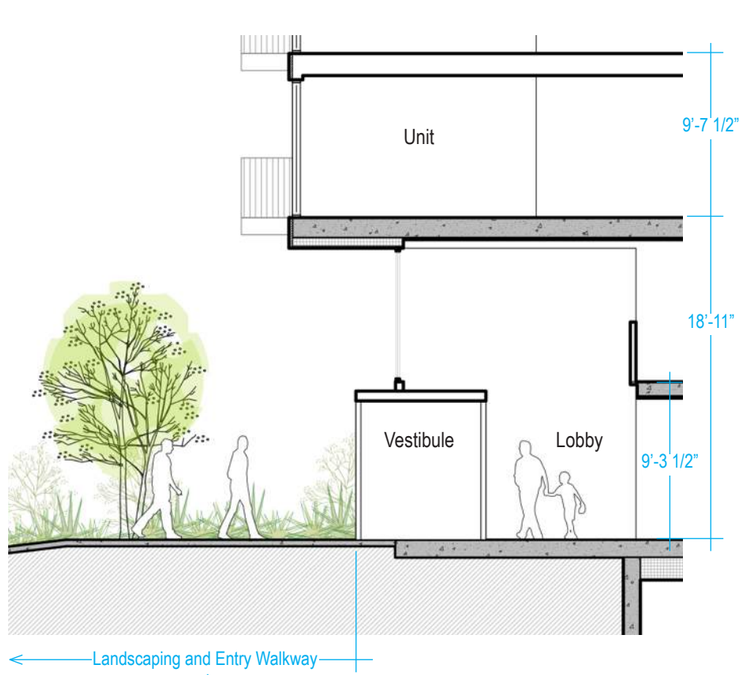
The residential entry has been designed as a double height wood storefront that encloses a generous lobby space with a mezzanine. Staggered glass panels on the facade provide a backdrop to the entry vestibule portal and a landscape seating feature.

2b. Each of the ground level uses in this project will have a different character and relationship to the street. The plaza courtyard created around the Douglas Fir provides a privacy buffer from the ground floor residential uses and the primary building entry is expressed as double height space close to the edge of the property. Refer to the street level use plan and section diagrams for the Ⓐ Residential Entry Ⓑ Residential Units Ⓒ Commercial Spaces Ⓓ Alley and Ⓔ Bike Entry.

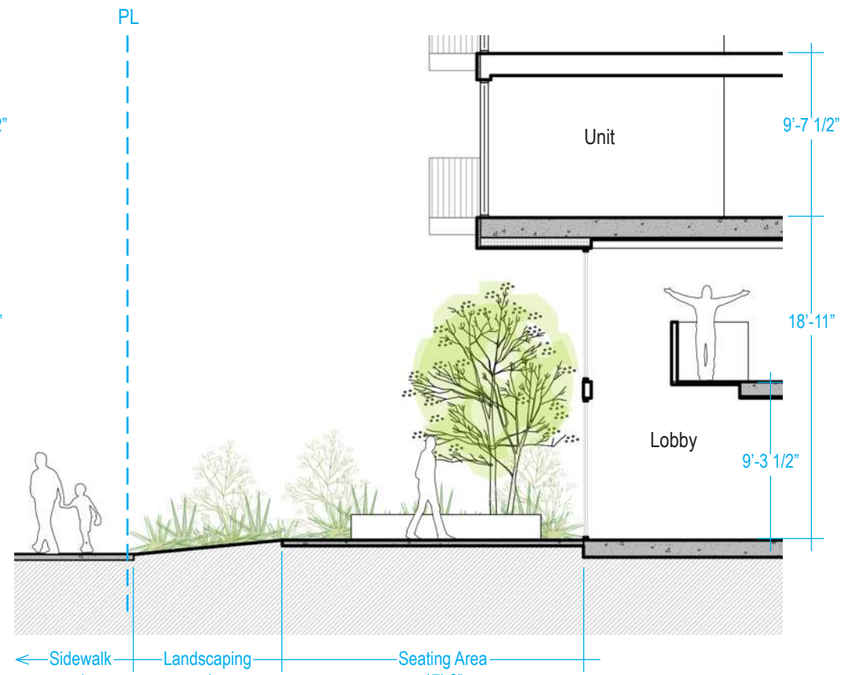
Refer to the rendering at right showing the entrance path and facade treatment of the residential lobby.



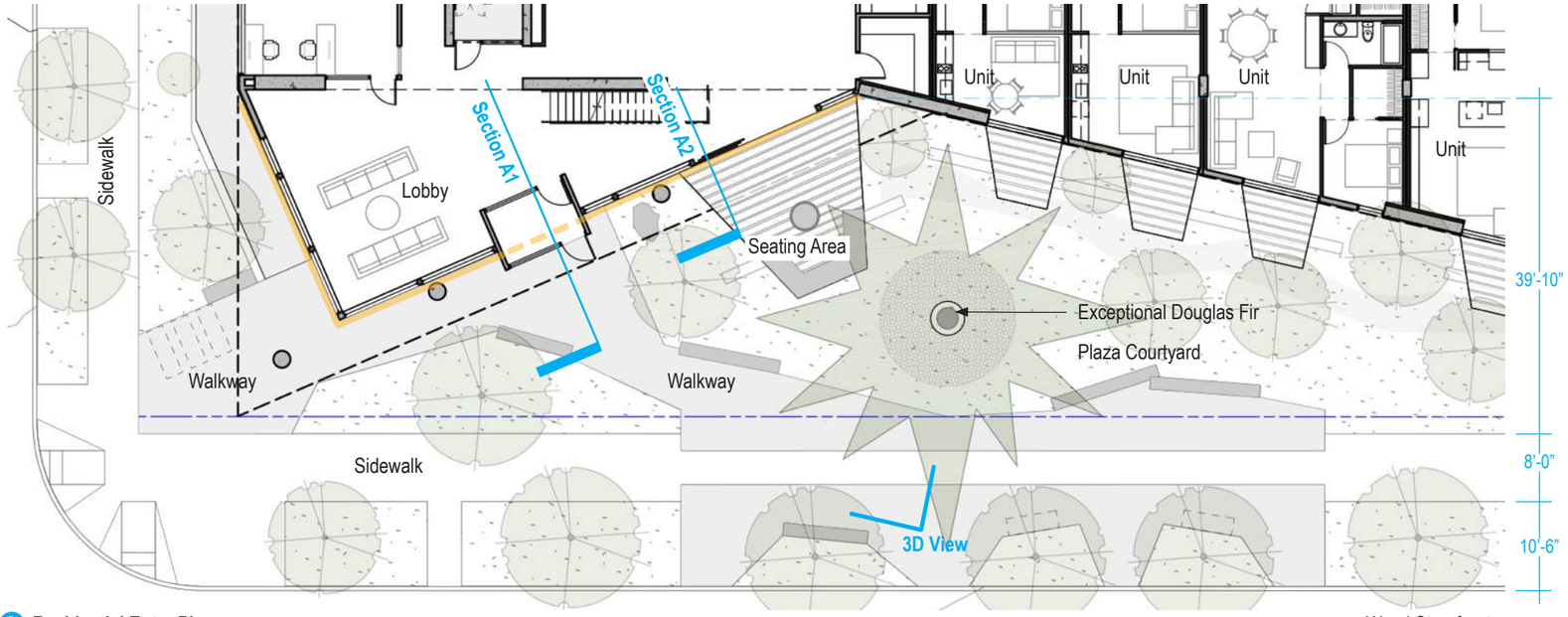
Key Plan



Section A1



Section A2



Ⓐ **Residential Entry Plan**

Residential Entry

EDG RESPONSE

2. Façade Design:

EDG Guidance

2a. The Board supported residential expression along the west façade where the project faces a residential zone and commercial expression along the north and south street frontages where ground-level commercial spaces are currently proposed. The Board requested examination at the Recommendation phase of review to show how the distinct residential and commercial scales are expressed within the building design through materials and secondary architectural features (PL2-D-1. Design as Wayfinding, DC2-C-1. Visual Depth and Interest, DC2-D-1. Human Scale, DC2-E-1. Legibility and Flexibility).

2b. Related to the guidance above for the design of ground-level uses, the Board requested ground-level perspective drawings along the street frontages to show the character of street frontages, the building design relationship to wayfinding, and the relationships of ground-floor uses to each other and the street frontage (PL2-D-1. Design as Wayfinding, PL3-C-1. Porous Edge, DC1-A. Arrangement of Interior Uses, DC2-D-1. Human Scale).

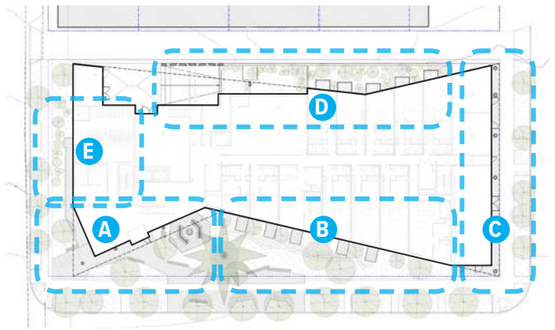
Design Response:

2a. In contrast to the primary building entry and commercial portion, the residential portion has a distinctly different facade treatment and scale. See plans, sections, and ground level renderings showing the different street level uses in this project. (A) Residential Entry (B) Residential Units (C) Commercial Spaces (D) Alley and (E) Bike Entry.

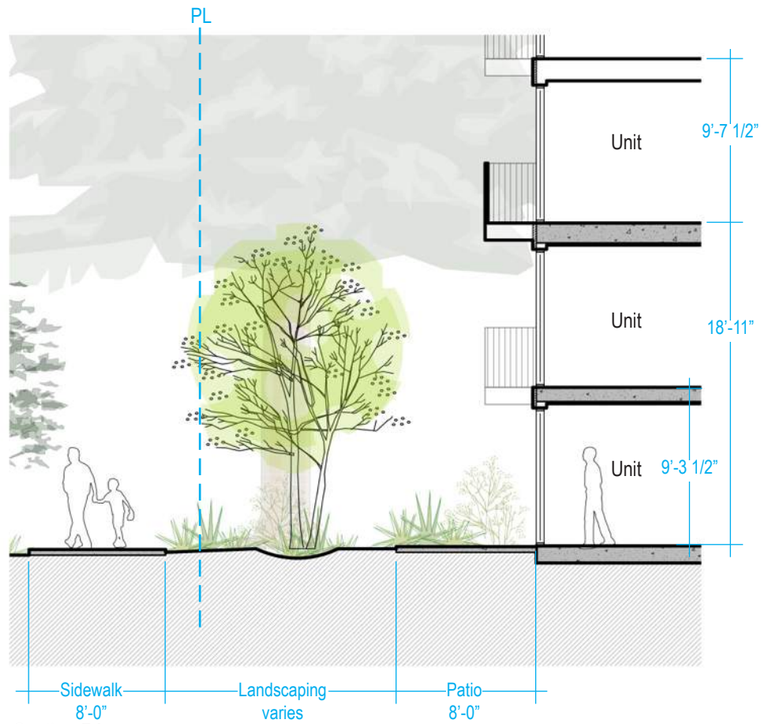
The residential units at grade have a facade character similar to the units above. The units are single story and have semi- private exterior patios set back from the sidewalk on 20th Ave. The patios are integrated into the bio-infiltration landscaping helping to provide some privacy while mitigating storm water.

2b. Each of the ground level uses in this project will have a different character and relationship to the street. The plaza courtyard created around the Douglas Fir provides a privacy buffer from the ground floor residential use and the primary building entry is expressed as double height space close to the edge of the property. Refer to the street level use plan and section diagrams for the (A) Residential Entry (B) Residential Units (C) Commercial Spaces (D) Alley and (E) Bike Entry.

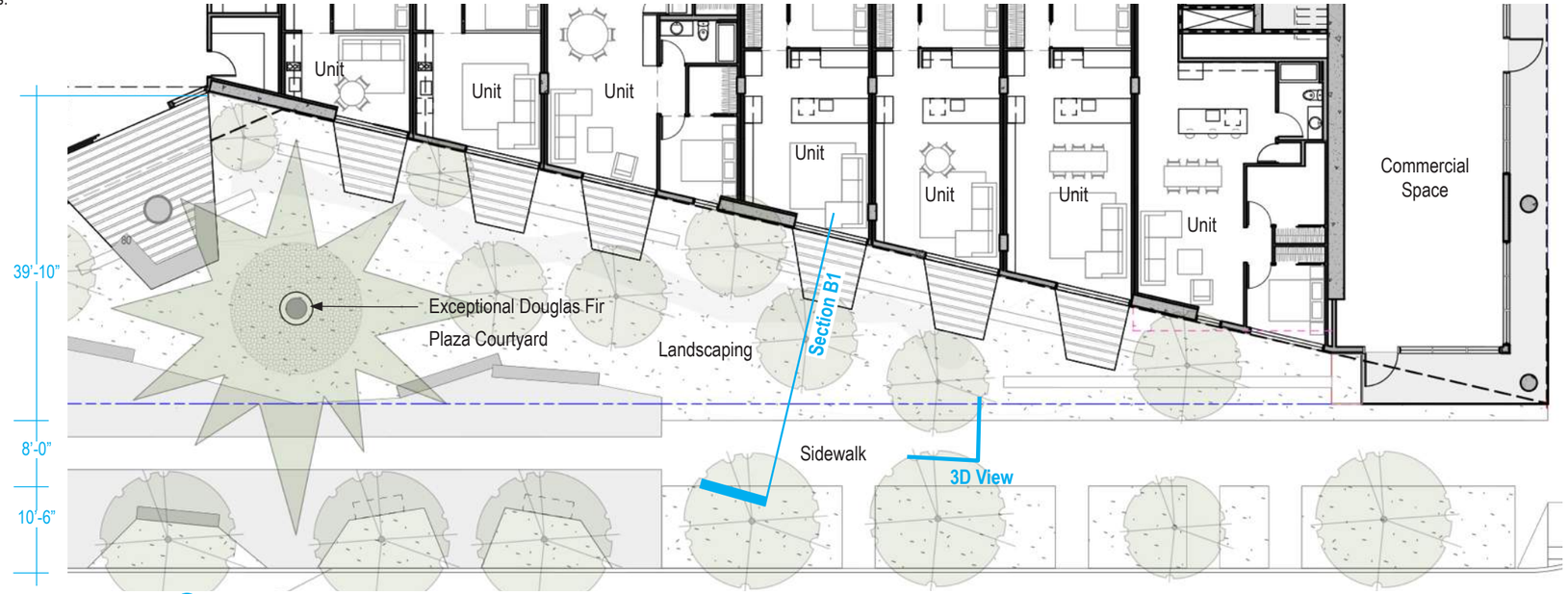
Refer to the rendering at right showing the facade treatment and landscaping at the residential units.



Key Plan



Section B1



(B) Residential Units

Residential Units on 20th

EDG RESPONSE

2. Façade Design:

EDG Guidance

2a. The Board supported residential expression along the west façade where the project faces a residential zone and commercial expression along the north and south street frontages where ground-level commercial spaces are currently proposed. The Board requested examination at the Recommendation phase of review to show how the distinct residential and commercial scales are expressed within the building design through materials and secondary architectural features (PL2-D-1. Design as Wayfinding, DC2-C-1. Visual Depth and Interest, DC2-D-1. Human Scale, DC2-E-1. Legibility and Flexibility).

2b. Related to the guidance above for the design of ground-level uses, the Board requested ground-level perspective drawings along the street frontages to show the character of street frontages, the building design relationship to wayfinding, and the relationships of ground-floor uses to each other and the street frontage (PL2-D-1. Design as Wayfinding, PL3-C-1. Porous Edge, DC1-A. Arrangement of Interior Uses, DC2-D-1. Human Scale).

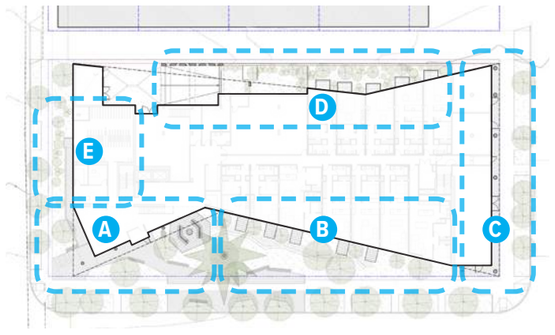
Design Response:

2a. In contrast to the primary building entry and commercial portion, the residential portion has a distinctly different facade treatment and scale. See plans, sections, and ground level renderings showing the different street level uses in this project. (A) Residential Entry (B) Residential Units (C) Commercial Spaces (D) Alley and (E) Bike Entry.

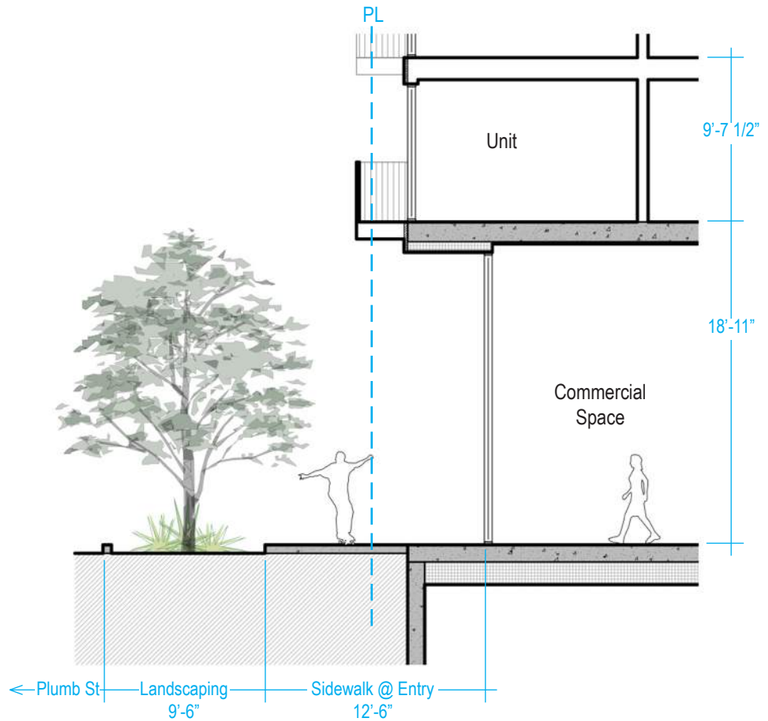
The commercial spaces are double height but expressed differently from the residential entry as black aluminum storefront with commercial storeftont signs. The face of the commercial spaces are also set back from the units above creating a distinctly different massing at the ground floor.

2b. Each of the ground level uses in this project will have a different character and relationship to the street. The plaza courtyard created around the Douglas Fir provides a privacy buffer from the ground floor residential use and the primary building entry is expressed as double height space close to the edge of the property. Refer to the street level use plan and section diagrams for the (A) Residential Entry (B) Residential Units (C) Commercial Spaces (D) Alley and (E) Bike Entry.

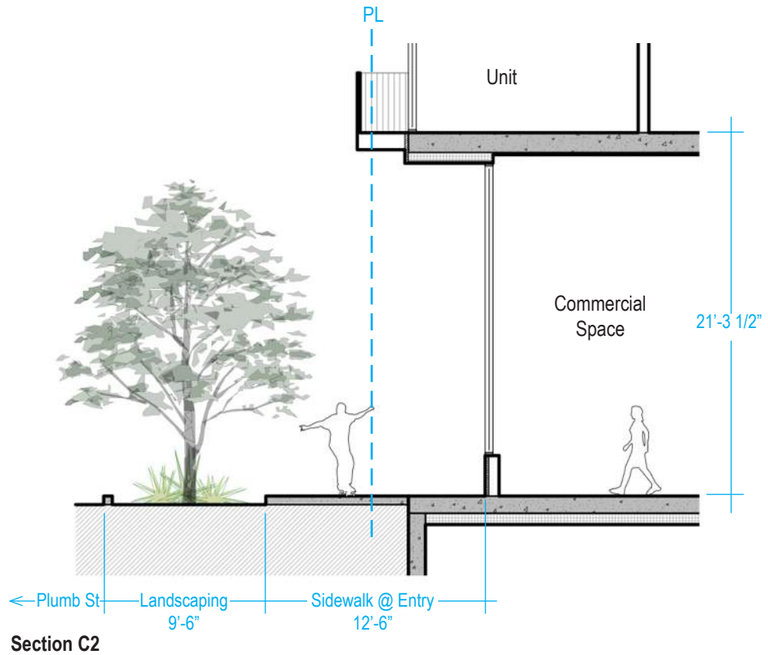
Refer to the rendering at right showing the ground level charachter of the commercial spaces.



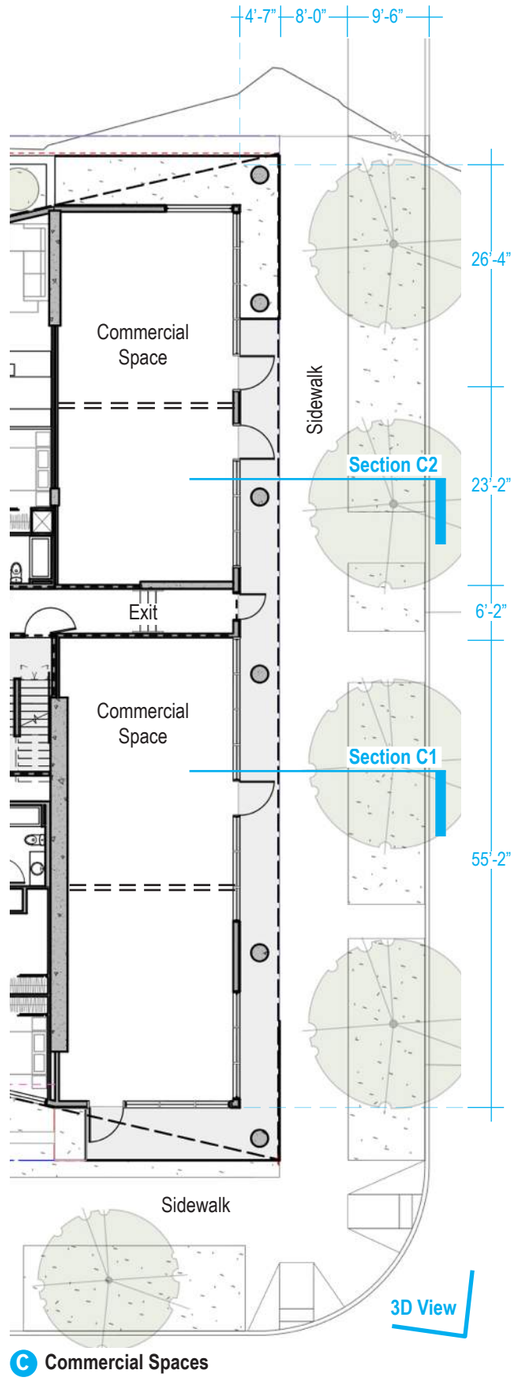
Key Plan



Section C1



Section C2



(C) Commercial Spaces

Commercial Entries

EDG RESPONSE

2. Façade Design:

EDG Guidance

2a. The Board supported residential expression along the west façade where the project faces a residential zone and commercial expression along the north and south street frontages where ground-level commercial spaces are currently proposed. The Board requested examination at the Recommendation phase of review to show how the distinct residential and commercial scales are expressed within the building design through materials and secondary architectural features (PL2-D-1. Design as Wayfinding, DC2-C-1. Visual Depth and Interest, DC2-D-1. Human Scale, DC2-E-1. Legibility and Flexibility).

2b. Related to the guidance above for the design of ground-level uses, the Board requested ground-level perspective drawings along the street frontages to show the character of street frontages, the building design relationship to wayfinding, and the relationships of ground-floor uses to each other and the street frontage (PL2-D-1. Design as Wayfinding, PL3-C-1. Porous Edge, DC1-A. Arrangement of Interior Uses, DC2-D-1. Human Scale).

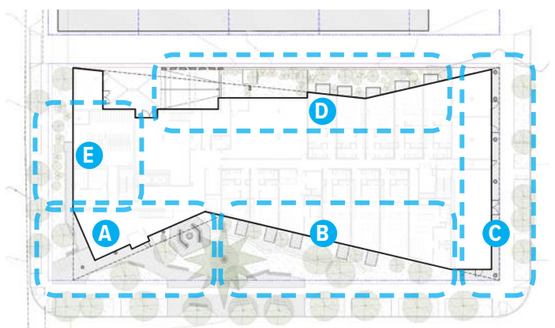
Design Response:

2a. In contrast to the primary building entry and commercial portion, the residential portion has a distinctly different facade treatment and scale. See plans, sections, and ground level renderings showing the different street level uses in this project. Ⓐ Residential Entry Ⓑ Residential Units Ⓒ Commercial Spaces Ⓓ Alley and Ⓔ Bike Entry.

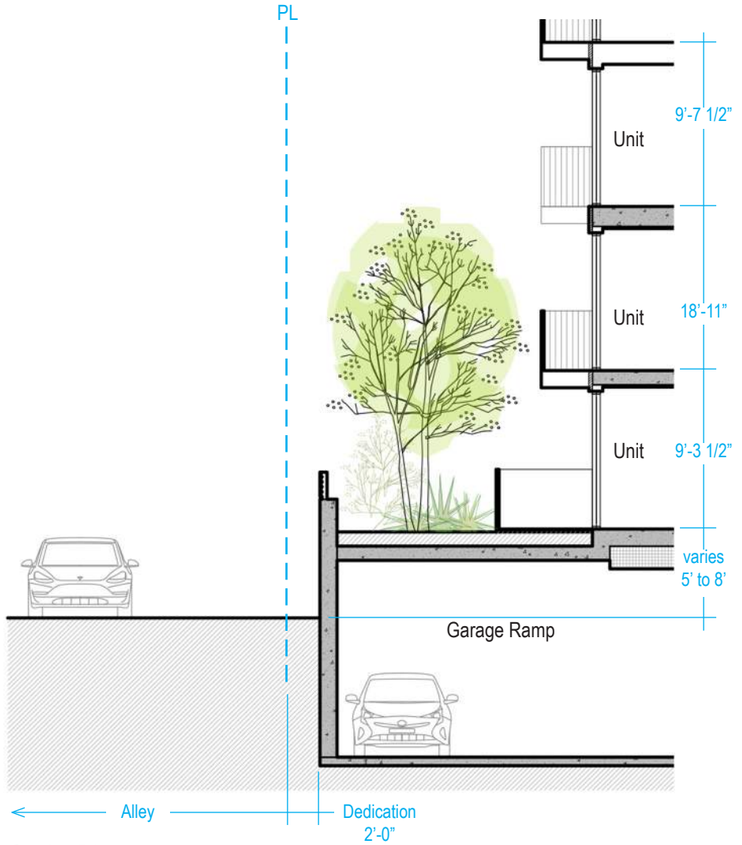
The residential units at the alley side are up away from traffic and set back with a landscape bed. Patios at the lower level are integrated into the landscaping and trees which also provide a buffer. The materials on the alley side residential units are consistent with those on other faces of the building.

2b. Each of the ground level uses in this project will have a different character and relationship to the street. The plaza courtyard created around the Douglas Fir provides a privacy buffer from the ground floor residential use and the primary building entry is expressed as double height space close to the edge of the property. Refer to the street level use plan and section diagrams for the Ⓐ Residential Entry Ⓑ Residential Units Ⓒ Commercial Spaces Ⓓ Alley and Ⓔ Bike Entry.

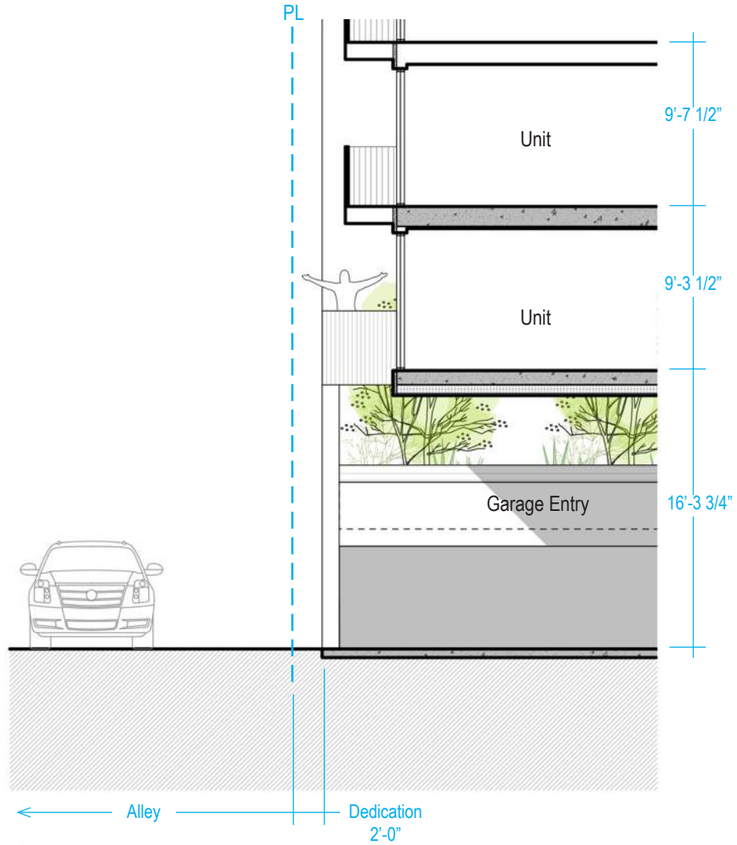
Refer to the rendering at right showing the character of the alley side residential units.



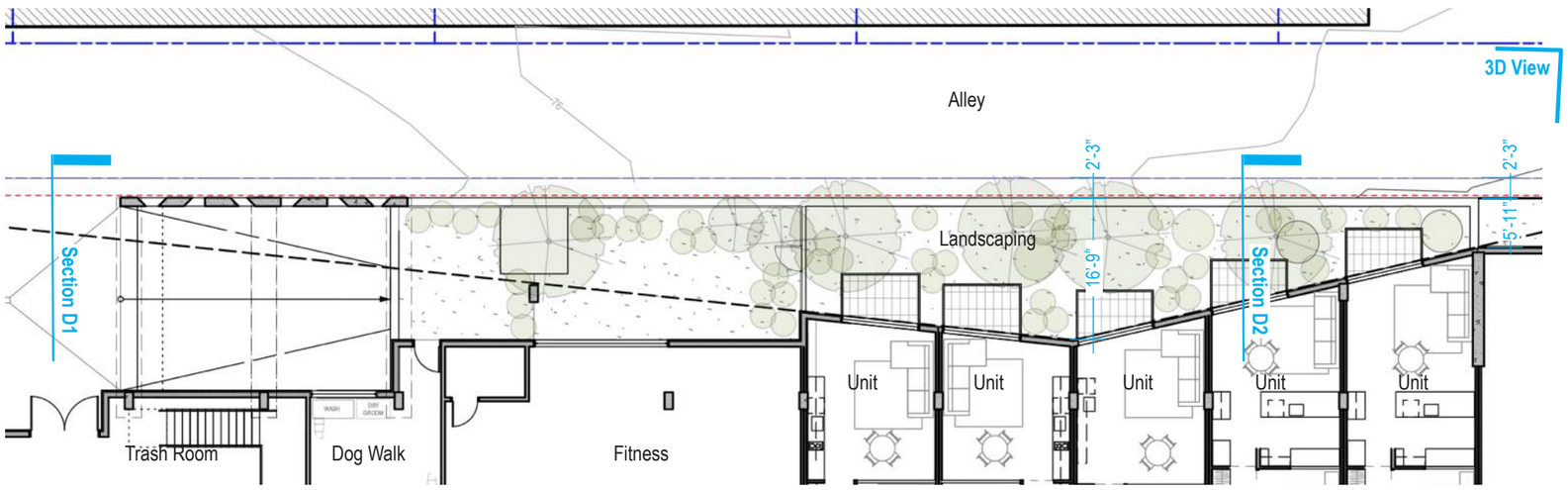
Key Plan



Section D2



Section D1



Ⓓ **Residential Units**

Residential Units on Alley

EDG RESPONSE

2. Façade Design:

EDG Guidance

2a. The Board supported residential expression along the west façade where the project faces a residential zone and commercial expression along the north and south street frontages where ground-level commercial spaces are currently proposed. The Board requested examination at the Recommendation phase of review to show how the distinct residential and commercial scales are expressed within the building design through materials and secondary architectural features (PL2-D-1. Design as Wayfinding, DC2-C-1. Visual Depth and Interest, DC2-D-1. Human Scale, DC2-E-1. Legibility and Flexibility).

2b. Related to the guidance above for the design of ground-level uses, the Board requested ground-level perspective drawings along the street frontages to show the character of street frontages, the building design relationship to wayfinding, and the relationships of ground-floor uses to each other and the street frontage (PL2-D-1. Design as Wayfinding, PL3-C-1. Porous Edge, DC1-A. Arrangement of Interior Uses, DC2-D-1. Human Scale).

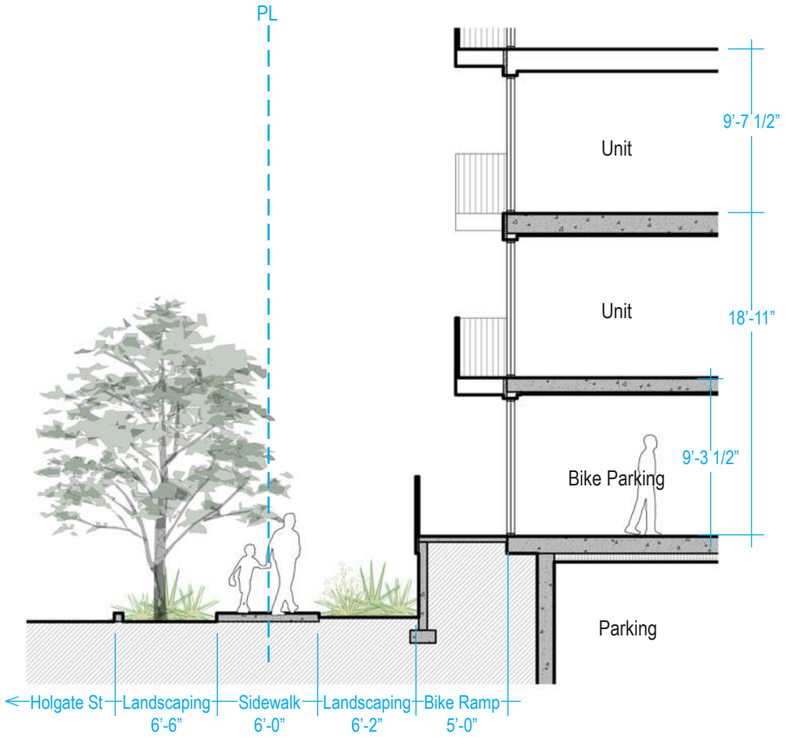
Design Response:

2a. In contrast to the primary building entry and commercial portion, the residential portion has a distinctly different facade treatment and scale. See plans, sections, and ground level renderings showing the different street level uses in this project. Ⓐ Residential Entry Ⓑ Residential Units Ⓒ Commercial Spaces Ⓓ Alley and Ⓔ Bike Entry.

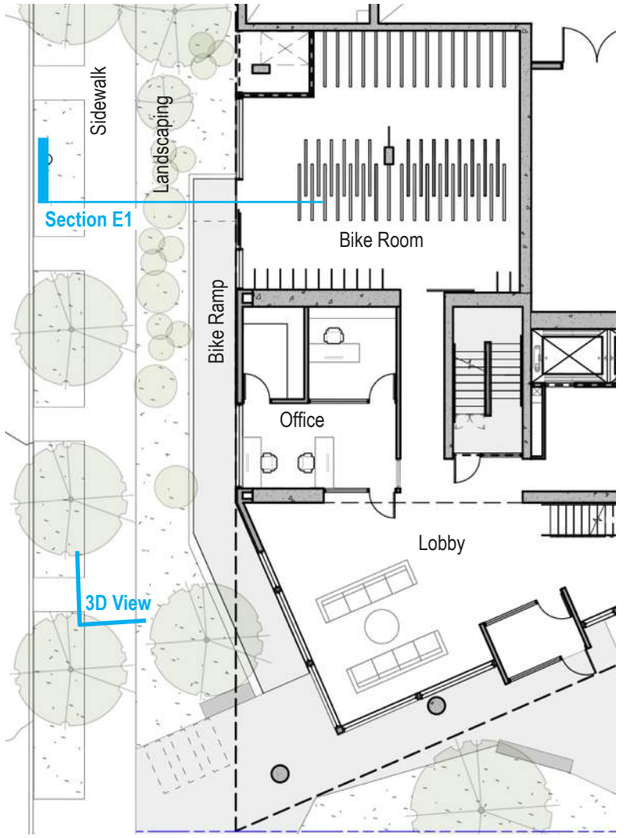
The bike access is located on the north facade at the lobby level, due to existing grade conditions the bike room is accessed by a ramp that starts near the residential entrance. The bike room is a single story tall and has storefront glass that makes for a visually identifiable bike room.

2b. Each of the ground level uses in this project will have a different character and relationship to the street. The plaza courtyard created around the Douglas Fir provides a privacy buffer from the ground floor residential use and the primary building entry is expressed as double height space close to the edge of the property. Refer to the street level use plan and section diagrams for the Ⓐ Residential Entry Ⓑ Residential Units Ⓒ Commercial Spaces Ⓓ Alley and Ⓔ Bike Entry.

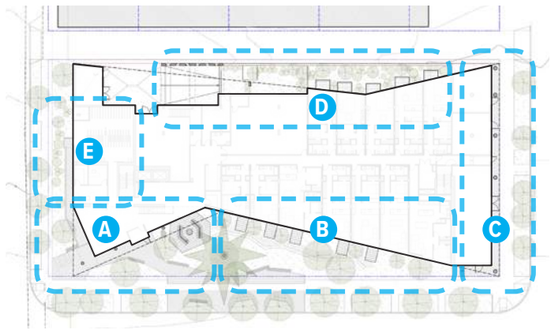
Refer to the rendering at right showing the bike access, facade treatement, and landscape buffer.



Section E1



Ⓔ **Bike Entry**



Key Plan

Holgate Sidewalk

Rooftop Amenity

EDG RESPONSE

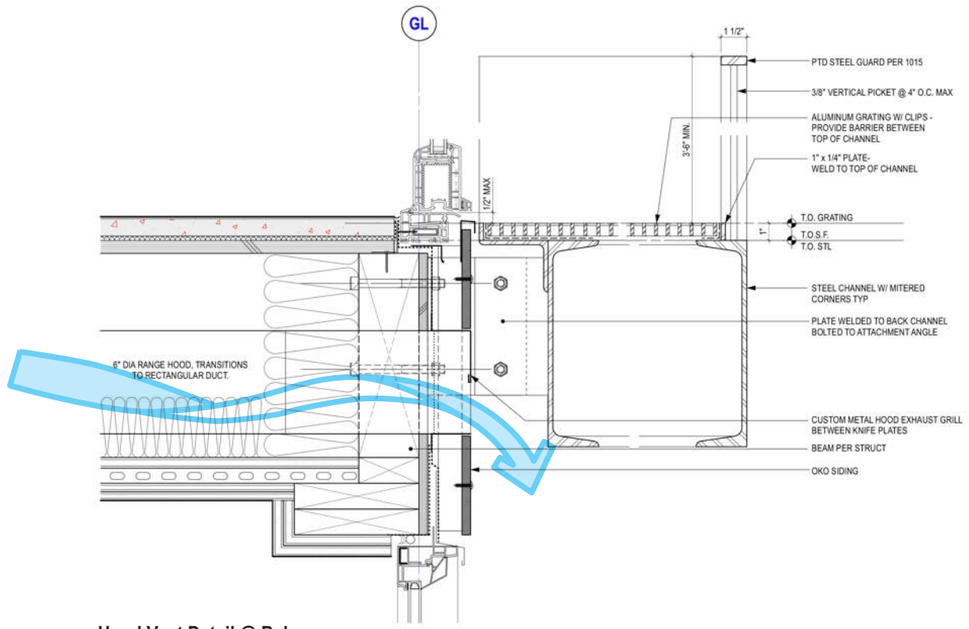
2. Façade Design:

EDG Guidance

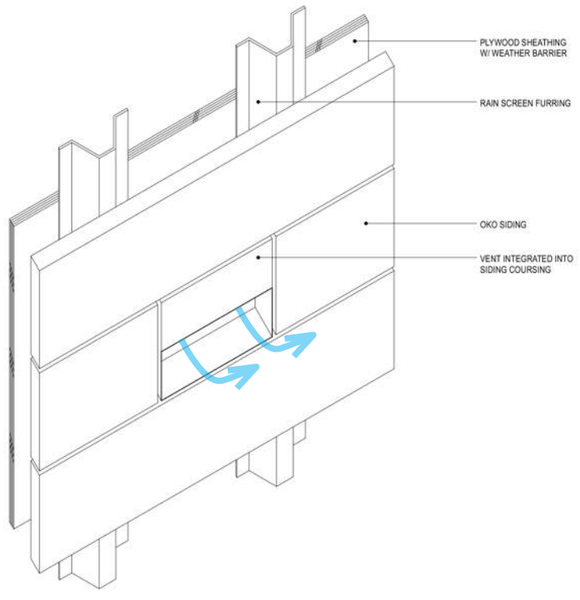
2c. The Board anticipated the potential desire of future residential tenants to use window air-conditioning units and proposed incorporating the ability to do this within the façade design so that air-conditioning units could be grouped or aligned to be complementary to the building design (DC4-A-1. Exterior Finish Materials, DC2- B-1. Façade Composition).

Design Response:

2c. Venting will be integrated into the siding coursing for kitchen range hood exhaust and AC is being provided to the units by vertical shafts and rooftop HVAC units, see proposed detail.



Hood Vent Detail @ Balcony



Typical Vent Detail

Typical Vent Elevation

At-Grade Landscape - Site Plan

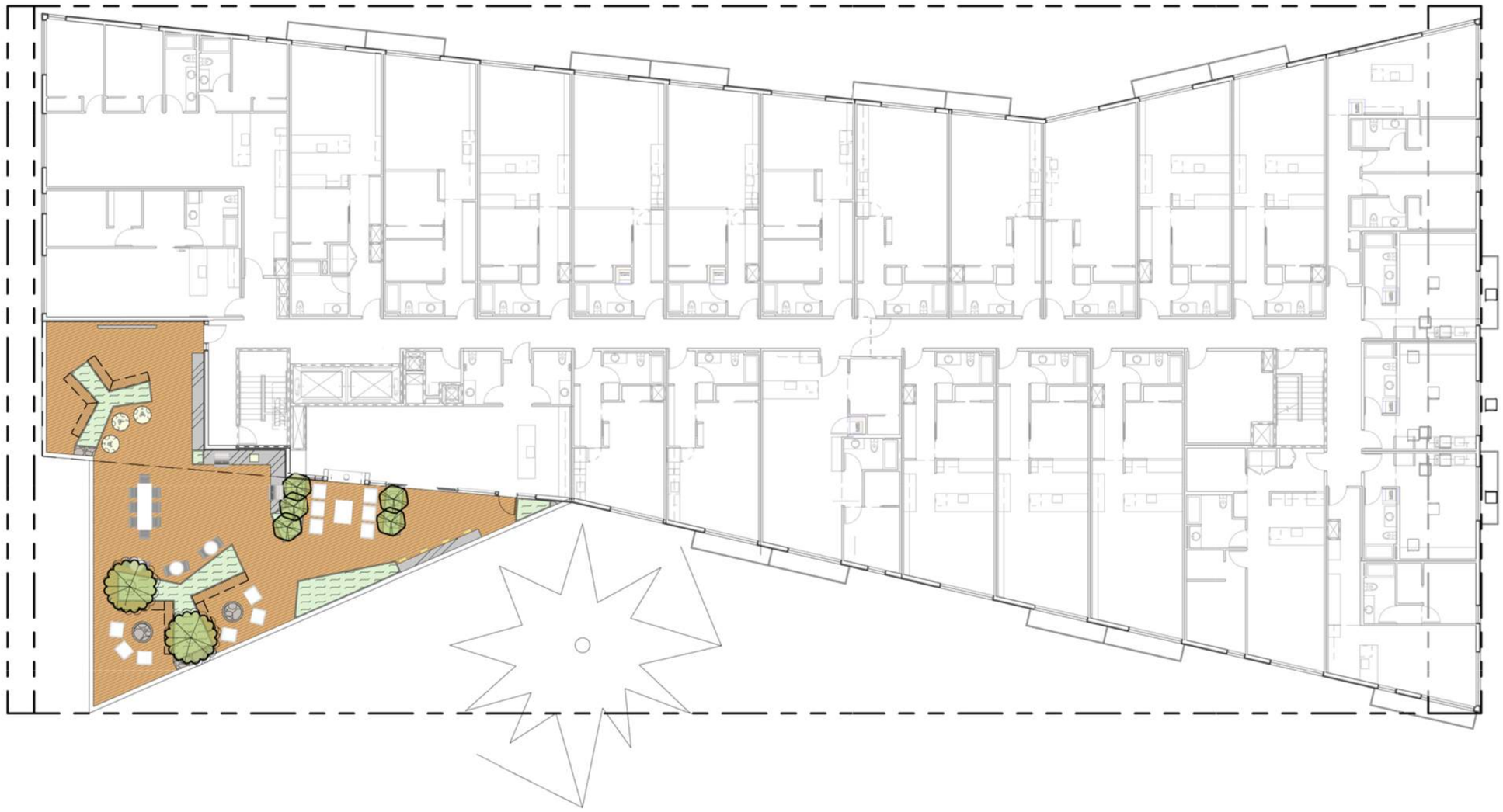
3. Lighting and Landscaping: EDG Guidance

3a. Citing the east and west plazas as important buffers between residential uses and street/alley frontages, the Board requested a planting plan to be included at the Recommendation phase of review to show how seasonal changes will affect the plaza landscaping (CS2-B-3. Character of Open Space, DC4-D Trees, Landscape, and Hardscape Materials).

Design Response:

3a. See planting diagrams which includes imagery for seasonal elements like flowers, fruits or fall color.

Level 8 Roof Terrace - Site Plan



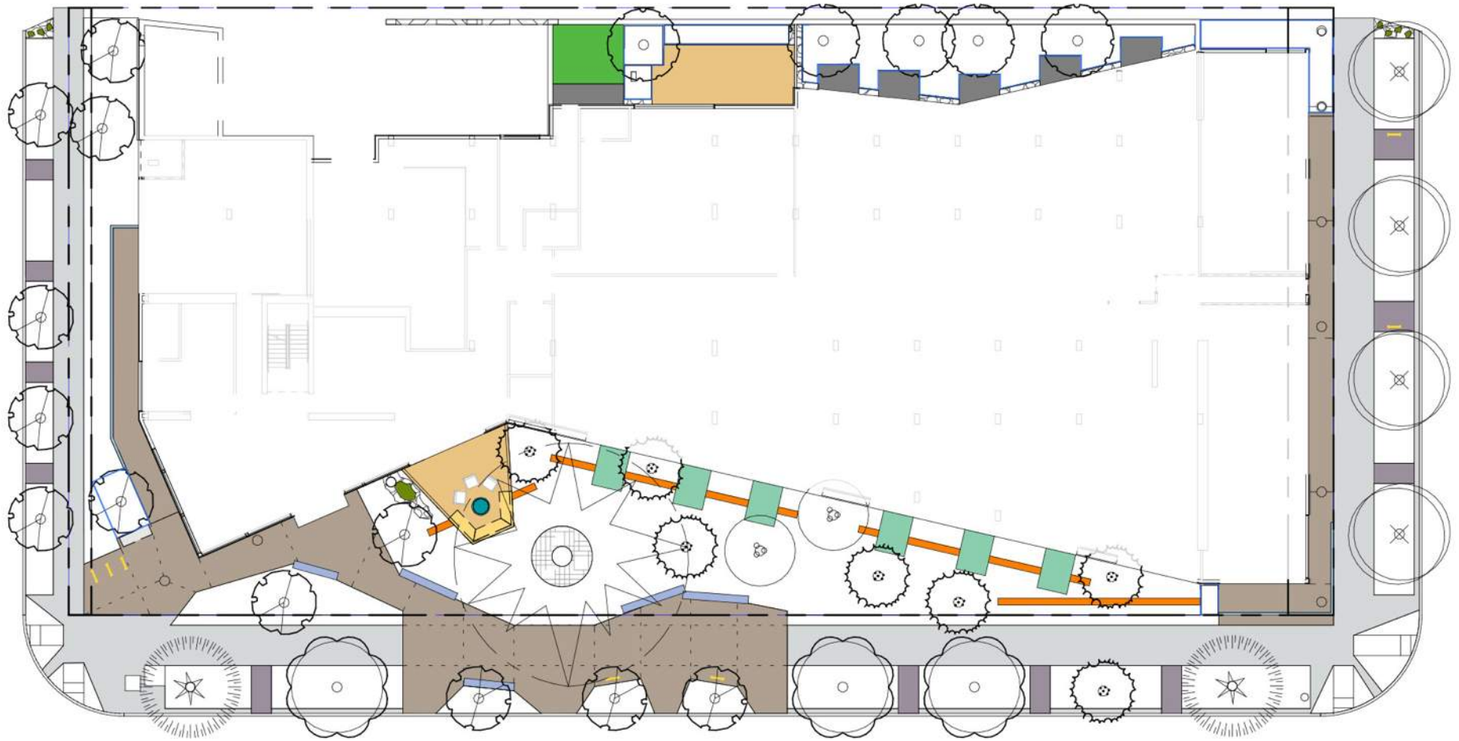
At-Grade Landscape - Materials Diagram

CITY OF SEATTLE STANDARD CIP CONCRETE – 2X2 JOINTING

CAST IN PLACE CONCRETE WALLS

INTEGRAL COLORED CONCRETE - EXPOSED AGGREGATE FINISH

METAL PLANTER WALLS



FLEXIBLE POROUS PAVEMENT

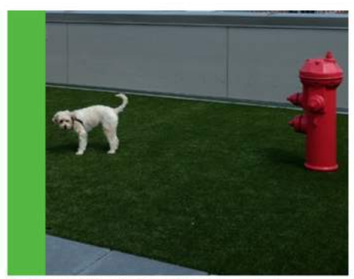
FEATURE WALL AT BIORETENTION (GABION BASKET OR BOARDFORM)

WOOD DECKING AT AMENITY

FIBERGLASS DECKING PATIOS OVER BIORETENTIONAT UNITS

BIKE PARKING

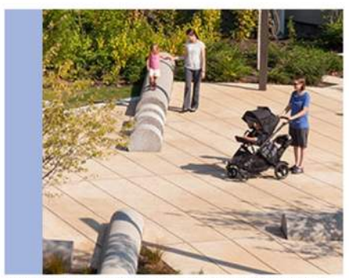
PRECAST PAVERS



ARTIFICIAL TURF AT PET AREA

CUSTOM SEATING AT AMENITY

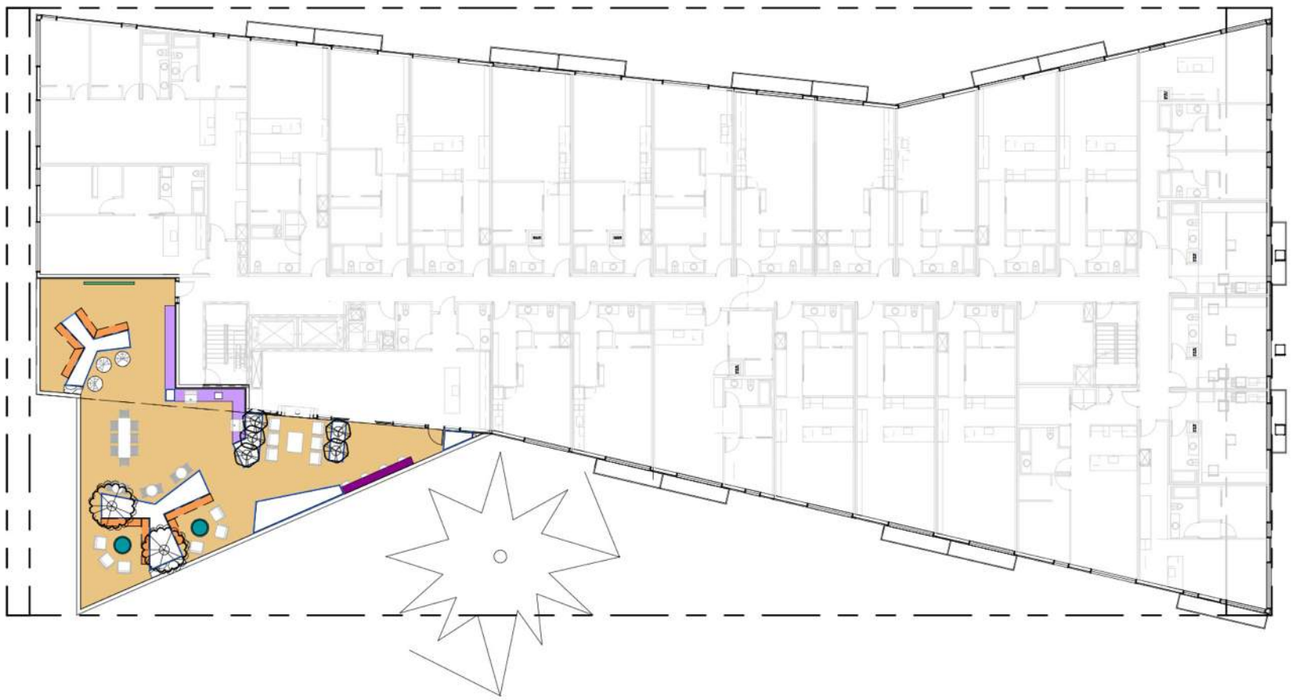
FIRE BOWL AT CUSTOM SEATING



“BLOW DOWN” LOG LANDSCAPE ELEMENTS

RAIN LEADER FEATURE STONE

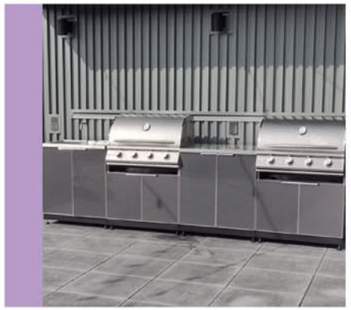
Level 8 Roof Terrace - Materials Diagram



DECKING

METAL PLANTERS TO CREATE ROOMS

BENCHES INTEGRATED WITH PLANTER WALLS



OUTDOOR KITCHEN

FIRE BOWL

OUTDOOR COVERED TV LOUNGE

BEVERAGE RAILING

At-Grade Planting Palette - Native Understory and Bioretention

Juncus patens 'Elk's Blue'
Elk's Blue rush

Camassia leichtlinii Caerulea

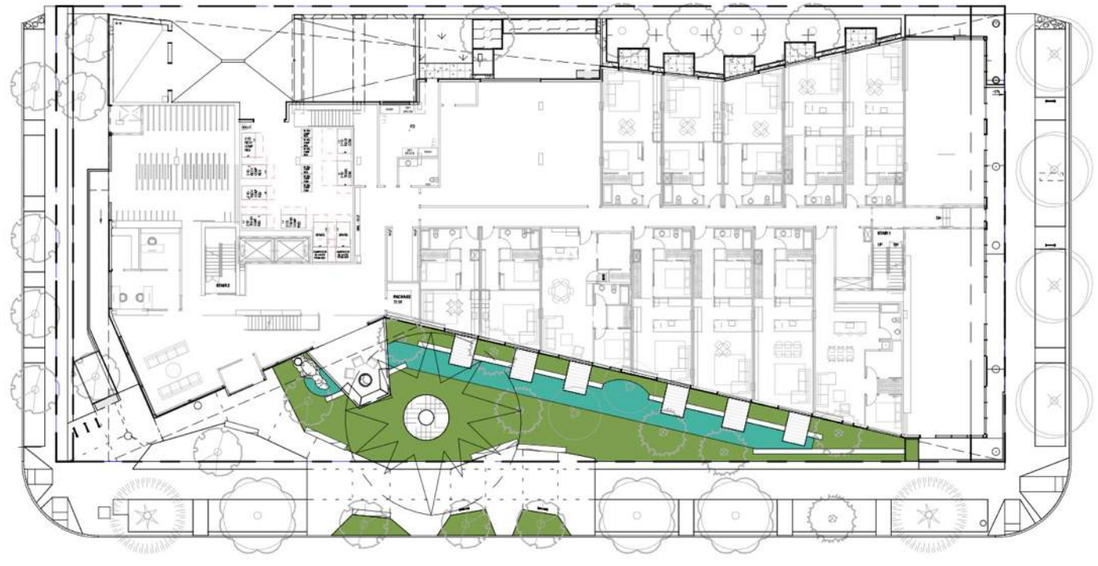
Iris siberica 'Gull's Wing'
Gull's Wing Siberian iris

Iris sibirica 'Caesar's Brother'
Siberian Iris

Viburnum davidii
David Viburnum

Hydrangea quercifolia 'Snow Queen'
Snow Queen oakleaf hydrangea

Lonicera pileata "Moss Green'
Moss Green privet honeysuckle



Pachysandra terminalis 'Green Sheen'
Japanese pachysandra

Carex oshimensis 'Everiime'
Everlime sedge

Polystichum munitum

Liriope muscari 'Royal Purple'
Royal Purple lilyturf

Blechnum spicant
Deer fern

Ligularia stenocephala 'The Rocket'
Rocket ligularia

Anemone × hybrida 'Honorine Jobert'
Windflower

Iris siberica 'Gull's Wing'
Gull's Wing Siberian iris

Schizostylis coccinea 'Alba'
White Kaffir lily

Ribes sanguineum
Flowering currant

At Grade Planting Palette - Ornamental Variety

SHRUBS

Lonicera pileata “Moss Green’
Moss Green privet honeysuckle

Viburnum davidii
David Viburnum

Rhaphiolepus umbellata ‘minor’
Dwarf Yeddo hawthorn

Rosa x ‘NOA168098F’
Flower Carpet Pink Supreme rose

SHRUBS

Rosa x ‘Noaschnee’
Flower Carpet White Rose

Cephalotaxus harringtonia ‘Duke Gardens’

Mahonia eurybracteata
Soft Caress Mahonia

Hydrangea quercifolia ‘Snow Queen’
Snow Queen oakleaf hydrangea

GROUNDCOVER

Prunus laurocerasus ‘Mount Vernon’
Mount Vernon English Laurel

Carex oshimensis ‘Everillo’
Everillo sedge

Carex divulsa
European grey sedge

Liriope muscari ‘Royal Purple’
Royal Purple lilyturf

Blechnum spicant
Deer fern

Carex testacea

ACCENT

Hemerocallis x ‘Little Grapette’
Little Grapette dwarf daylily

Anemone sylvestris

Schizostylis coccinea ‘Alba’
White Kaffir lily

Salvia x sylvestris ‘May Night’
May Night sage

Helleborus niger ‘Double Fantasy’
Double Fantasy Hellebore

Liatris spicata ‘Floristan White’

At-Grade Planting Palette - Trees

Gymnocladus dioicus
Kentucky Coffeetree

Magnolia virginiana 'Moonglow'
Sweet Bay Magnolia

Quercus frainetto 'Schmidt'
Forest Green Oak

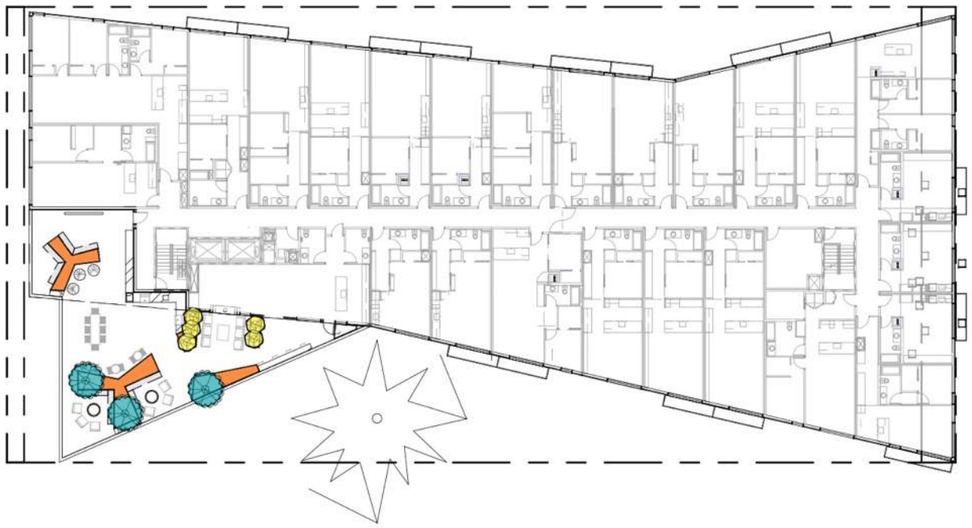
Tsuga heterophylla

Amelanchier x grandiflora 'Autumn Brilliance'

Acer circinatum
Vine Maple

Stewartia psuedocamellia
Japanese Stewartia

Pseudotsuga menzesii
Douglas Fir - EXISTING TO REMAIN



Roof Planting Palette - Amenity Deck

SHRUBS

Viburnum davidii
David Viburnum

Hydrangea quercifolia 'Snow Queen'
Snow Queen oakleaf hydrangea

Lonicera pileata "Moss Green'
Moss Green privet honeysuckle

GROUNDCOVER

Carex oshimensis 'Everillo'
Everillo sedge

Liriope muscari 'Royal Purple'
Royal Purple lilyturf

Carex divulsa
European grey sedge

Populous tremuloides 'Mountail Sentinel'
Fastigiate Quaking Aspen

Lagerstroemia indica x fauriei 'Natchez'
Natchez Crepe Myrtle

ACCENT

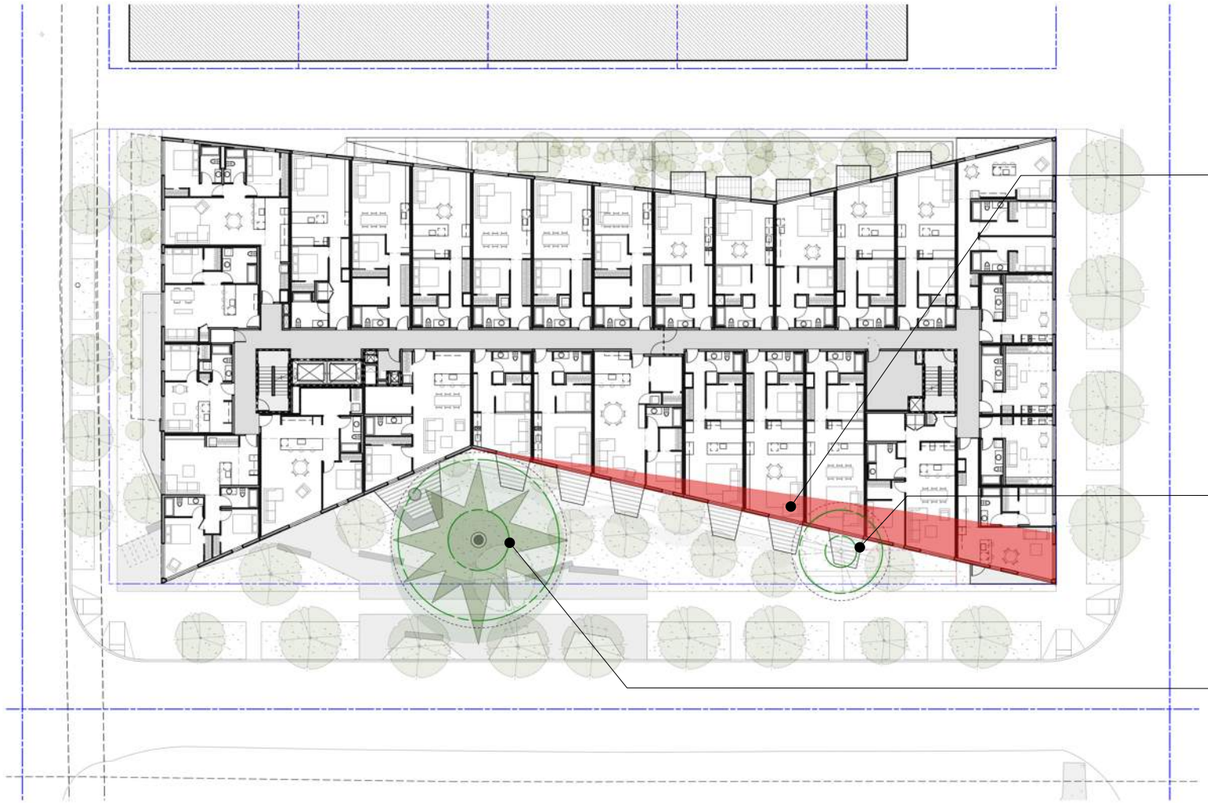
Ligularia stenocephala 'The Rocket'
Rocket ligularia

Anemone × hybrida 'Honorine Jobert'
Windflower

Iris siberica 'Gull's Wing'
Gull's Wing Siberian iris

Schizostylis coccinea 'Alba'
White Kaffir lily

EXCEPTIONAL TREES



Typical Floor Plan Potential Area Loss

Tree Summary
Fir Tree - 30.5" - To Be Retained
Exceptional at 30"

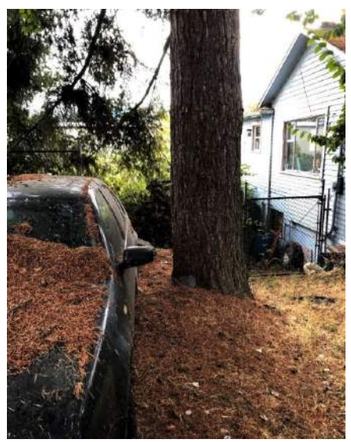
Hop Tree - 9"
Exceptional at 4"

Preferred scheme would involve removing the Hop Tree per SMC 25.11.080 A.1 & A.2
Development cannot be avoided in this area without loss of square footage and impacts to units.

Proposed:
To remove the exceptional Hop Tree that is in poor condition and replace with new tree plantings onsite. SDCI requires that any exceptional tree, or tree 24-inches DSH or greater, planned for removal must be approved by SDCI and replaced by one or more trees. The proposed landscaping plans for the site include over two dozen new tree plantings to be installed by project completion. See mitigation diagram.

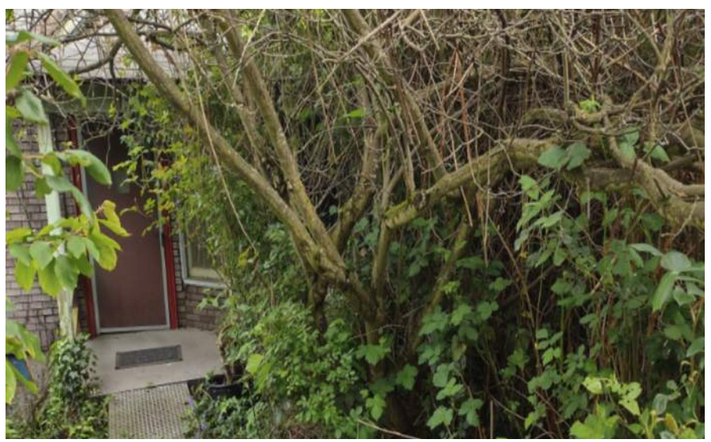
Rationale:
The original proposal included transplanting the hop tree onsite to retain it however upon further review with the project Arborist and Landscape Architect it has been determined to be in poor condition and a poor candidate for transplantation. Based on the number of trees currently existing on site, the proposed planting will more than replace the existing canopy cover. Additionally the City of Seattle Arborist concurs with these findings in conversation about removal of this tree.

Transplant Summary - Tree Solutions Consulting Arborist
Tree Solutions carried out a third site inspection on May 17, 2022, to evaluate existing infrastructure around the two exceptional trees on site. Originally, transplanting of the hop tree was recommended, however, after the most recent assessment of this tree it was determined that the health and structural condition of the tree is not good. Retaining the Hop Tree *is no longer recommended.*



Fir Tree - To Be Retained

Hop Tree - Condition at Base of Trunk



Hop Tree - Branches

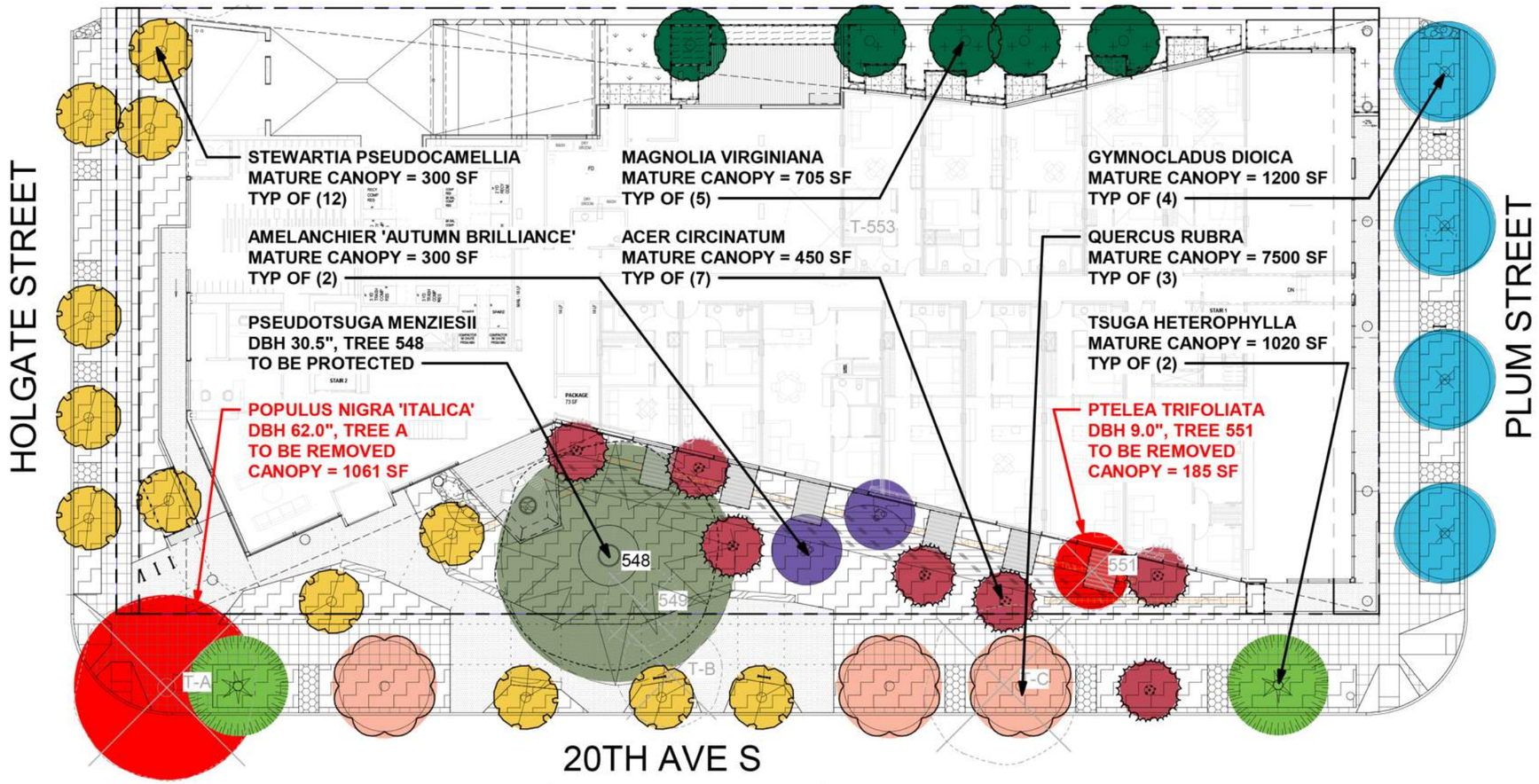
Hop Tree - Evidence of Poor Pruning Practices and Decay

Mitigation Summary
Removal of the exceptional Hop Tree will be replaced per: SMC 25.11.090.A

Each exceptional tree and tree over two (2) feet in diameter that is removed in association with development in all zones shall be replaced by one or more new trees, the size and species of which shall be determined by the Director; the tree replacement required shall be designed to result, upon maturity, in a canopy cover that is at least equal to the canopy cover prior to tree removal. Preference shall be given to on-site replacement. When on-site replacement cannot be achieved, or is not appropriate as determined by the Director, preference for off-site replacement shall be on public property.

Required area of replacement canopy
1050 SF See area table below

Proposed area of replacement canopy
40215 SF



CANOPY REMOVAL					
QTY	BOTANICAL NAME	COMMON NAME	MATURE CANOPY	TOTAL CANOPY	
1	PTELEA TRIFOLIATA	HOP TREE	340 SF	340 SF	REPLACEMENT NOT REQUIRED
1	POPULOUS NIGRA 'ITALICA'	ITALIAN POPLAR	1050 SF	1050 SF	REPLACEMENT REQUIRED

REPLACEMENT CANOPY OF THE POPLAR PROVIDED UNDER SIP PERMIT.
REPLACEMENT CANOPY OF THE HOP TREE NOT REQUIRED UNDER 25.11.090.B

25.11.090.B
No tree replacement is required if the tree is: (1) hazardous, dead, diseased, injured, or in a declining condition with no reasonable assurance of regaining vigor as determined by a registered tree service provider; or (2) proposed to be relocated to another suitable planting site as approved by the Director.

CANOPY REPLACEMENT					
QTY	BOTANICAL NAME	COMMON NAME	SIZE	MATURE CANOPY	TOTAL CANOPY
7	Acer circinatum	Vine maple	10-12' ht	450 SF	3150 SF
2	Amelanchier 'Autumn Brilliance'	Autumn Brilliance serviceberry	10-12' ht	300 SF	600 SF
4	Gymnocladus dioicus	Kentucky coffeetree	3.5" cal	1200 SF	4800 SF
5	Magnolia virginiana 'Moonglow'	Moonglow sweetbay magnolia	10-12' ht	705 SF	3525 SF
3	Quercus frainetto 'Schmidt'	Forest Green oak	3.5" cal	7500 SF	22500 SF
12	Stewartia pseudocamellia	Japanese stewartia	3" cal	300 SF	3600 SF
2	Tsuga heterophylla	Western hemlock	12-14' ht	1020 SF	2040 SF
					40215 SF

SITE LIGHTING CONCEPT

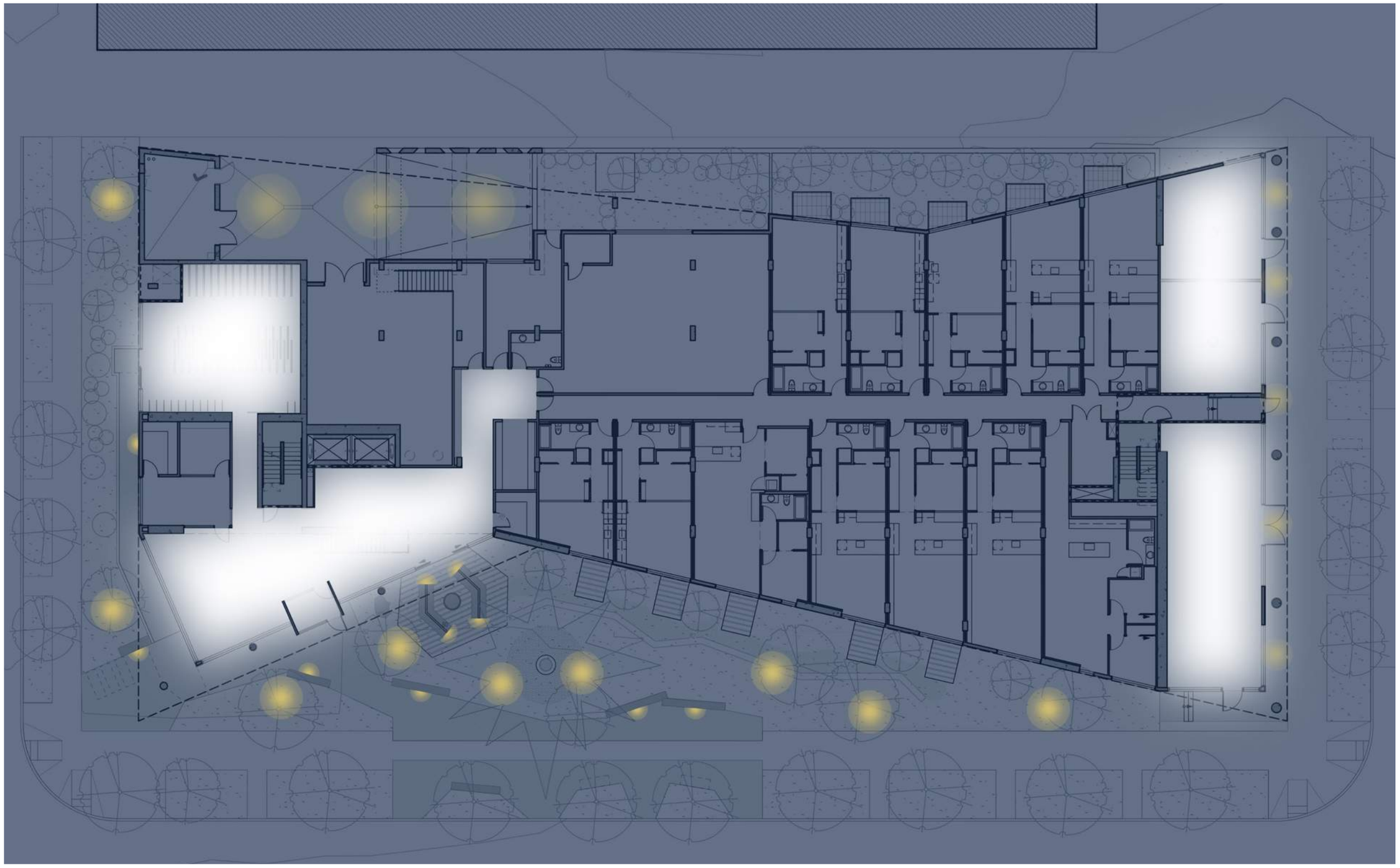
3. Lighting and Landscaping:

EDG Guidance

3b. The Board requested a lighting diagram at the Recommendation phase of review to show that lighting will be used to augment wayfinding and safety (PL2-B-2. Lighting for Safety, PL3-A-4. Ensemble of Elements, PL3-C-2. Visibility, DC4-C-1. Functions).

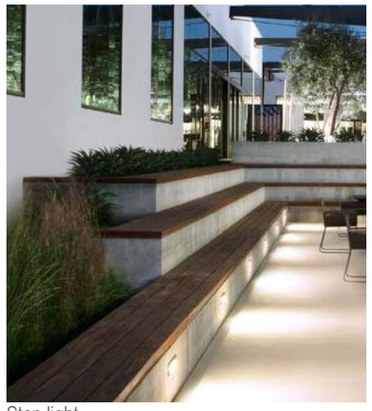
Design Response:

3b. Refer to the following lighting diagram showing the lighting augmenting the wayfinding and security of the proposed plan.



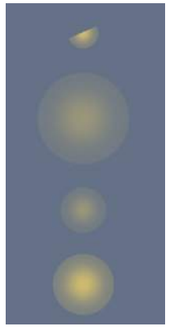
Landscape Light

Down Light



Step light

LEGEND

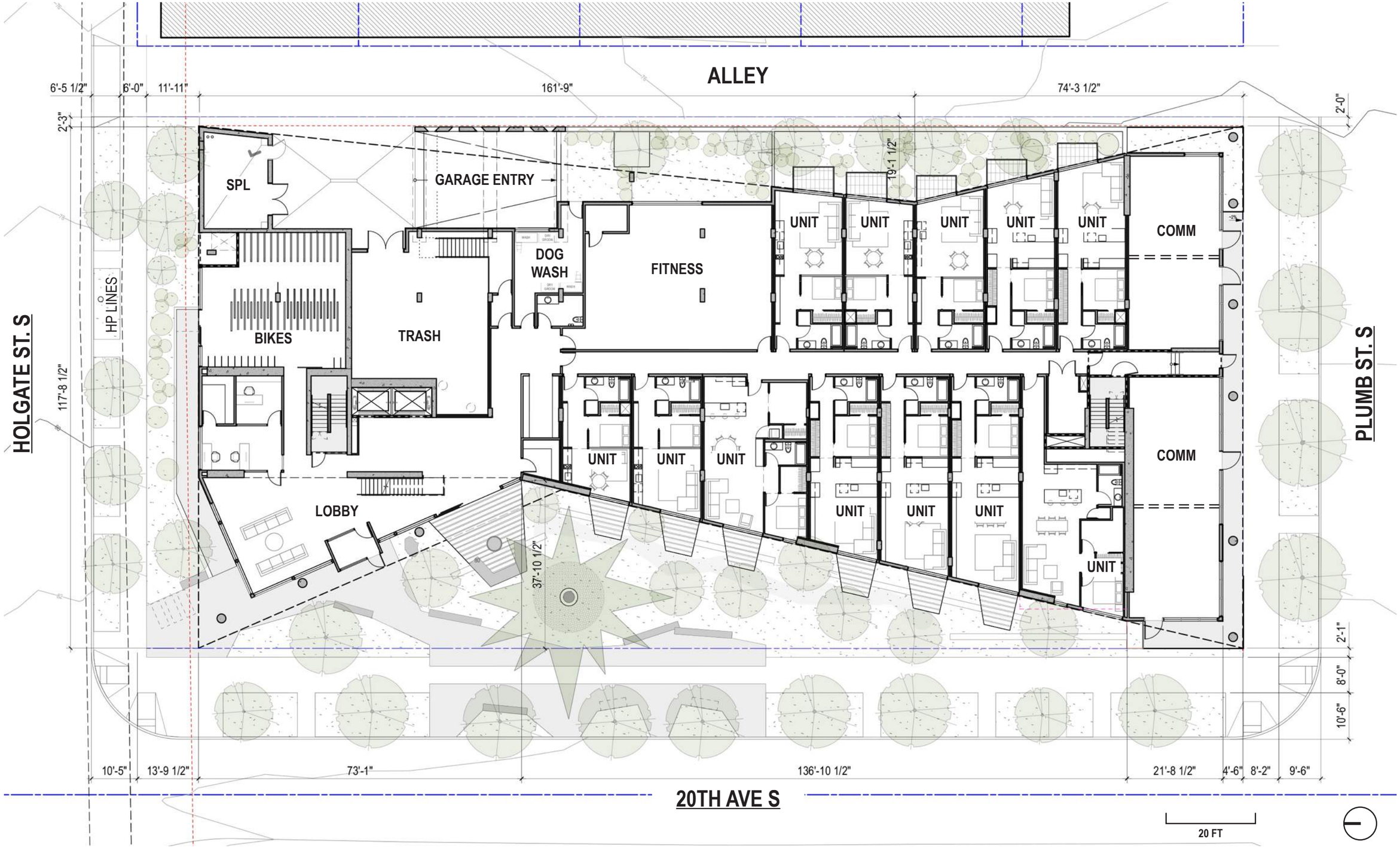


Step light

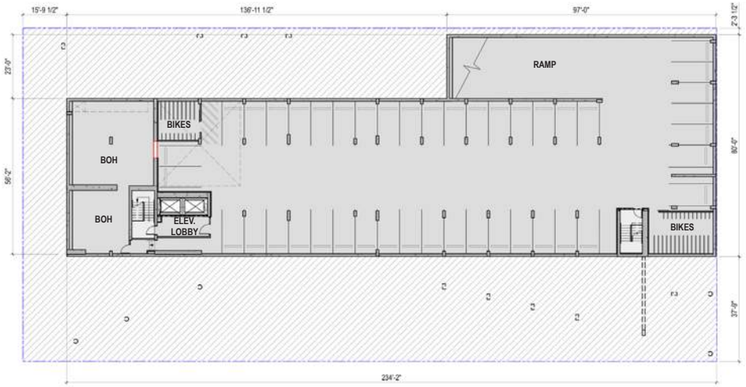
Down Light - Large

Down Light - Small

Landscape Light

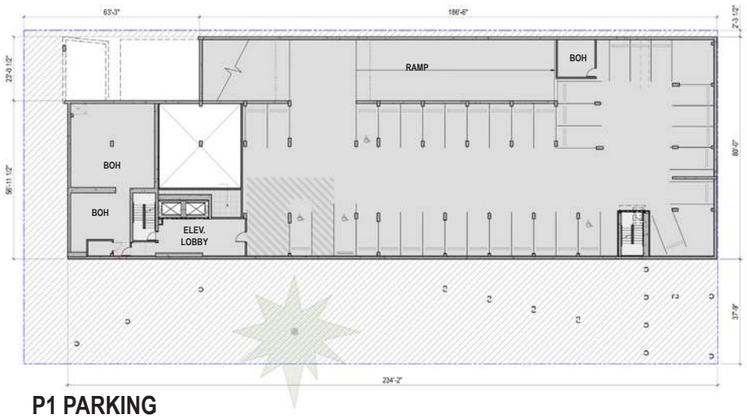

ALLEY
6'-5 1/2"
6'-0"
11'-11"
161'-9"
74'-3 1/2"
2'-0"
2'-3"
SPL
GARAGE ENTRY
19'-1 1/2"
UNIT
UNIT
UNIT
UNIT
UNIT
COMM
DOG WASH
FITNESS
HP LINES
BIKES
TRASH
HOLGATE ST. S
117'-8 1/2"
PLUMB ST. S
UNIT
UNIT
UNIT
UNIT
UNIT
UNIT
COMM
LOBBY
37'-10 1/2"
2'-1"
8'-0"
10'-6"
10'-5"
13'-9 1/2"
73'-1"
136'-10 1/2"
21'-8 1/2"
4'-6"
8'-2"
9'-6"
20TH AVE S
20 FT

FLOOR PLANS



P2 PARKING

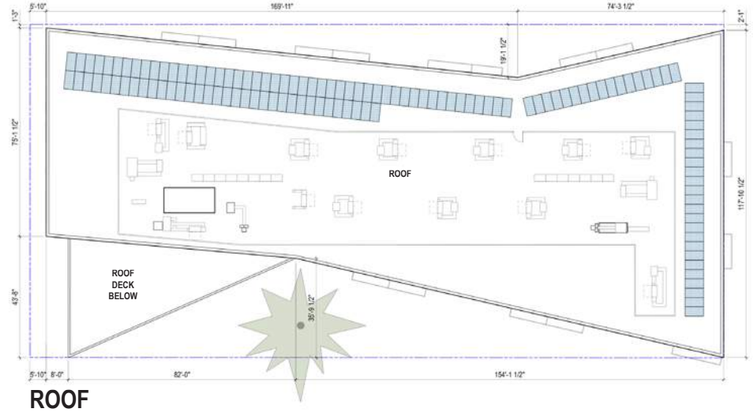
TYPICAL FLOOR



P1 PARKING

L8

L2



ROOF

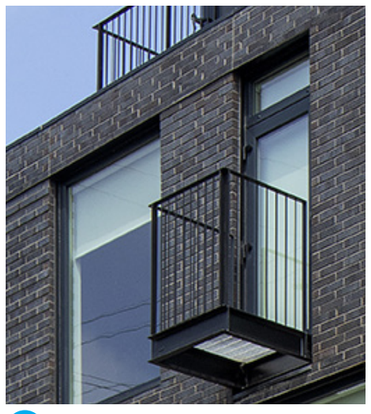
20 FT

1 Stained Douglas Fir

2 OKO Siding - Anthracite - 3 Tones

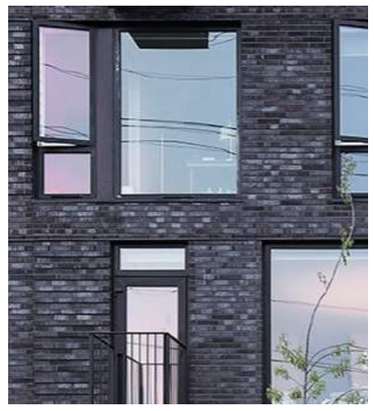
3 Charred Wood Siding

4 Concrete / Sandblasted - Natural



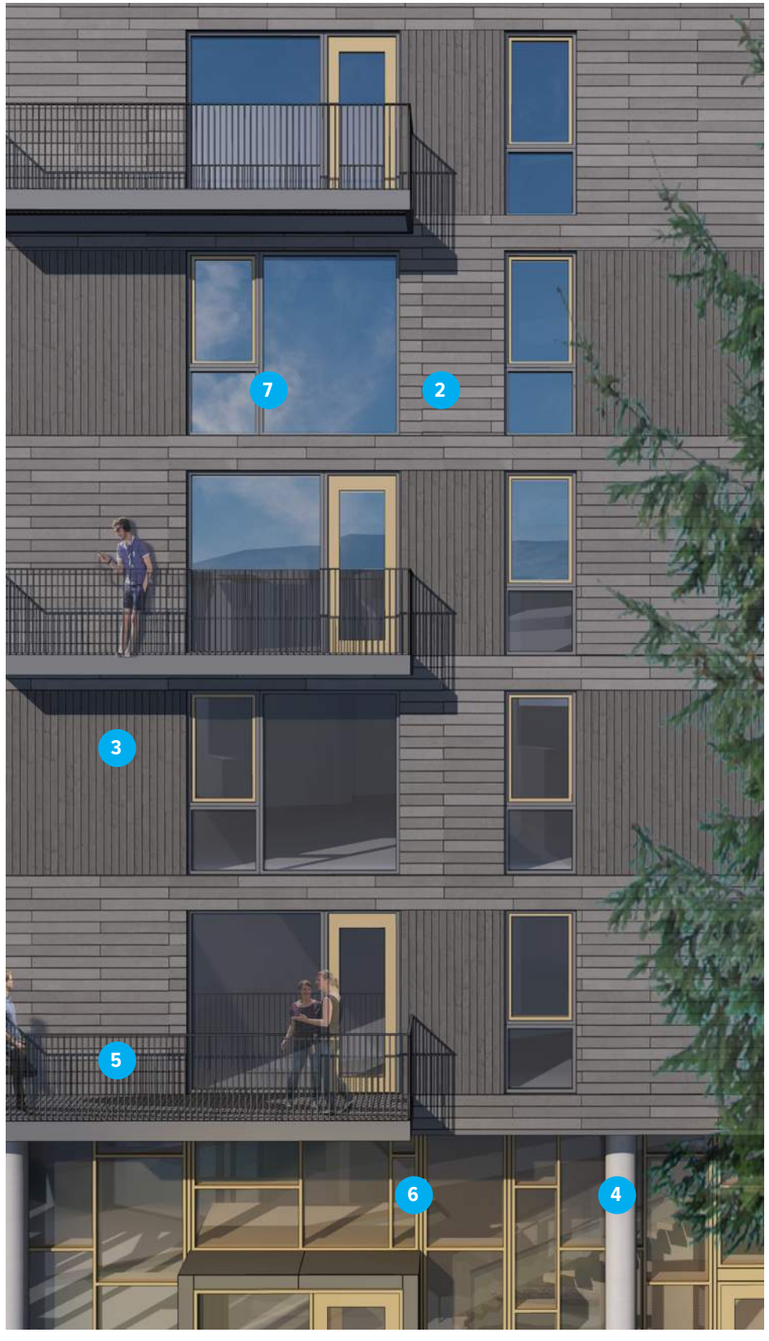
5 Guards / Powder Coated Steel Black

6 Wood Storefront Windows



7 Vinyl Windows Black w/ Ochre Operable Sash

8 Commercial Aluminium Storefront Black



ELEVATIONS

North Elevation

Legend

1. Stained Douglas Fir
2. OKO Siding - Anthracite - 3 Tones
3. Charred Wood Siding
4. Concrete / Sandblasted - Natural
5. Guards / Powder Coated Steel Black
6. Wood Storefront Windows
7. Vinyl Windows Black w/ Ochre Operable Sash
8. Commercial Aluminum Storefront Black

West Elevation

South Elevation

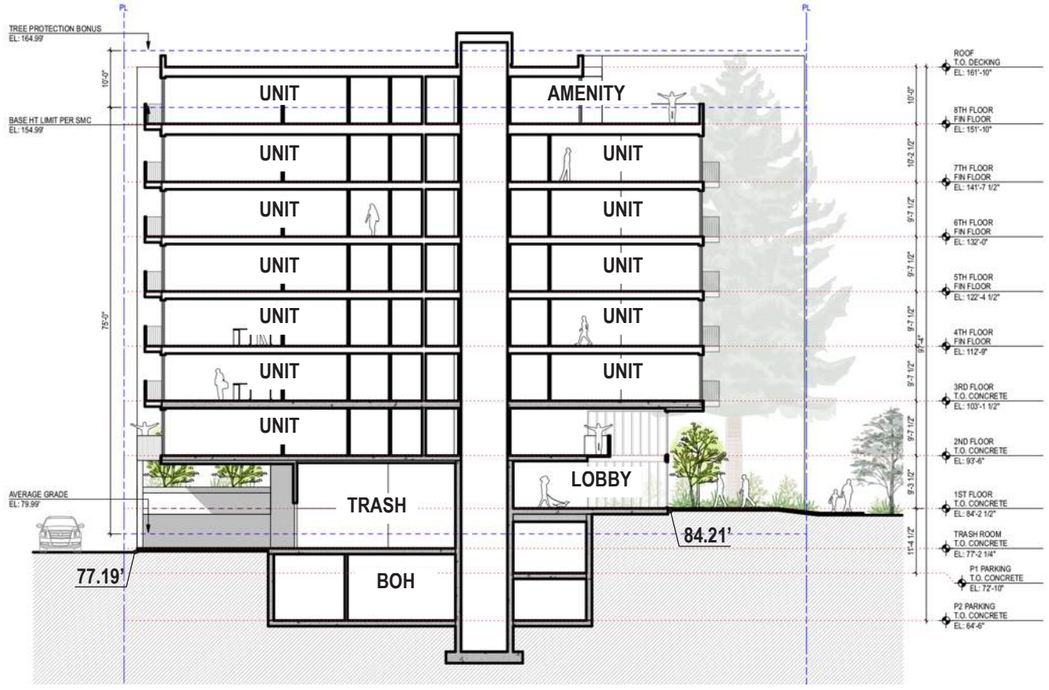
Legend

1. Stained Douglas Fir
2. OKO Siding - Anthracite - 3 Tones
3. Charred Wood Siding
4. Concrete / Sandblasted - Natural
5. Guards / Powder Coated Steel Black
6. Wood Storefront Windows
7. Vinyl Windows Black w/ Ochre Operable Sash
8. Commercial Aluminum Storefront Black

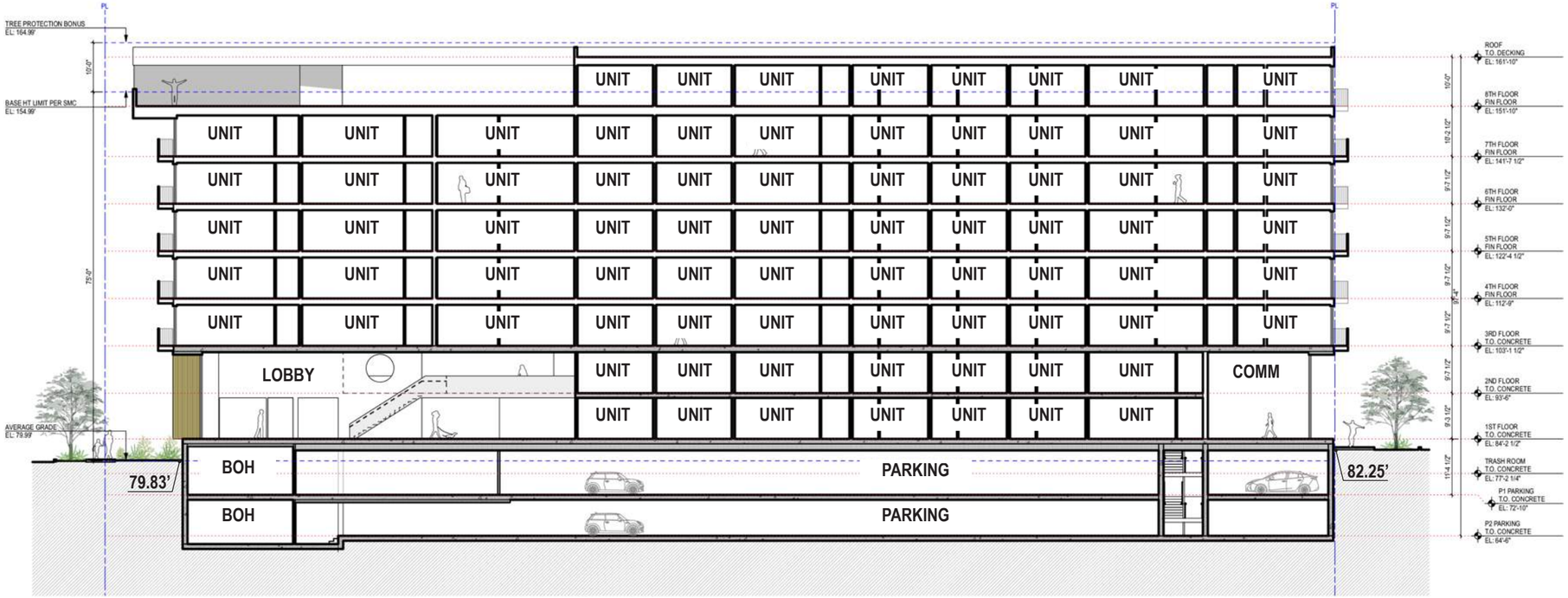
East Elevation

SECTIONS

East-West Section



North-South Section



Signage Concept

To provide a high-contrast signs, complimentary to the building materials and overall concept.

METAL SIGNAGE INSPIRATION - COMMERCIAL ZONE

SIGNAGE INSPIRATION

Examples of signage inspirational to the building branding and logo.

MAIN BUILDING SIGNAGE

The new building is named after the Douglas Fir that is being retained. The building signage shall provide a high-contrast visually legible feature consistent with the overall design of the building.

Proposed are two types of signs. 1. Residential Entry and Fir logo sign. 2.Commercial pedestrian scale blade signs at commercial tenant spaces.

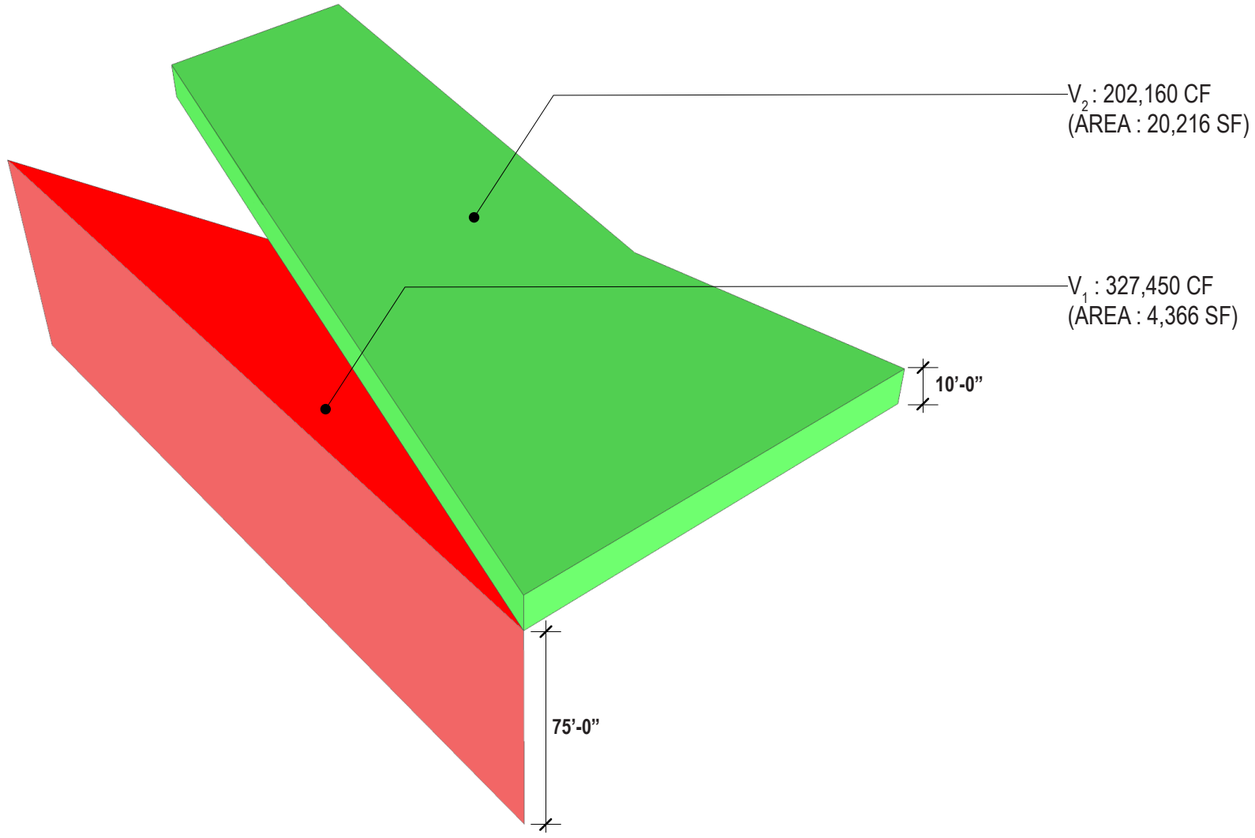
Pin mounted, illuminated logo sign set on wood backdrop.

Proposed Building Sign

Illuminated blade sign. Commercial zone contrasts the residential entry with different material strategy.

Proposed Commercial Signage

DEPARTURE REQUEST #1



Standard:
Per 23.41.012.B.11.f
Departures of up to 10 feet of additional height may be granted if the applicant demonstrates that:

The departure is needed to protect a tree that is located on the lot that is either an exceptional tree, as defined in Section 25.11.020, or a tree greater than 2 feet in diameter measured 4.5 feet above the ground; and avoiding development in the tree protection area will reduce the total development capacity of the site.

Proposed:
Allow up to 10'-0" of additional structure height in order to preserve an Exceptional Douglas Fir tree on the subject property and accommodate loss of development capacity in the tree protection area.

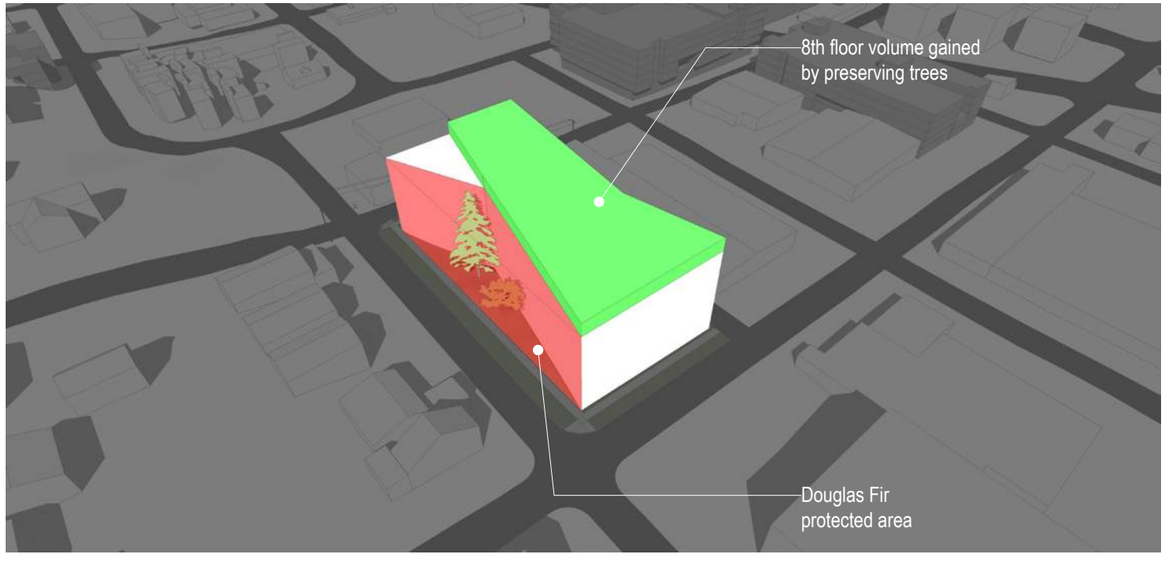
Rationale:
Preserving and Protecting the existing Douglas Fir tree reduces the development capacity of the site, as indicated by the red volume (V_1) on the adjacent diagram. The existing tree is the starting point for the massing concept (per CS-1 Natural Systems and Site) and preserving the tree provides a gracious and natural zone transition to the RSL zoned properties to the west (per CS-2 Urban Pattern and Form). The additional height and volume afforded by this departure are also used to create a landscaped courtyard off the alley, contributing to a more unified whole with integrated open spaces (per DC-3 Open Space Concept). In addition the landscaped courtyard created around the Douglas Fir is a key site feature, visible from adjacent public spaces and part of the pedestrian entry and lobby experience as indicated on the Landscape plans and 3D vignettes. Therefore, retaining the exceptional trees and incorporating this departure also better meets the intent of the design guidelines.

V_1 = Volume lost from tree preservation
V_1 = (4,366 square feet * 75 feet)
V_1 = 327,450 cf

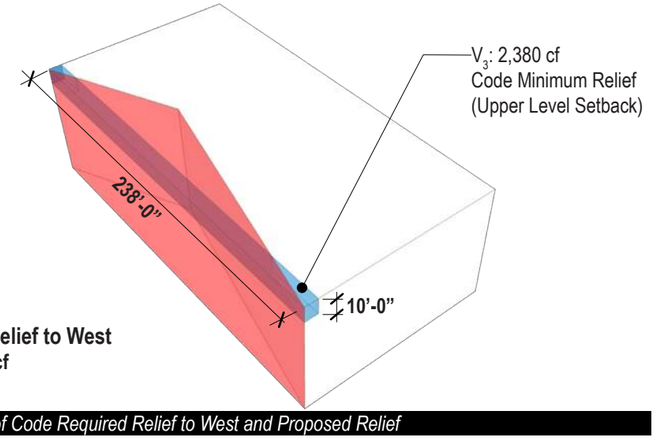
V_2 = Volume gained from departure
V_2 = 20,216 square feet * 10.0 feet
V_2 = 202,160 cf

$V_2 < V_1$

$V_1 > V_3$




Subject Fir Tree



Proposed Relief to West
V_1 : 327,450 cf

Comparison of Code Required Relief to West and Proposed Relief

INTENTIONALLY BLANK

DEPARTURE REQUEST #2

Standard:
Per 23.47A.008.B
Street level development standards for Non-residential uses.

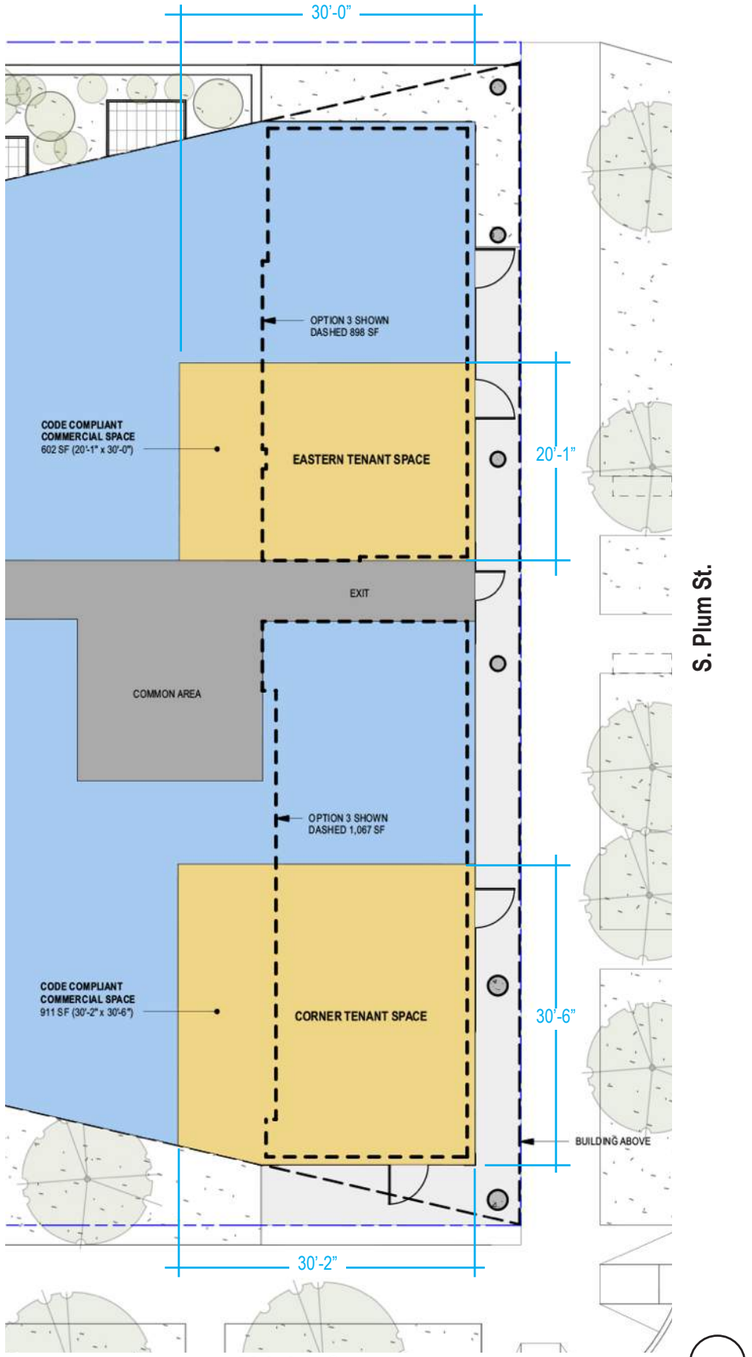
3. Depth provisions for new structures or new additions to existing structures

a. Non-residential uses greater than 600 square feet in size shall extend an average depth of at least 30 feet and a minimum depth of 15 feet from the street-level, street-facing facade.

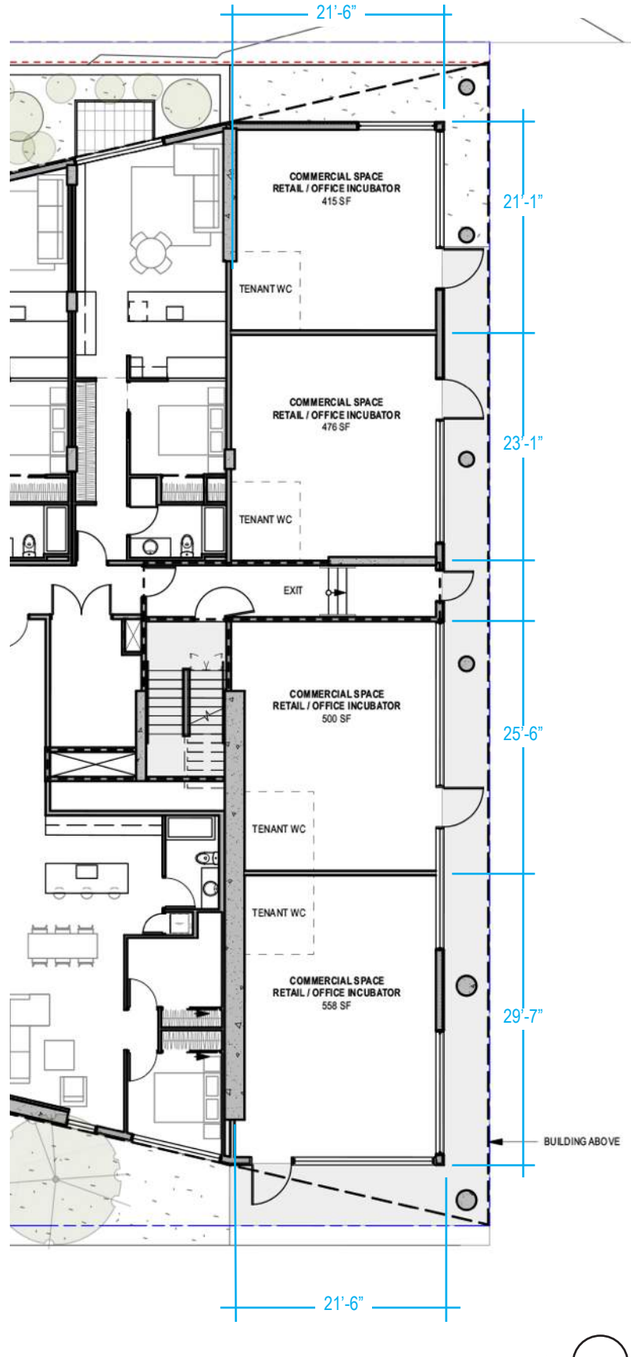
Proposed:
Departure from 30' average depth requirement if spaces configured > 600 sf.
Average depth measured from S. Plum St. 21.2' for the eastern tenant space
Average depth measured from S. Plum St. 20.4' for the corner tenant space.

Allow for two commercial spaces to be demised as needed to suit tenant needs. The eastern tenant space being approximately 21'-6" x 44-11' and the corner space being approximately 21'-6" x 55'-1" with a exhaust shaft to the roof that could facilitate a small restaurant or cafe.

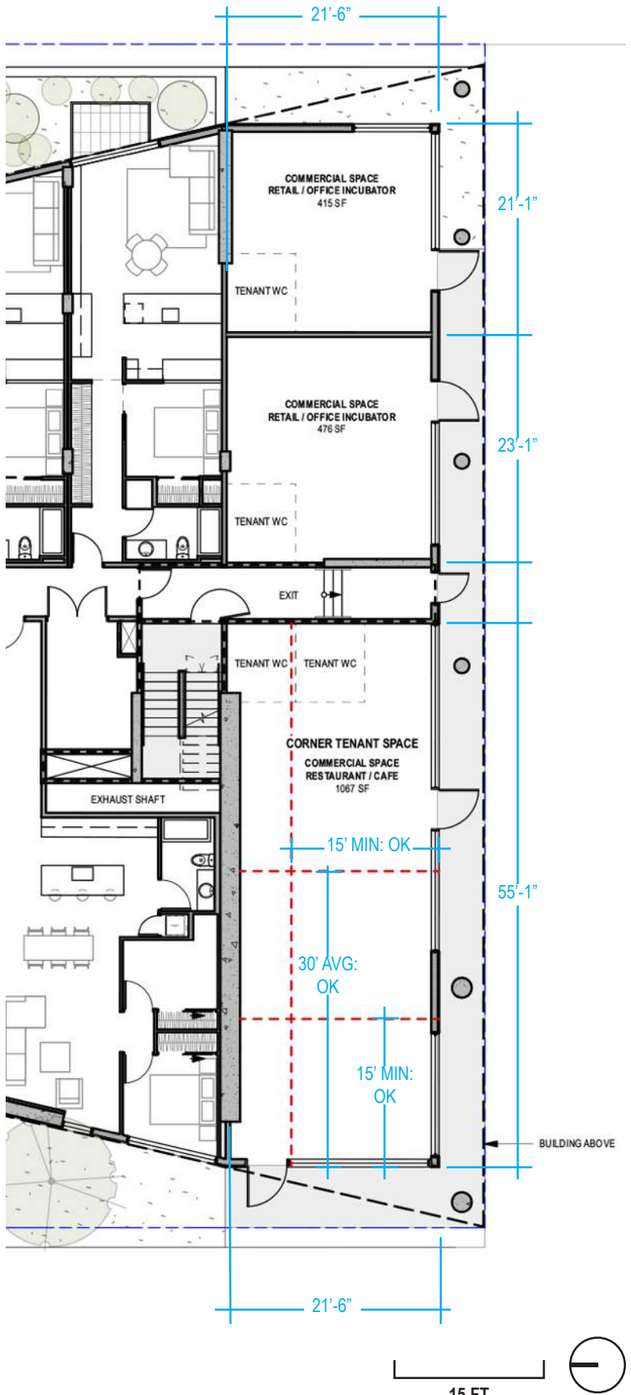
Rationale:
The diagram to the right shows a strictly code compliant space for commercial spaces larger than 600 sf. In this project a departure from the average depth provision would allow for larger and more desirable commercial spaces than the code compliant schemes. The proposed scheme is just oriented differently. Future flexibility is important in finding the right fit for prospective tenants. While a code compliant scheme is possible, it has inherent drawbacks. The smaller spaces shown in code compliant scheme 2 are too small to allow for a small restaurant or cafe and would limit the potential for a retail space. In this neighborhood much of the surrounding areas are residential, smaller incubator spaces would have limited benefit to the community. Allowing for a departure from the average depth requirement will allow for smaller spaces to be combined. A small retail establishment or office could occupy the eastern tenant space while the corner tenant space at 20th and S. Plum St. could be a restaurant with an exhaust shaft up to the roof.



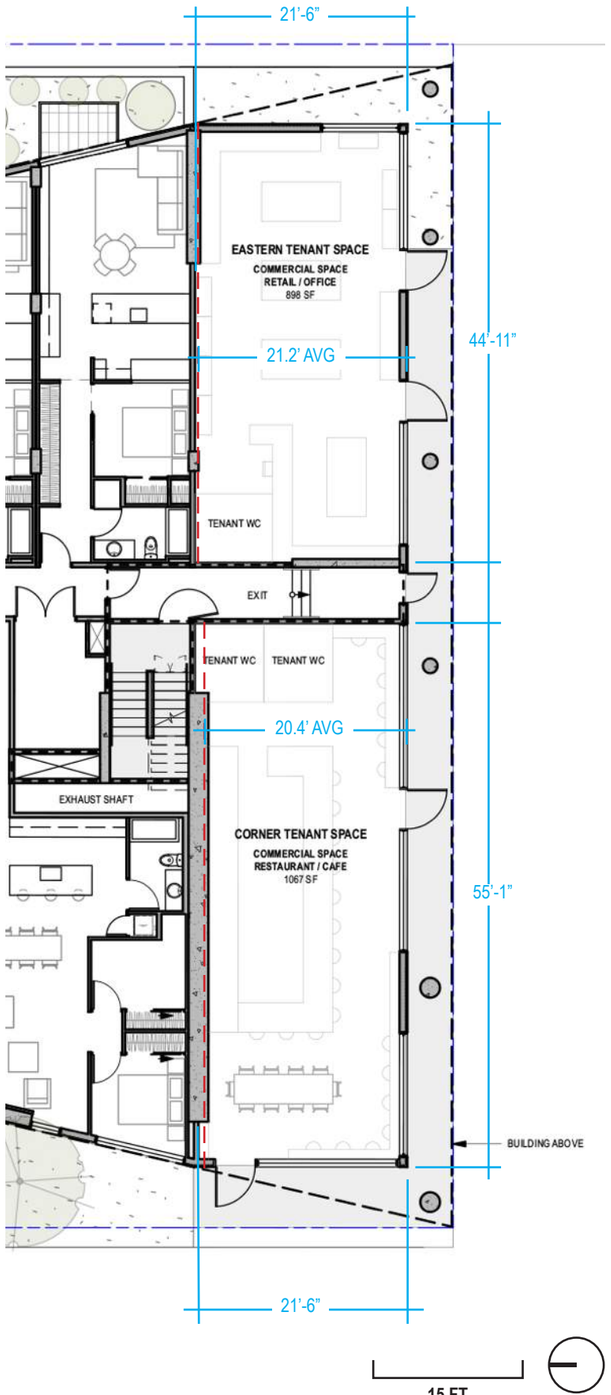
Code Compliant Scheme 1 - Spaces > 600 SF



Code Compliant Scheme 2 - All Spaces < 600 SF
Depth Provisions Do Not Apply



Option 2 - Departure Required
Average Depth of West Commercial Space (1067 sf) in North-South Direction



Option 3 - Departure Required
Average Depth of Both Commercial Spaces in North-South Direction

EXAMPLES OF PAST WORK

Anhalt Apartment Renovation and Addition
Seattle, WA

2016 NW & Pacific Region AIA Merit Award
2015 Seattle AIA Honor Award
2015 People's Choice Urban Design Awards, Second Place
2015 Historic Seattle Preserving Neighborhood Character Award

Henry Apartments
Seattle, WA

2017 Seattle AIA Honorable Mention Award

Inspire Apartments
Seattle, WA

LIVING BUILDING CHALLENGE

architecture 2030

2020 AIA Award for meeting 2030 Challenge

Shelton Apartments
Seattle, WA

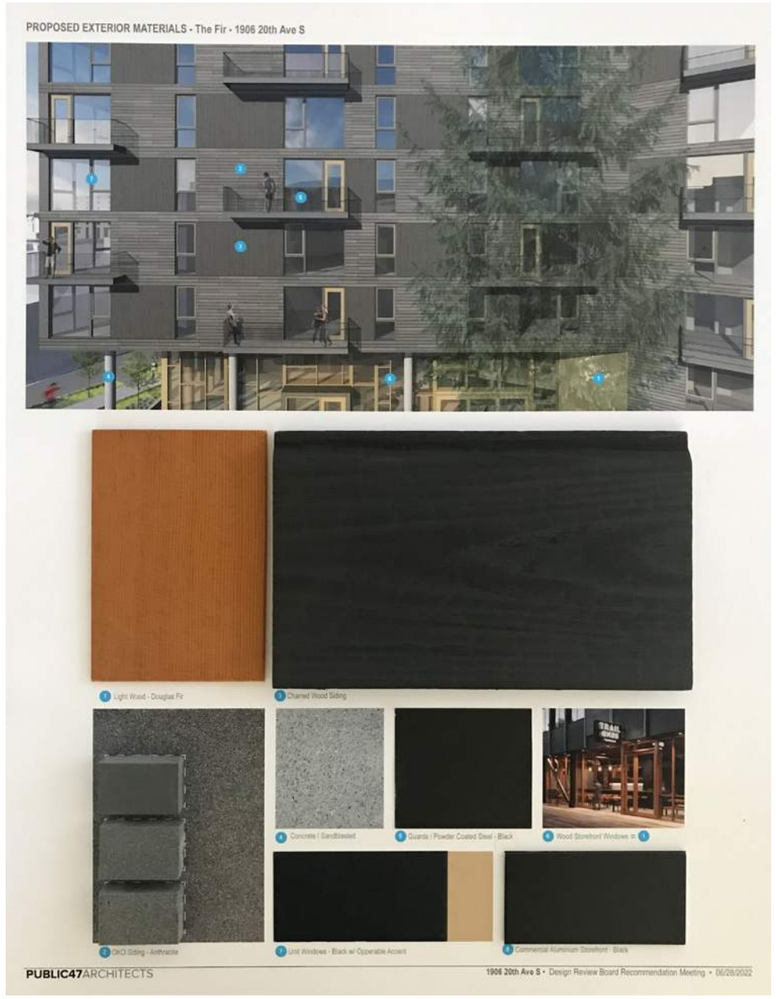
BUILT GREEN

the fir

Appendix
Materials Board Photos
Arborist Report

PUBLIC47ARCHITECTS

KAMIAK



Diffuse Lighting

Shadow

Direct Lighting

Tree Solutions Inc
Consulting Arborists

Project No. TS-7346

Arborist Report

To:	Kamiak Real Estate c/o Justin Merriman
Site:	1901 21st Ave S, 1906-1918 20th Ave S, 1920 21st Ave S, Seattle, WA
Re:	Tree Inventory and Assessment for Haug Development Project
Date:	May 24, 2022
Project Arborist:	Haley Galbraith ISA Board Certified Master Arborist PN-7512BM Municipal Specialist, ISA Qualified Tree Risk Assessor
Attached:	Table of Trees Tree Inventory Map

Summary

Six significant trees exist on the subject site, which is composed of adjacent addresses 1901 21st Ave S, 1906-1918 20th Ave S, and 1920 21st Ave S. Based on City of Seattle Municipal Code (SMC), trees measuring 6 inches or greater in diameter at standard height (DSH) qualify as significant and are required to be documented for development projects. A Tree Solutions Arborist Field Team tagged each of the six trees on site with a numbered aluminum tree tag. Tree identifiers shown in the attached Table of Trees and Tree Inventory Map correspond to the number on each tree tag.

Of the trees assessed, two met the exceptional tree criteria outlined by Seattle Director's Rule 16-2008. One of these trees, a Douglas-fir (*Pseudotsuga menziesii*) tree 548, is proposed for retention. Tree 551, a hop tree (*Ptelea trifoliata*) was under consideration for transplanting to a different location on site, but after further inspection, we now recommend removal of this tree.

Three trees located in adjacent Right-of-Way (ROW) were documented. These trees were assigned alphabetical tree identifiers.

Detailed information on each of the trees assessed can be found in the attached Table of Tree.

Assignment and Scope of Work

This report documents the initial site visit by Josh Petter and Andrea Starbird, of Tree Solutions Inc, on September 21, 2020, a follow-up site inspection by Andrea Starbird on January 19, 2021, and another visit to the above-referenced site by Joseph Sutton-Holcomb of Tree Solutions on May 17, 2022 to look specifically at retention feasibility of the two exceptional trees on site. Tree Solutions was asked to perform a tree inventory and assessment, followed by preparation of a complete arborist report as a necessary step in applying for permits for site development.

Observations and Discussion

Site

The subject site is made up of nine parcels (#1498302305, #1498302005, #1498302010, #1498302020, #1498302030, #1498301995, #1498301990, #1498301985, and #1498301980) between 20th Ave S, S Holgate St, S Plum St, and the alley between 21st Ave and 22nd Ave S. These lots are located in the Mount Baker neighborhood of Seattle.

Multiple commercial warehouse buildings, vehicle lots, and two small houses exist on the subject site, as well as several detached garage structures. According to the Seattle Department of Construction and Inspections (SDCI) GIS, one parcel is zoned NC3-75 (M) (#1498302305), and the rest are zoned C1-75M. All parcels fall within a liquefaction zone environmentally critical area (ECA5).

Several invasive plant species were documented throughout the site, including invasive ivy (*Hedera* spp.), Himalayan blackberry (*Rubus bifrons*), English holly (*Ilex aquifolium*), knotweed (*Polygonum* spp.), and morning glory (*Convolvulus arvensis*).

<u>1910 21st Ave S</u>

There is one parcel (#1498302305) at this address. It is a 25,500 square-foot lot that fronts both 21st Ave S and S Holgate St. It covers three-quarters of the northern portion of the block that spans 21st Ave S to the alley between 21st and 22nd, between S Holgate St and S Plum St. Two commercial warehouses and associated parking areas exist on this parcel.

<u>1901 21st Ave S</u>

Four parcels make up the area of the site that is east of the alley that runs parallel to 21st Ave S northward to S Holgate St from S Plum St. Each of these parcels contain a portion of a commercial warehouse and associated parking areas that spans the eastern half of the block, from the alley to 21st Ave S, between S Holgate St and S Plum St. According to SDCI, all of these parcels are zoned C1-75 (M) and fall within a liquefaction zone environmentally critical area (ECA).

Parcel #1498302005 is a 6,000 square-foot lot that fronts 21st Ave S and is the most northern part of the block at the corner of S Holgate St and 21st Ave S.

Parcel #1498302010 is a 9,660 square-foot lot that fronts 21st Ave S and makes up the north-central portion of the block between S Holgate St and S Plum St, east of the alley.

Parcel #1498302020 is a 5,340 square-foot lot and makes up the south-central portion of the block between S Holgate St and S Plum St, east of the alley.

Parcel #1498302030 is a 9,000 square-foot lot and is the southernmost lot on the block between S Holgate St and S Plum St, east of the alley.

<u>1906-1918 20th Ave S</u>

Four parcels make up the area of the site that is west of the alley parallel to 21st Ave S and S 20th St. According to SDCI, these four parcels are zoned C1-75 (M) and fall within a liquefaction zone ECA.

Parcel #1498301995 is a 12,000 square-foot lot at the northwest corner of S Holgate St and 20th Ave S. The address associated with this parcel is 1906 20th Ave S. There is a parking lot with vehicles on the site.

Parcel #1498301990 is a 6,000 square-foot lot and makes up the north-central section of the block. The address associated with this parcel is 1912 20th Ave S. A duplex with attached garage structures and garden exist on site.

Parcel #1498301985 is a 6,000 square-foot lot that makes up the south-central section of the block. The address associated with this parcel is 1916 20th Ave S. A single-family home and detached garage exists on site.

Parcel #1498301980 is a 6,000 square-foot lot at the southernmost corner of the block at the corner of 20st Ave S and S Plum St. The address associated with this parcel is 1918 20th Ave S. This lot is currently vacant with a parking lot and vehicles on site.

Trees
Two stumps of removed non-exceptional trees were observed during the follow-up site inspection on January 19, 2021.

Six significant trees exist on site; they are located on 1906 20th Ave S, 1912 20th Ave S, 1916 20th Ave S, and 1918 20th Ave S. No significant trees exist at 1910 21st Ave S or 1901 21st Ave S.

A mix of native and ornamental tree species was observed. Two trees (548 and 551) met the exceptional tree criteria outlined by Seattle Director's Rule 16-2008.

Tree 548, a 30.5-inch DSH Douglas-fir was found to be in good health and structural condition.

Tree 551, a hop tree measured at 9 inches DSH at the narrowest point below the trunk union was found to be in good health and fair structural condition.

Tree Solutions was not able to determine whether tree 555, a common hawthorn (*Crataegus monogyna*) which measured 11.7 inches DSH was located on site, or possibly in the alley/unimproved ROW.

Three off-site trees were documented. All three were located in the ROW and are therefore regulated by the Seattle Department of Transportation (SDOT).

The attached Table of Trees contains detailed information about each tree assessed, and the Tree Inventory Map shows approximate tree locations relative to the entire site.

Discussion—Construction Impacts

Due to existing conditions throughout the site and the extent of proposed site improvements, only one tree, the exceptional Douglas-fir tree 548 is proposed for retention.

Tree Solutions carried out a third site inspection on May 17, 2022, to evaluate existing infrastructure around the two exceptional trees on site. Originally, transplanting of the hop tree was recommended, however, after the most recent assessment of this tree it was determined that the health and structural condition of the tree is not good. Retaining the Hop Tree is no longer recommended.

SDCI requires that any exceptional tree, or tree 24-inches DSH or greater, planned for removal must be approved by SDCI and replaced by one or more trees. The proposed landscaping plans for the site include over two dozen new tree plantings to be installed by project completion. Based on the number of trees currently existing on site, the proposed planting will more than replace the existing canopy cover.

Removal of trees A, B, and C located in the ROW will require approval from SDOT.

Tree Protection
Tree 548
This tree is proposed for retention, and as drawn, the building courtyard is designed around the tree. To successfully retain this tree in a healthy and stable condition, the tree protection specifications provided in Appendix D must be implemented in addition to the measures below.

Tree Protection Fencing & Demolition
Minimize tree root impacts to the extent possible. SDCI requires no more than one third of the outer half of the dripline area be disturbed. In the case of tree 548, an existing subgrade house foundation and an existing retaining wall are within the tree dripline area. These areas do not need to be considered when evaluating proposed root zone impacts. Leave as much of the existing retaining wall in place as feasible and install tree protection fencing as far from the tree as possible.

Install tree protection fencing prior to any site demolition activities. When the existing buildings and hardscape are demolished, all equipment, storage and access must occur from outside the tree protection area. No transport or storage of materials is allowed within the tree protection area. Arborist woodchips should be spread throughout the entire tree protection area to a depth of 4-6 inches.

Civil, Utility and Grading
Plan utilities so that excavation remains outside of the tree protection area.

Avoid grade changes within the tree protection area. No grade cuts may occur within the tree protection areas without arborist coordination and approval. Limit any fill to uncompacted, well-draining soil, no more than one foot deep; fill must be kept at least one foot from the base of the tree. In situations where this is not possible arborist coordination is required.

Building Foundation and Garage
Excavation for the garage and basement of the building should remain outside the tree protection area. No materials, including excavated soils, may be staged within tree protection areas. No over-excavation or layback should occur within the tree protection area.

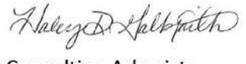
Landscape Planning
Design landscape improvements to limit plant sizes to 1 gallon or below within the dripline of tree 548.

If any irrigation is proposed within the dripline of retained trees, it should be surface mounted rather than trenched below the soil. If irrigation lines must be trenched, pneumatic air excavation or hand digging should be used to install lines to avoid damaging roots; all trenching within the tree protection areas will require arborist coordination.

Recommendations

- Site planning around exceptional trees must follow the guidelines outlined in SMC 25.11.050. [1]
- Tree protection consisting of chain-link fencing should be installed at the edge of the tree protection area for all retained trees prior to any demolition work on the site; Tree Solutions should inspect fencing prior to the start of site work.
- Any required clearance pruning should be conducted by an ISA certified arborist and following current ANSI A300 specifications.[2]

Respectfully submitted,



Consulting Arborist

[1] Seattle Municipal Code 25.11.050. General Provisions for Exceptional Trees

[2] Accredited Standards Committee A300 (ASC 300). ANSI A300 (Part 1) Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). Londonderry: Tree Care Industry Association, 2017.

Appendix A **References**

Accredited Standards Committee A300 (ASC 300). ANSI A300 (Part 1) Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). Londonderry: Tree Care Industry Association, 2017.

Council of Tree and Landscape Appraisers, Guide for Plant Appraisal, 10th Edition, Second Printing. Atlanta, GA: The International Society of Arboriculture (ISA), 2019.

Mattheck, Claus and Helge Breloer, The Body Language of Trees.: A Handbook for Failure Analysis. London: HMSO, 1994.

Seattle Municipal Code 25.09.070. Standards for Trees and Vegetation in Critical Areas.

Seattle Municipal Code 25.11.050. General Provisions for Exceptional Trees.

Sugimura, D.W. "DPD Director's Rule 16-2008". Seattle, WA, 2009

Appendix B **Photographs**

Photo 1. Tree 551, an exceptional hop tree, is no longer recommended for transplanting.

Photo 2. Tree 548, an exceptional Douglas-fir, is the only tree proposed for retention.

Arborist Report
Kamiak Real Estate: 1910 21st Ave S May 24, 2022

Photo 3. Tree A, a large Lombardy poplar (*Populus nigra* 'Italica') located in the ROW is proposed for removal.

Appendix C **Assumptions & Limiting Conditions**

1 Consultant assumes that the site and its use do not violate, and is in compliance with, all applicable codes, ordinances, statutes or regulations.

2 The consultant may provide a report or recommendation based on published municipal regulations. The consultant assumes that the municipal regulations published on the date of the report are current municipal regulations and assumes no obligation related to unpublished city regulation information.

3 Any report by the consultant and any values expressed therein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event, or upon any finding to be reported.

4 All photographs included in this report were taken by Tree Solutions, Inc. during the documented site visit, unless otherwise noted. Sketches, drawings and photographs (included in, and attached to, this report) are intended as visual aids and are not necessarily to scale. They should not be construed as engineering drawings, architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by the consultant as to the sufficiency or accuracy of the information.

5 Unless otherwise agreed, (1) information contained in any report by consultant covers only the items examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring.

6 These findings are based on the observations and opinions of the authoring arborist, and do not provide guarantees regarding the future performance, health, vigor, structural stability or safety of the plants described and assessed.

7 Measurements are subject to typical margins of error, considering the oval or asymmetrical cross-section of most trunks and canopies.

8 Tree Solutions did not review any reports or perform any tests related to the soil located on the subject property unless outlined in the scope of services. Tree Solutions staff are not and do not claim to be soils experts. An independent inventory and evaluation of the site's soil should be obtained by a qualified professional if an additional understanding of the site's characteristics is needed to make an informed decision.

9 Our assessments are made in conformity with acceptable evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.

Appendix D **Tree Protection Specifications**

The follow is a list of protection measures that must be employed before, during and after construction to ensure the long-term viability of retained trees.

1. **Project Arborist:** The project arborists shall at minimum have an International Society of Arboriculture (ISA) Certification and ISA Tree Risk Assessment Qualification.
2. **Tree Protection Area (TPA):** The city of Seattle requires a tree protection area to be the area within dripline. In some cases, the TPA may extend outside tree protection fencing. Work within the TPA must be approved and monitored by the project arborist.
3. **Tree Protection Fencing:** Tree protection shall consist of 6-foot chain-link fencing installed at the TPA as approved by the project arborist. Fence posts shall be anchored into the ground or bolted to existing hardscape surfaces.
    a. Where trees are being retained as a group the fencing shall encompass the entire are including all landscape beds or lawn areas associated with the grove.
    b. Per arborist approval, TPA fencing may be placed at the edge of existing hardscape within the TPA to allow for staging and traffic.
    c. Where work is planned within the TPA, install fencing at edge of TPA and move to limits of disturbance at the time that the work within the TPA is planned to occur. This ensures that work within the TPA is completed to specification.
    d. Where tree protection is placed at the top of a rockery, high visibility fencing shall be used.
    e. Where trees are protected at the edge of the project boundary, construction limits fencing shall be incorporated as the boundary of tree protection fencing.
4. **Access Beyond Tree Protection Fencing:** In areas where work such as installation of utilities is required within the TPA, a locking gate will be installed in the fencing to facilitate access. The project manager or project arborist shall be present when tree protection areas are accessed.
5. **Tree Protection Signage:** Tree protection signage shall be affixed to fencing every 20 feet. Signage shall be fluorescent, at least 2' x 2' in size, with 3" tall text. Signage will note: "Tree Protection Area – Do Not Enter: Entry into the tree protection area is prohibited unless authorized by the project manager." Signage shall include the contact information for the project manager and instructions for gaining access to the area.
6. **Filter Fencing:** Filter fencing within the TPA of retained trees shall be installed in a manner that does not
sever roots. Do not trench to insert fabric into the ground. Install so that filter fabric sits on the ground and is weighed in place by sandbags or gravel.
7. **Monitoring:** The project arborist shall monitor all ground disturbance at the edge of or within the TPA, including where the TPA extends beyond the tree protection fencing.
8. **Soil Protection:** No parking, foot traffic, materials storage, or dumping (including excavated soils) are allowed within the TPA. Heavy machinery shall remain outside of the TPA. Access to the tree protection area will be granted under the supervision of the project arborist. If project arborist allows, heavy machinery can enter the area if soils are protected from the load. Acceptable methods of soil protection include applying 3/4-inch plywood over 4 to 6 inches of wood chip mulch or use of AlturnaMATS (or equivalent product approved by the project arborist). Retain existing paved surfaces within or at the edge of the TPA for as long as possible.
9. **Soil Remediation:** Soil compacted within the TPA of retained trees shall be remediated using pneumatic air excavation according to a specification produced by the project arborist.
10. **Canopy Protection**: Where fencing is installed at the limits of disturbance within the TPA, canopy

Tree Solutions Inc
Consulting Arborists

Table of Trees

1901 21st Ave S, 1906-1918 20th Ave S, 1920 21st Ave S, Seattle WA

Arborist: H. Galbraith
Inventory: 9/21/2020
Revised: 5/24/2022

DSH (Diameter at Standard Height) is measured 4.5 feet above grade, or as specified in the Guide for Plant Appraisal, 10th Edition , published by the Council of Tree and Landscape Appraisers.
DSH for multi-stem trees are noted as a single stem equivalent, which is calculated using the method defined in the Director's Rule 16-2008.
Letters are used to identify trees on neighboring properties with overhanging canopies.
Dripline is measured from the center of the tree to the outermost extent of the canopy.

							Dripline Radius (feet)								
Tree ID	**Scientific Name**	**Common Name**	**DSH** (inches)	**DSH Multistem**	**Health Condition**	**Structural Condition**	**N**	**E**	**S**	**W**	**Exceptional Threshold**	**Exceptional by Size**	**Proposed Action**	**Exceptional per Draft Director's Rule 13-2020**	**Notes**
548	*Pseudotsuga menziesii*	Douglas-fir	30.5		Good	Good	21.3	19.3	22.3	26.3	*30.0*	Exceptional	Retain	Exceptional	blackberry growing into crown, canopy a bit stressed
549	*Malus domestica*	Apple	6.6	5.6,3.4	Good	Good	8.3	8.3	8.3	8.3	*20.0*	-	Remove	-	
551	*Ptelea trifoliata*	Hop tree	9.0		Good	Fair	10.4	10.4	10.4	10.4	*4.0*	Exceptional	Remove	-	measured at narrowest point below union, blackberry, ivy, roses growing at base; originally under consideration for transplanting, but after further inspection, removal is recommended.
553	*Prunus domestica*	Common plum	13.4	7.8,10.9	Fair	Fair	17.6	10.6	8.6	12.6	*22.9*	-	Remove	-	partially supported by roof of garage
554	*Prunus laurocerasus*	Cherry laurel	12.0		Good	Good	20.5	13.5	13.5	13.5	*26.2*	-	Remove	-	corrected lean to the north, measured at the narrowest point below union, supported by van paked beside the tree and a wooden prop, invasive knotweed present
555	*Crataegus monogyna*	Common hawthorn	11.7	6,8,6	Fair	Fair	9.5	9.5	9.5	9.5	*16.2*	-	Remove	-	DSH estimated due to access. May be in an unimproved ROW or alley - location should be confirmed with a survey
A	*Populus nigra 'Italica'*	Lombardy poplar	62.0		Good	Good	18.6	18.6	18.6	18.6	*30.0*	-	Remove	-	heavy elm sprouting at base, street tree, cannot be exceptional. SDOT tree, TRE-1091019
B	*Fraxinus oxycarpa*	Raywood ash	9.5		Good	Good	6.4	10.4	13.4	11.4	*24.0*	-	Remove	-	SDOT Tree, TRE-1091020
C	*Prunus serrulata*	Flowering cherry	17.0		Fair	Fair	19.7	19.7	19.7	19.7	*23.0*	-	Remove	-	ivy throughout canopy, reassess after ivy removal. SDOT Tree, TRE-1091022

Tree Solutions Inc.
Arborist: JP & AS
206-528-4670

Tree Inventory Map
Revised 1/25/2021

Tree inventory took place on September 21, 2020 and included all trees 6-inches in diameter or greater on the site. We also assessed trees with overhanging canopies. Drip line measurements and other tree specifics are listed in the tree table produced by Tree Solutions Inc. and should be added to drawings prior to any design relating to tree protection.

Below regulated size: "NR"