

Recommendation Meeting
1516 NW 51st St, Seattle WA 98107
A Proposed Apartment Development
for GRE Ballard 1516 LLC.

PROJECT #: 3017093



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Recommendation Meeting
1516 NW 51st St

12/08/14

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PROJECT INFORMATION & SHEET INDEX

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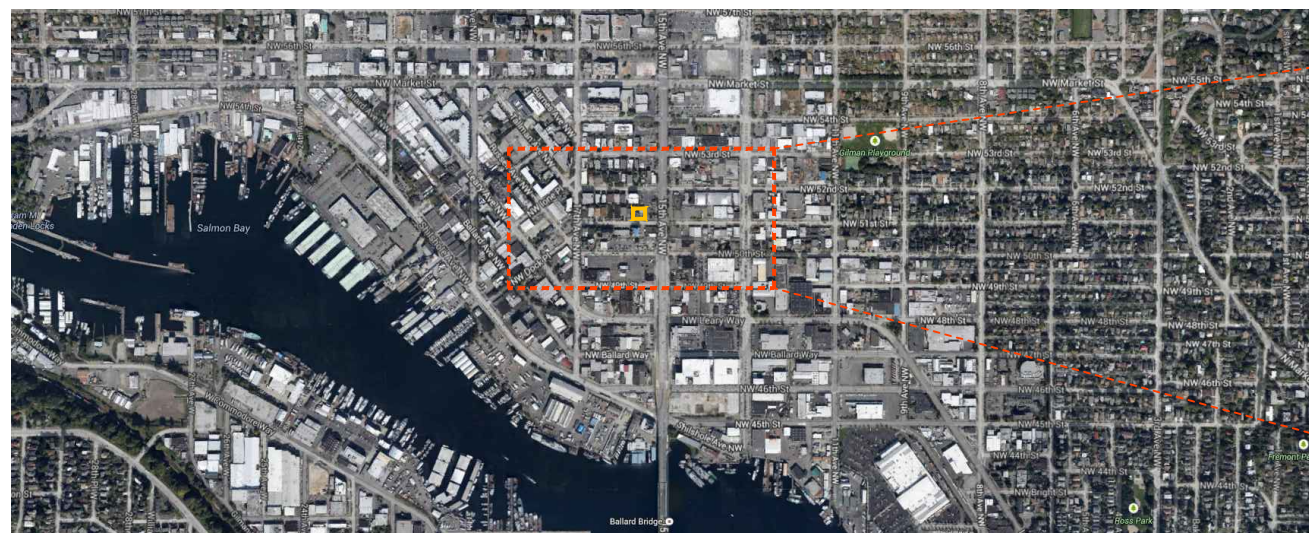
PROJECT INFORMATION

ADDRESS: 1516 15th AVE NW, SEATTLE, WA 98107
PARCEL #: 276770-1650
ZONING: C1-65
OVERLAY: BALLARD (HUB URBAN VILLAGE)
OTHER: PEDESTRIAN AREA / FREQUENT TRANSIT
LOT SIZE: 14,270 SF
BASE FAR: 4.25 (RESIDENTIAL) = 60,647 SF
BLDG. MAX. HT: 65'-0"

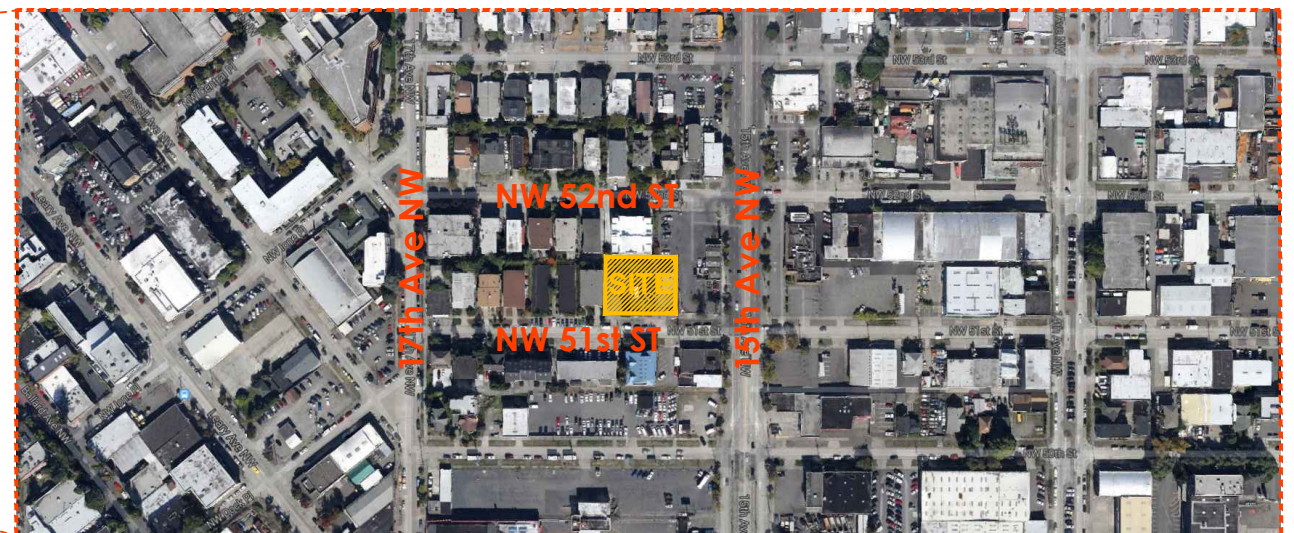
LEGAL DESCRIPTION

276770-1650 (1516 NW 51st St)
GILMAN PARK ADD
Plat Block: 64 Plat Lot: 15-16-17

VICINITY MAP



SITE MAP



PROJECT INFO & SHEET INDEX

RECOMMENDATION MEETING- 1516 NW 51st St

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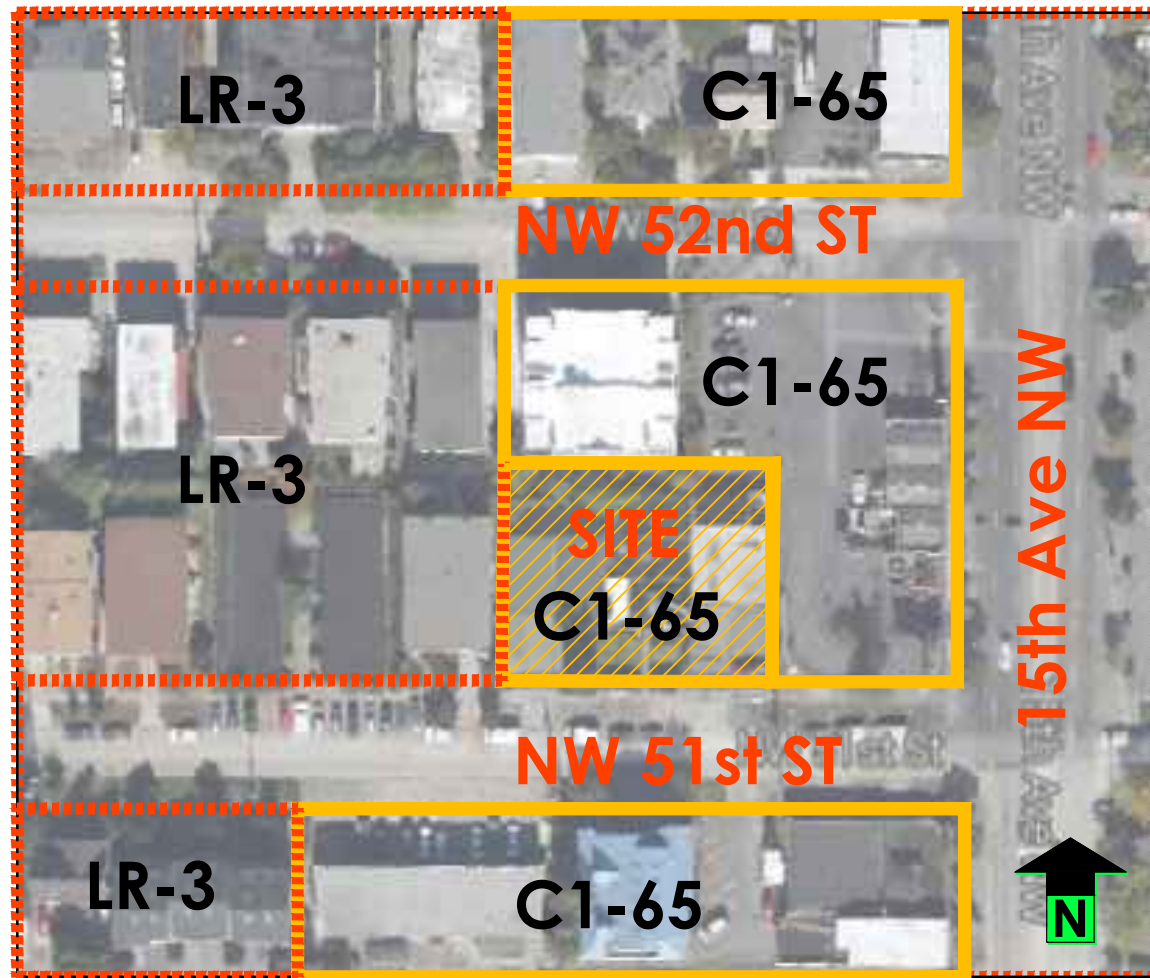
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DEVELOPMENT OBJECTIVES

ZONING MAP



1. Please describe the existing site, including location, existing uses and/ or structures, topographical or other physical features, etc.

The project site is located in a pedestrian area of the Ballard Hub Urban Village, northwest of the intersection of NW 51st St and 15th Ave NW. The site is 14,270 square feet of contiguous land. One existing single-story, commercial structure with carports is to be demolished.

2. Please indicate the site's zoning and any other overlay designations, including applicable Neighborhood-Specific Guidelines.

The project site is zoned C1-65. It is located within the Ballard Hub Urban Village overlay zone and a pedestrian area/ frequent transit zone.

3. Please describe neighboring development and uses, including adjacent zoning, physical features, existing architectural and siting patterns, views, community landmarks, etc.

The neighborhood is a mix of C1-65 commercial zone and LR-3 low-rise zone. Building types range from two to eight-story apartments/condominiums, single family houses, restaurants, and commercial buildings. A car wash sits immediately to the site's east on 15th ave NW, and single and multi-story residences border it to the north, south and west. Commercial buildings line the north-south oriented arterial streets 17th and 15th Avenues NW. The site is only a few blocks from Ballard's primary commercial strip, NW Market Street, as well as Swedish Medical Center-Ballard. The architecture styles in Ballard make an exciting mix, ranging from contemporary to Colonial, Craftsman to modernistic.

4. Please describe the applicant's development objectives, indicating types of desired uses, structure height (approx.), number of residential units (approx.) amount of commercial square footage (approx.), and number of parking stalls (approx.). Please also include potential requests for departure from development standards.

The owner's aim is to create a market rate rental community that appeals to a wide range of Ballard neighborhood dwellers. The project is designed to maximize the potential residential use of the site, with the massing setback from neighboring properties. The building proposed accommodates 91 units, in a five-level wood frame over concrete. The design will include a surface level of parking for 35 stalls accessed via NW 51st St.

Proposed Building Summary:

- Desired Uses: residential
- Structure Height: 65'-0"
- Number of Residential Units: 90 Units (apartments)
- Number of Live/Work Units: 1 Units
- Building Area: 60,200 SF (including covered parking garage area)
- Number of Parking Stalls: 35

DEVELOPMENT OBJECTIVES

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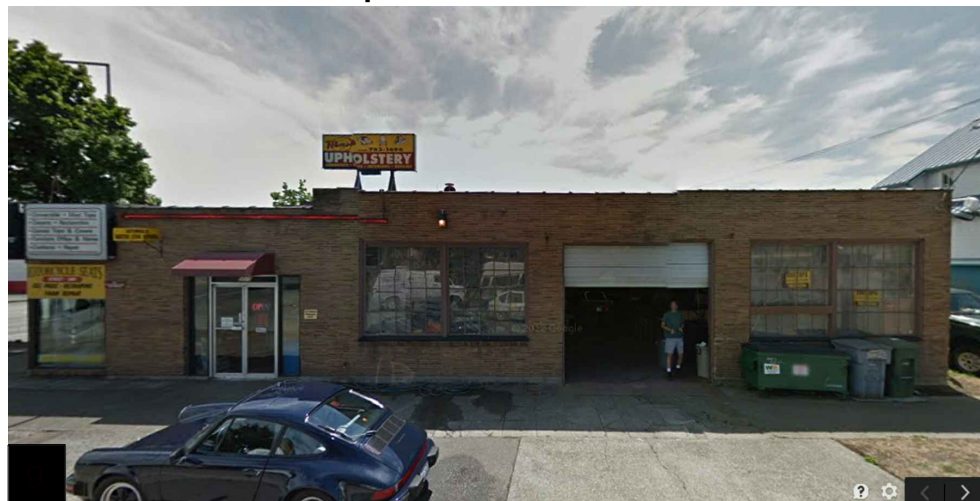
NW 51ST STREET PHOTOS



North Streetscape



South Streetscape



NW 51ST STREET PHOTOS
RECOMMENDATION MEETING- 1516 NW 51st St

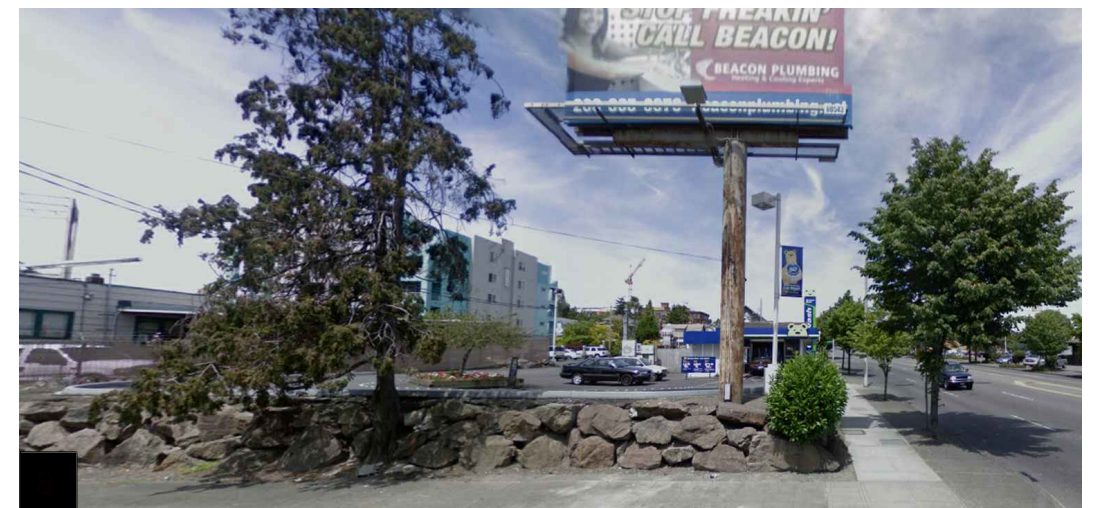
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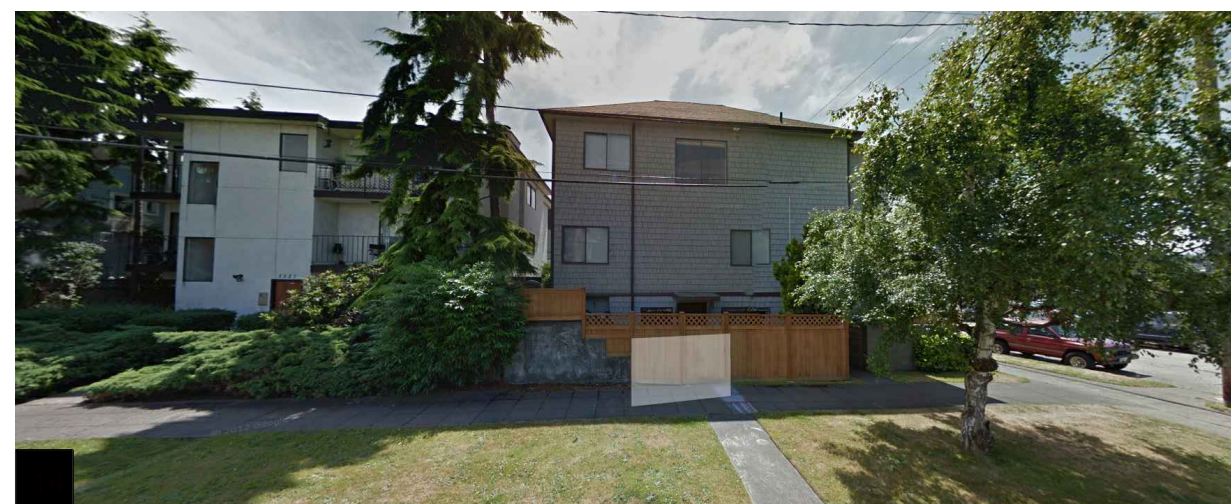
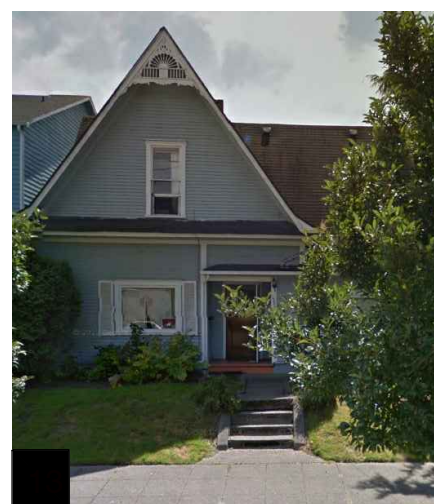
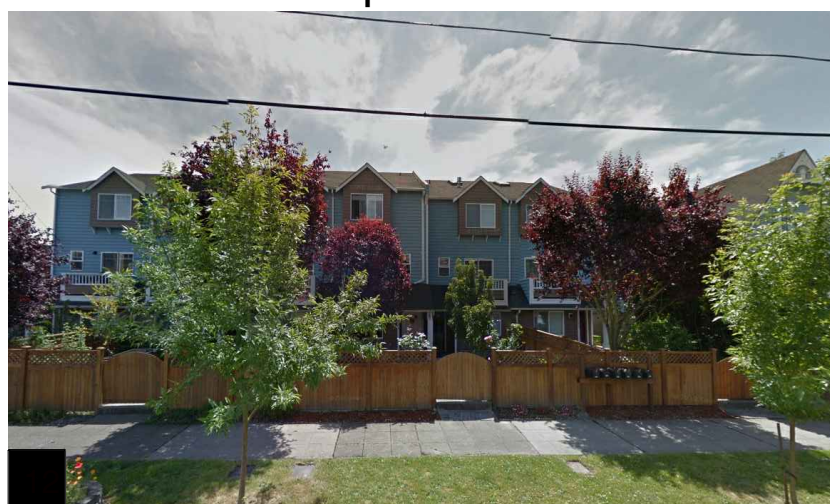
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North Streetscape



South Streetscape



SITE PHOTOS



1



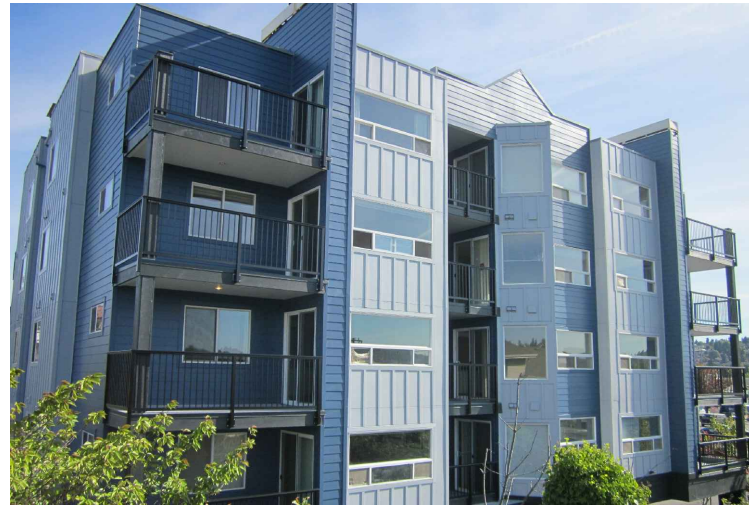
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SITE PHOTOS
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SITE PHOTOS



10



11



12



13



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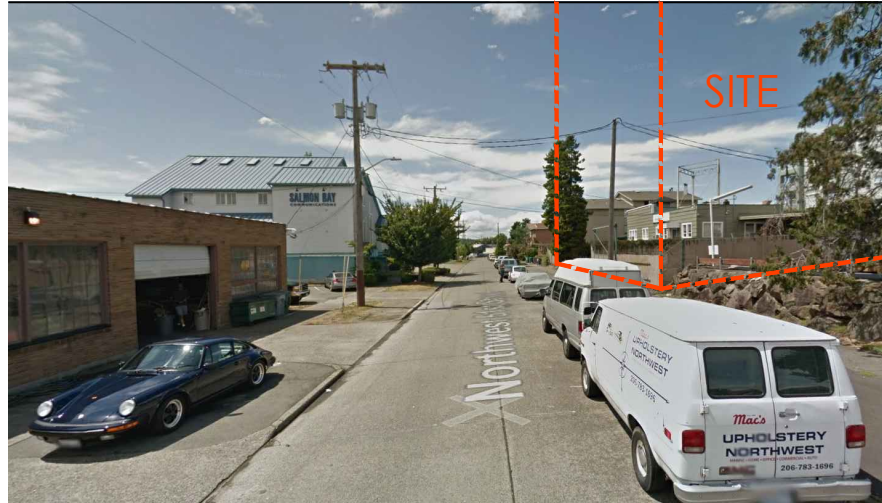


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VICINITY PHOTOS



NW 51st ST - LOOKING WEST



NW 51st ST - LOOKING WEST



NW 51st ST - LOOKING WEST



NW 51st ST - LOOKING EAST



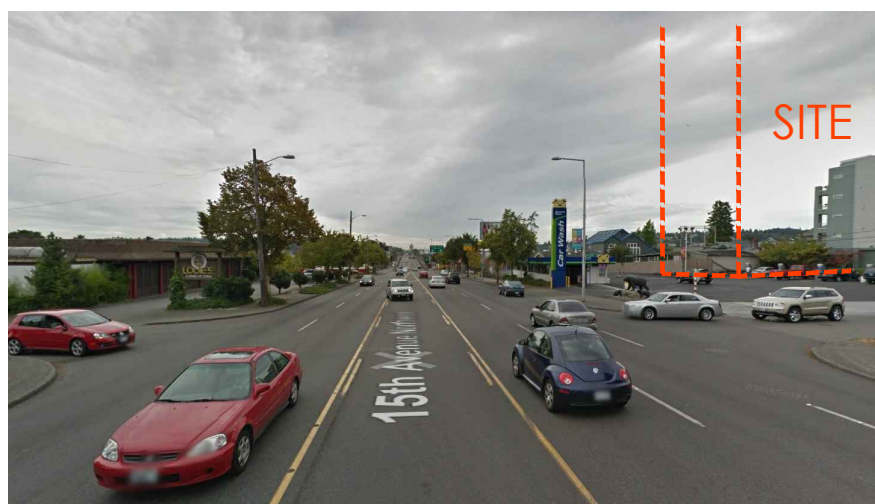
NW 51st ST - LOOKING EAST



NW 51st ST - LOOKING NORTH (beyond site)



15TH AVE NW - LOOKING NORTH



15TH AVE NW - LOOKING SOUTH



15TH AVE NW - LOOKING SOUTH (beyond site)

VICINITY PHOTOS
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ADDRESSING EDG REPORT

CS1 Natural Systems and Site Features

B. Sunlight and Natural Ventilation

2. Daylight and Shading - Large door and window openings along the perimeter walls provide maximum daylight for interior spaces. Placement of massing with 10' east and north setbacks and 15' west setbacks effectively minimize shading on adjacent sites.

3. Managing Solar Gain - Low-E glazing provided at all fenestration openings to minimize radiant heat gain. Operable internal shading devices at window openings reduce solar heat gain.

CS2 Urban Pattern and Form

A. Location in the City and Neighborhood

1. Sense of Place - The proposed building uses Western Red Cedar, a native and sustainable building material, as a central facade feature to give the building a sense of place. Along the NW 51st St facing facade, the wood siding continues to the base of the building and wraps along the east corner at the pedestrian level to create a strong street edge.

2. Architectural Presence - Upper portions of the site are visible along the 15th Ave NW arterial from the north and south. The mid-block site lends itself to a strong and simple design that provides visual interest to the current conditions of the surrounding site and block, while encouraging future development through the central placement of the massing.

B. Adjacent Sites, Streets, and Open Spaces

2. Connection to the Street - The simple facade configuration and central material change and modulation along NW 51st St provide a strong visual connection to both NW 51st St and 15th Ave NW. The significant depth between the property and street allow for a large landscape strip between the street and pedestrian sidewalk, as well as a substantial planting strip between the building and sidewalk.

C. Relationship to the Block

2. Mid-Block Sites - The building cues uses of the adjacent residential uses and uses material, texture, and simple modulation to create smaller scale masses along the mid-block set. The central placing of the mass allows for a zero lot-line blank walls to be virtually eliminated.

D. Height, Bulk, and Scale

D.3 Zone Transitions - The proposed building compliments the adjacent low-rise residential zone by providing smaller perceived masses at each corner. A landscape planting area and linear wood fencing provides a nice ground level zone transition.

D.4 Massing Choices - Massing designed to maximize potential of the site while landscape elements along the east and streetfront designed to transition well into the east residential zone.

D.5 Respect for Adjacent Sites - Project setback along west, east, and north provide ample space and privacy between all adjacent properties.

CS3 Architectural Context and Character

A. Emphasizing Positive Neighborhood Attributes

A.4 Evolving Neighborhoods - The neighborhood of 1516 NW 51st St is continually evolving with a variety of surrounding uses that contribute to its unique, eclectic style. The modern box design with large glazing openings provides a positive context to the surrounding buildings and neighborhood. Furthermore, the introduction of cedar siding and modulation centered along the facades break down the building massing.

PL3 Street-Level Interaction

A. Entries

A.4 Ensemble of Elements - The residential entrance is designed to attract visitors. The entry is setback 5'-6" from the property line and utilizes landscaping strips, modern lighting, and deep canopies to provide a pedestrian friendly environment. Covered bike parking is provided adjacent to the entry, with views from the leasing office providing security.

B. Residential Edges

B.1 Buildings with Live/Work Uses - The placement of the live-work unit on the south east corner of the site allows for a nice transition along NW 51st St. In response to the boards concern about podium construction lot-line-to-lot-line, the live-work unit was pulled inwards just inset of the massing above. This creates a softer edge and a more-pedestrian friendly feel while allowing the live-work entrance to now be accessed from the setback. A rockery wall that is reused from the site will be used to transition this area, along with landscaping and a bench.

PL4 Active Transportation

B. Planning Ahead for Bicyclists

B.2 Bike Facilities - A bike storage room with a work bench and tools is located at parking garage level. Covered and uncovered temporary bike parking stalls located outside of main building entrance, allowing leasing office to provide visual security.

DC1 Project Uses and Activities

C. Parking and Service Uses

C.2 Visual Impacts - The covered portion of the parking garage was removed to eliminate the vast majority of the blank walls at the property line which were a concern for the board. In place of the blank wall, a 20" planting strip and a 5' tall horizontal wood slat fence has been added around the parking garage to provide pleasant screening to adjacent neighbors. The wood will be stained to match the cedar on the building.

DC1 Project Uses and Activities

C. Parking and Service Uses

C.4 Service Uses - The trash and recycling room is located within the parking garage and is not visible from the street. The trash and recycling containers will be stored within the parking garage in a designated space west of the parking entrance. This allows containers to be hidden from sight at all times, and avoids placing containers along the street.

DC2 Architectural Concept

A. Massing

A.2 Reducing Perceived Mass - A large building recess is added along the north and south facades with a change in material, color, and texture to break up the building into smaller perceived masses. Furthermore, the use of color within the individual massing elements help reduce the bulk of the residential massing.

B. Architectural and Facade Composition

B.1 Facade Composition - The building facades have been designed to create 4 unified masses at each corner. The simple composition of each mass is enhanced by picture frame and vertical elements that comprise the facade. The fenestration pattern is designed to maximize day lighting for the units, while also complementing the make up of the facade. The central setback along the street frontage continues to the base of the building and wraps around the southeast corner to create a unified frontage.

B.2 Blank Walls - The lot-line to lot-line construction has been removed for the entire site, with the exception of the transformer vault at the east property line. This has virtually eliminated the blank walls from the EDG proposal. The small 5' wide and 17' wide blank walls that exist along NW 51st St will be treated with either a planting screen or another option supported by the board.

C. Secondary Architectural Features

C.1 Visual Depth and Interest - A 3' centralized setback adds depth to the facade and continues to the street level enhancing the pedestrian experience. The material and texture change adds visual interest to each facade. At the 3' overhang, the cedar siding will continue underneath the massing creating a warm, pedestrian friendly feel.

DC3 Open Space Concept

B. Open Space Uses and Activity

B.1 Multifamily Open Space - Residential shared open space consists of expansive roof top deck. This gathering space will have a barbeque as well as games for residents to enjoy and connect. The deck is surrounded by a green roof while planting on the deck will consist of 2' deep planters to enhance the area.

DC4 Exterior Elements and Finishes

A. Building Materials

A.1 Exterior Finish Materials - Building materials at the residential levels consist of painted smooth fiber cement panels and stained tongue and v-groove engineered cedar siding. The cedar siding will continue to the base where it will provide a warm experience for pedestrians. The remaining building material at the base is a board-formed concrete to complement the adjacent wood siding. The board-formed concrete adds nice texture and shadow lines along the street.

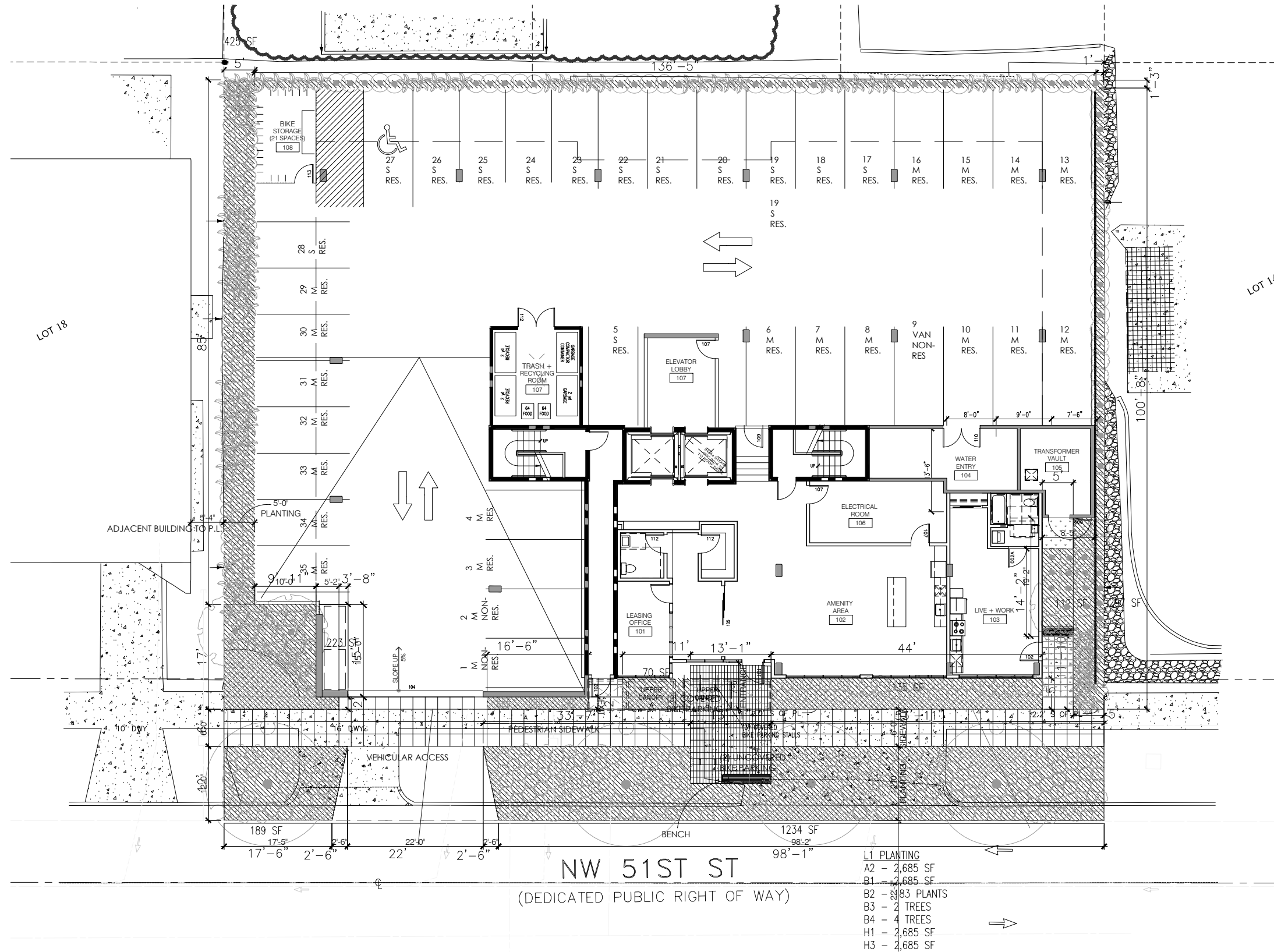
A.2 Climate Appropriateness - The concrete, wood, and fiber cement panels all handle the climate of the northwest well. The wood will be protected from weathering with a pre-applied semi-transparent stain. This protects the wood from moisture and UV radiation while allowing the beauty of the natural wood to remain seen.

Trees, Landscape and Hardscape Materials

D. Trees, Landscape, and Hardscape Materials

D.4 Place Making - The landscape design on the site is designed to provide pleasant screening around the entire property. Furthermore, planting areas on the southeast and southwest corners of the project provide a softer edge and nice transition to the site. The street improvement planting provides a much more pedestrian-friendly streetscape than the existing asphalt surface.

SITE PLAN



SITE PLAN
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ARCHITECTURAL CONTEXT (Looking North)



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ARCHITECTURAL CONTEXT
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ARCHITECTURAL CONTEXT (Looking Northwest)



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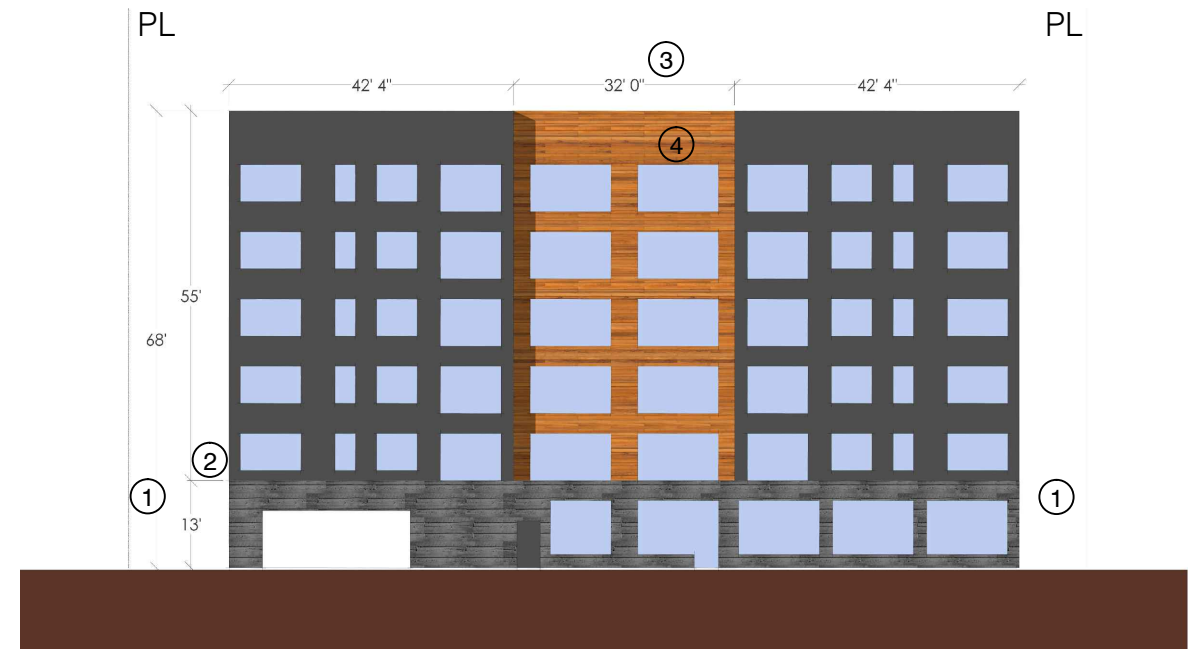
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FACADE BREAK DOWN (NW 51st St)



A. Facade at Early Design Guidance

- ① 15' tall concrete base extends property line to property line
- ② 117'-8" wide centralized massing placed above to allow maximum glazing
- ③ 70' total building height including parapet



B. Facade Development 1

- ① Concrete base pulled back from property line to align with massing above
- ② Height of concrete level reduced by 2'
- ③ 32' wide x 3' deep centralized setback added to residential massing
- ④ Wood added to setback to introduce new material color + texture



C. Facade Development 2

- ① Centralized setback brought down to base of building to create two distinct masses
- ② Light accent color added within massing to create a picture frame effect for each facade
- ③ Picture frame effect extended 2' into concrete level to create 11' exposed concrete height



D. Facade Final Development

- ① Wood setback extended to the east and wraps around adjacent facade to provide character and depth
- ② Accent 'strips' added within picture frame facade to add verticality and visual interest at each perceived massing
- ③ Planting added at concrete blank walls for visual interest
- ④ Main entrance recessed additional 2'-6" and canopies added at central setback to highlight entry and add depth at pedestrian level
- ⑤ Parapet eliminated at west massing to provide 4' height difference between east and west perceived massings.

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DESIGN IMAGE
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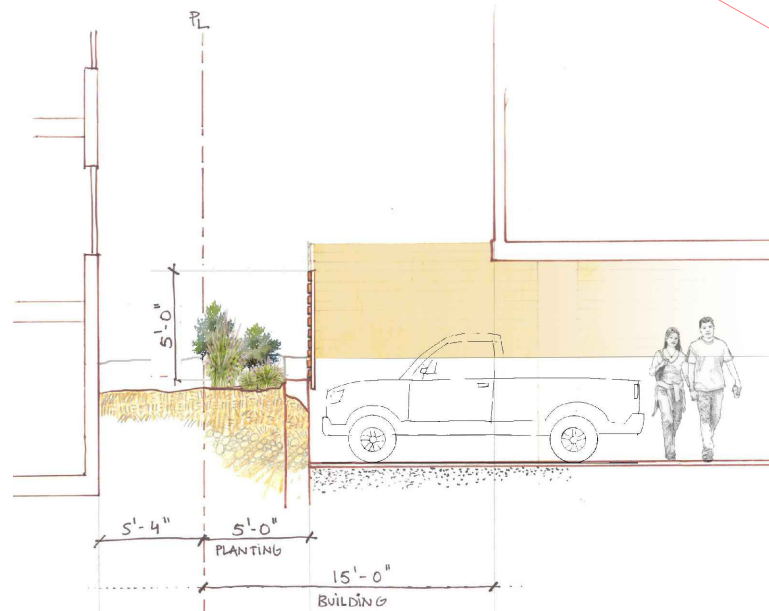
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**CS1, CS2, CS3,
DC2, DC4**

MATERIAL, COLOR, TEXTURE REDUCE PERCEIVED MASSING. DURABLE MATERIALS STRENGTHEN SENSE OF PLACE AND NEIGHBORHOOD CHARACTER.

DESIGN DETAIL

FENCE DETAIL ALONG WEST ELEVATION SETBACK AT PARKING GARAGE



CS3, DC2, PL3,
BALCONIES OVERLOOKING THE STREET PROVIDES SAFETY THROUGH INFORMAL SURVEILLANCE AND ADD ARCHITECTURAL CHARACTER.

PL3, PL4, DC1
LANDSCAPING AND PAVING PATTERN TO MINIMIZE VISUAL IMPACT OF GARAGE. PARKING AND SERVICES LOCATED AWAY FROM THE STREET.

CS3, PL3
DESIGN ORIENTED TO THE PUBLIC STREET FRONTS PROMOTE HUMAN ACTIVITY

DESIGN IMAGE (LOOKING NW)

DC2, DC3

USEABLE BALCONIES,
AND ROOF TOP GARDEN MAXIMIZE
RESIDENTIAL OPEN SPACE



DC4, PL3

ATTRACTIVE &
TRANSPARENT PEDESTRIAN
ENTRANCE & LANDSCAPED
PEDESTRIAN-ORIENTED
OPEN SPACE

CS2, PL3

DESIGN ORIENTED TO THE CORNER
AND PUBLIC STREET FRONTS
PROMOTE HUMAN ACTIVITY

CS2, CS3

MATERIAL, TEXTURE AND CENTRAL
STRONG, SIMPLE SETBACK CREATE
FACADE PATTERN AND REDUCE
PERCEIVED MASS.

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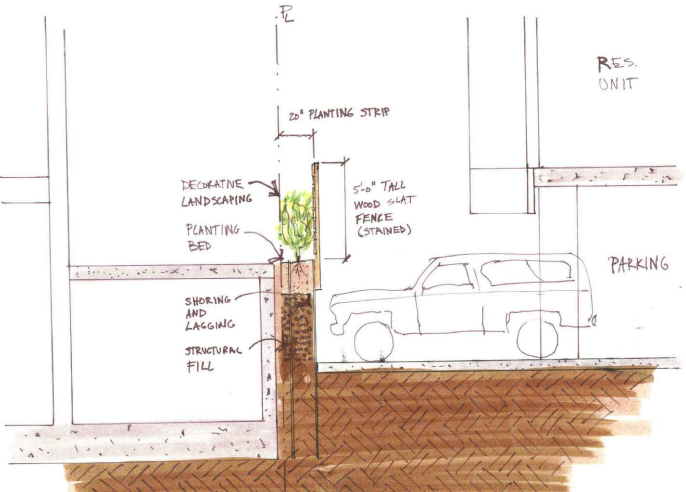
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**DESIGN
DETAIL**

PLANTER & FENCE AT
GARAGE PERIMETER
ALONG NORTH & EAST
ELEVATIONS



PL3

CONTINUOUS PLANTING
AND FENCING PROVIDE
SECURITY AND PRIVACY
BUFFER.

DC2

CENTRALIZED SETBACKS, MATERIAL,
COLOR, AND TEXTURE CHANGE
CREATE UNIFIED FACADE DESIGN.

DESIGN IMAGE (STREET VIEW- GARAGE & MAIN ENTRANCE)

DC1, DC2, DC4, PL4

EXTENDING PAVING SCORING PATTERN TO MINIMIZE VISUAL IMPACT OF DRIVEWAY. LANDSCAPING AND GARAGE SCREEN PARKING AND SERVICES FROM THE STREET.



DC2, DC3, DC4

BALCONIES OVERLOOKING THE STREET PROVIDES SAFETY THROUGH INFORMAL SURVEILLANCE AND ARCHITECTURAL INTEREST.

PL3

MAXIMUM TRANSPARENCY AT RESIDENTIAL ENTRY AND LIVE/WORK SPACE PROVIDE SECURITY AND ENCOURAGE HUMAN INTERACTION.

DC2

PLANTING BUFFER PROVIDES LANDSCAPE GREEN SCREEN AT BLANK WALL.



DESIGN IMAGE
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DESIGN IMAGE (STREET VIEW- LIVE/WORK ENTRANCE)

CS2

DURABLE & ATTRACTIVE MATERIALS
CREATE UNIFIED DESIGN. SIMPLE
SETBACK PROVIDES PEDESTRIAN
FRIENDLY EXPERIENCE.

CS3, DC1, DC2, DC3

LIVE/WORK ENTRY ACCESSIBLE FROM
SIDEWALK. ELEGANT BUILDING
MATERIALS, OPEN SPACE AND
LANDSCAPING CREATES INVITING
LIVE/WORK ENTRY.



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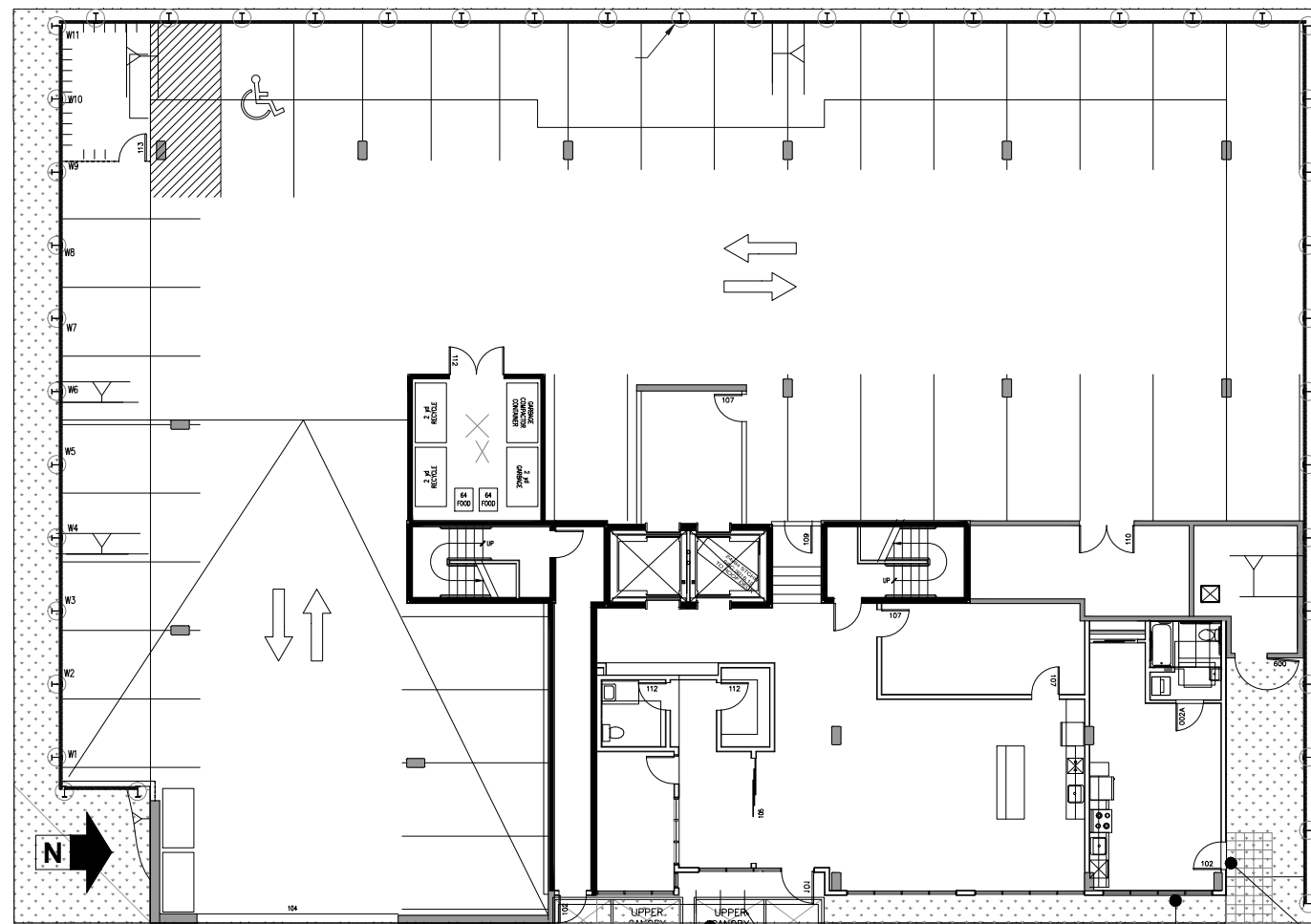
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CONCEPTUAL SIGNAGE



BROWN
BEAR
CARWASH

NEIGHBORHOOD CONTEXT SIGNAGE



NW 51ST STREET

SIGN 'A'

SIGN 'B'

SIGN 'C'



AWNING SIGN OVER ENTRY



SURFACE MOUNTED SIGN
AT BUILDING CORNER



BLADE SIGN
AT LIVE/WORK ENTRY



SIGNAGE
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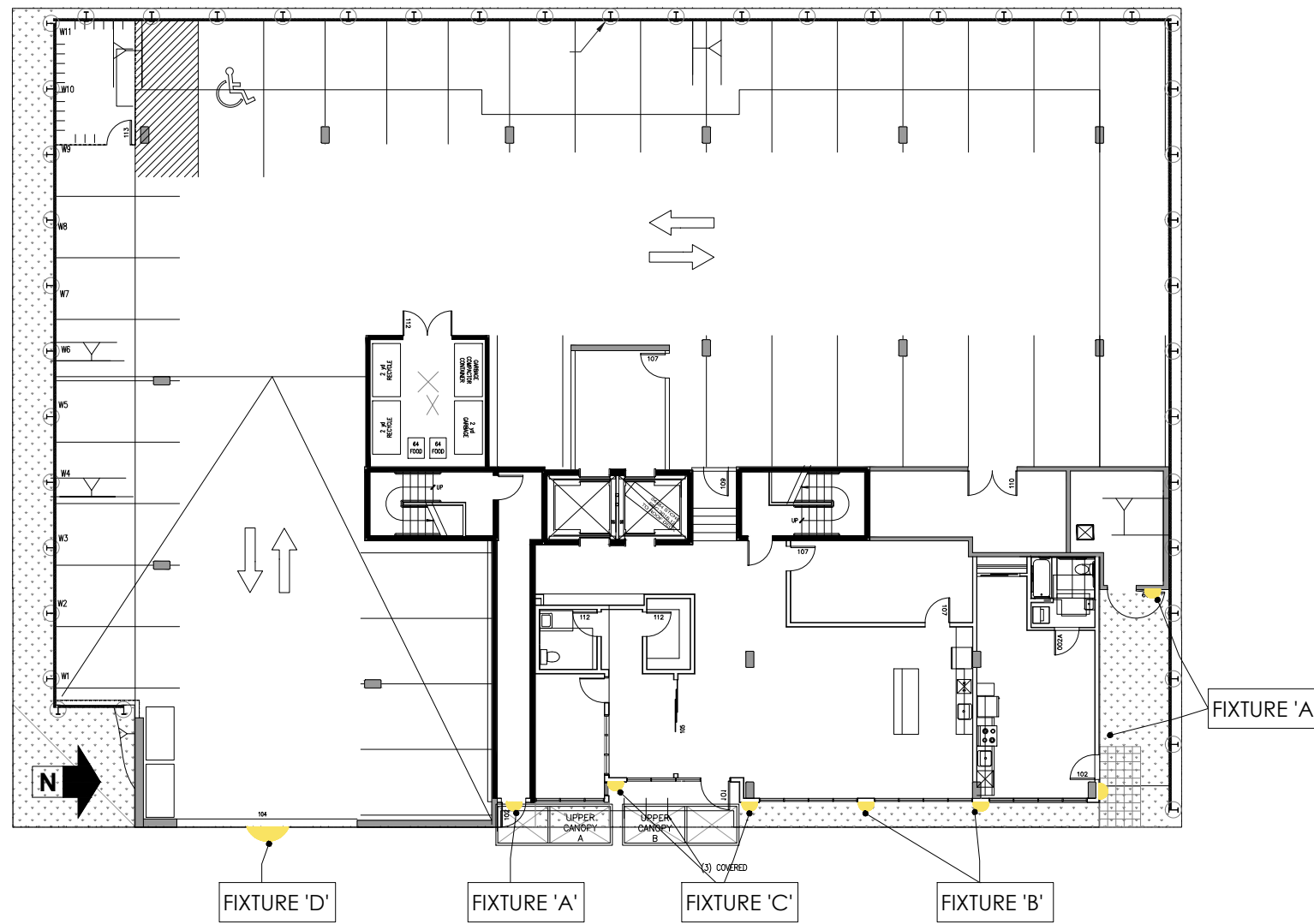
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CONCEPTUAL LIGHTING

NIEGHBORHOOD CONTEXT LIGHTING

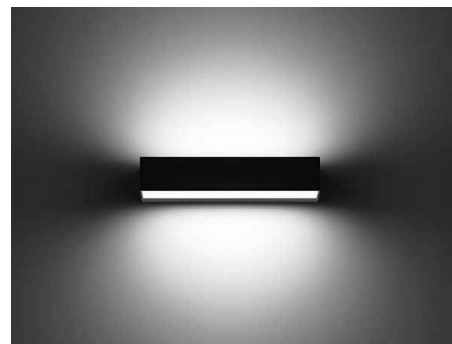


BROWN
BEAR
CARWASH

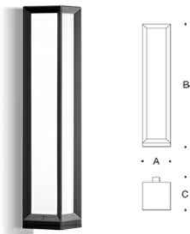
NW 51ST STREET



FIXTURE 'A': shielded wall luminaire- down



FIXTURE 'B': shielded wall luminaire up/down



FIXTURE 'C': unshielded wall luminaire



FIXTURE 'D': shielded wall luminaire- down

LIGHTING

RECOMMENDATION MEETING- 1516 NW 51st St

A20

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SCHEMATIC NIGHT RENDERINGS



DC2, DC4
 LIGHTING PLACEMENT
 HIGHLIGHTS BUILDING
 MATERIALS AND PROVIDES
 SAFETY ALONG PEDESTRIAN
 FRONTAGE.

DC4
 SIMPLE, CONTEMPORARY
 LIGHTING FIXTURES
 ENHANCE PEDESTRIAN
 EXPERIENCE.



SCHEMATIC NIGHT RENDERINGS
 RECOMMENDATION MEETING- 1516 NW 51st St

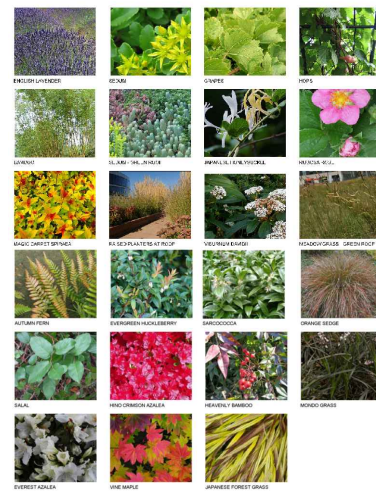
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MATERIAL BOARD



LANDSCAPE PALETTE

- GREEN FACTOR
- TENANT AMENITY AREA
- ENERGY SAVINGS & REDUCED HEAT ISLAND EFFECT



STEEL PICKET RAILING AT ROOF DECK

- SAFETY & DURABILITY
- SIMPLICITY



CONCRETE PAVER ROOF DECK

- DURABLE
- CLEAN DESIGN

MINERAL FIBER CEMENT PANEL (TEXTURE ONLY)

- NEIGHBORHOOD CONTEXT
- DURABLE MATERIAL- easily painted

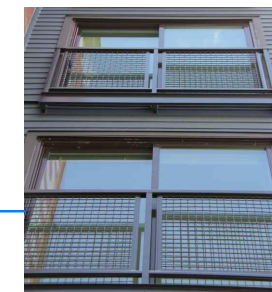


EXTERIOR PAINT COLORS



CEDAR SIDING- TONGUE AND GROOVE

- NATURAL, WARM MATERIAL
- CHARACTER- adds character to the streetscape experience
- CLEAN, HORIZONTAL LINES



BOLT-ON, JULIET BALCONIES

- RHYTHM & PATTERN - modulates elevation
- SAFETY - allows for large areas of natural ventilation
- EXPANSIVE VIEWS - allows for large opening area
- STYLE- perforated panels add texture and visual interest



CEDAR SLAT PRIVACY FENCE

- PRIVACY - respects neighboring properties
- SAFETY - adds security to parking garage
- STYLE- clean, horizontal lines.
- DURABLE- material will weather well in local climate



VINYL WINDOWS- ADOBE & BLACK

- LOW-E GLASS - energy efficient windows
- OPERABLE WINDOWS - tenant flexibility
- FRESH AIR - insect screens
- STYLE- black framing complements wood siding



PLANT SCREEN

- GREEN FACTOR
- STYLE- enhances blank walls at parking garage



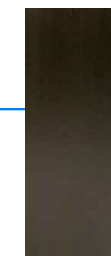
ALUMINUM & GLASS GARAGE DOOR

- SAFETY - adds security to parking garage
- STYLE- clean, modern design



EXPOSED BOARD FORMED CONCRETE

- DURABLE MATERIAL - graffiti-proof
- 'STRONG' DESIGN



ALUMINUM STOREFRONT GLAZING SYSTEM & CANOPY

- CLEAR GLASS - provides day-lighting and visibility at residential entry
- METAL FRAME- commercial space appearance at street
- MODERN FINISH- Aluminum framing system
- STEEL CANOPY TO MATCH

LANDSCAPING (CHARACTER)

SITE LEVEL PLANT MATERIALS



SOUR GUM



MOUNT VERNON LAUREL



DWARF HEAVENLY BAMBOO



NORTHERN LIGHT HAIR GRASS



KOUSA DOGWOOD



CAREX



SITE - ANTHONY WATERER SPIRAEA



SITE - VIRGINIA CREEPER



SWORD FERN



OREGON GRAPE

SITE LEVEL AMENITIES



BIKE RACK



BENCH



SITE - SANDBLAST CONCRETE

ROOF TOP AMENITIES



PRECAST PLANTERS



GATHERING AREA



SEDUM



FIRE PIT



PAVERS WITH DIFFERENT TEXTURES

ROOF TOP PLANT MATERIALS



SEDUM

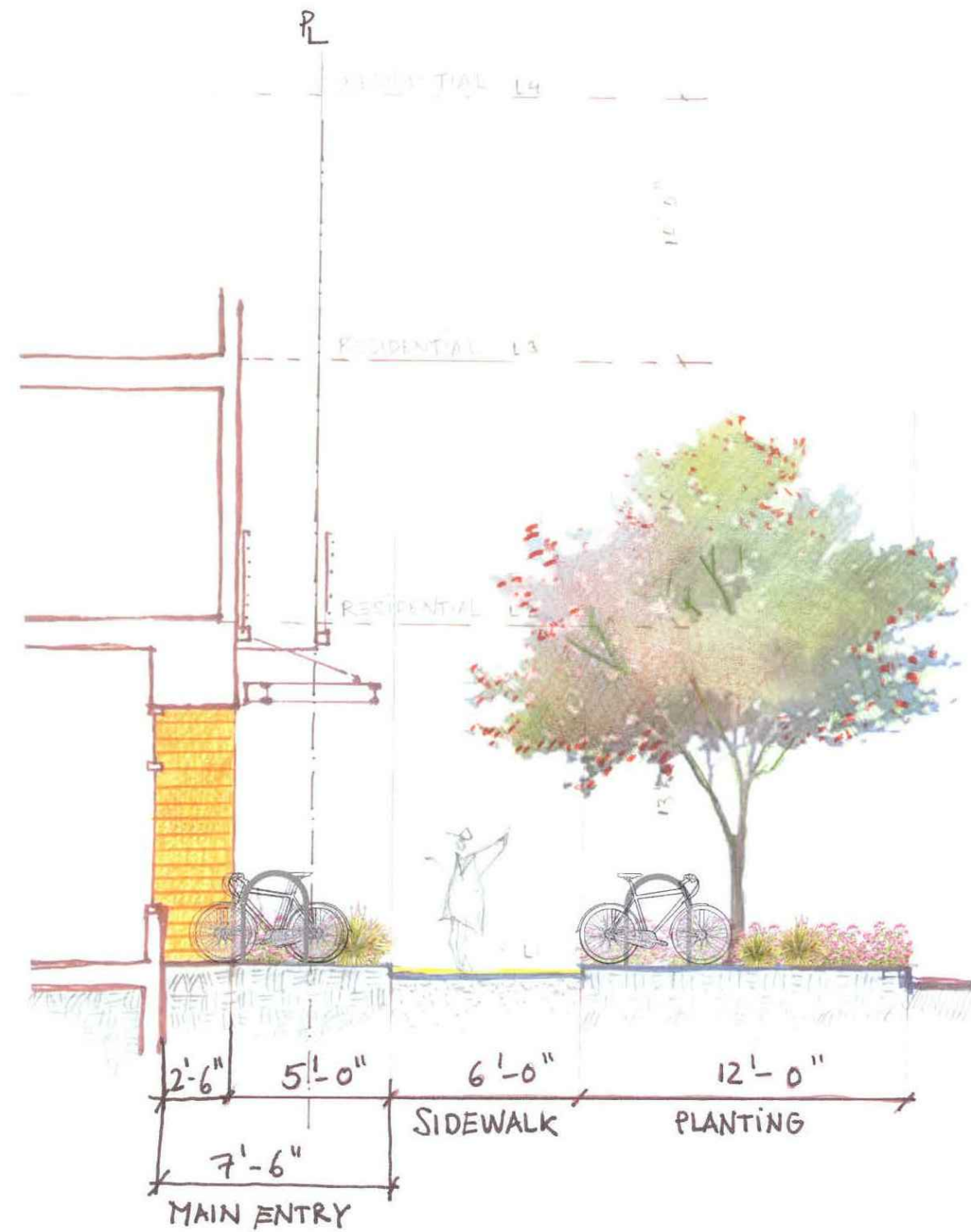


FEATHER REED GRASS

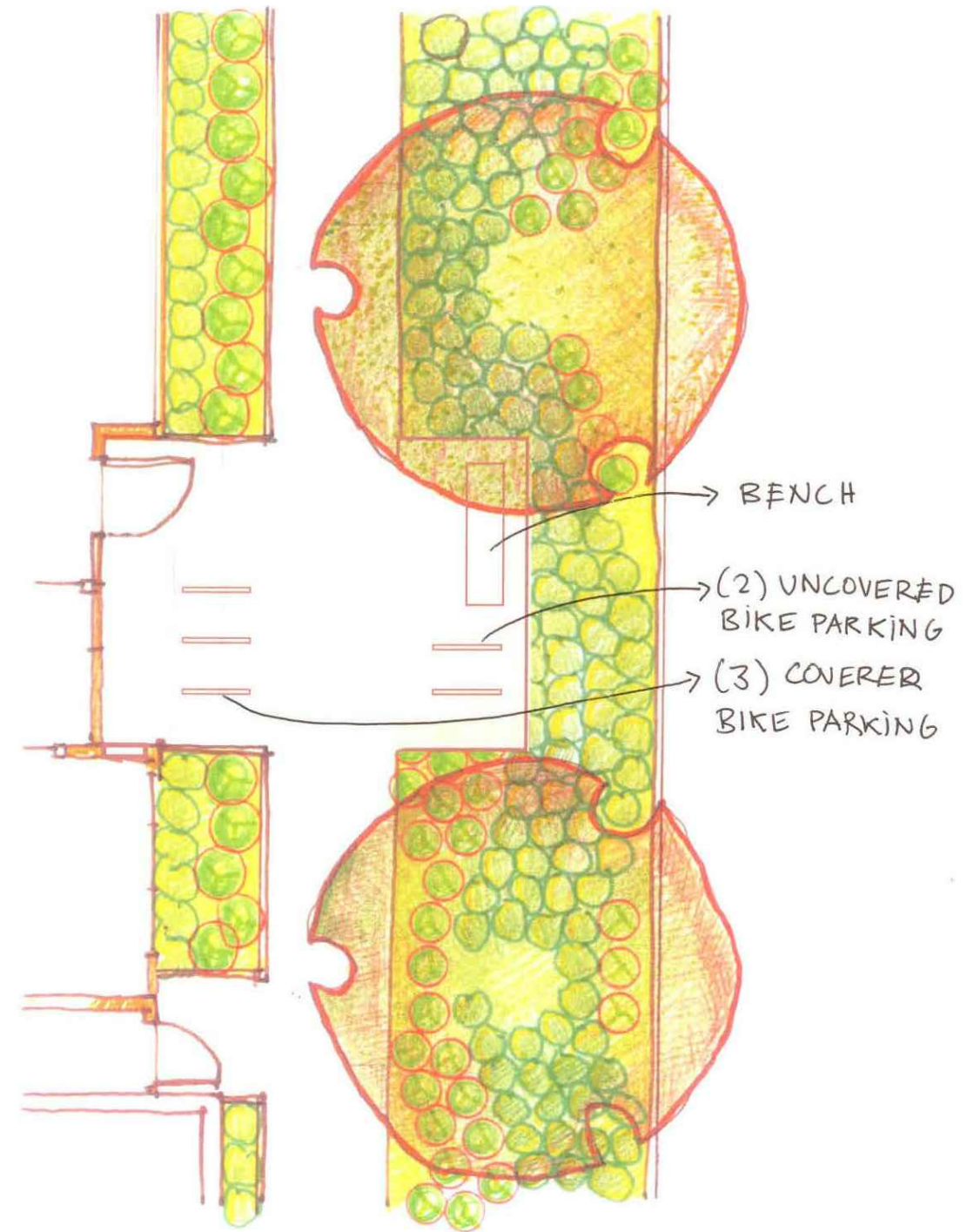


NANDINA UMPQUA CHIEF

LANDSCAPE SECTIONS



LANDSCAPE SECTION AT LOBBY ENTRY



LANDSCAPE PLAN AT LOBBY ENTRY

11/25/2014 1516 NW 51st St_DRB Packet-10-25-14.dwg

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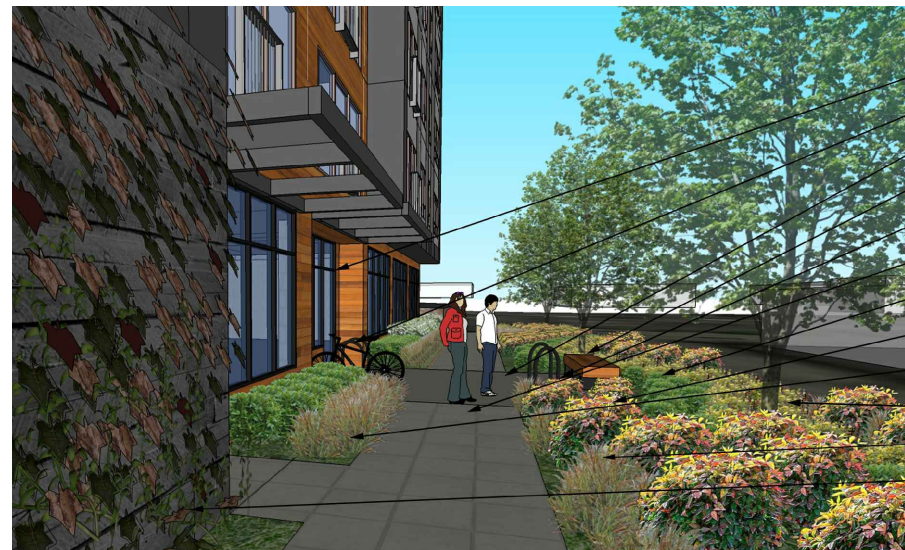
LANDSCAPING (GROUND PLAN)



PLANT SCHEDULE

DECIDUOUS TREES	BOTANICAL NAME	COMMON NAME	CONT	CAL
	CORNUS KOUSA 'EDDIE'S WHITE WONDER'	KOUSA DOGWOOD	B & B	2" CAL
	NYSSA SYLVATICA 'BLACK TUPELO'	SOUR GUM	B & B	2" CAL
VINES	BOTANICAL NAME	COMMON NAME	CONT	CAL
	PARTHENOCESSUS QUINQUEFOLIA 'PURPLE FALLS'	VIRGINIA CREEPER	1 GAL	
SHRUBS	BOTANICAL NAME	COMMON NAME	CONT	MIN HT/SPREAD
	CAREX TESTACEA	CAREX	1 GAL	
	MAHONIA AQUIFOLIUM	OREGON GRAPE	2 GAL	12" - 18"
	NANDINA DOMESTICA 'HARBOUR DWARF'	DWARF HEAVENLY BAMBOO	5 GAL	6" - 12"
	POLYSTICHUM MUNITUM	WESTERN SWORD FERN	3 GAL	
	PRUNUS LAUROCERASUS 'MOUNT VERNON'	MOUNT VERNON LAUREL	5 GAL	
	SPIRAEA JAPONICA 'ANTHONY WATERER'	JAPANESE SPIREA	5 GAL	
GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	SPCG
	DESCHAMPSIA CESPITOSA 'NORTHERN LIGHTS'	NORTHERN LIGHTS HAIR GRASS	1 GAL	18"

- BENCH
- SANDBLAST CONCRETE
- BIKE RACK
- SANDBLAST CONCRETE
- BENCH



- LOBBY ENTRANCE
- BIKE RACKS - COVERED
- SANDBLAST FINISHED CONCRETE
- CUSTOM BENCH
- BIKE RACKS
- SIDEWALK
- MOUNT VERNON LAUREL
- DWARF HEAVENLY BAMBOO
- NORTHERN LIGHT HAIR GRASS
- OREGON GRAPE
- CAREX
- VIRGINIA CREEPER



- SOUR GUM - STREET TREE
- EDDIE'S WHITE WONDER DOGWOOD
- LIVELINE ENTRANCE
- ANTHONY WATERER SPIRAEA
- CUSTOM BENCH
- SANDBLASTED CONCRETE
- MOUNT VERNON LAUREL
- NORTHERN LIGHTS HAIR GRASS
- SIDEWALK
- SWORD FERN

LANDSCAPING (GROUND PLAN)

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LANDSCAPING (ROOF PLAN)

TREE REMOVAL



April 1, 2014

Christopher Davidson
Studio Meng Strazzara
2001 Western Ave., Suite 200
Seattle, WA 98121

Regarding: Tree at 1516 NW 51st Street, Seattle – Ballard 80 Project

This report documents an arborist's assessment of a species Sawara Cypress, *Chamaecyparis pisifera*, assessed for species, size, health status, and Exceptional Tree status.

The tree is 25.5 inches in diameter, has multiple stems, and is in excellent condition. It is growing at the top of a rockery at the extreme southwest corner of the above property and has a drip line radius of 13 feet.

Because this species is not found in Table 1 of Director's Rule 16-2008, the threshold diameter to be considered Exceptional shall be "30 inches or 75% of the largest documented diameter for a tree of that species in Seattle, whichever is less, as noted in *Trees of Seattle, 2nd Edition*, by Arthur Lee Jacobson" (DR 16-2008 Page 2). The largest documented Sawara Cypress in Seattle, listed on page 132 of Jacobson's book, is 9 feet 4.5 inches in circumference, translating to 35.8 inches in diameter. 75% of that figure is 26.85 inches.

Because the tree on the Ballard 80 project site does not exceed the required 75% of the largest documented diameter, it is not considered Exceptional.

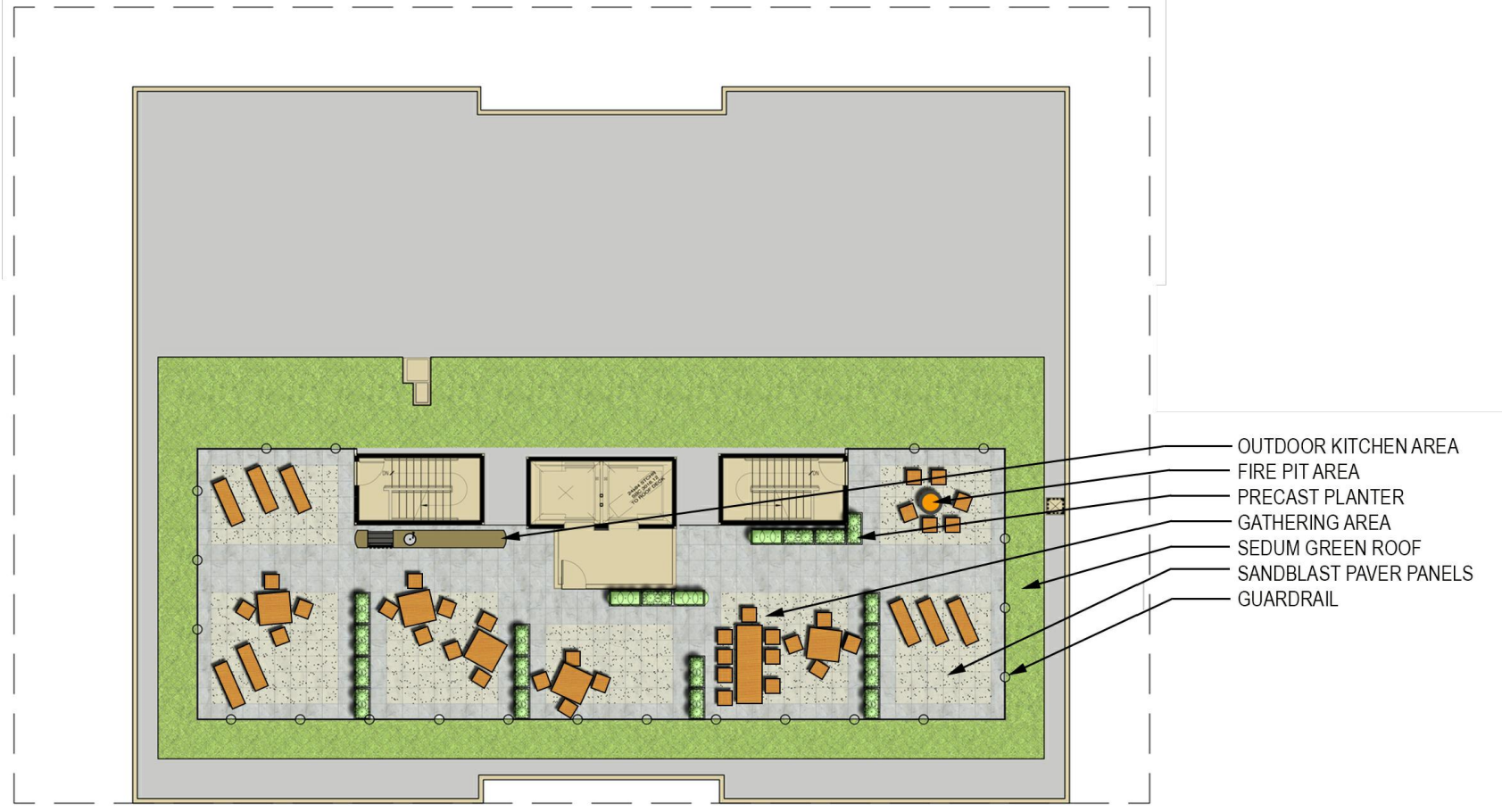
Assumptions and Limiting Conditions:

1. Field examination of the site was made on April 1, 2014. Observations and conclusions are as of that date.
2. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.
3. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject tree may not arise in the future. All trees possess the risk of failure. Trees can fail at any time, with or without obvious defects, and with or without applied stress.

Report Submitted by,

ISA Certified Arborist #PN 5979A
Tree Risk Assessment Qualified

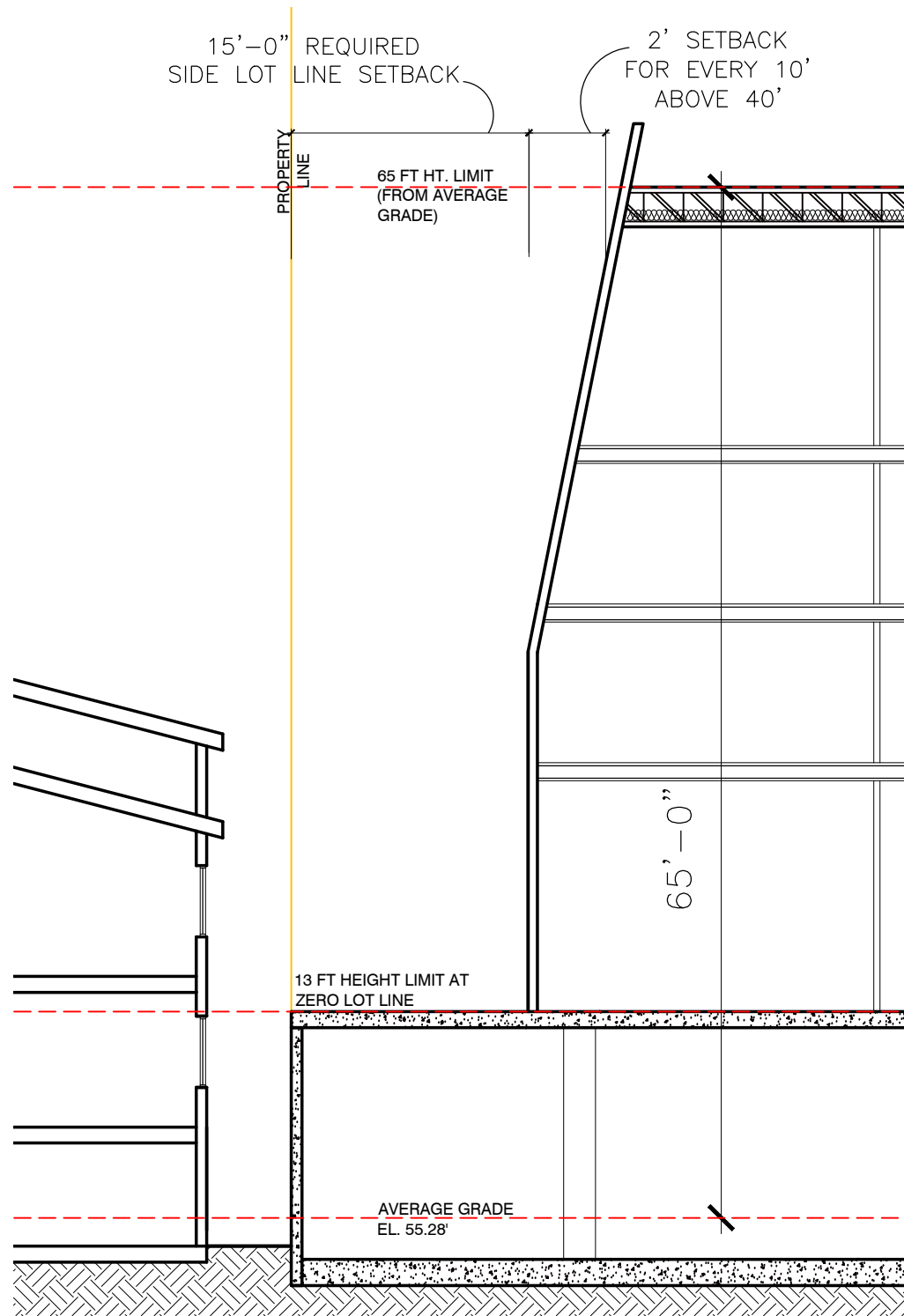
4310 Sunnyside Avenue N.
Seattle, WA 98103-7661
206-545-1726
206-280-9740 cell
susanminicol@gmail.com



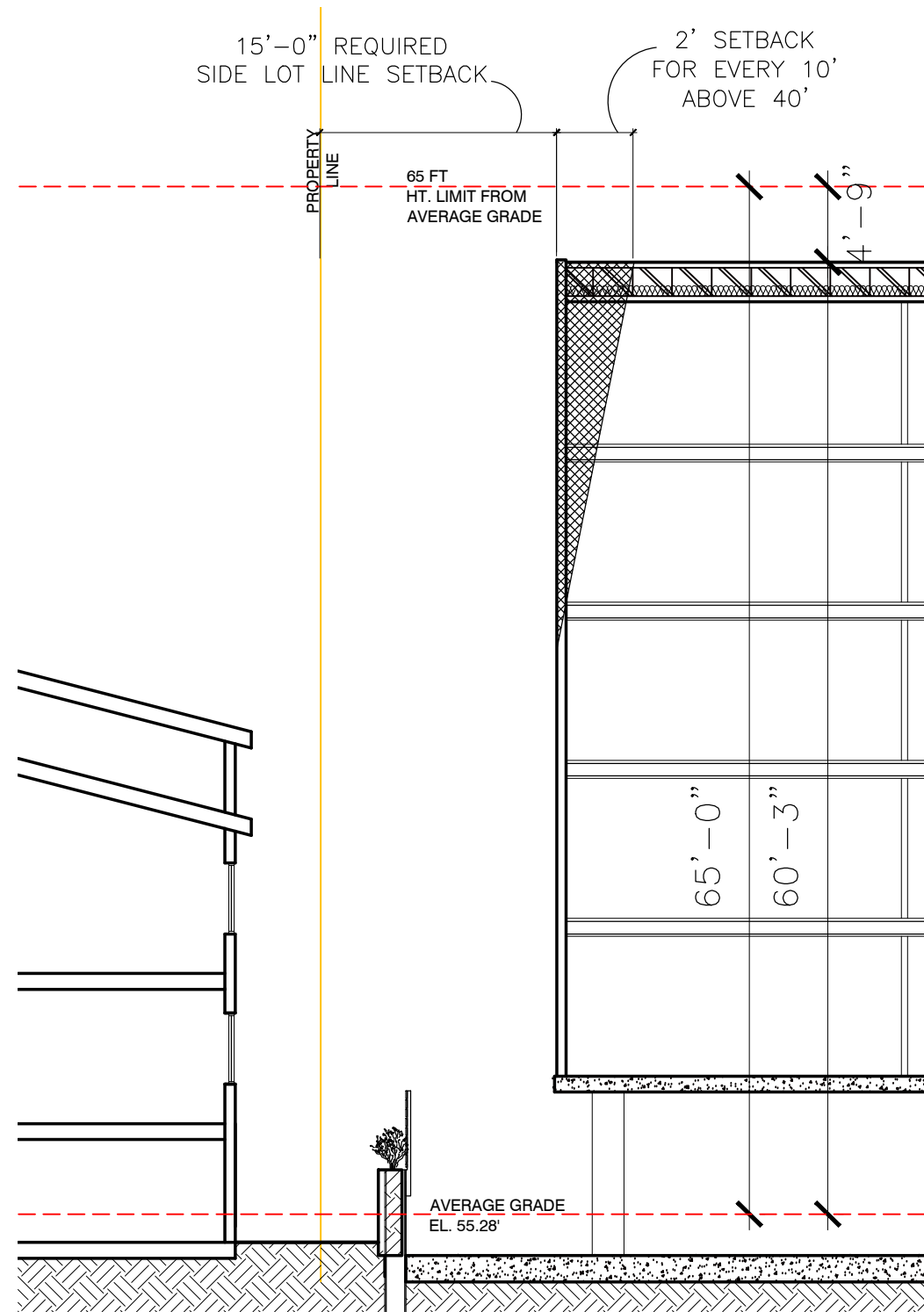
PLANT SCHEDULE

SHRUBS	BOTANICAL NAME	COMMON NAME	CONT	
	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	FEATHER REED GRASS	5 GAL	
	NANDINA DOMESTICA 'UMPQUA CHIEF'	UMPQUA CHIEF HEAVENLY BAMBOO	5 GAL	
GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	SPACING
	EVERGREEN AND DECIDUOUS SEDUMS	4" TRAY SYSTEM	FLAT	12" o.c.

DEPARTURE REQUEST: PROPOSED VS. CODE COMPLIANT



Section - West Property, Code Compliant



Section - West Property, Proposed Design

Departure Request

Reduce setback requirements above 40' height limit to 15' where adjacent to residential use

Code Requirement

SMC 23.47A.014.B.3 - Residential Building Setback:

The Code requires a structure containing a residential use with a side lot line abutting a lot in a residential zone be setback as follows:

- a. 15' for portions of structure above 13' in height to a maximum of 40'; and
- b. for each portion of structure above 40' in height, an additional setback at the rate of 2' of setback for every 10' by which the height of such portion exceeds 40'.

The structure's proposed west wall façade is parallel with the side lot abutting property in a residential (LR3) zone.

Explanation for Departure

Guideline DC2: The requested departure allows for a facade layout which avoids blank walls along all facades and creates a unified architectural design that provides maximum day-lighting to units while setting back from all adjacent properties.

This departure provides a full 20 feet between the buildings with a landscaped buffer at the second level that provides privacy and security for occupants of both buildings.

DEPARTURE REQUEST: SHADOW STUDIES

9:30AM
ROOF PLANS

9:30AM
PERSPECTIVES

11:00AM
ROOF PLANS

11:00AM
PERSPECTIVES

PROPOSED BUILDING



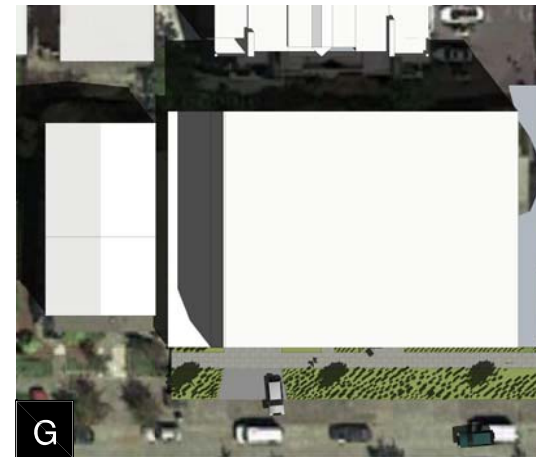
PROPOSED BUILDING



SETBACK



SETBACK



ANALYSIS:

Images A-D demonstrate that at 9:30am the proposed building casts a slightly larger shadow on the neighboring building in the morning. However, at that time both options would cast the neighboring building in shadow up to the roof.

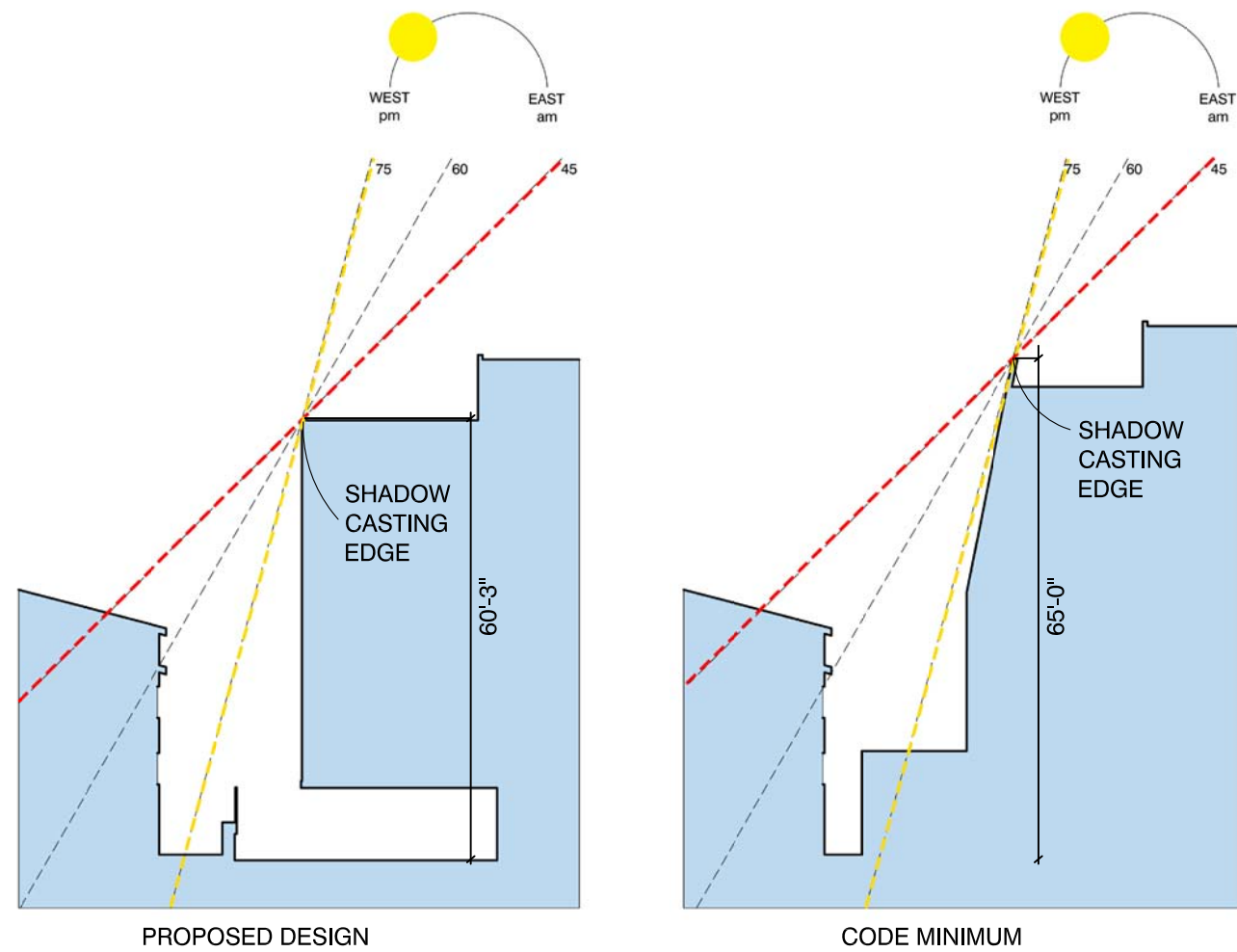
Images E-H show that by 11am, the neighboring building is completely out of shadow, and the patterns cast by both proposals are nearly identical.

CONCLUSION:

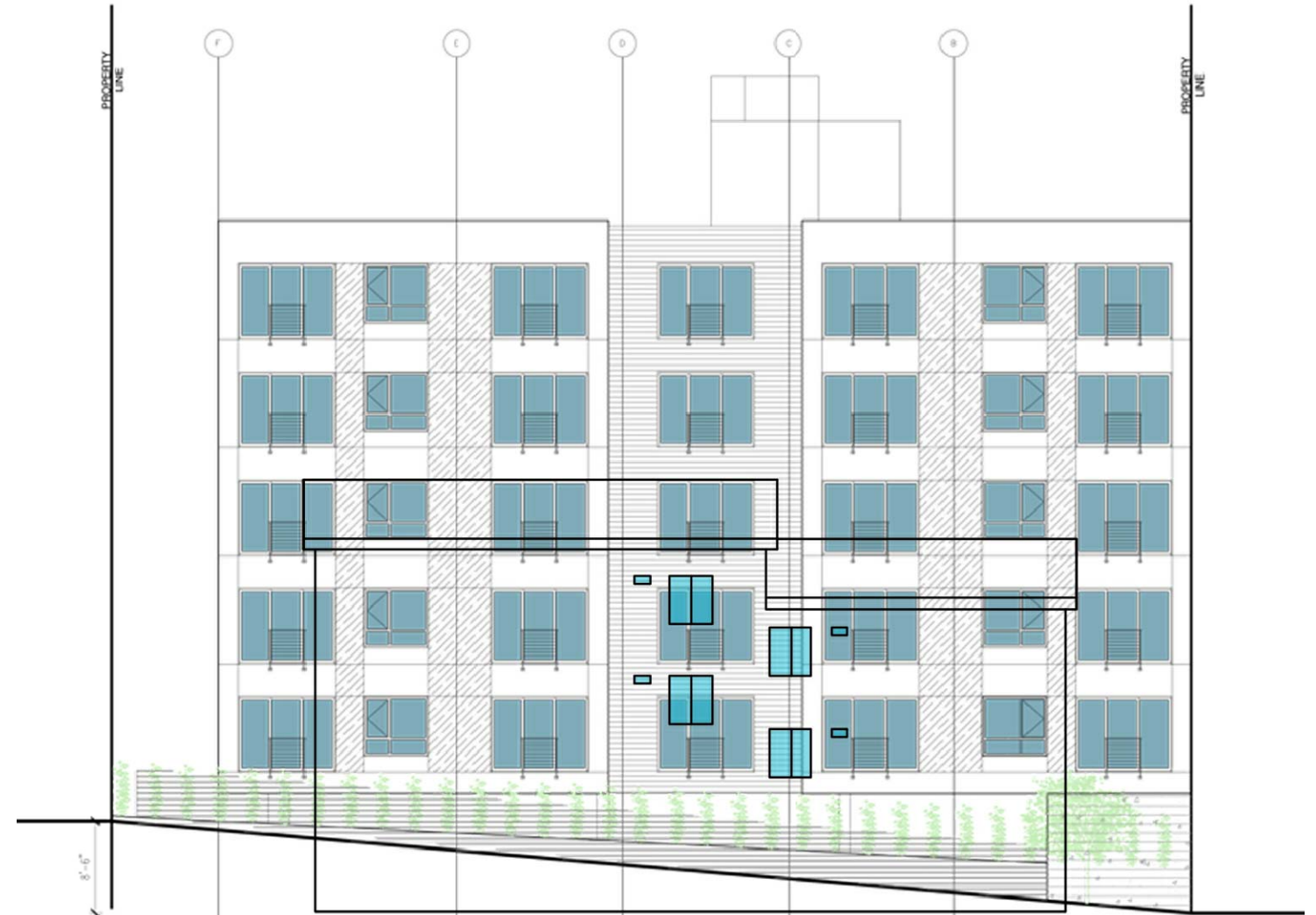
The requested setback departure does not significantly impact day-lighting to the neighboring building to the west. The proposed design is 4'-9" below the allowable building height for the site., which minimizes the overall scale of the building. The small departure request allows for a unified architectural design that improve and strengthens the character of the neighborhood.

DEPARTURE REQUEST: SOLAR & PRIVACY DIAGRAMS

SOLAR DIAGRAMS



GLAZING OVERLAY DIAGRAM AT WEST ELEVATION



GLAZING:

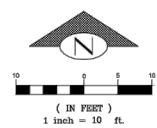
The intent of the residential setback is to provide adjacent residential uses with access to light and air.

The proposed design does not significantly increase shadows on the neighboring property greater than what is allowable by code. The proposed design respects day-lighting and views at the western neighbor's lower windows by continuing the 15ft setback in the structure all the way to grade, preventing an immediate view of a blank wall.

PRIVACY:

The proposed design respects the privacy of the neighboring building to the west through the structure setback at its base, as well as preventing direct views into living spaces.

- SURVEY
- ZONING REQUIREMENTS
- PLANS
- SECTIONS
- ELEVATIONS
- ENERGY CALCULATIONS



SEE SHEET 1

SURVEY

RECOMMENDATION MEETING - 1516 NW 51st St

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ZONING CODE SUMMARY FOR C1-65 ZONE

PROJECT DATA

LOCATION: 1516 NW 51st St
 SITE AREA: 14,270 SQ FT
 ZONE: C1-65
 OVERLAYS: BALLARD OVERLAY DISTRICT (HUB URBAN VILLAGE)
 BUILDING CODE: SEATTLE AMENDMENTS TO THE 2012 IBC
 PROPOSED USE: RESIDENTIAL MIXED USE
 OCCUPANCY CLASSIFICATION / SEPARATIONS:

DESIGN STATEMENT

The owner's aim is to create a market rate rental community that appeals to a wide range of Ballard neighborhood dwellers. The development will be designed in context with the distinguished character of the surrounding neighborhood in architectural elements, building scale, and massing. The building proposed is a 91-unit, five-level wood frame over concrete. The design will include a surface level of parking for 35 stalls accessed via NW 51st St.

Proposed Building Summary:

- * Building Area: 60,948 SF (include parking garage)
- * Unit: 91 Units
- * Parking: 35 Parking Stalls

POTENTIAL USE: (23.47A.004) SOME PERMITTED EXAMPLES
 RESIDENTIAL, LIVE-WORK UNITS

STREET-LEVEL DEVELOPMENT STANDARDS: (23.47A.008)

BLANK FACADES PERMITTED: NO SEGMENT LONGER THAN 20'
 TOTAL BLANK FACADE <40%

STREET-LEVEL STREET-FACING FACADES SHALL BE LOCATED WITHIN 10' OF THE STREET LOT LINE. UNLESS WIDER SIDEWALKS, PLAZAS, OR OTHER APPROVED LANDSCAPED OR OPEN SPACES ARE PROVIDED.

TRANSPARENCY REQUIRED: 60% FOR NON-RESIDENTIAL USES

DEPTH OF NON-RESIDENTIAL: AVERAGE 30 FT. MINIMUM 15 FT.
 HEIGHT OF NON-RESIDENTIAL: 13 FT FLOOR-TO-FLOOR

AT LEAST ONE OF THE STREET-LEVEL STREET-FACING FACADES CONTAINING A RESIDENTIAL USE SHALL HAVE A VISUALLY PROMINENT ENTRY

THE FLOOR OF A DWELLING UNIT LOCATED ALONG THE STREET-LEVEL STREET-FACING FACADE SHALL BE AT LEAST 4' ABOVE OR BELOW SIDEWALK GRADE OR BE SET BACK AT LEAST 10' FROM THE SIDEWALK.

LIVE-WORK UNITS LOCATED ON STREET-LEVEL STREET-FACING FACADES MUST COMPLY WITH BLANK FACADE AND TRANSPARENCY REQUIREMENTS

STRUCTURE HEIGHT: (23.47A.012)

MAX. ALLOWED: 65 FEET
 PROJECTIONS ALLOWED ABOVE HEIGHT LIMIT: PARAPETS, GUARDRAILS, ELEVATOR OVERRUNS, ETC.

FLOOR AREA RATIO: (23.47A.013)

LOT AREA: 14,270 SF
 MAX. FAR FOR SINGLE USE (RESIDENTIAL): 4.25 (60,647 SF)
 MAX. FAR FOR TOTAL OF MIXED-USE STRUCTURE: 4.75 (67,782 SF)

SETBACK REQUIREMENTS: (23.47A.014)
 NO REQUIRED SETBACKS

REQUIRED LANDSCAPING: (23.47A.016)
 SEATTLE GREEN FACTOR SCORE OF .30 OR GREATER

LIGHT AND GLARE STANDARDS: (23.47A.022)
 INTERIOR LIGHTING IN PARKING GARAGES MUST BE SHIELDED TO MINIMIZE NIGHTTIME GLARE AFFECTING NEARBY USES.
 DRIVEWAYS AND PARKING AREAS SHALL BE SCREENED FROM ADJACENT PROPERTIES BY A FENCE OR WALL BETWEEN FIVE AND SIX FEET IN HEIGHT, OR SOLID EVERGREEN HEDGE OR LANDSCAPED BERM AT LEAST FIVE FEET IN HEIGHT.

REQUIRED PARKING: (23.47A.030)
 0 STALLS REQUIRED

PARKING LOCATION AND ACCESS: (23.47A.032)
 IF ALLEY ACCESS IS NOT AVAILABLE, ACCESS IS PERMITTED FROM THE SIDE STREET WHEN LOT ABUTS TWO OR MORE STREETS.
 A LOADING ZONE MAY BE REQUIRED.

PROPOSED FAR:

FLOOR LEVEL	USE	SUBJECT TO FAR
LEVEL P1/L1	PARKING	6,673 SF
LEVEL P1/L1	LIVE/WORK	500 SF
LEVEL P1/L1	RESIDENTIAL	3,640 SF
LEVEL L2-L6	RESIDENTIAL	10,072 SF/ FLOOR
TOTAL		60,732 SF (< 67,782 SF)

RESIDENTIAL AMENITY AREA: (23.47A.024)
 5% OF GROSS BUILDING AREA IN RESIDENTIAL USE
 54,000 SF x 5% = 2,700 SF

ADA PARKING REQUIREMENTS: (SBC 1106)
 AT LEAST 2 PERCENT OF EACH TYPE OF PARKING SPACE PROVIDED FOR OCCUPANCIES IN GROUPS R-2 AND R-3 SHALL BE ACCESSIBLE.
 PARKING SPACES PROVIDED: 35 STALLS
 ACCESSIBLE PARKING SPACE REQUIRED: 1 ADA VAN STALL

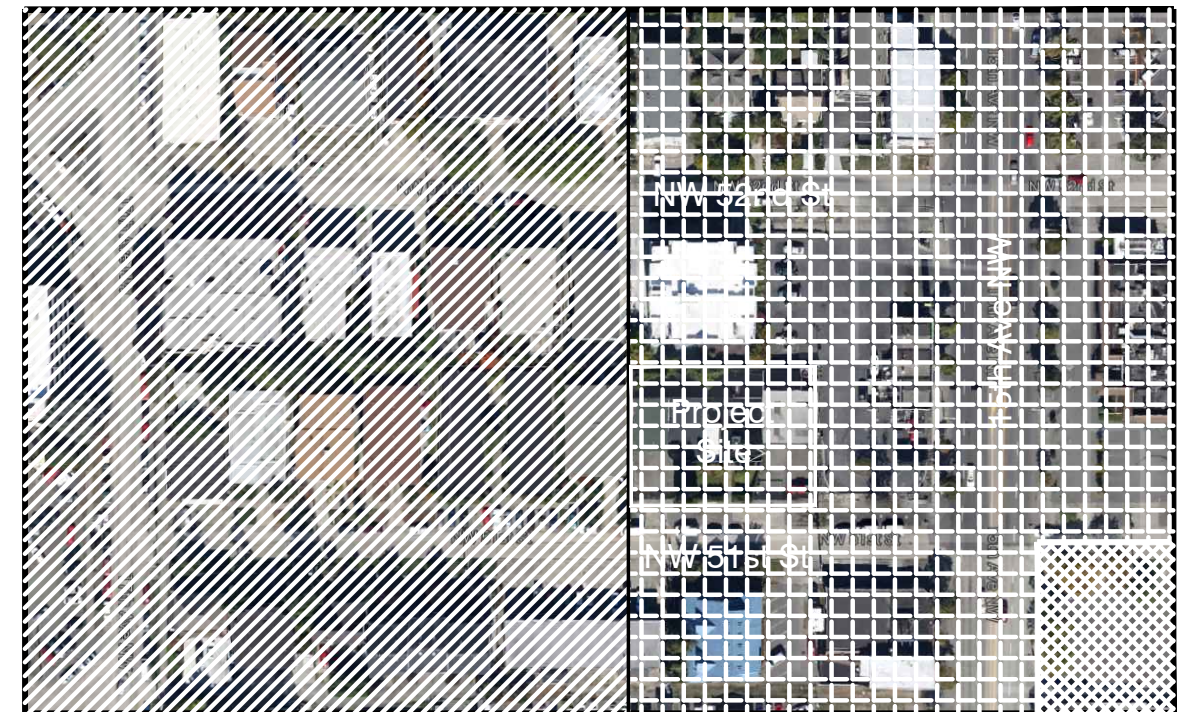
AVERAGE GRADE CALCULATION
 AVERAGE GRADE HEIGHT- CALCULATED USING THE MIDPOINT OF PROPERTY LINE, ASSUMING BUILDING HAS 0 LOT LINE: =285.76

SOLID WASTE CALCULATION: (23.54.040)
 RESIDENTIAL: 495 SF
 NON RESIDENTIAL: 82 SF
 TOTAL= 577 SF (250 SF PROVIDED)

BICYCLE PARKING REQUIREMENT: (23.54.015.K)
 TOTAL BICYCLE PARKING REQUIRED: 21 STALLS

KEY

-  URBAN VILLAGE
-  C1-65
-  LR-3
-  IG2-U/65



2 ZONING MAP
 SCALE: NTS



ZONING REQUIREMENTS
 RECOMMENDATION MEETING - 1516 NW 51st St

D

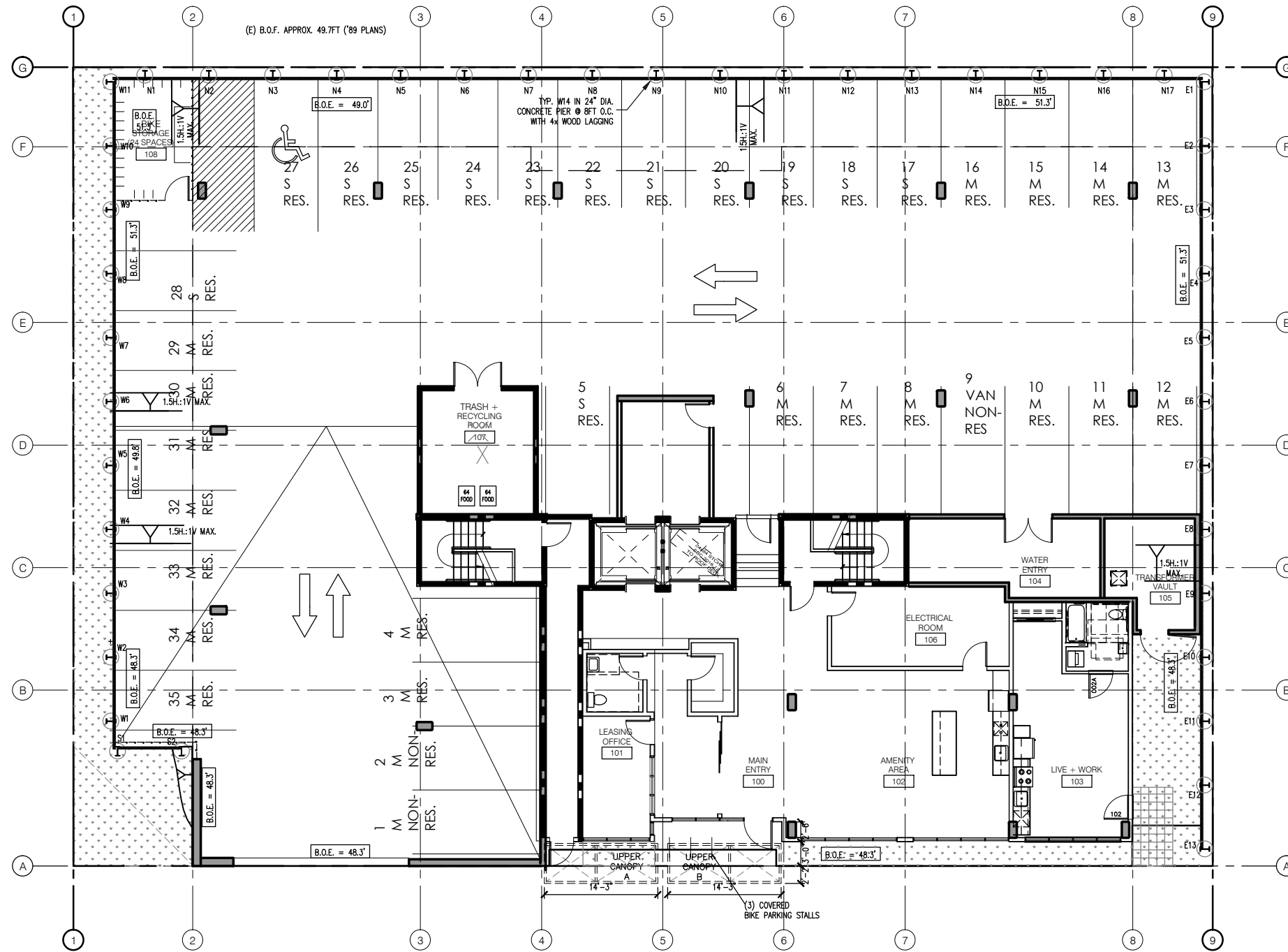
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FIRST FLOOR PLAN



FIRST PLAN
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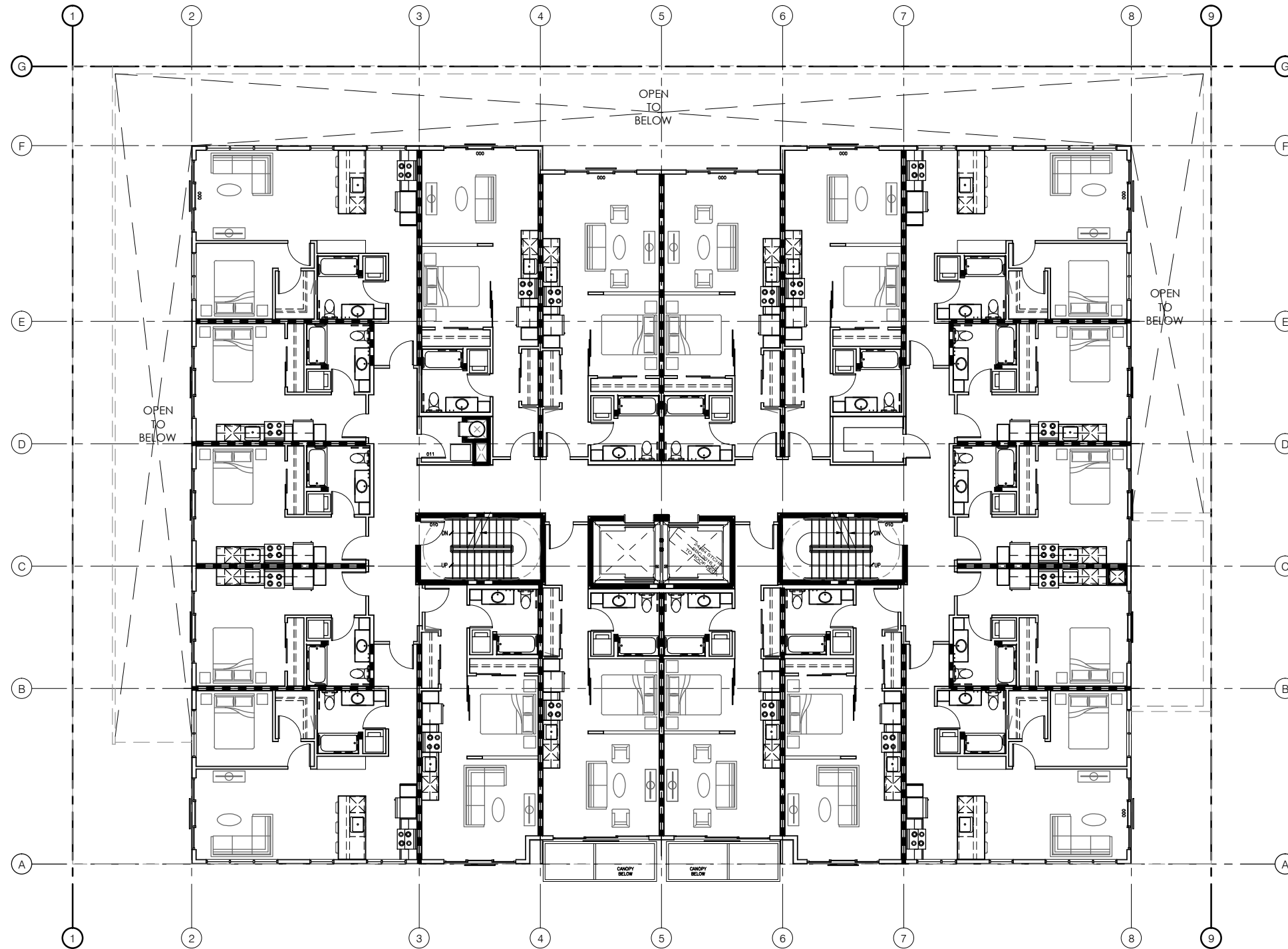
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2nd FLOOR PLAN



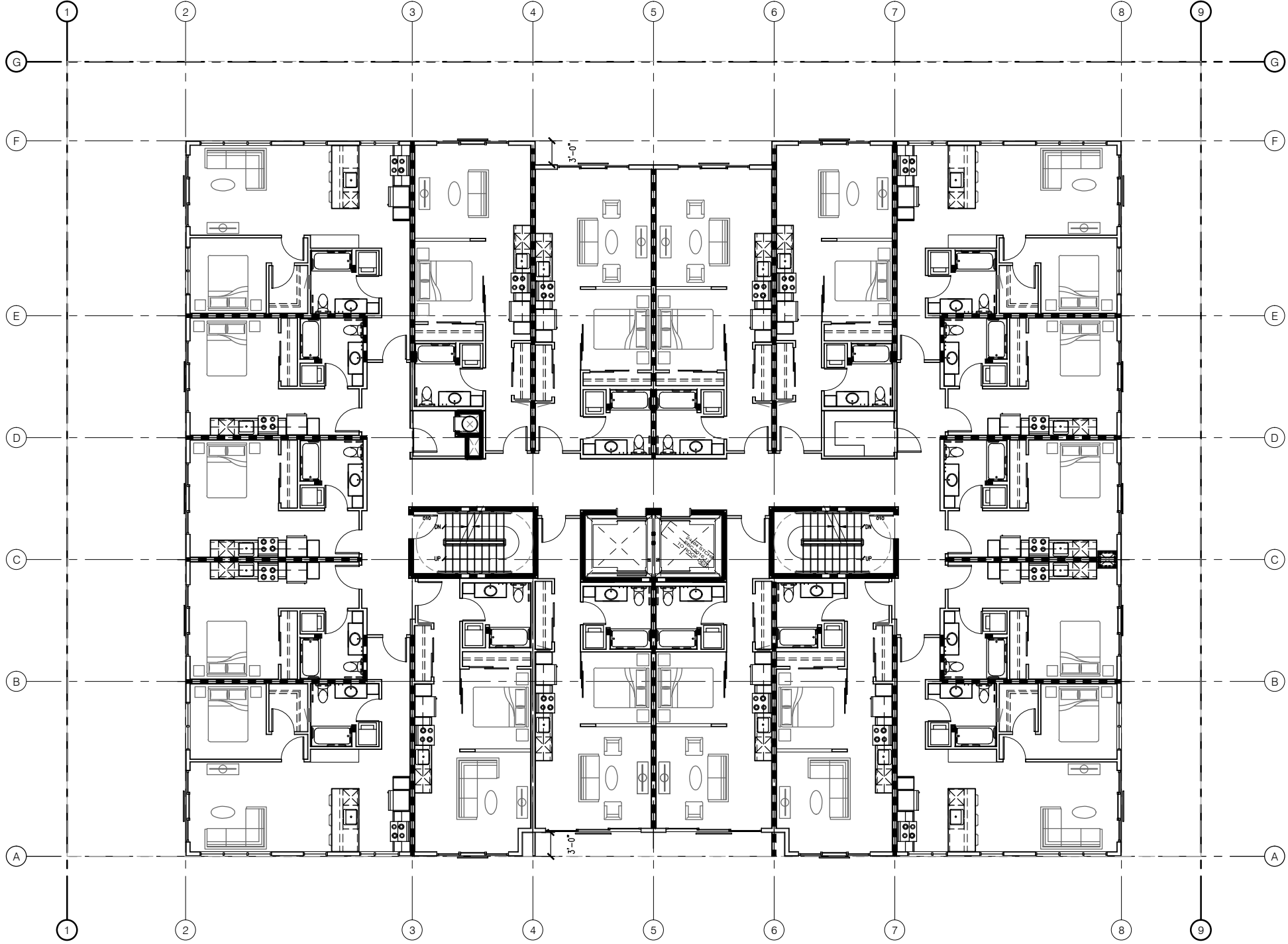
2nd FLOOR PLAN
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3rd-6th FLOOR PLAN
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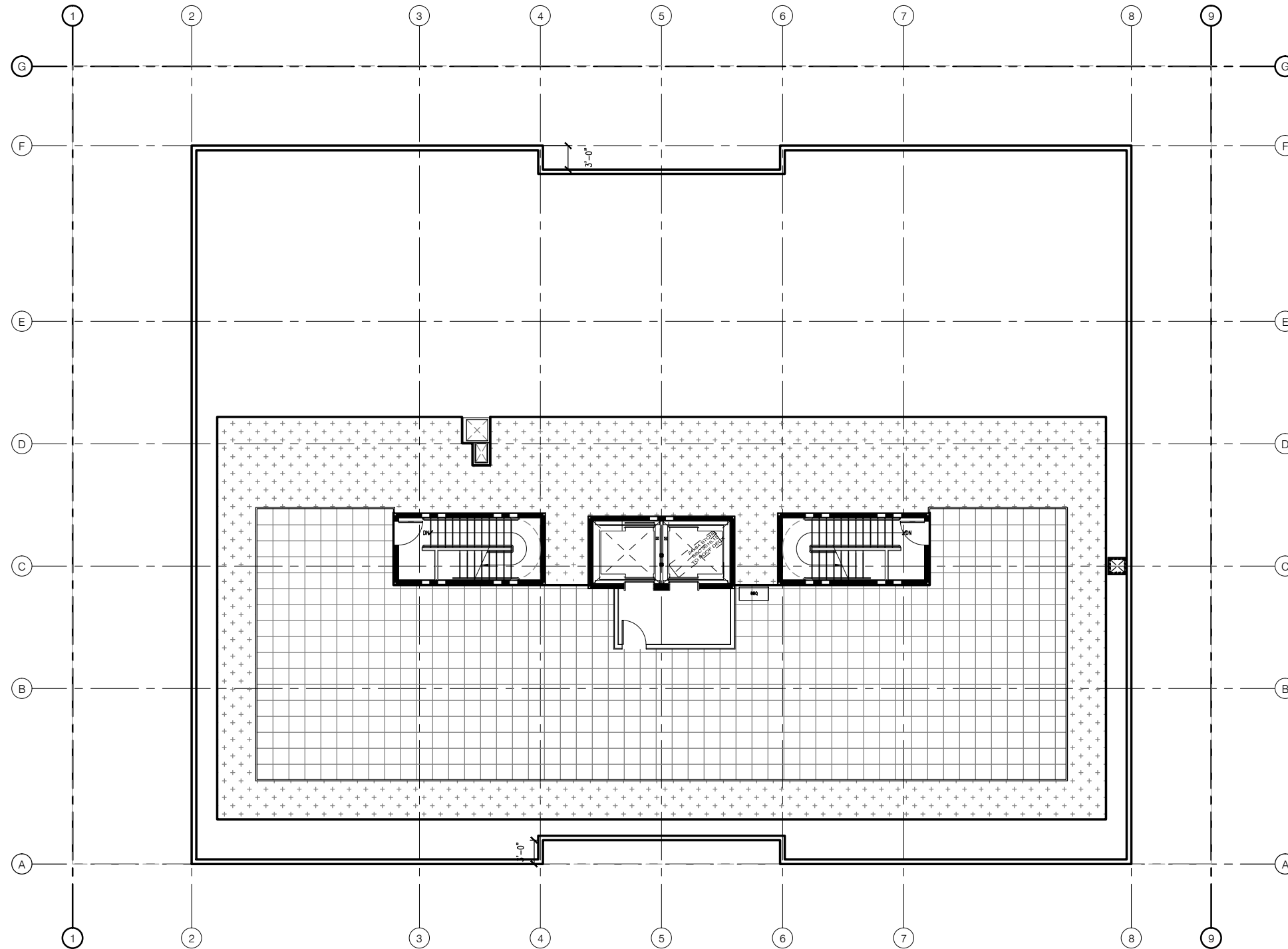
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ROOF



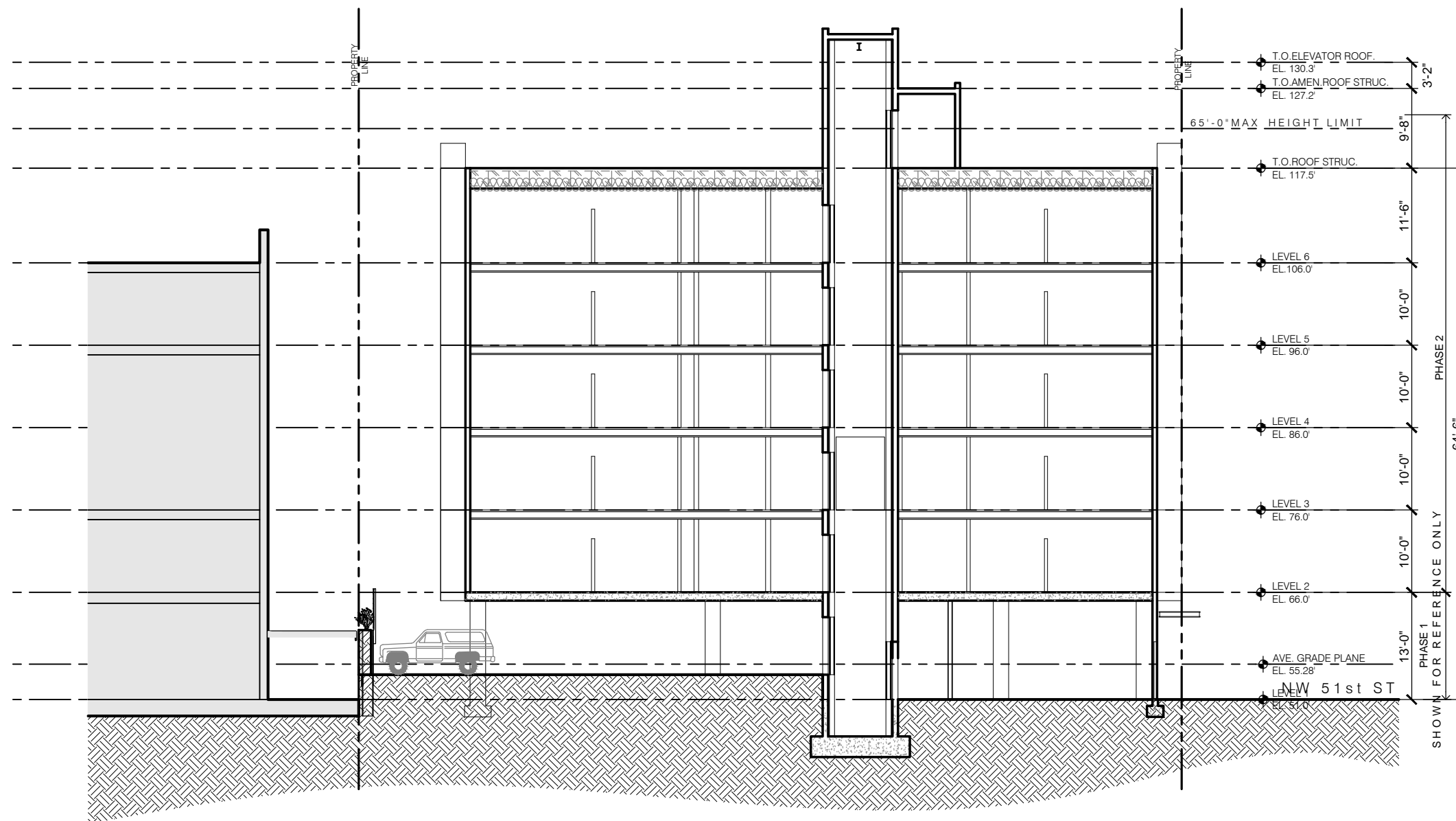
ROOF
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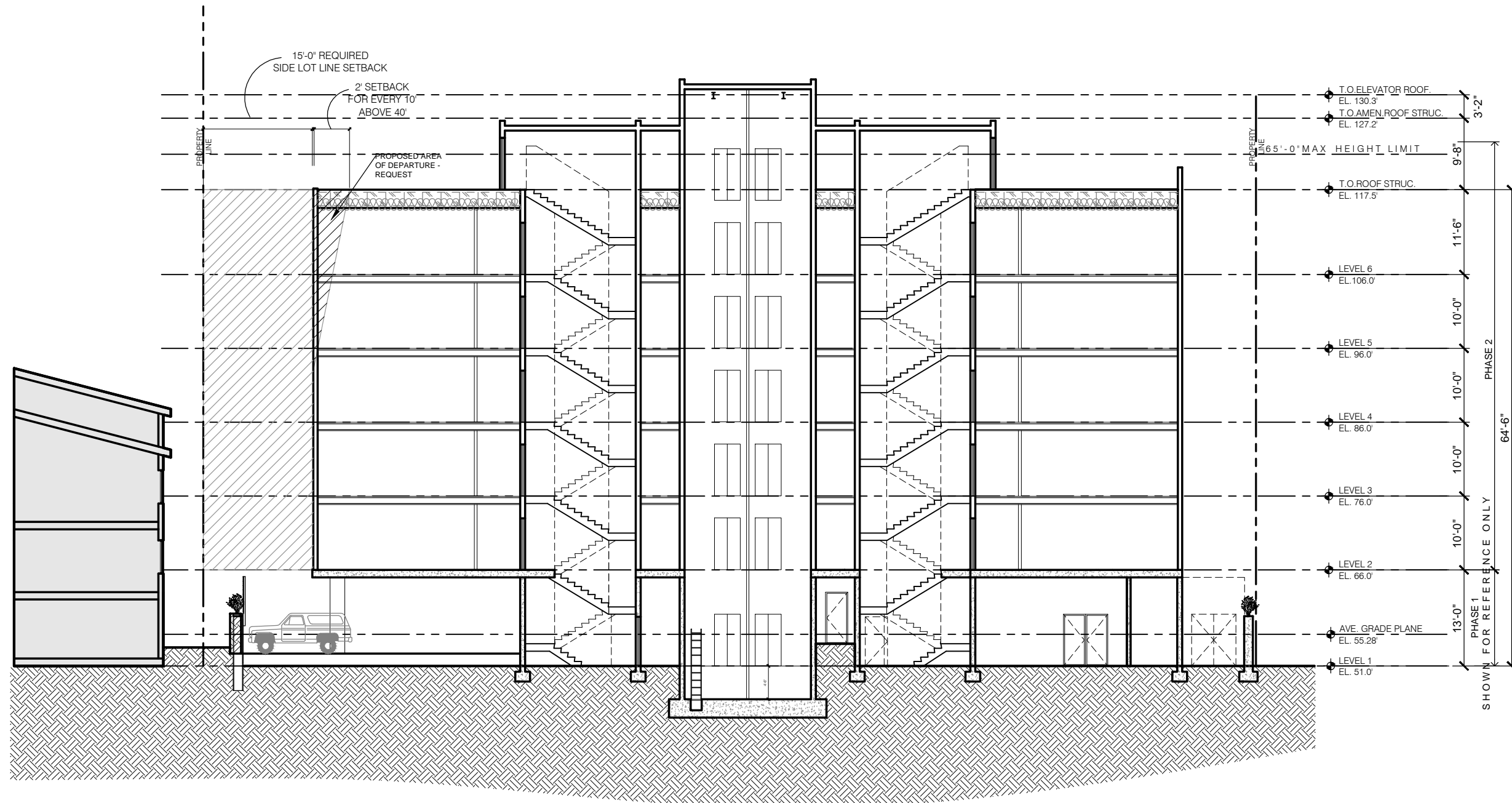
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SECTIONS



SECTIONS
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ELEVATIONS



NORTH
RECOMMENDATION MEETING - 1516 NW 51st St

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ELEVATIONS



WEST
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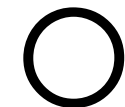
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Envelope Summary		Zones 4c/5b		ENV-SUM	
2012 Washington State Energy Code Compliance Forms for Commercial Buildings including R2 & R3 over 3 stories and all R1 <small>Revised Oct 2013</small>					
Project Info <i>Compliance forms do not require a password to use. Instructional and calculating cells are write-protected.</i>	Project Address	GRE BALLARD 90		Date	8/26/2014
		1516 NW 51ST STREET		For Building Department Use	
		SEATTLE, WA 98107			
	Applicant Name:	Emerald City Engineers			
	Applicant Address:	6505 216th Street SW, Suite 200, Mountlake Terrace			
Applicant Phone:	425-741-1200				
Project Description	<input checked="" type="checkbox"/> New Building <input type="checkbox"/> Addition <input type="checkbox"/> Alteration <input type="checkbox"/> Change of Occupancy/Conditioning				
Compliance Path <i>Selection required to enable forms.</i>	<input type="checkbox"/> Prescriptive <input checked="" type="checkbox"/> Component Performance <input type="checkbox"/> Total Building Performance				
Occupancy Group <i>Selection required to enable forms.</i>	<input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Group R - R2 & R3 over 3 stories and all R1				
Vertical Fenestration and Skylight Area Calculation <i>If complying via the Prescriptive path, enter values for vertical fenestration, skylights, gross walls and roof on this ENV-SUM worksheet. If complying via the Component Performance path, enter these values in the ENV-UA worksheet. These values auto-fill from ENV-UA and are write-protected on ENV-SUM.</i>	Total Vertical Fenestration (rough opening)	divided by	Gross Exterior Above Grade Wall Area	times 100 equals	% Vertical Fenestration
	8026.0	÷	33647.0	X 100 =	23.9%
	Total Skylight	divided by	Gross Exterior Roof Area	times 100 equals	% Skylight
	0.0	÷	10565.0	X 100 =	0.0%
Fenestration Area Compliance	Vertical Fenestration Area	VERTICAL FENESTRATION AREA COMPLIES			
	Skylight Area	SKYLIGHT AREA COMPLIES			
Vertical Fenestration Alternates	<input type="checkbox"/> 50% or more of the floor area is within a daylight zone per C402.3.1.1 <input type="checkbox"/> High Performance Fenestration U-factors and SHGC per C402.3.1.3				
Single Story Spaces Requiring Skylights	Compliance Method				
	<input type="checkbox"/> Skylight area 3% or greater, VT-0.40 or greater <input type="checkbox"/> Skylight effective aperture 1% or greater, provide calculation <input type="checkbox"/> Space eligible for exception <i>Requires a minimum of 50% of floor area to be within a skylight daylight zone for specific space types. Refer to C402.3.2 for requirements.</i>				
Semi-Heated Spaces	<input type="checkbox"/> Project has semi-heated spaces as defined per C402.1.4 <input type="checkbox"/> Applying wall exception to semi-heated spaces 1. Semi-heated spaces may comply under Prescriptive or Component Performance compliance path. 2. Semi-heated spaces shall be documented separately from other conditioned spaces – provide separate compliance forms for each conditioned space type. 3. Envelope elements separating semi-heated from other conditioned spaces shall comply with exterior thermal envelope requirements.				
	<input type="checkbox"/> Walk-in Cooler <input type="checkbox"/> Walk-in Freezer <input type="checkbox"/> Refrigerated Warehouse Cooler <input type="checkbox"/> Refrigerated Warehouse Freezer <i>Refrigerated spaces shall comply under the Prescriptive Path only. Compliance documentation for these areas may be combined with non-refrigerated areas in the ENV-PRESCRIPTIVE form. Refer to C402.5 and C402.6 for requirements.</i>				
Refrigerated Spaces	<input type="checkbox"/> Commercial <input checked="" type="checkbox"/> R2 & R3 over 3 stories and all R1 <input type="checkbox"/> Refrigerated Space <input type="checkbox"/> Fully Conditioned <input type="checkbox"/> Semi-Heated <input type="checkbox"/> Low Energy* <input type="checkbox"/> R2 & R3 - 3 stories or less <i>*Low energy areas are exempt from all thermal envelope provisions and compliance forms for these areas are not required. Refer to C101.5.2 for exemption.</i>				
Mixed Occupancy and/or Space Conditioning	Project includes more than one occupancy type and/or level of space conditioning. Multiple compliance forms may be required. Select all that apply to scope of project: <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> R2 & R3 over 3 stories and all R1 <input type="checkbox"/> Refrigerated Space <input type="checkbox"/> Fully Conditioned <input type="checkbox"/> Semi-Heated <input type="checkbox"/> Low Energy* <input type="checkbox"/> R2 & R3 - 3 stories or less <i>*Low energy areas are exempt from all thermal envelope provisions and compliance forms for these areas are not required. Refer to C101.5.2 for exemption.</i>				

Envelope Requirements Summary, pg 1		Zones 4c/5b		ENV-REQ	
2012 Washington State Energy Code Compliance Forms for Commercial Buildings including R2 & R3 over 3 stories and all R1 <small>Revised Oct 2013</small>					
Minimum Requirements for Prescriptive Compliance	<i>This table summarizes prescriptive compliance requirements for opaque elements and fenestration. Refer to Tables C402.1.2, C402.2 and C402.3 in the 2012 WSEC for important footnotes that apply to these tables. Refer to Section C402 for all applicable requirements that apply for each envelope element type and applicable exceptions.</i>				
	Prescriptive Path	Table C402.2 Insulation Minimum R-Value		Table C402.1.2 Assembly Maximum U-factor	
Occupancy Group	All Other	Group R	All Other	Group R	
Opaque Elements					
Roofs					
Insulation Entirely above Deck	R-30 c.i.	R-38 c.i.	U-0.034	U-0.031	
Metal Building (with R-3.5 thermal blocks) ^{Note 3}	R-25 + R-11 Ls	R-25 + R-11 Ls	U-0.031	U-0.031	
Attic and Other	R-49	R-49	U-0.021	U-0.021	
Walls, Above-grade					
Mass	R-9.5 c.i.	R-13.3 c.i.	U-0.104 ^{Note 6}	U-0.078	
Metal Building	R-13 + R-13 c.i.	R-13 + R-13 c.i.	U-0.052	U-0.052	
Steel Framed	R-13 + R-10c.i.	R-19 + R-8.5 c.i.	U-0.055	U-0.055	
Wood Framed and Other	R-21 int	R-21 int	U-0.054	U-0.054	
Below Grade Wall ^{Note 4}	Same as above grade		Same as above grade		
Floors					
Mass	R-30 c.i.	R-30 c.i.	U-0.031	U-0.031	
Steel Joist	R-38 + R-10 c.i.	R-38 + R-10 c.i.	U-0.029	U-0.029	
Wood Framed and Other	R-30	R-30	U-0.029	U-0.029	
Slab-On-Grade Floors					
Unheated	R-10 for 24 in. (from top of slab)		F-0.54	F-0.54	
Heated ^{Note 5}	R-10 perimeter & under entire slab		F-0.55	F-0.55	
Opaque Doors					
Swinging	No R-Value for prescriptive compliance.		U-0.37	U-0.37	
Roll-up or sliding	R-4.75	R-4.75	No U-Value for prescriptive compliance.		
Fenestration					
<i>Table C402.3 - 0-30% of wall area, or 30%-40% per Section C402.3.1.1 DLZ</i> <i>Section C402.3.1.3 High Performance Fenestration Option - 0-40% of wall area</i>					
Assembly Maximum U-factor ^{Notes 1,2}					
Vertical Fenestration					
Nonmetal framing	U-0.30	U-0.30	U-0.28	U-0.28	
Metal framing (fixed)	U-0.38	U-0.38	U-0.34	U-0.34	
Metal framing (operable)	U-0.40	U-0.40	U-0.36	U-0.36	
Entrance doors	U-0.60	U-0.60	U-0.60	U-0.60	
Skylights					
Skylights	U-0.50	U-0.50	U-0.50	U-0.50	
Assembly Maximum SHGC Factor					
Vertical Fenestration					
PF < 0.2: all orientations - SHGC-0.40		PF < 0.2: all orientations - SHGC-0.35			
0.2 ≤ PF < 0.5: north - SHGC-0.44;		0.2 ≤ PF < 0.5: north - SHGC-0.385;			
all other - SHGC-0.48		all other - SHGC-0.42			
PF ≥ 0.5: north - SHGC-0.48;		PF ≥ 0.5: north - SHGC-0.42;			
all other - SHGC-0.64		all other - SHGC-0.56			
Skylights					
SHGC-0.35		SHGC-0.35			
Refrigerated Spaces Insulation					
Insulation Minimum R-Value Assembly Maximum U-factor					
Freezers - Walk-in and Warehouse					
Roof / Ceiling	R-32		No U-Value for prescriptive compliance		
Wall	R-32				
Door	R-32				
Door - transparent reach-in	triple-pane, heat-reflective treated or gas				
Floor	R-28				
Coolers - Walk-in and Warehouse					
Roof / Ceiling	R-25		No U-Value for prescriptive compliance		
Wall	R-25				
Door	R-25				
Door - transparent reach-in	double-pane, heat-reflective treated & gas fill, or comply with freezer door req.				
Floor	No Requirement				



ENERGY CALCULATIONS

Vertical Fenestration Target Area Adjustment Calculations

If vertical fenestration area exceeds maximum allowed per Section C402.3.1, then Target Area Adjustment of all applicable envelope elements is required. This worksheet automatically calculates these adjustments and updates target areas in the ENV-UA and ENV-SHGC worksheets. Information shown in this worksheet is for reference only and is write-protected. Submit this Target Area Adjustment form with ENV-UA and ENV-SHGC forms.

VF = Vertical fenestration
 DR = Opaque doors
 AG = Above-grade
 NW = Net above grade wall (excludes fenestration and doors.)
 Gross Exterior Above-Grade Wall Area = VF + NW + DR

Proposed Areas

Vertical Fenestration ->	VF=	8026.0	
Opaque ->	NW=	25575.0	DR= 46.0

Gross Exterior AG Wall Area	Max Vert. Fen. % (C402.3.1)	Maximum Target Vert. Fen. Area
33647.0	30.0%	10094.1

Total Vertical Fenestration	Maximum Target	Delta Vertical Fenestration	Excess Vertical Fenestration
8026.0	10094.1	-2068.1	0
			↑ greater
			-2068.1

Total Vertical Fenestration	Excess Vertical Fenestration	Target Vertical Fenestration	Total Vertical Fenestration	Target VF Multiplier
8026.0		8026.0	8026.0	1.00

Net AG Wall Area	Excess Fenestration	Target Net Wall Area	Net Wall	Target Net Wall Mult.
25575.0		25575.0	25575.0	1.00

Multiplier applied to all Proposed Vertical Fenestration Areas to calculate Target Vertical Fenestration Area

Multiplier applied to all Proposed Opaque Above-Grade Wall Areas to calculate Target Above-Grade Wall Area

UA Adjustments

Vertical Fenestration	Proposed Area	Target VF Mult.	Target Area
Non-metal frame	8026.0	1.00	8026.0
Metal frame, fixed			
Metal frame, operable			
Metal frame, entrance door			
Above-grade Wall	Proposed Area	Target Net Wall Mult.	Target Area
Steel Frame			
Metal Building			
Wood / Other frame	25575.0	1.00	25575.0
Mass			
Sum of Proposed	33601.0	Sum of Target	33601.0

Target areas in shaded boxes are applied to target areas on ENV-UA

Sum of target above-grade wall and vertical fenestration areas are calculated to equal the sum of proposed

SHGC x A Adjustments

Non-North Vertical Fenestration	Proposed Area	Target VF Mult.	Target Area
PF < 0.2	5963.0	1.00	5963.0
0.2 ≤ PF < 0.5			
PF ≥ 0.5			
North Vertical Fenestration	Proposed Area	Target VF Mult.	Target Area
PF < 0.2	2063.0	1.00	2063.0
0.2 ≤ PF < 0.5			
PF ≥ 0.5			

SHGC target areas in shaded boxes are applied to target areas on ENV-SHGC

SHGC Calculation		Zones 4c/5b		ENV-SHGC	
2012 Washington State Energy Code Compliance Forms for Commercial Buildings including R2 & R3 over 3 stories and all R1 Revised Oct 2013					
Project Address GRE BALLARD 90			Date 08/26/2014		
Fenestration Area as % gross above-grade wall area 23.9% Max. Target: 30%			For Building Department Use		
Skylight Area as % gross roof area Max. Target: 5%					
Vertical Fenestration Alternates: None Selected on ENV-SUM					
Notes: 1 - Proposed vertical fenestration and skylight areas entered in ENV-SHGC must match proposed fenestration areas in ENV-UA. 2 - If Target Area Adjustment is required per ENV-UA, then target areas will be automatically adjusted in ENV-SHGC. Refer to Target Area Adjustments worksheet for this calculation. 3 - Provide NFRC rated SHGC or default from Table C303.1.3(3) for fenestration assembly SHGC. 4 - Fenestration that separates conditioned space from a non-conditioned or semi-conditioned space shall be included in this worksheet.					
Skylights		Proposed SHGC		Target SHGC	
Provide source of SHGC, page/plan # of assembly detail & ID		SHGC x Area (A) = SHGC x A		SHGC x Area (A) = SHGC x A	
ID:				0.35	
ID:				SHGC	0.35
ID:					
ID:					
Totals				Totals	

All Non-North Vertical Fenestration+				Proposed SHGC		Target SHGC ++				
Provide source of SHGC, page/plan # of assembly detail & ID				PF	SHGC* x Area (A) = SHGC x A	PF Category	SHGC	x Area (A) = SHGC x A		
ID: NON- NORTH WINDOWS	0	0.40	5963	2385	PF < 0.2	0.40	5963	2385.2		
ID:	0				0.2 ≤ PF < 0.5	0.48				
ID:	0				PF ≥ 0.5	0.64				
ID:	0				++ If projection factor (PF) credits are applied to the proposed design, Target SHGC will sum fenestration area by PF category.					
ID:	0									
ID:	0									
ID:	0									
ID:	0									
Totals				5963.0	2385.2	Totals		5963.0	2385.2	

+ If projection factor credit is applied, then vertical fenestration must be entered in the correct table according to orientation. If credit is not applied then all vertical fenestration can be entered in either table.
* Note: Fenestration that separates conditioned space from a non-conditioned or semi-conditioned space shall be listed here with a proposed SHGC equal to the target value.

North Vertical Fenestration+				Proposed SHGC		Target SHGC++				
Provide source of SHGC, page/plan # of assembly detail & ID				PF	SHGC* x Area (A) = SHGC x A	PF Category	SHGC	x Area (A) = SHGC x A		
ID: NORTH WINDOWS	0	0.40	2063	825	PF < 0.2	0.40	2063	825.2		
ID:	0				0.2 ≤ PF < 0.5	0.44				
ID:	0				PF ≥ 0.5	0.48				
ID:	0				++ If projection factor (PF) credits are applied to the proposed design, Target SHGC will sum fenestration area by PF category.					
ID:	0									
ID:	0									
North Total				2063.0	825.2	Totals		2063.0	825.2	

To comply, the Proposed total SHGC x A for all fenestration (vertical & skylights) shall not exceed the Target total SHGC x A.		Area	SHGC x A	Area	SHGC x A
Grand Total		8026.0	3210.4	Grand Total	

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SHGC CALCULATION
RECOMMENDATION MEETING - 1516 NW 51st St



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