

SDR
Packet

20 May.2014

414 12th Ave E

PROJECT #
3016773

414 12th Ave E

SDR PACKET 414 12TH AVE EAST



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INFORMATION

Address
414 12th Avenue East

Lot Size
6000 square feet

Zoning
Lowrise LR-3

DESCRIPTION

The 5,000 square foot, L3 zoned property, is located just off of the intersection of 12th Ave E. and E. Harrison St. in Capitol Hill. The project proposes to demolish the existing four-plex apartment structure and construct five new townhouses. The structures will be three stories tall. No parking is provided.

GOALS

Sustainability
Achieve a minimum of 4-Star Built Green while designing to Passivhaus standards. Maximize building performance and utilize reclaimed materials.

Community
A central courtyard activates the center of the site, directly accessible to all homes, the below-grade parking structure and via a shared walkway to 12th Avenue E.

DESIGN

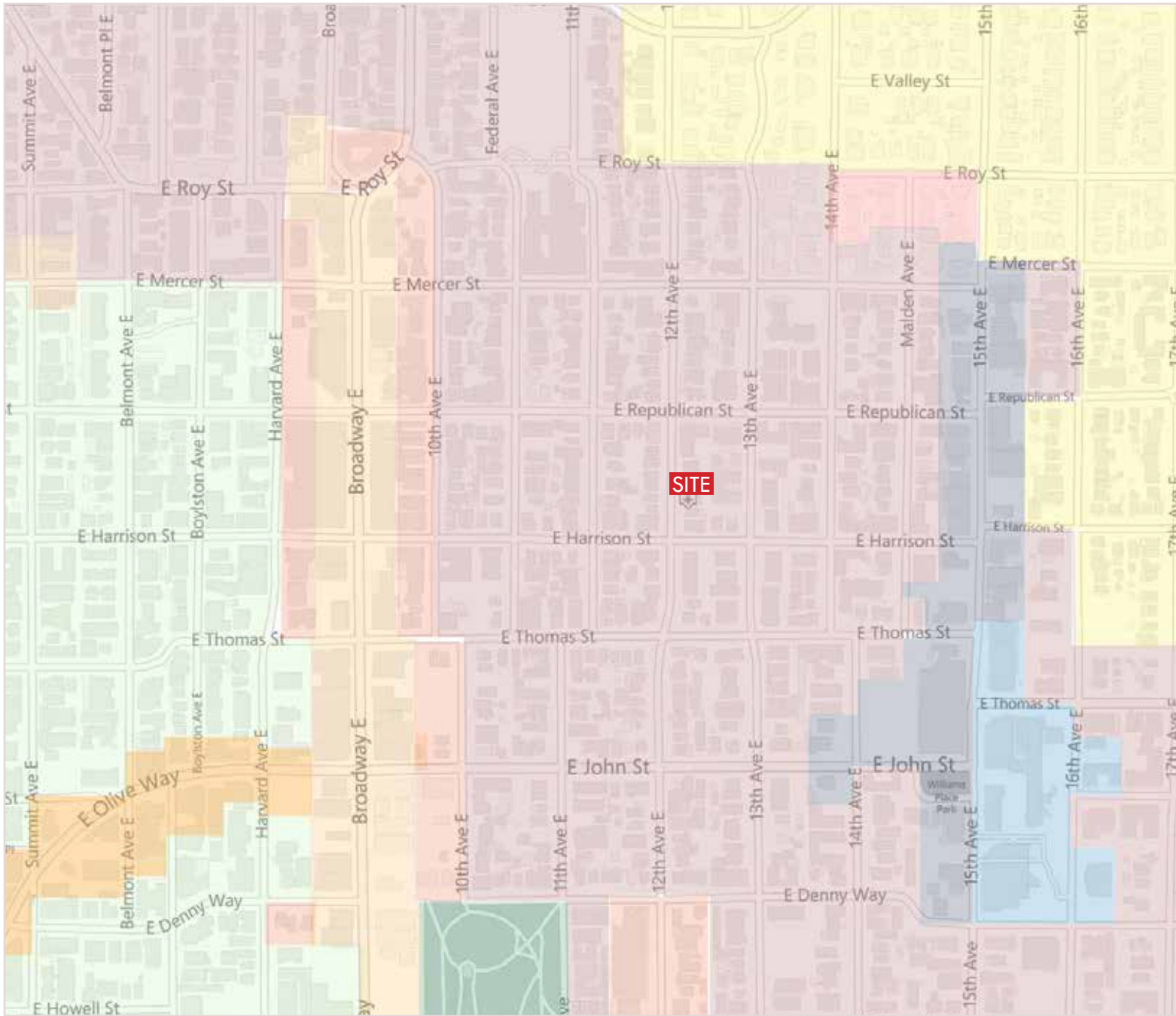
Design Approach
The 5,000 square-foot lot will be adjusted from a standard rectangle shape to an L-shape through a lot boundary adjustment. The resulting parcel shape creates its mirror on the adjacent parcel at 414 12th Avenue E. Responding to this parcel shape and the site's topography alternating duplexes and triplexes are proposed on two adjacent parcels, stepping down the grade. The street-facing homes are lifted above the street with all homes connecting at the central courtyard.

The massing responds to the existing rhythm of duplexes across the street and larger adjacent structures, and are scaled through modulation and varied materials. Private amenity space is located in decks and roof decks with the at grade amenity area focused in varied spaces in the courtyard.

A black steel trellis highlights the shared walkway from the street, with addresses and mailboxes attached to and located below it. A reddish trellis highlights the entry to the below-grade parking structure and provides weather protection. Varied paving, planters and larger landscaping activate the courtyard and setback to the street.



Project Site, existing 4-plex structure to be deconstructed.



- LR3
- LR2
- MR
- NC3P-65
- NC3-40
- NC3P-40
- NC2-40
- MIO-105, NC2-40
- SINGLE FAMILY

Zoning

The site is located in the center of Low Rise (LR3) zoning. East of 16th Ave East and North of E Harrison St., the zoning changes to Single Family and Neighborhood Commercial zoning west of 10th Ave E. The site is located in the Capitol Hill Urban Center Village.



Context Map

Arterial

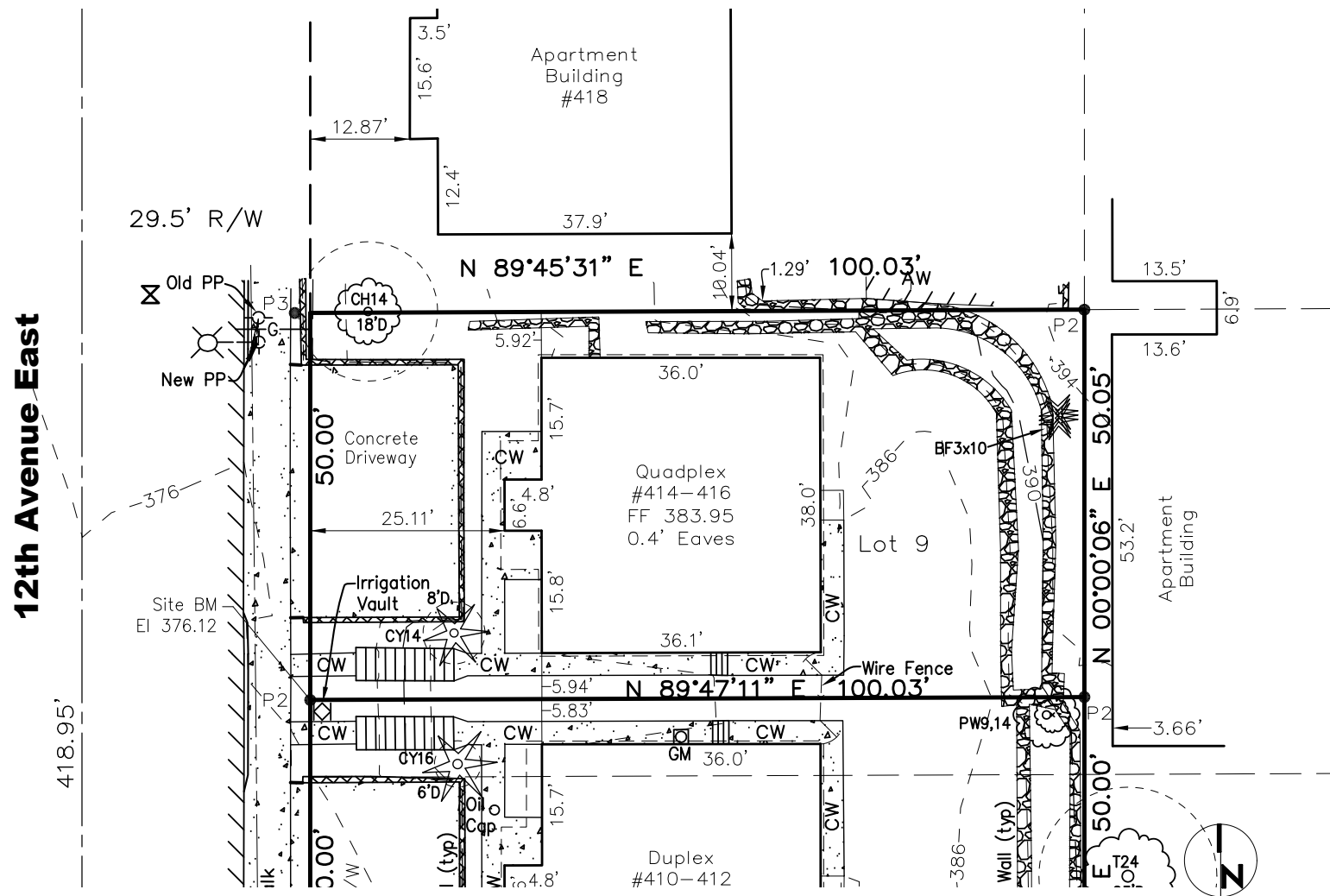
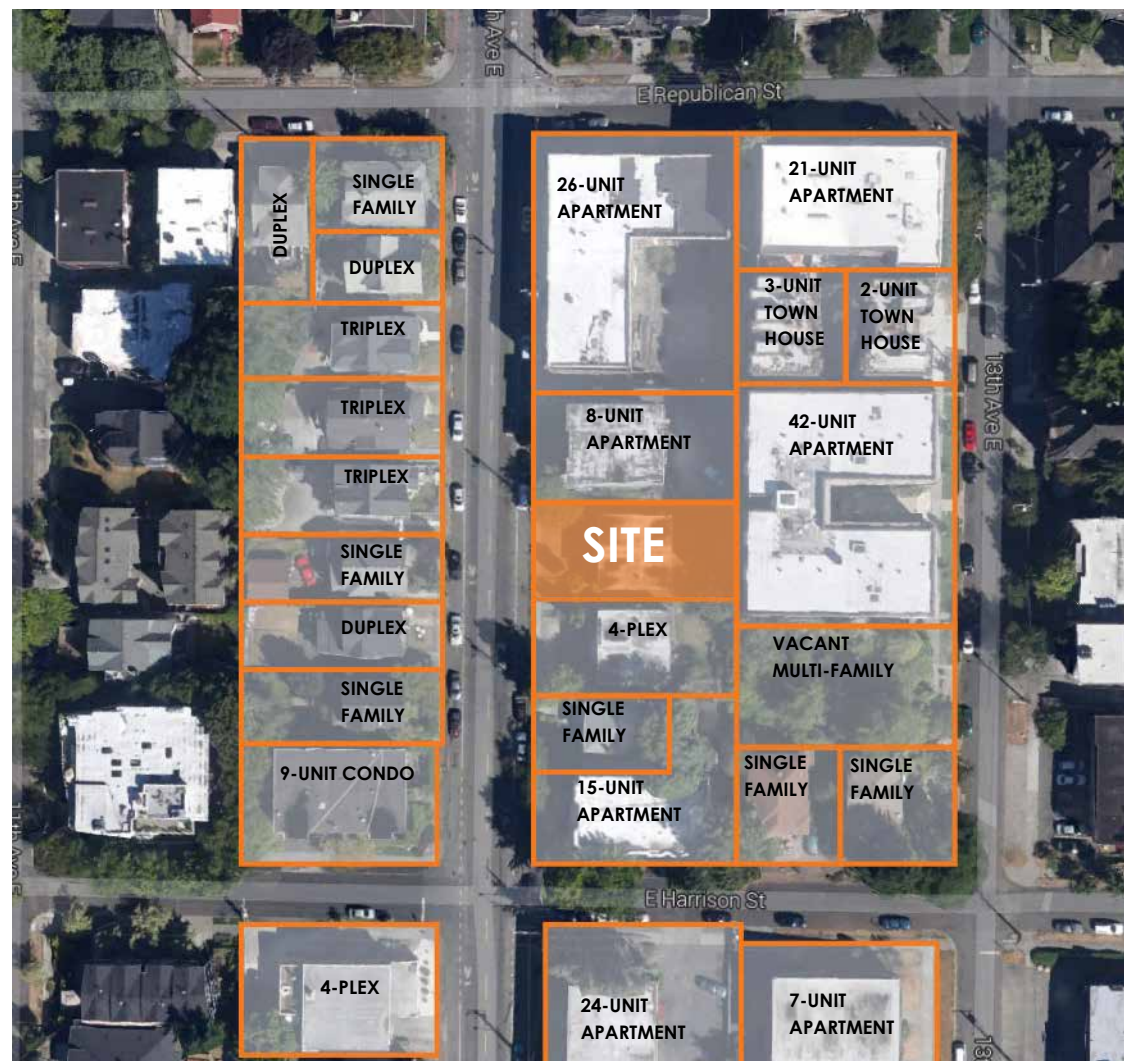
The site's dimensions are 50 feet north-south and 120 feet east-west. It fronts 13th Ave W with no alley access. The lot contains an existing single family home and an accessory structure. The uses immediately surrounding the site are multifamily structures including recent townhouse developments and established apartment and condominium buildings.

The site is located within the Upper Queen Anne Urban Village and has access to bus transit as well as city arterials. Bus stops at 13th Ave W and N Nickerson ST (a two block walk) provide access to routes 29, 31, 32 and 62. A three block walk to 15th Ave W and Nickerson provides direct access to downtown via the D Line.

The site has a grade change of 14 ft sloping down towards the western edge of the property to the alley.


Our solution seeks to address Design Guidelines A-1, Respond to Site Characteristics, A-2

Streetscape Compatibility, A-3 Entrances Visible from the Street, A-7 Residential Open Space, A-8 Parking and Vehicle Access, C-1 Architectural Context, C-2 Architectural Concept and Consistency, C-4 Exterior Finish Materials, D-6 Screening of Dumpsters, Utilities and Service Areas, D-7 Pedestrian Safety, E-2 Landscape to Enhance the Building and/or Site and E-3 Landscape Design to Address Special Site Conditions.

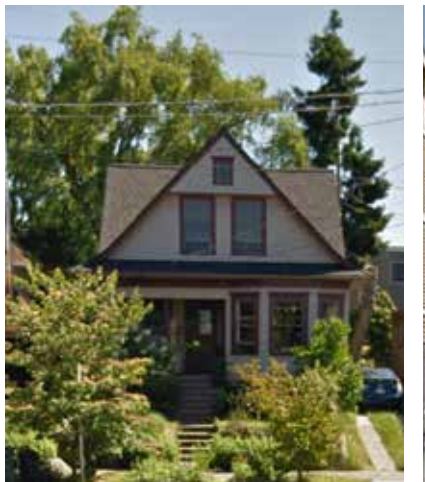





Small - Single family,




Small - duplex, triplex




Small - duplex, triplex



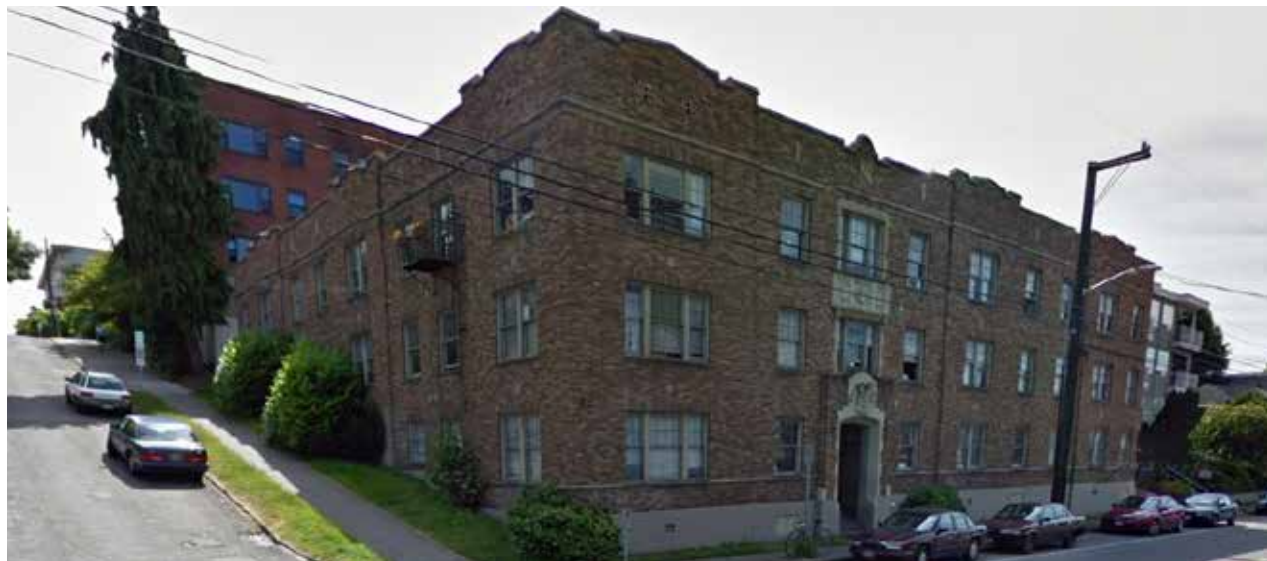
Medium - 5 to 10 units

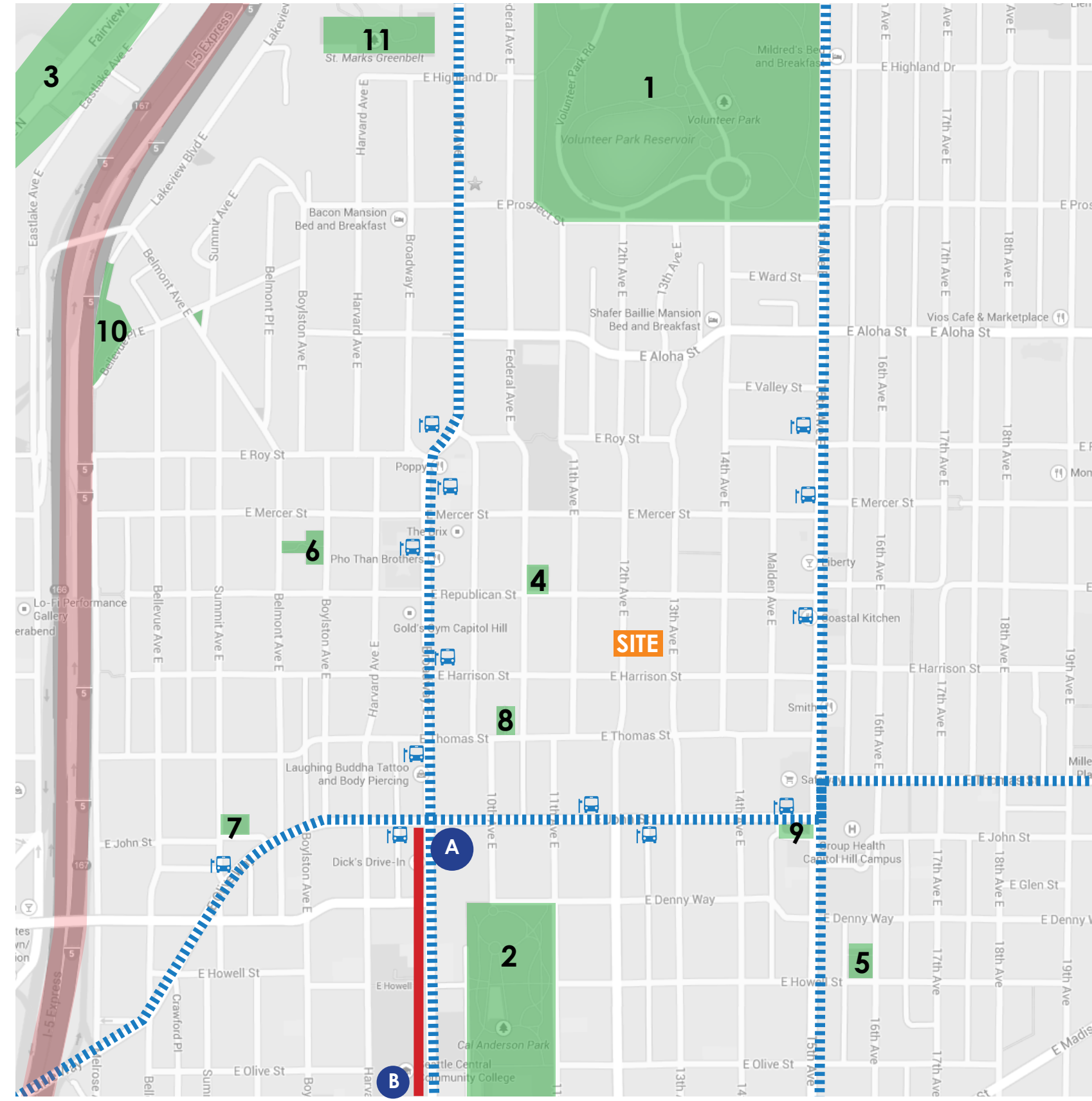


Medium - 5 to 10 units



Large - 15+ units





- 5 Freeway

Street Car

transit line

bus stops

green space
1. Volunteer Park

2. Cal Anderson Park

3. Lake Union

4. Broadway Hill Park

5. Seven Hills Park

6. Tashkent Park

7. Summit Slope Park

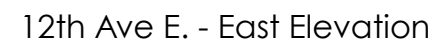
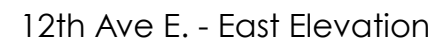
8. Thomas Greens Garden

9. Williams Place

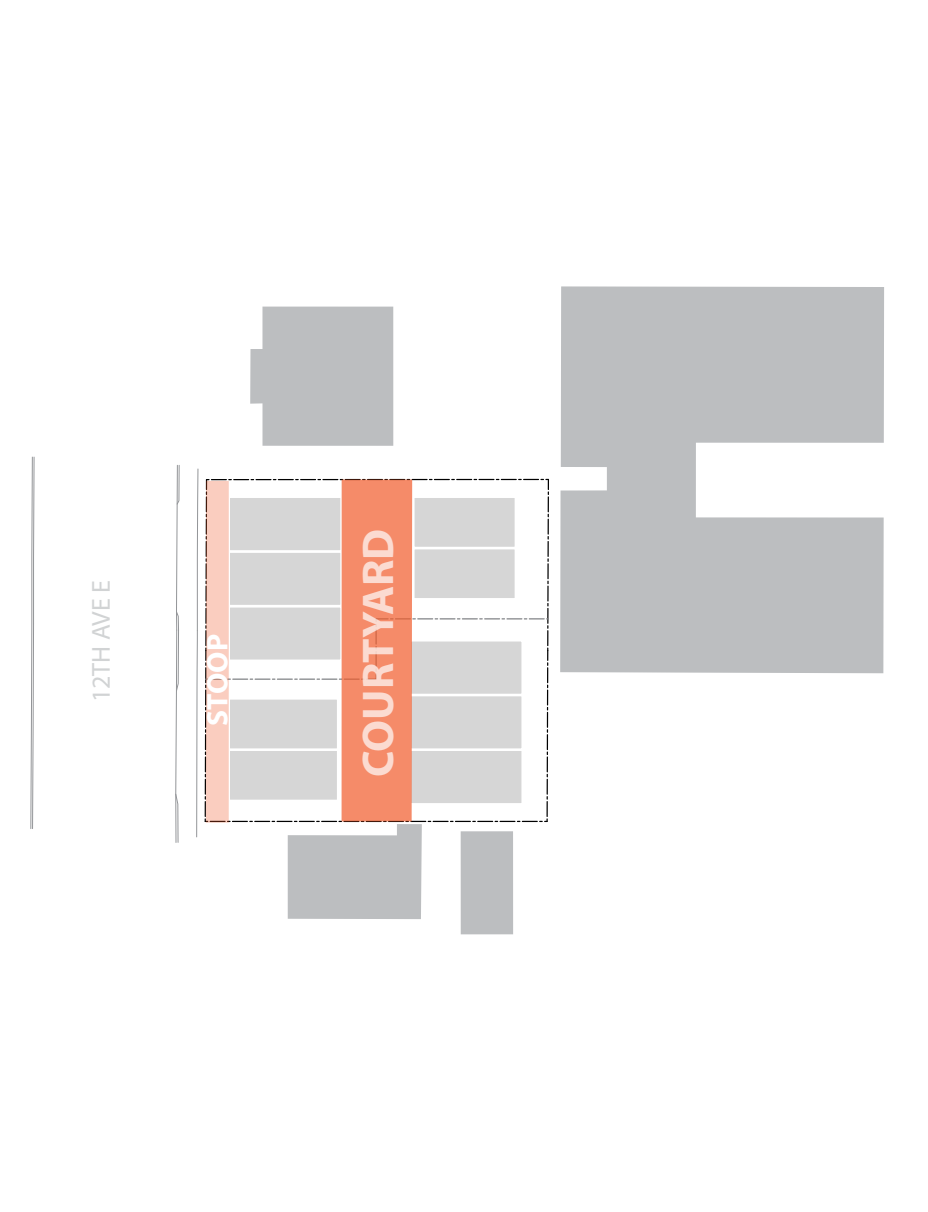
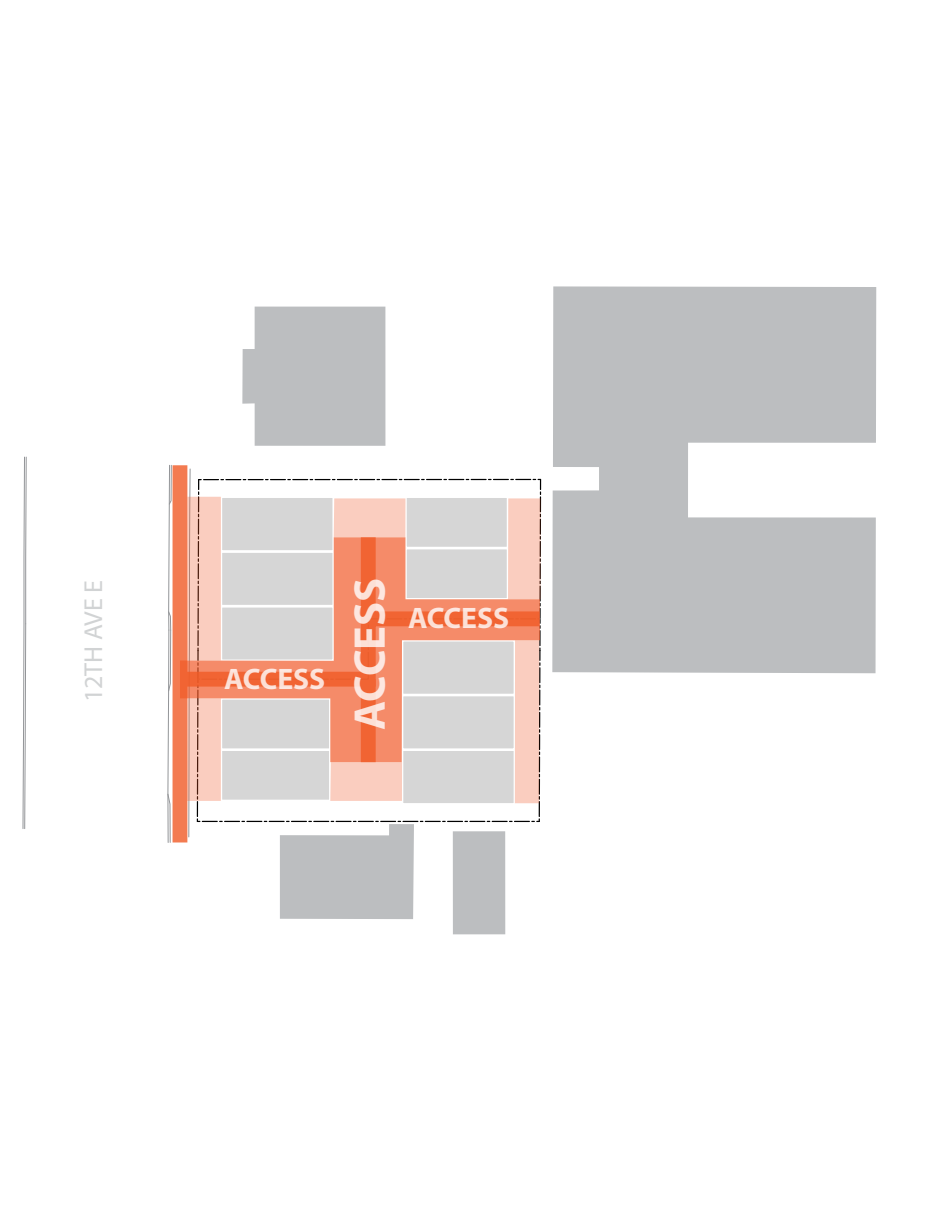
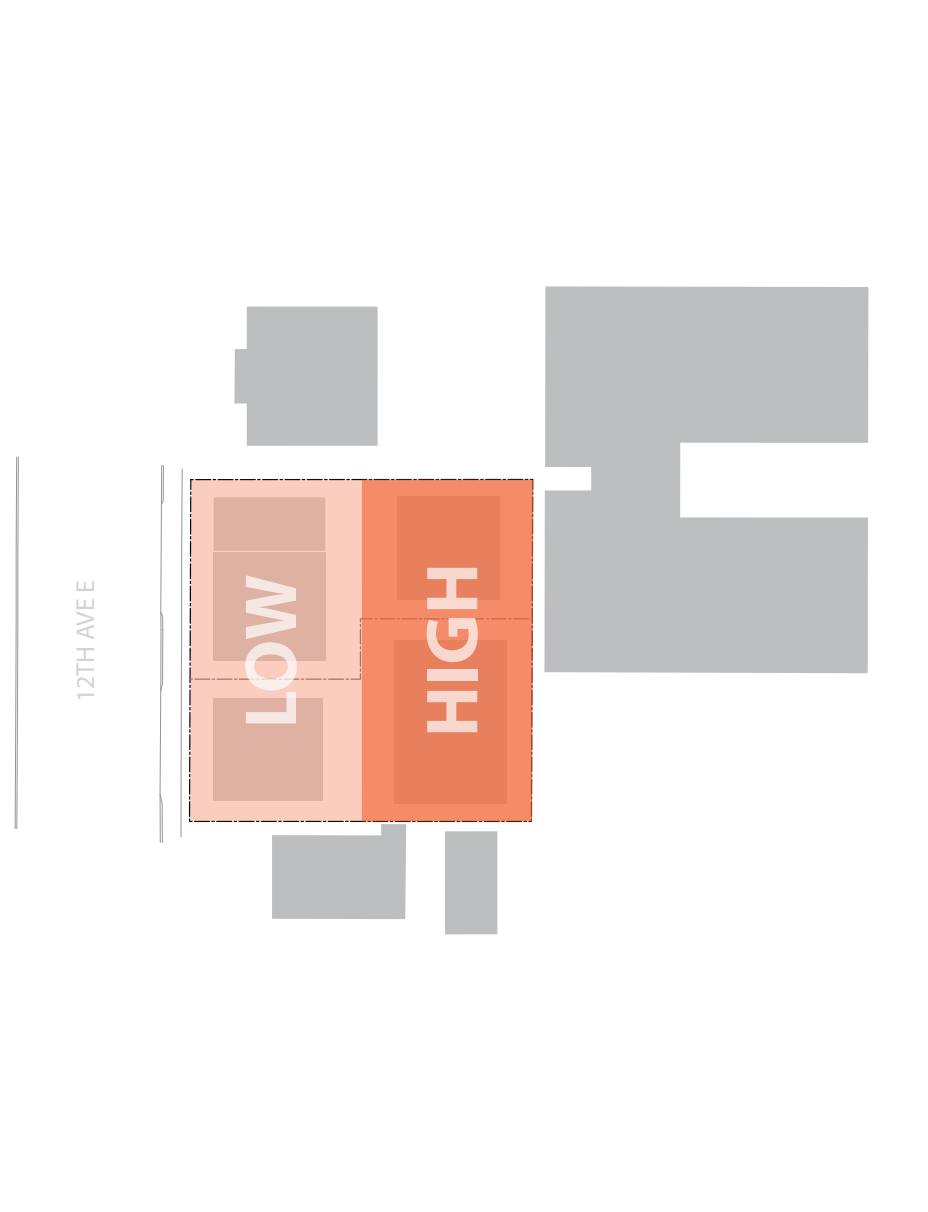
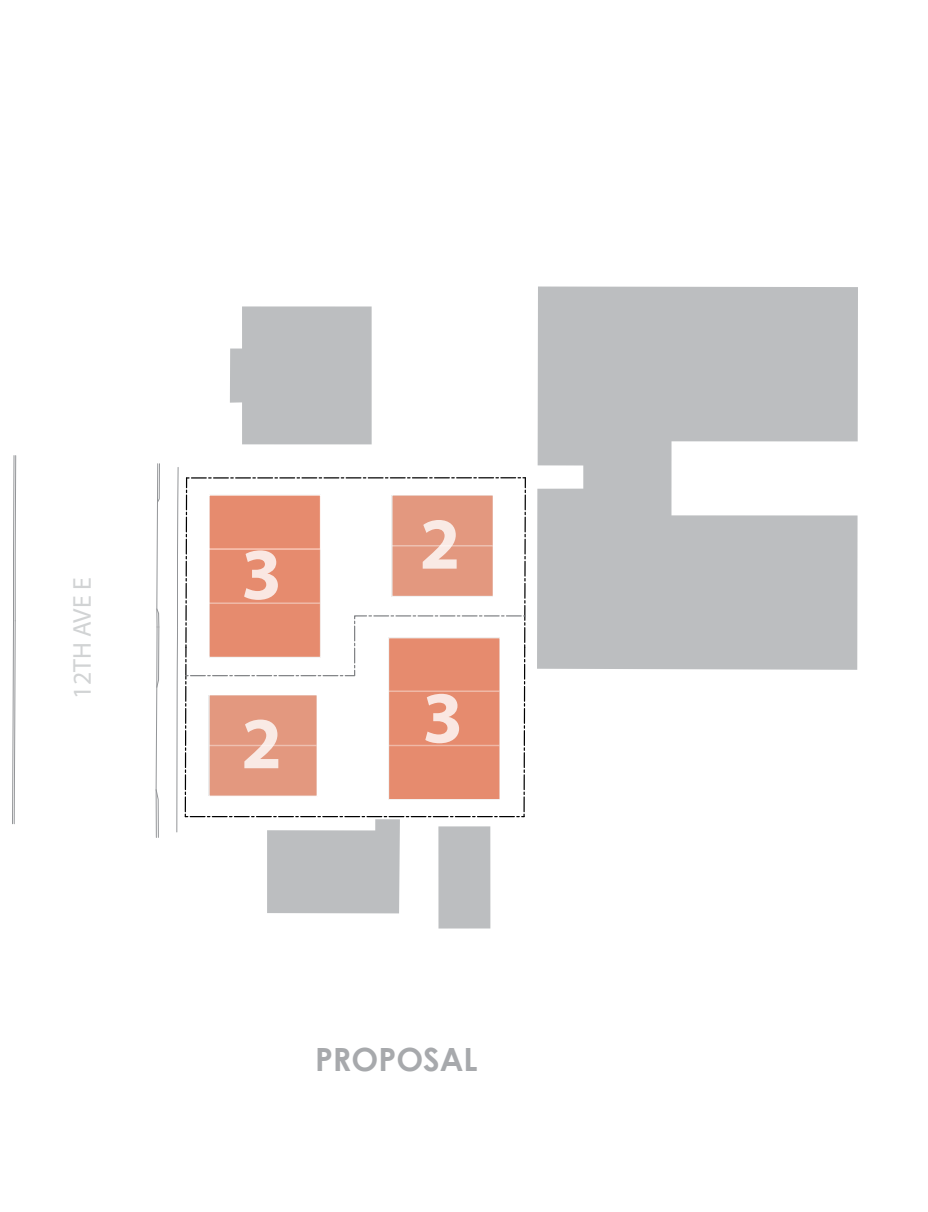
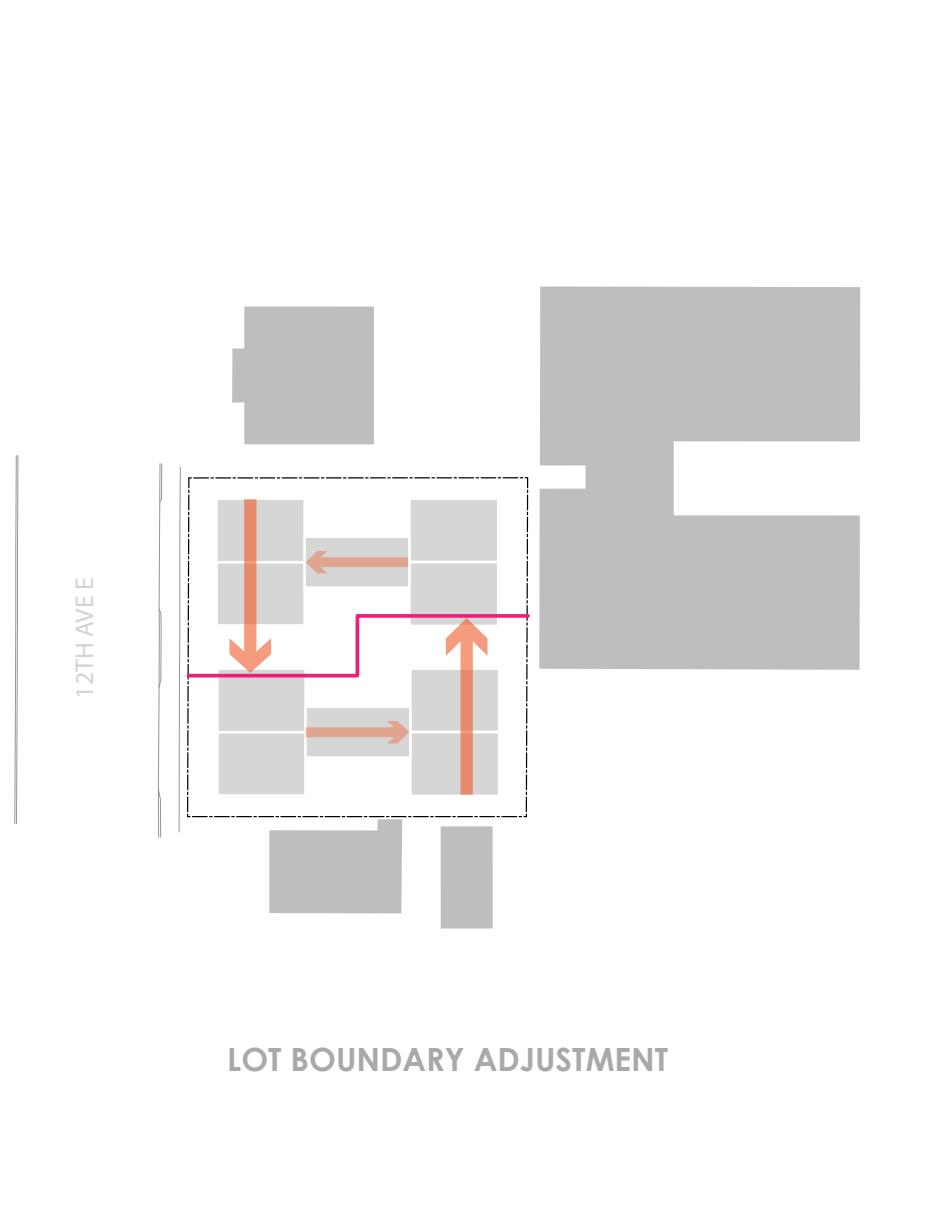
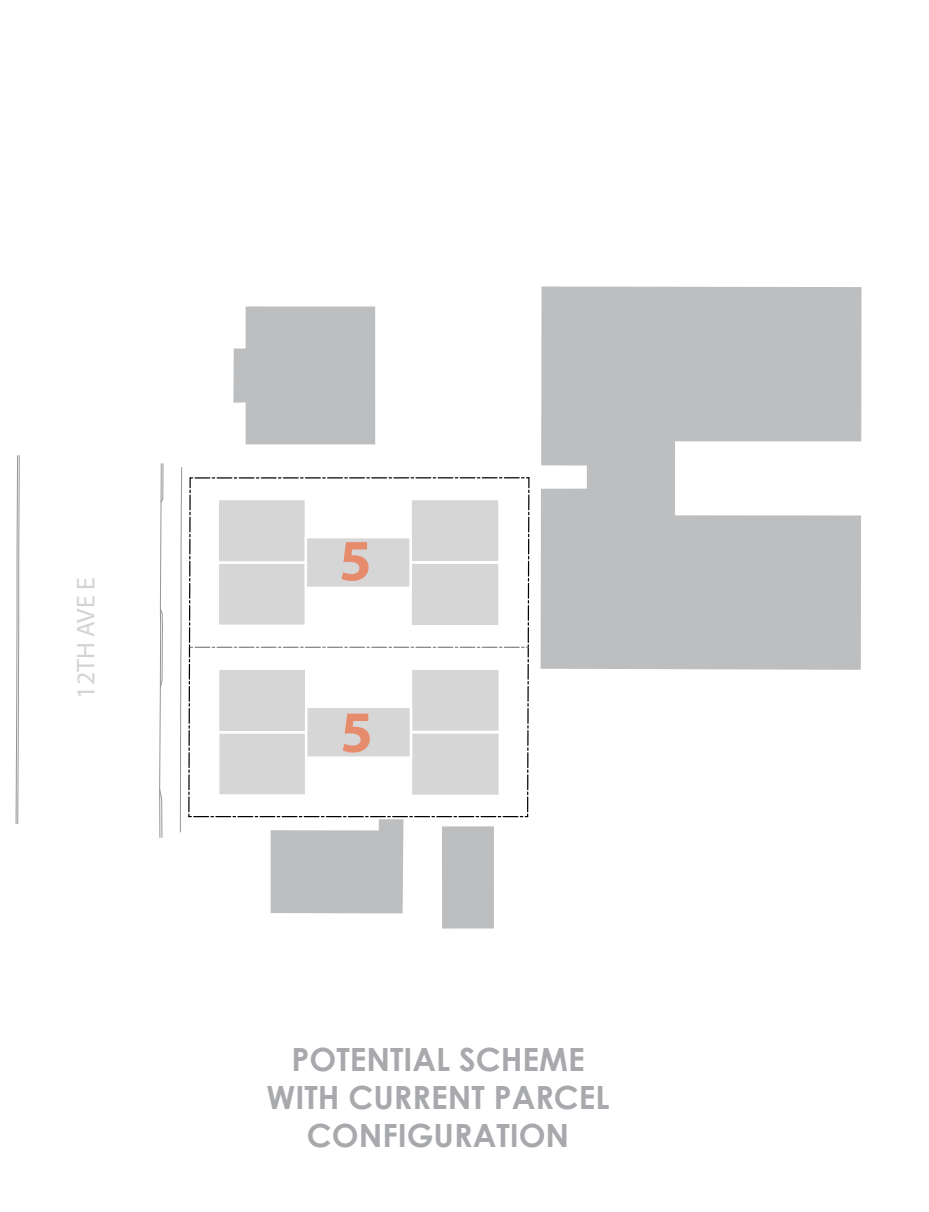
10. Bellevue Place

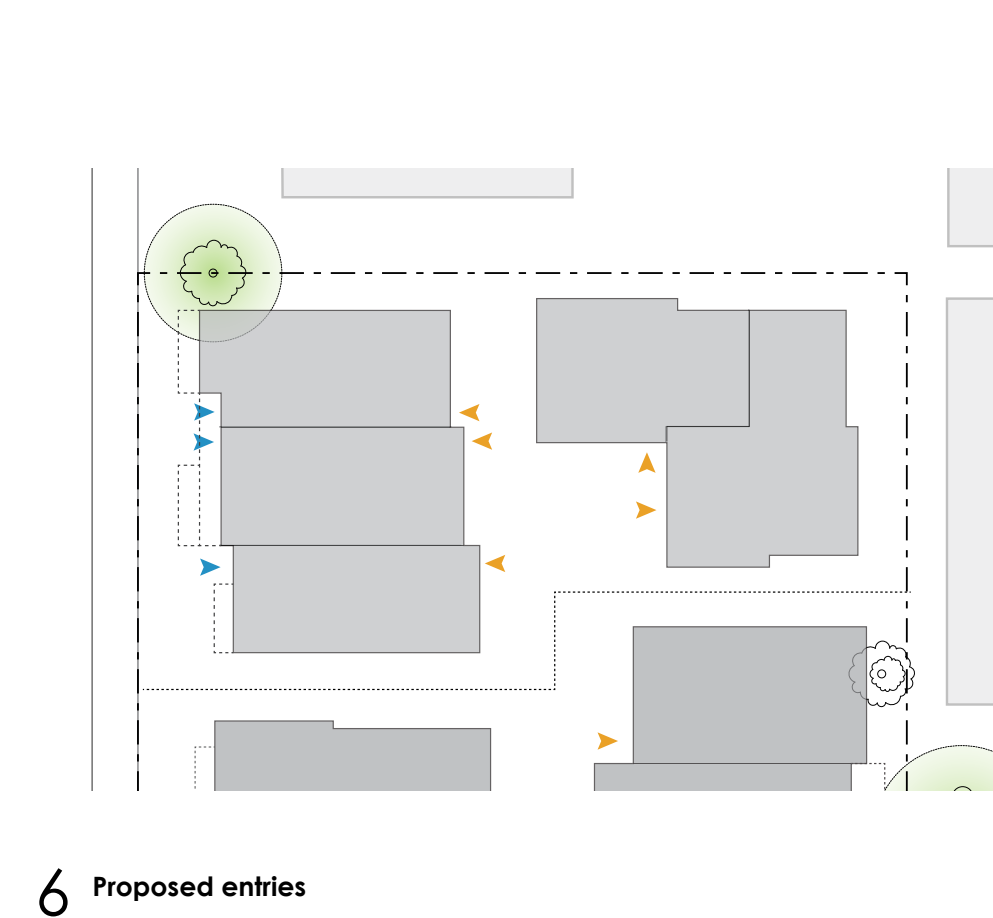
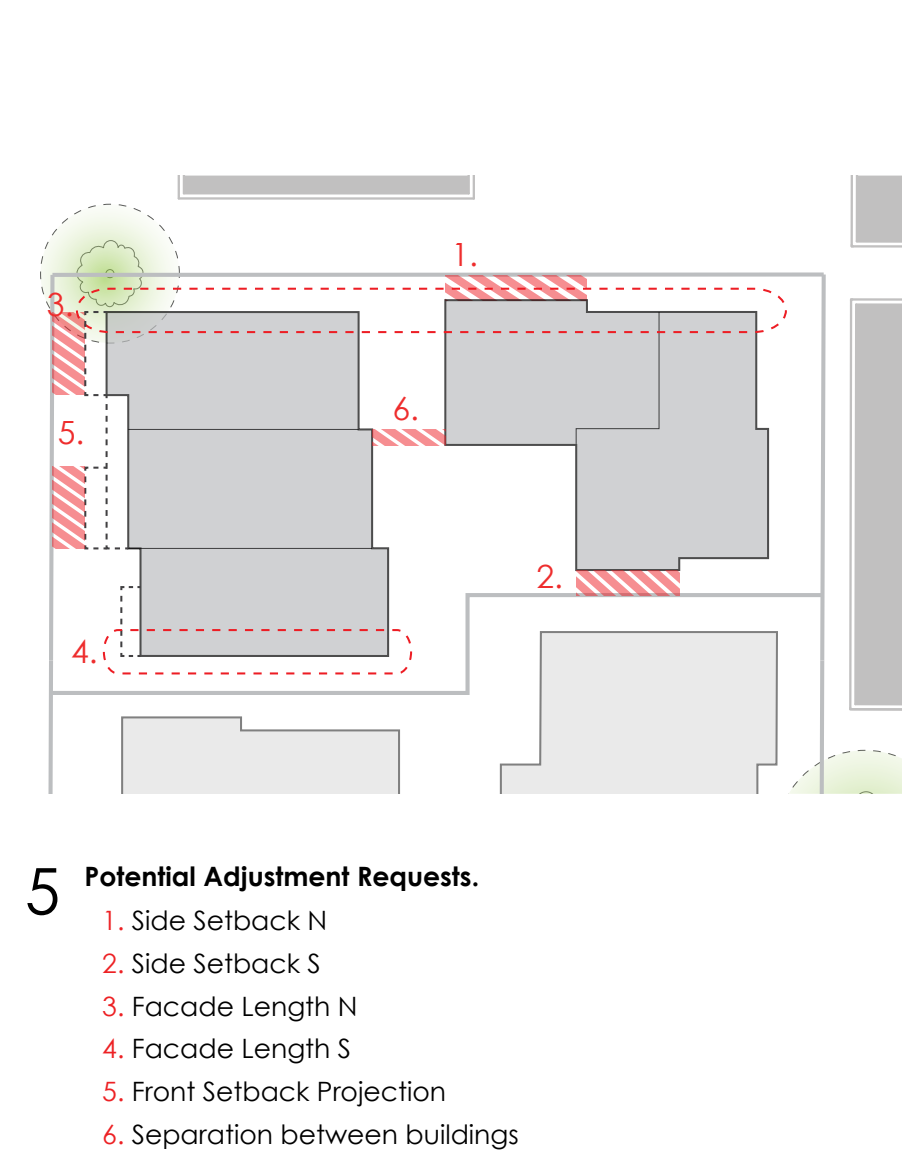
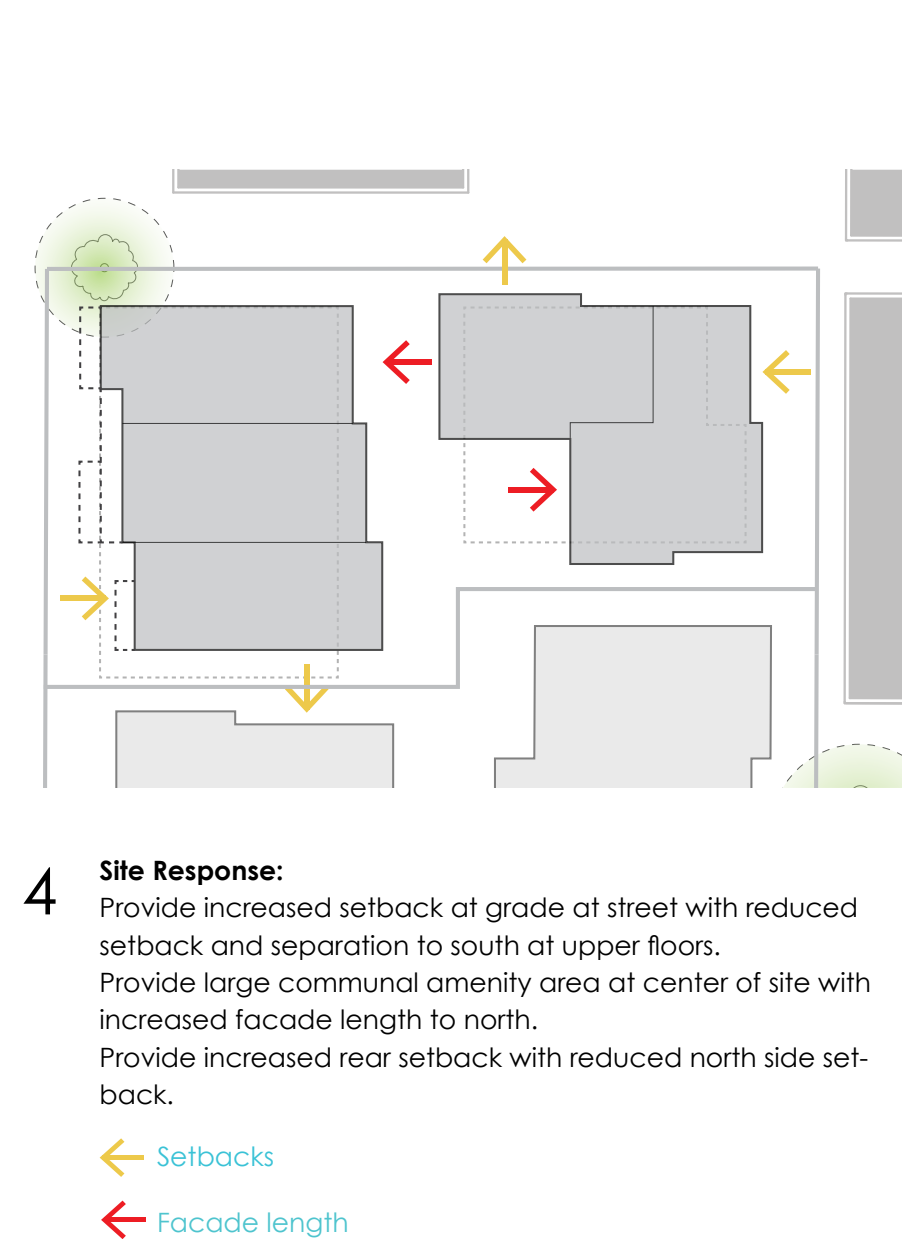
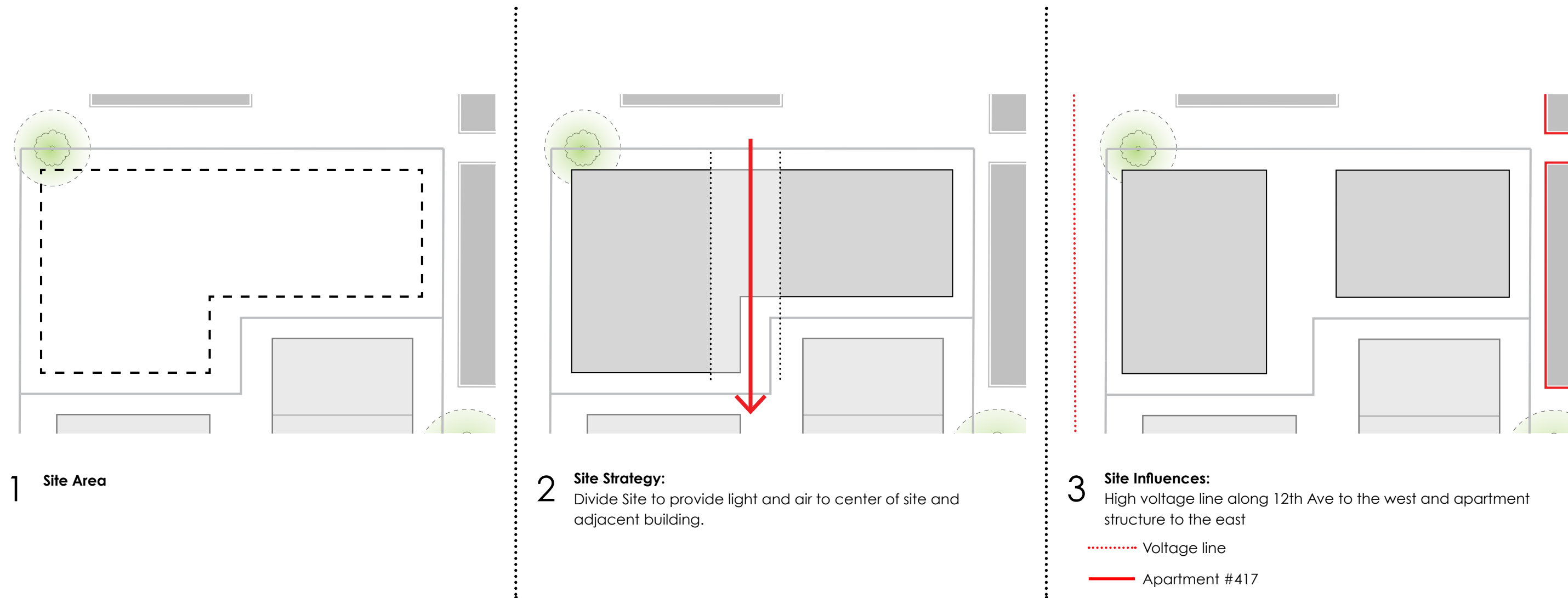
11. St. Marks Green Belt
- A Future - Capitol Hill Light Rail Station

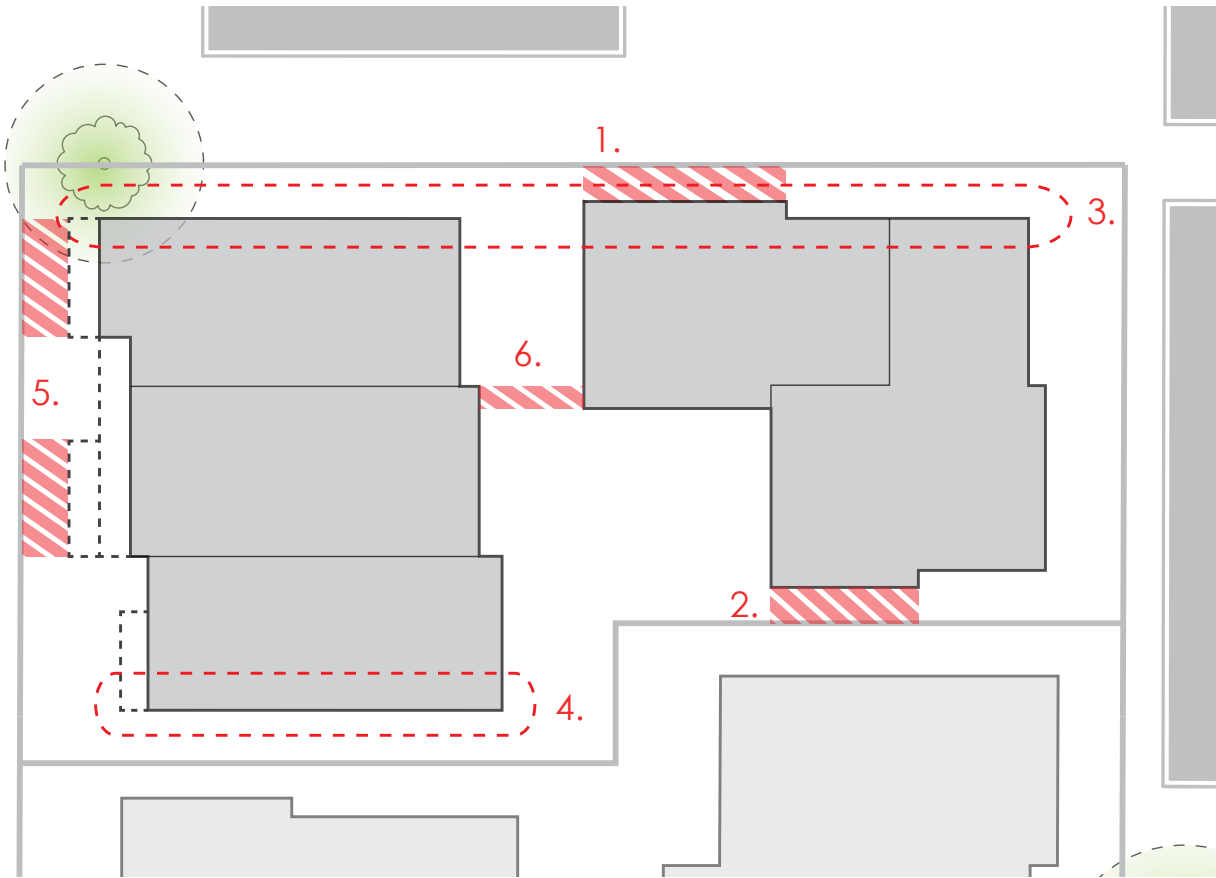
B Future - First Hill Street Car



ENTRY
STAIRS



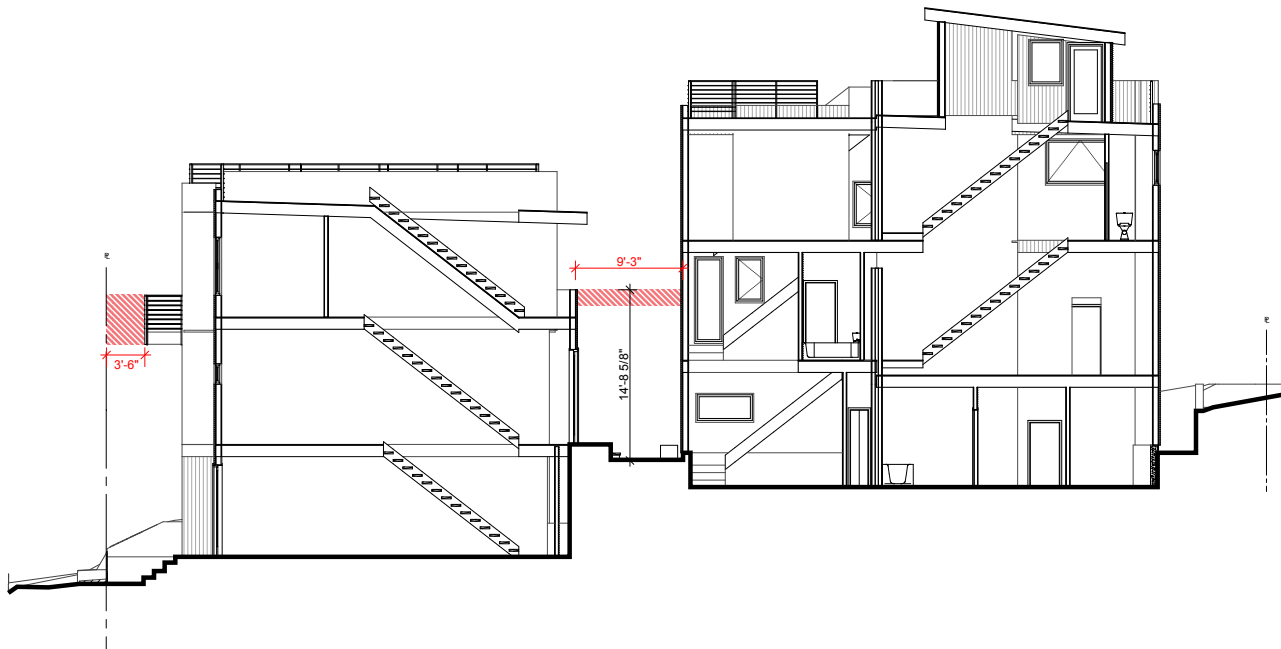
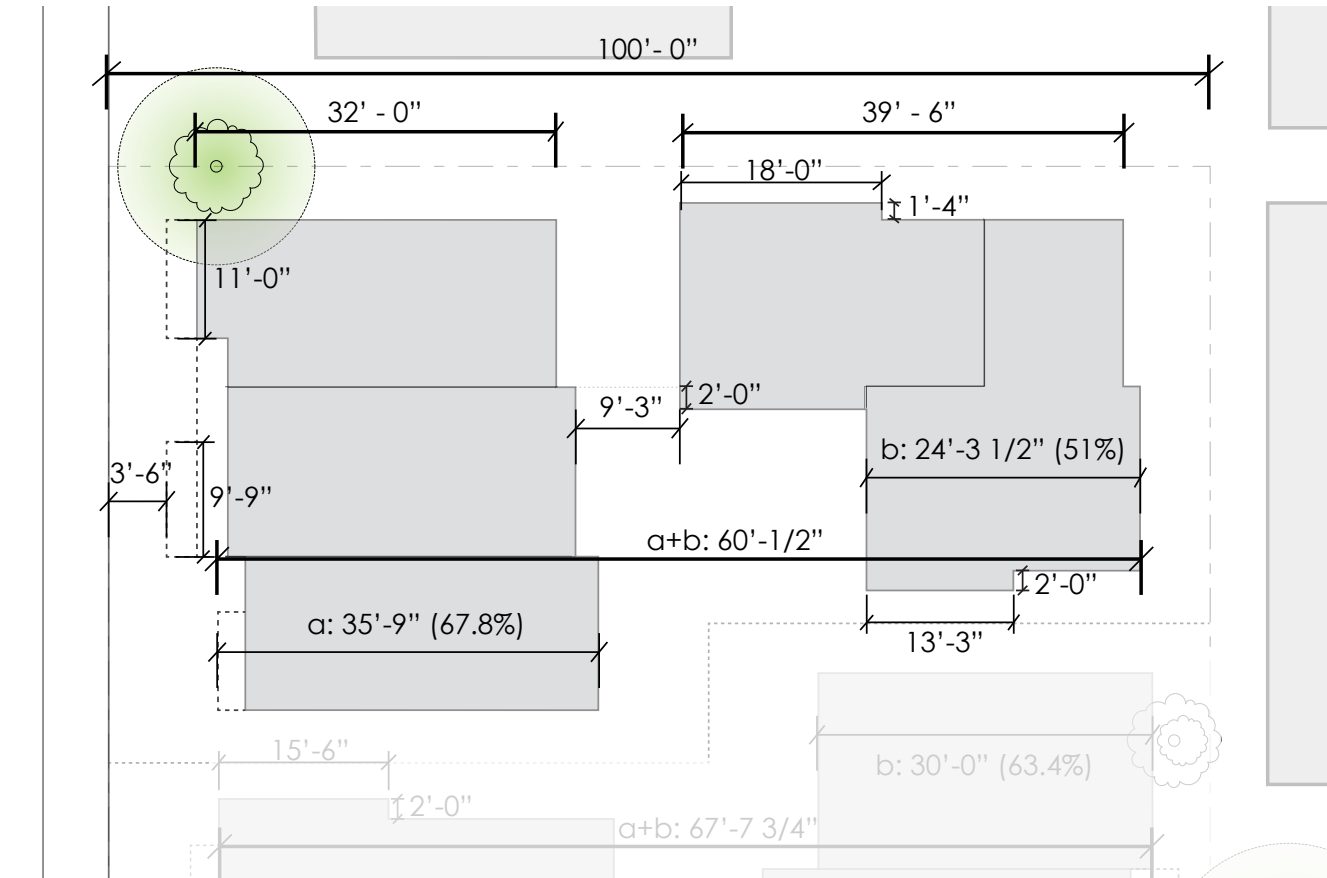




- 1. North Setback:** Reduce setback from 5' to 3'-0" for 18'-0" of North property line.
- 2. South Setback:** Reduce setback from 5' to 3'-0" for 13'-3" of North property line.
- 3. Facade Length:** The 25'-0" x 18'-0" courtyard at the center of the site increases the facade length to 71'-6" or 71.5% on the north side of the parcel.
- 4. Facade Length:** The lot boundary adjustment creates two facades measured separately on the south side. The east facade length is 35'-9" or 67.8%.
- 5. Front Setback Projection:** Allow projection of 3'-2" to within 3'-6" of the front property line for 9'-9" and 11'-0" at the second and third floor respectively.
- 6. Separation:** Reduce separation from 10' to 9'-3" for 2'-0".

Facade Length Calculation:

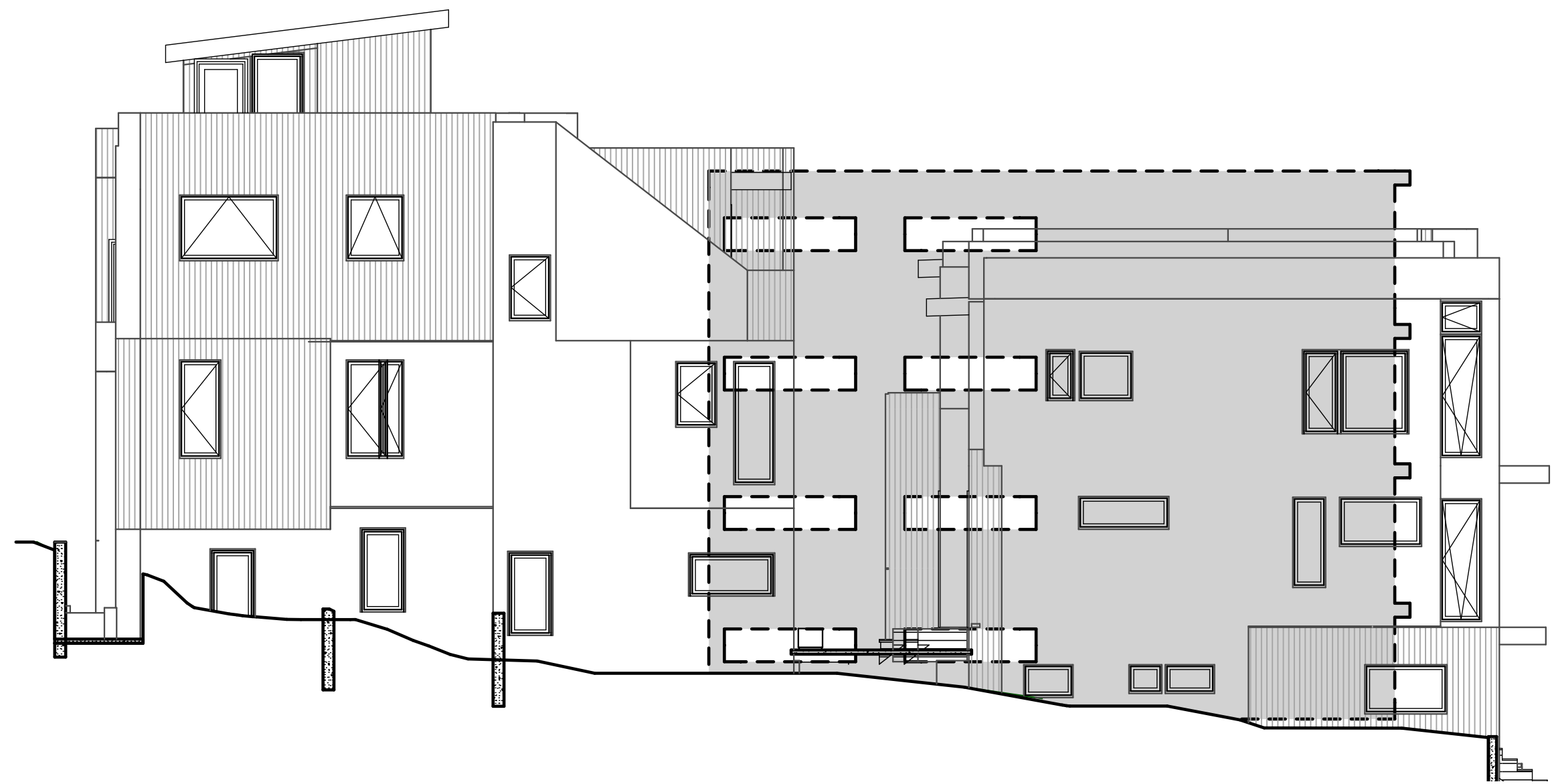
North Lot Line	=	100'-0"
Allowable Facade Length	=	100' x .65 = 65'-0"
Proposed Northwest Facade Length	=	32'-0"
Proposed Northeast Facade Length	=	39'-6"
Total Proposed North Facade Length	=	71'-6" = 71.5%



4 | 16 SECTION AT UNIT 2 AND 5



ITEM	CODE SECTION AND REQUIREMENT NAME	REQUIRED	PROVIDED	AMOUNT OF ADJUSTMENT	JUSTIFICATION	SUPPORTED DESIGN GUIDANCE
1	SIDE SETBACK N SMC 23.45.518.A	5 FEET MINIMUM; 7 FEET AVERAGE	3'-8" MINIMUM FOR A LENGTH OF 18 FEET, 5'-1" AVERAGE	SETBACK: 1'-4" REDUCTION ADJUSTMENTS ARE WITHIN LIMITS ALLOWED PER SMC 23.41.018.D.4.a	THE SETBACK IS REDUCED TO PROVIDE A LARGE INTERNAL COURTYARD. INSTEAD OF CREATING A RECTANGULAR SHAPED STRUCTURE, THE STRUCTURE IS AN 'L' SHAPE IN PLAN WITH A SMALL PROJECTION TO THE NORTH. THIS CREATES A SOUTH-FACING COURTYARD AT THE CENTER OF THE SITE. THE COURTYARD IS DESIGNED TO ENCOURAGE INTERACTION AMONG RESIDENTS AND IS OPEN TO THE ADJACENT DEVELOPMENT PROPOSED TO THE SOUTH ALIGNED WITH ITS COURTYARD.. THE PROPOSED SETBACK REDUCTION IS ADJACENT TO AN EXISTING APARTMENT STRUCTURE WITH A 10' SIDE SETBACK. THE OVERLAP OF FACADES BETWEEN THE EXISTING STRUCTURE AND THE PROPOSED ONE IS ONLY 5' AND MAINTAINS A COMBINED SEPARATION OF 13'. IN ADDITION A PORTION OF THE WALL AT THE 3RD FLOOR OF THE PROPOSED STRUCTURE STEPS BACK TO 7'-8". THE ONLY WINDOWS ON THE ADJACENT NEIGHBOR STRUCTURE ARE SLENDER AND HIGH ABOVE THE FLOOR.	PL3.B.4 INTERACTION, CS2.D.4.1,2,4 HEIGHT BULK & SCALE,CS2.D.5 RESPECT FOR ADJACENT SITES, DC2.A. MASSING, DC2.B.1 FACADE COMPOSITION
2	SIDE SETBACK S SMC 23.45.518.A	5 FEET MINIMUM; 7 FEET AVERAGE	3'-0" MINIMUM FOR A LENGTH OF 15 FEET AT THE FIRST TWO FLOORS. 5 FEET MINIMUM AT THE THIRD FLOOR. 9'-5" AVERAGE AT THE FIRST TWO FLOORS	SETBACK: 2'-0" REDUCTION ADJUSTMENTS ARE WITHIN LIMITS ALLOWED PER SMC 23.41.018.D.4.a	THE SETBACK IS REDUCED AT THE FIRST TWO FLOORS ONLY TO PROVIDE A LARGE INTERNAL COURTYARD. REFER TO ITEM 1 ABOVE. THE MODULATION CREATES OPPORTUNITIES FOR MATERIAL CHANGE AND VISUAL INTEREST. THE COURTYARD REQUIRED THE SHIFTING OF MASS INTO THE SETBACKS IN ORDER TO OPEN UP THE SPACE AT THE CENTER. THE AVERAGE SETBACK IS MORE THAN WHAT IS REQUIRED, BALANCING THE MINIMUM SETBACK WITH THE SOUTH SETBACK TO THE COURTYARD A MINIMUM OF 17 FEET.	PL3.B.4 INTERACTION, CS2.D.4.1,2,4 HEIGHT BULK & SCALE,CS2.D.5 RESPECT FOR ADJACENT SITES, DC2.A. MASSING, DC2.B.1 FACADE COMPOSITION
3	FAÇADE LENGTH N SMC 23.45.527.B	65% OF LOT DEPTH	71.5% ACTUAL DEPTH - 71'-6" ALONG PROPERTY DEPTH OF 100'-0"	10% INCREASE ADJUSTMENT IS WITHIN LIMITS ALLOWED PER SMC 23.41.018.D.4.d	THE FAÇADE LENGTH IS INCREASED TO PROVIDE A LARGE INTERNAL COURTYARD. INSTEAD OF CREATING A RECTANGULAR SHAPED STRUCTURE, THE STRUCTURE IS AN 'L' SHAPE IN PLAN THAT IS EXTENDED TO THE WEST ALONG THE NORTH PROPERTY LINE. THIS RESULTS IN LESS STRUCTURE TO THE SOUTH, CREATING THE COURTYARD. REFER TO ITEM 1 ABOVE. THE FACADE IS MODULATED ALONG ITS LENGTH WITH VARIATION IN MATERIAL AND FENESTRATION. PRIVACY FOR THE NEIGHBOR HAS BEEN CONSIDERED, AND INCLUDES A COMBINED 15-FOOT SETBACK FOR THE MAJORITY OF ITS WALL (SEE ITEM 1 ABOVE FOR 13-FOOT PORTION) TO THE ADJACENT APARTMENT STRUCTURE TO THE NORTH. VERY FEW WINDOWS EXIST ALONG THEIR FAÇADE. IN ADDITION THE WEST TRIPLEX IS PROPOSED 3'-2" BELOW THE HEIGHT LIMIT.	PL3.B.4 INTERACTION, CS2.D.4.1,2,4 HEIGHT BULK & SCALE,CS2.D.5 RESPECT FOR ADJACENT SITES, DC2.A. MASSING, DC2.B.1 FACADE COMPOSITION
4	FAÇADE LENGTH S SMC 23.45.527.B	65% OF LOT DEPTH	67.8% ACTUAL DEPTH - 35'-9" AT 2ND AND 3RD FLOORS ALONG PROPERTY DEPTH OF 52'-9" RESULTING FROM LOT BOUNDARY ADJUSTMENT	4.3% INCREASE ADJUSTMENT IS WITHIN LIMITS ALLOWED PER SMC 23.41.018.D.4.d	A LOT BOUNDARY ADJUSTMENT IS PROPOSED TO CREATE AN 'L'-SHAPED PARCEL TO ALLOW A DUPLEX AND TRIPLEX WITH VARIED SIZED DWELLINGS TO BE CONSTRUCTED WITH A COURTYARD IN BETWEEN THEM INSTEAD OF A SINGLE STRUCTURE WITH 5 SIMILAR ATTACHED DWELLINGS WITH NO COURTYARD. SINCE FAÇADE LENGTH IS MEASURED ALONG EACH INDIVIDUAL FAÇADE LENGTH ARE MEASURED SEPARATELY. IF FAÇADE LENGTH WERE MEASURED AS AN AGGREGATE OF THE TWO SEGMENTS OF THE LOT BOUNDARY ADJUSTMENT ON THE SOUTH SIDE OF THE PARCEL, THE FAÇADE LENGTH WOULD BE 60 FEET, OR 60%, SIGNIFICANTLY LESS THAN ALLOWED BY CODE. IN ADDITION THE PROPOSED STRUCTURE IS 3'-2" LOWER THAN ITS ALLOWABLE HEIGHT PRODUCING A WALL THAT IS SMALLER THAN ALLOWED WHEN COMBINING FAÇADE LENGTH AND HEIGHT.	PL3.B.4 INTERACTION, CS2.D.4.1,2,4 HEIGHT BULK & SCALE,CS2.D.5 RESPECT FOR ADJACENT SITES, DC2.A. MASSING, DC2.B.1 FACADE COMPOSITION
5	FRONT SETBACK PROJECTION SMC 23.45.518.I	4-FOOT PROJECTION NO CLOSER THAN 5 FEET TO LOT LINE	3'-2" PROJECTION TO WITHIN 3'-6" OF THE LOT LINE FOR THE LENGTHS OF 9'-9" AND 11'-0" AT 2ND AND 3RD FLOOR RESPECTIVELY	PROJECTION: 1'-6" REDUCTION ADJUSTMENTS ARE WITHIN LIMITS ALLOWED PER SMC 23.41.018.D.4.a	BALCONIES AT THE SECOND AND THIRD FLOOR. PROVIDE DETAIL AND MODULATION ON THE STREET FAÇADE. A CONNECTION TO THE STREET. THE DECK PROJECTIONS CREATE OPPORTUNITIES FOR MATERIAL CHANGE AND VISUAL INTEREST AND OPPORTUNITIES FOR EYES ON THE STREET. THE BALCONIES CREATE A BUFFER SPACE FOR THE PRIVATE UNITS BETWEEN INTERIOR AND EXTERIOR SPACE AS WELL AS ADD AN ADDITIONAL ELEVATED INTERACTION TO THE STREET.	PL2.B.1 EYES ON THE STREET, DC2.B.1 FACADE COMPOSITION, PL3.B.4 INTERACTION, DC2.C SECONDARY ARCHITECTURAL FEATURES, DC2.D SCALE & TEXTURE
6	SEPARATION SMC 23.45.518.F	10 FEET MINIMUM	9'-3" MINIMUM FOR A LENGTH OF 2'-0"	SEPARATION: 0'-9" REDUCTION ADJUSTMENTS ARE WITHIN LIMITS ALLOWED PER SMC 23.41.018.D.4.a	THE SEPARATION IS REDUCED BETWEEN THE TWO MASSES AT FOR THE HEIGHT OF ONE STORY. MASSING EXPRESSES THE INDIVIDUAL DWELLINGS IN THE COURTYARD AND AT THE STREET, CREATING OPPORTUNITIES FOR INTERACTION AT MULTIPLE LEVELS IN THE COURTYARD. THE SEPARATION OF 9'-3" FOR A LENGTH OF 2'-0" IS COMPENSATED BY A GENEROUS EXPANSION OF OPEN OUTDOOR COURTYARD SPACE FOR AN AREA OF 15 FEET BY 26 FEET.	CS2.D HEIGHT, BULK, + SCALE, PL3.B.4 INTERACTION, DC2.A MASSING, DC2.D SCALE & TEXTURE



CS1.A Energy Use

Examine how energy choices may influence building form, siting, and orientation, and factor in the findings when making siting and design decisions

RESPONSE

The project is designed to German Passivhaus standards through the use of an efficient building envelope that maximizes building performance. The homes performance benefits from southern exposure and sharing a common wall.

CS2.D. Height, Bulk, + Scale

2. **Existing Site Features:** Use changes in topography, site shape, and vegetation or structures to help make a successful fit with adjacent properties;

RESPONSE

The project establishes a new shape for the site through a lot boundary adjustment, allowing the structures to offset triplex and duplex from front to back. They step down the slope, minimizing the impact of the proposal along the front setback transition the remainder of the slope down to the 12th Avenue E.

CS1.B Sunlight + Natural Ventilation

Consider how the sun and wind may affect your building form, massing, and facade.

RESPONSE

The project is organized and modulated to allow natural light to access the courtyard at the center of the site as well as all homes. The courtyard is oriented north-south to maximize exposure and allow natural light and ventilation access adjacent sites.

CS2.D. Height, Bulk, + Scale

4. **Massing Choices:** Strive for a successful transition between zones where a project abuts a less intense zone. ...lower the building height, break up the mass of the building...

RESPONSE

The project resides in the center of a Lowrise 3 zone. Although there are no zoning transitions, the project utilizes the strategies listed to fit better with the varied context and provide visual interest through large scale modulation of by shifting units and smaller scale through projections and recesses of living space and decks. Material variation highlights the changes in massing and creates an additional layer of interest and scale.

CS1.C Topography

Use the natural topography and existing site features to inform the project design.

RESPONSE

The project is organized to follow the sloping topography down to the street from east to west.

CS2.D.5 Respect for Adjacent Sites

Respect adjacent properties with design and site planning to minimize disrupting the privacy and outdoor activities of residents in adjacent buildings.

RESPONSE

The project responds to adjacent sites by carefully studying the location of windows to minimize the impact of privacy. Access to light and air is maximized through this siting of the structure as well as through the inclusion of a generous central courtyard and front setback.

CS2.D. Height, Bulk, + Scale

1. **Existing Development and Zoning:** Review the height, bulk, and scale of neighboring buildings as well as the scale of development for the area to determine an appropriate complement.

RESPONSE

The project resides in a multifamily zone that consists of a variation of building types - single family homes, duplexes, and apartments. There is a large apartment building to the east of the site. The project massing responds specifically to the varied neighborhood structures.

CS3.A.2 Contemporary Design

Explore how contemporary designs can contribute to the development of attractive new forms and architectural styles; as expressed through use of new materials or other means.

RESPONSE

The project gives a new dimension to residential design through its variation of form, heights, and material. The project responds to contemporary living and aims to achieve passivhaus standards, organized around a shared courtyard. The courtyard will be accessed by large transparent high-performance roll-up garage doors for multiple dwellings.

CONTEXT + SITE



PL3.A. Entries

Design primary entries to be obvious, identifiable, and distinctive with clear lines of sight.

RESPONSE

Primary entries are located at the streetscape and within the courtyard. (see pg 13). Entries along the street are defined by stoops that create a buffer between the streetscape and homes. Entry from the street into the courtyard is defined by a canopy trellis with address signage for the rear homes. The offset triplex at the rear allows its entry to be visible from the street.

PUBLIC LIFE
DESIGN CONCEPT

DC2.A Massing

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 project design is broken into two masses that whose heights and bulk respond to the topography with modulation at all sides.. This separation allows an internal courtyard for solar exposure to the project and adjacent sites. The street-facing units are designed to be below the allowable height limit with open railings in most cases instead of parapets.

PL4.A Entry Locations and Relationships

Provide safe and convenient access points and connections for all modes of travel.

RESPONSE

Pedestrian entries from the street are lifted through stoops. Access to the below-grade garage is located at the south property line along 12th Avenue E with a pedestrian connection directly to the courtyard. All homes have an entry from the courtyard to encourage interaction among the residents and visitors. Bicycle parking will be provided in the garage below grade.

DC2.B.1 Facade Composition

Design all building facades by considering the composition and architectural expression of the building as a whole.

RESPONSE

Building facades are composed to express the verticality of the units and variation of volumes. Rhythm and depth are created by the pushing and pulling of surfaces, shifting of heights and variation of materials with in-fill transparent surfaces. Fenestration and material consistency create a holistic approach to the structures.

PL4.B Planning Ahead for Bicyclists

Plan for existing and future bicycle traffic by providing bike facilities and facilitating bike connections.

RESPONSE

The project provides secure bicycle parking below-grade in the shared parking garage.

DC2.C Secondary Architectural Features

Add depth to facades through secondary and potentially dual-purpose elements that appropriate themselves within the context of the neighborhood

RESPONSE

Further depth in facades is created by the detailing of projections, canopies, railings and decks that highlight additional volumes and provide weather protection. Planters and landscaping at the street level provide a transition to the street consistent with adjacent sites.

PL3.B.4 Interaction

Provide opportunities for interaction among residents and neighbors.

RESPONSE

The internal courtyard between the two structures encourages interaction among residents and neighbors. In addition, the homes are designed to engage the courtyard through large roll-up transparent garage doors for multiple homes. Decks above grade also connect back to the common space.

DC2.D Scale and Texture

Incorporate architectural features, elements, and details that are of human scale into the building in a manner that is consistent with the overall architectural concept.

RESPONSE

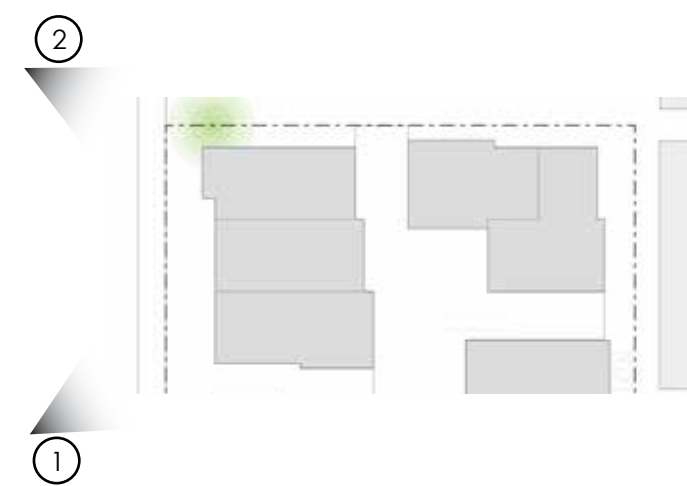
Vertical wood siding along the first floor provide texture and warmth at the street level. Railing and deck detailing also give a humanistic scale to the project.



code compliant massing



early design massing



1 proposal



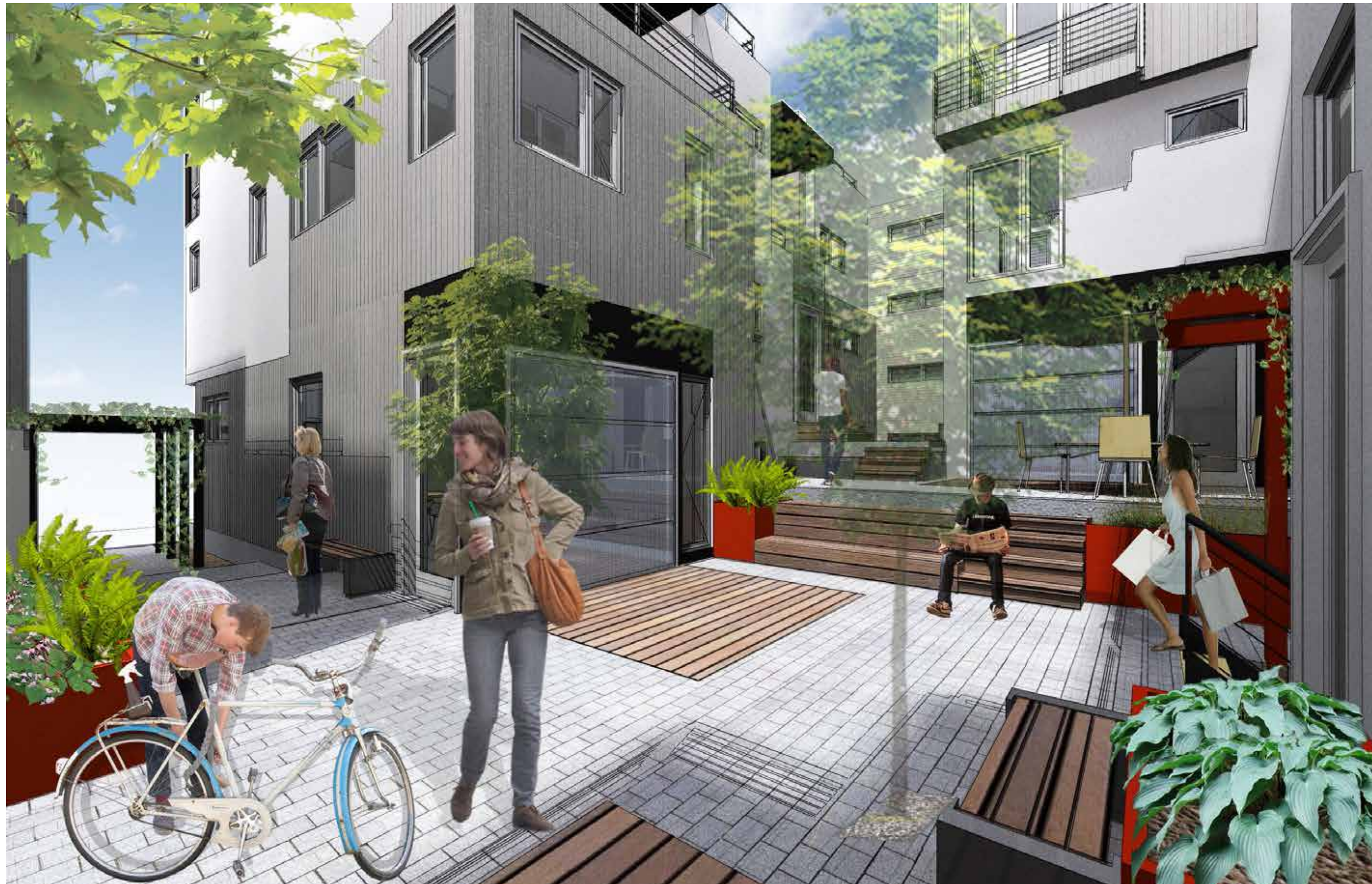
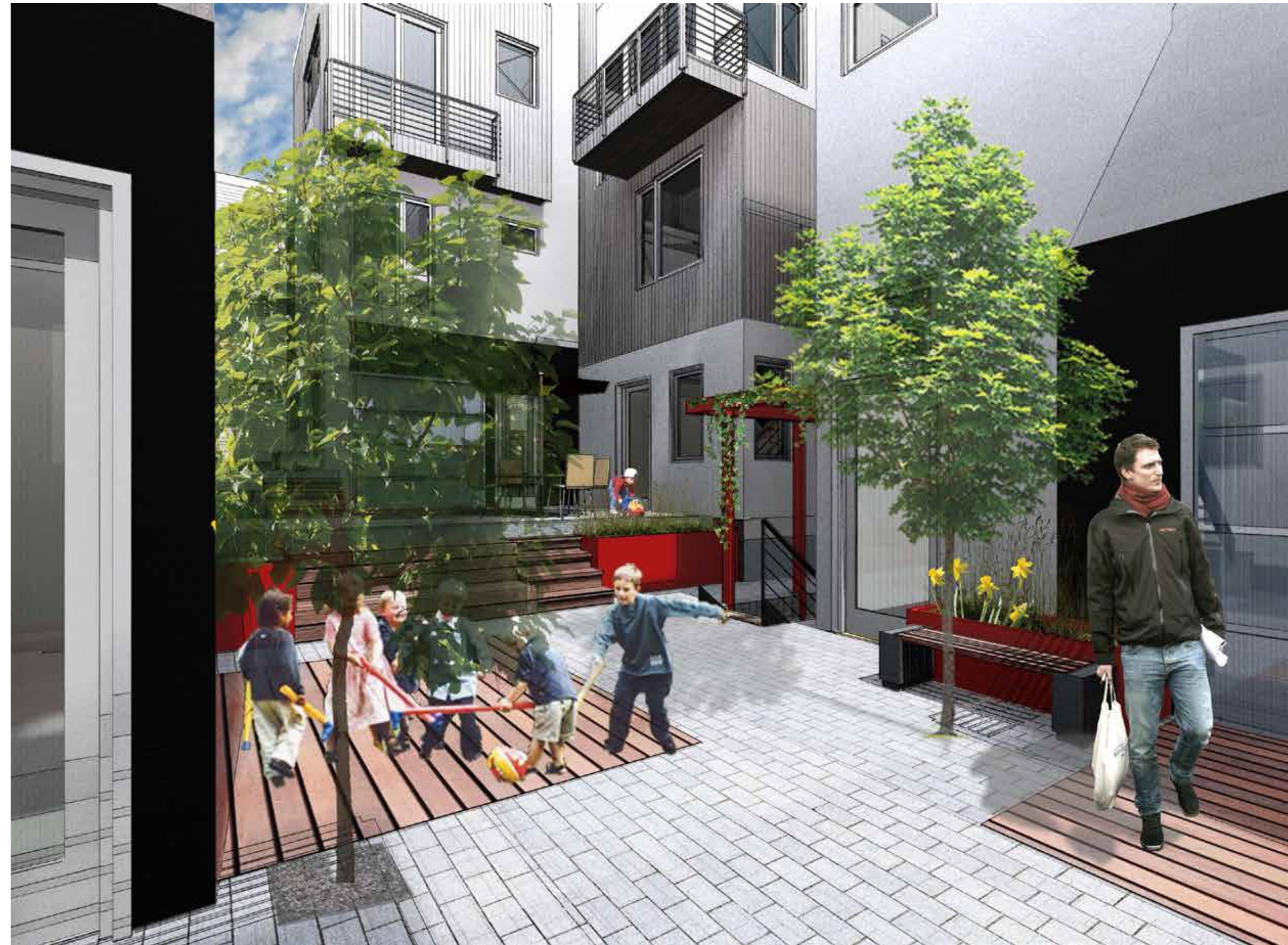
code compliant massing



early design massing



2 proposal





code compliant massing



early design massing



aerial view looking ne

backview looking ne



reclaimed vertical
wood siding

4x8 painted panel siding off
white or similar

1 x 8 painted panel
siding black



reclaimed vertical
wood siding

1 x 8 painted panel
siding black

4x8 painted panel siding off
white or similar



1 x 8 painted panel siding black

4x8 painted panel siding off white or similar

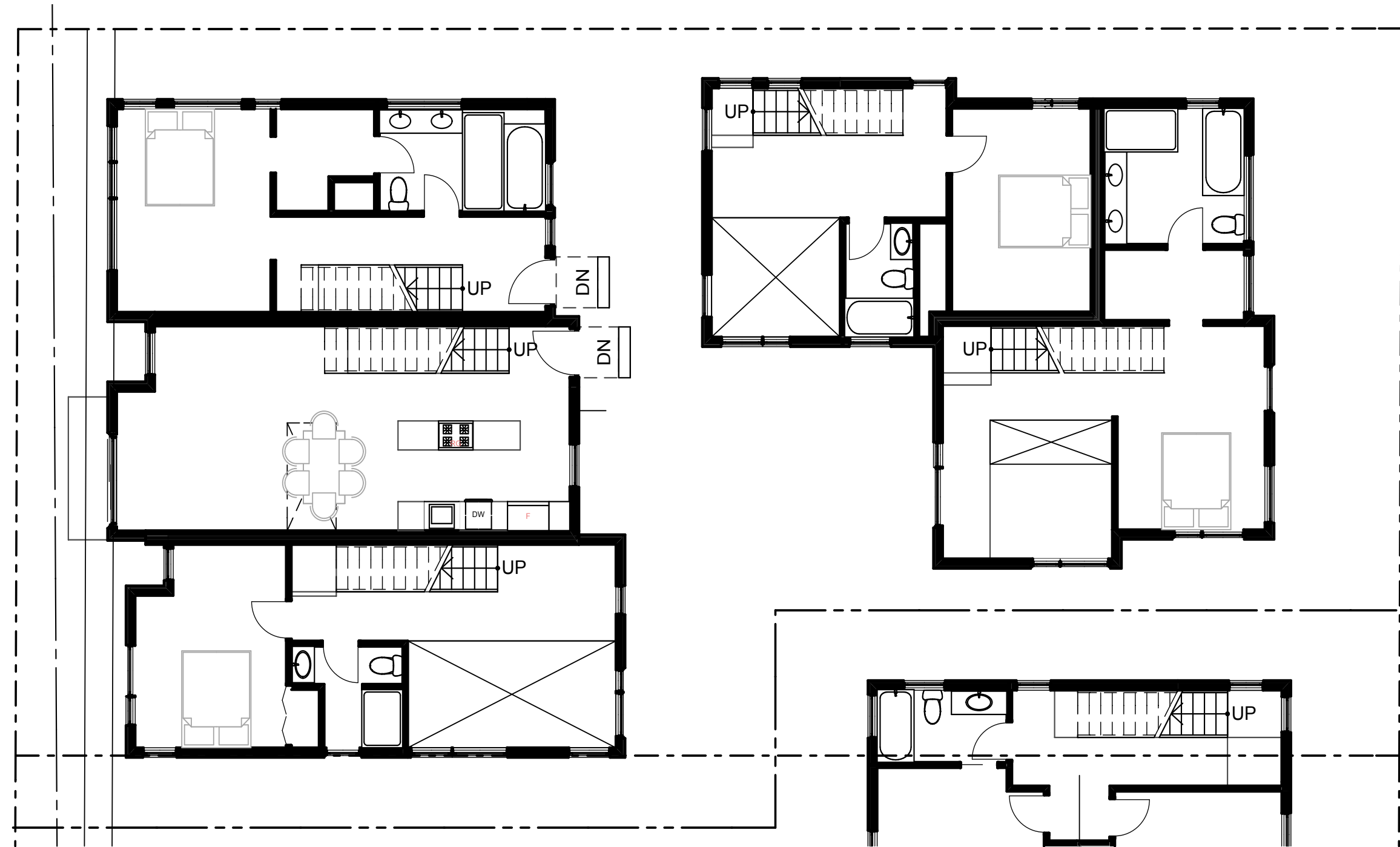
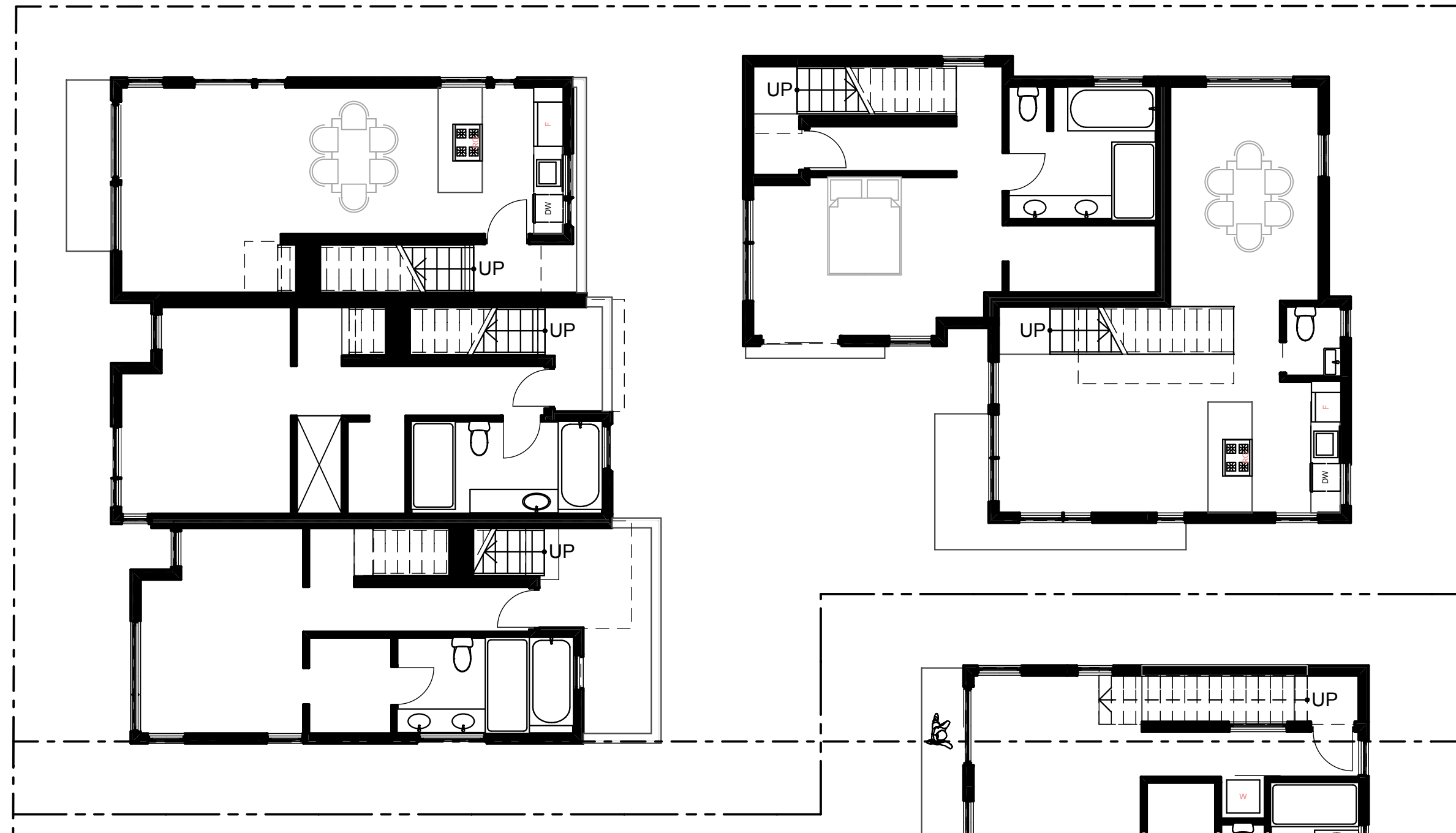
reclaimed vertical wood siding

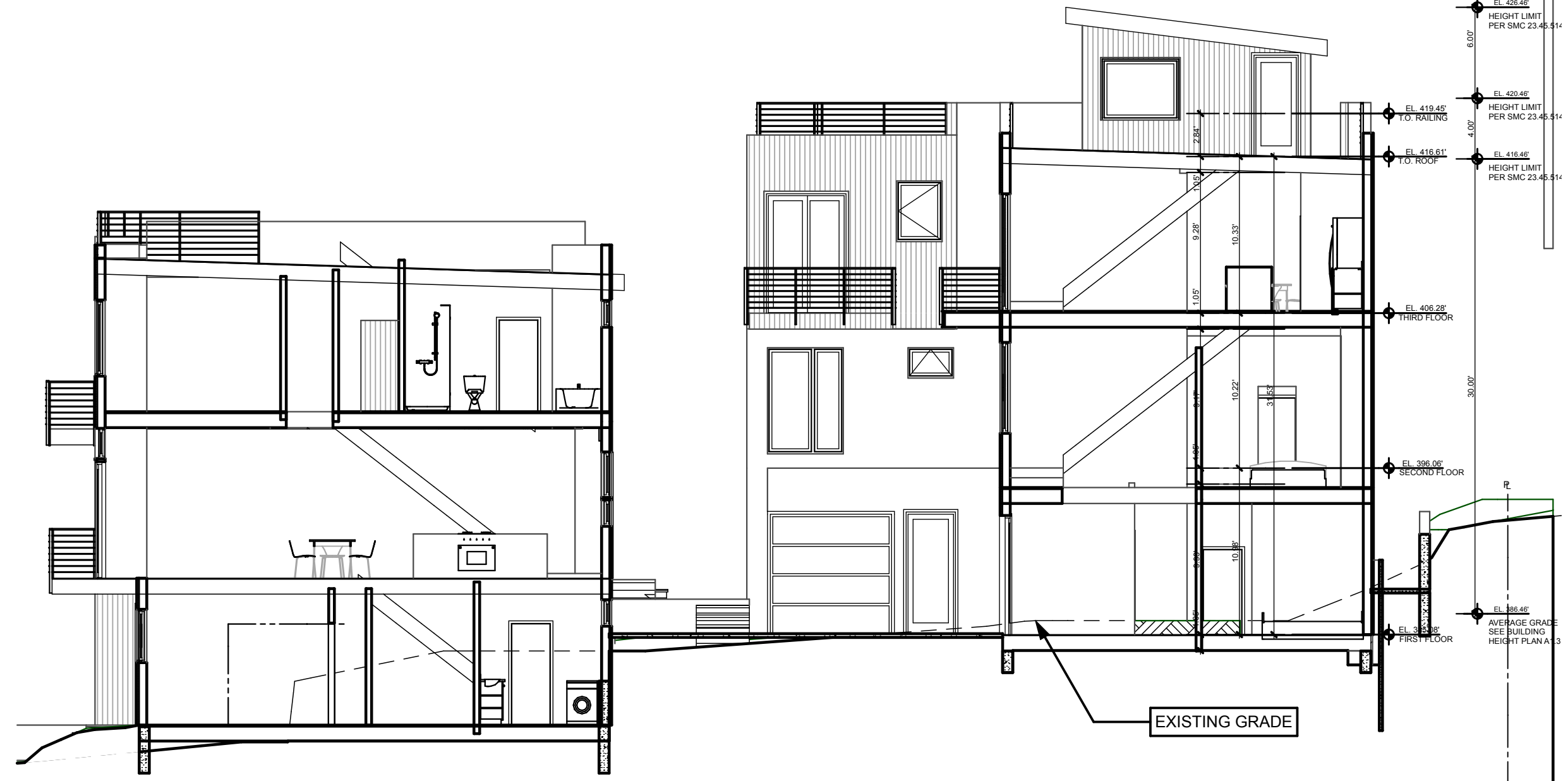
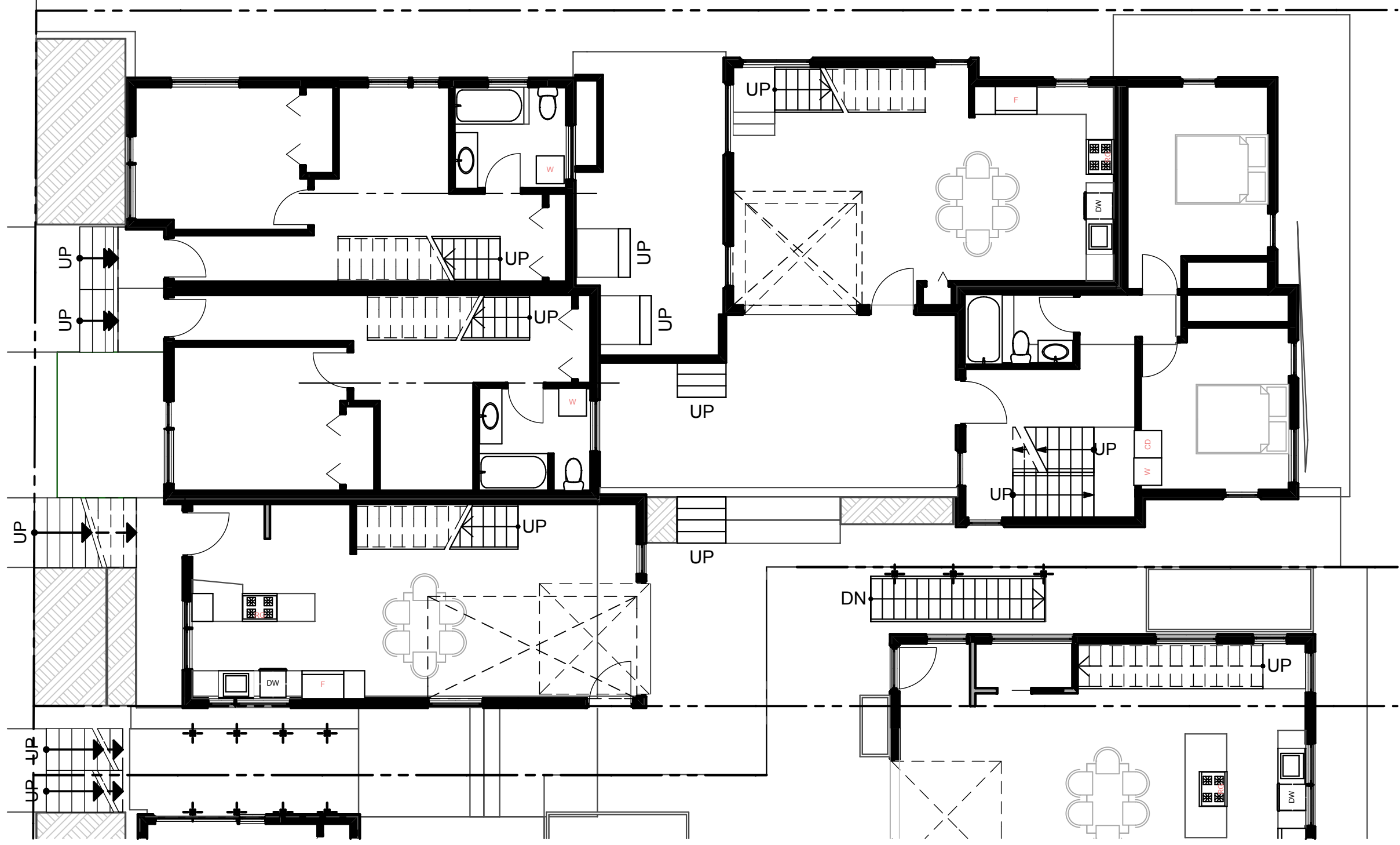
4x8 painted panel siding off white or similar

reclaimed vertical wood siding

1 x 8 painted panel siding black









① 208 18th Ave. E. exterior view from street



② 1504 19th Avenue Duplex behind SF House



③ 1411 E. Fir St. exterior view from street

⑦ 1411 E. Fir St. interior boardwalk view



④ 1911 E. Pine St. courtyard view from a deck

⑧ 1911 E. Pine St. view from street



⑥ 1818 E Yesler Way. view of a woonerf

