

# WORDSWORTH

Development Permit Submission  
January 10, 2022



FRANCL  
ARCHITECTURE

HAPA  
COLLABORATIVE





## PROJECT STATISTICS

Wordsworth

Lot 6, District Lot 6494, Group 1, NWD Plan EPP29484

## Birney Avenue and Ross Drive

## South Campus

University of British Columbia

Site Area	51,708 sf				
	<i>Allowed</i>		<i>Proposed</i>		FSR remaining
FSR	3.5		3.50		
Building Area	180,978 sf		180943 sf		35
Site Coverage	50 %		33 %		
<b>Setbacks</b>					
	<i>Required</i>		<i>Proposed</i>		
Front, Rear and Side	2.5 m		2.5 m		
<b>Building Height</b>					
	<i>Allowed</i>		<i>Proposed</i>		
Building Height	48m	157.4803 ft	49.372m*	161.9803 ft*	*Height Variance Requested
No. of Storeys Tower	16		16		
No. of Storeys City Homes	3		3		
Total No. of Parking Levels			2 - 1/2		
Total No. of Amenity Levels			1		
Total No. of Mechanical Floor (Rooftop Mech / Elev. Over-run & Elev. Machine Rm)			2		

Building Areas		Gross	Amenity	Exclusions		FSR Area
Tower				Storage Total	M&E Total	
	Level 1	10,722	2,497	440	203	7,582
	Level 2	10,722	2,497	480	226	7,519
	Level 3	11,087		600	307	10,180
	Level 4	11,087		600	307	10,180
	Level 5	11,087		600	307	10,180
	Level 6	11,087		600	307	10,180
	Level 7	11,087		600	307	10,180
	Level 8	11,087		600	307	10,180
	Level 9	11,087		600	307	10,180
	Level 10	11,087		600	307	10,180
	Level 11	11,087		600	307	10,180
	Level 12	10,612		560	278	9,774
	Level 13	10,612		560	278	9,774
	Level 14	10,612		560	278	9,774
	Level 15	10,612		560	278	9,774
	Level 16	8,537		240	118	8,179
	Total	172,212	4,994	8,800	4,420	153,998
City Homes	Level 1	10,269		800	400	9,869
	Level 2	10,261				10,261
	Level 3	7,403				7,403
	Total	27,933				26,945
Project Total		200,145			0	180,943

[illegible]

Parking Stall Count		
	Maximum	Proposed
Regular Stalls	257	220
Small Car Stalls	25% of total	12
Accessible Parking	10% of total	25
Visitor Stalls	24	24
<b>Total</b>	<b>281</b>	<b>281</b>

Bicycle Storage / Parking		Required	Proposed
Class I - Residents	(minimum 1.5 bicycle spaces per dwelling unit)	360	360

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TOTAL ARCHITECTURAL SUBMISSION (34 PAGES)

## LANDSCAPE

REAP CHECKLIST ##





SITE

Lot 6 of Wesbrook Place is a 4,804m2 (51,708 sq.ft.) site located at the corner of Ross Drive (to the south) and Berton Avenue to the west. The north and eastern boundaries are defined by pedestrian greenways. Scholar’s greenway to the east connects the nearby entrance of UBC Farm to Mundell Park and beyond. Webber Lane to the north is part of the east-west pedestrian thoroughway (green street) connecting Mundell Park to Berton Avenue and to Wesbrook Village center. This thoroughway incorporates a cascading stream landscape feature which directly borders Lot 6. The stream is the source to the pond at Mundell Park.

The existing site grades are gentle, sloping evenly from its highest point at the north corner to the south corner with a total drop of 3.57m (approximately 11’-8”). There is a slightly steeper cut down along the eastern boundary to navigate the grade transition down to Scholar’s greenway and Mundell park.

CONTEXT

Mundell Park is located directly east of Lot 6. This neighbourhood park is a node at the intersection of the two greenways and is a significant public outdoor amenity space. Its focal point is a natural pond, with an island and a pedestrian bridge crossing which completes the north-south pedestrian thoroughway connection. The park also incorporates grassy areas and playground structure at the southern end.

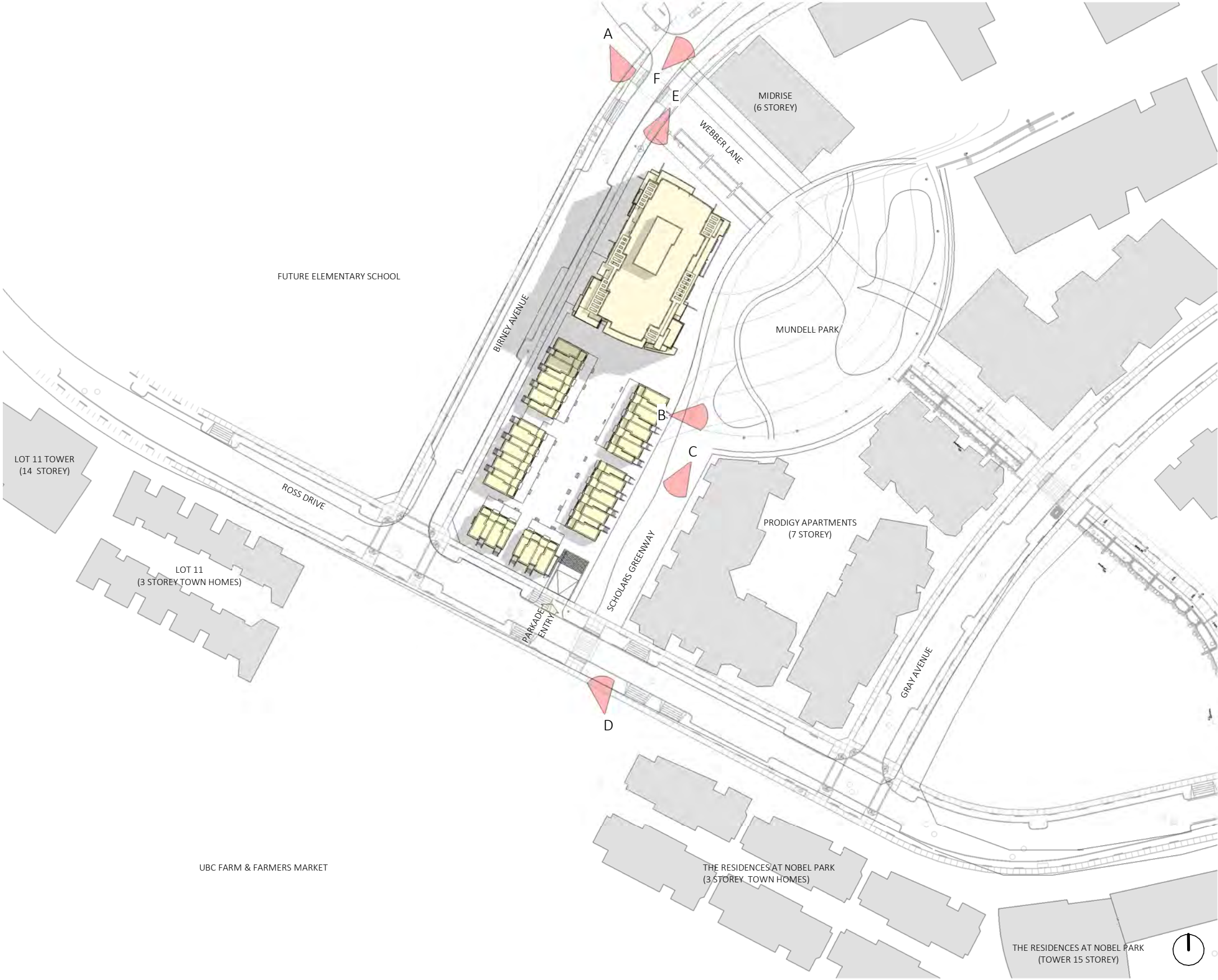
The park is surrounded by existing 6 and 7 storey residential developments along the northern, southern and eastern boundaries. Lot 6 is the last remaining site in the block to be developed.

Across Ross Drive to the south is a section of natural forest, UBC Farm, and the Salish Sea, which will be visible from higher levels of the tower. The site to the west across Berton Avenue is currently undeveloped but will become an elementary school and playing field in future.

Left: Illustrative Massing of the Wesbrook Place Neighbourhood Plan with project site | From <http://planning.ubc.ca/sites/planning.ubc.ca/files/images/DRAFT%20Wesbrook%20Place%20NP%20Illustrated%20Amendment%20Feb%204%202016.jpg>



SITE & CONTEXT PHOTOS



A - Birney Avenue & Webber Lane



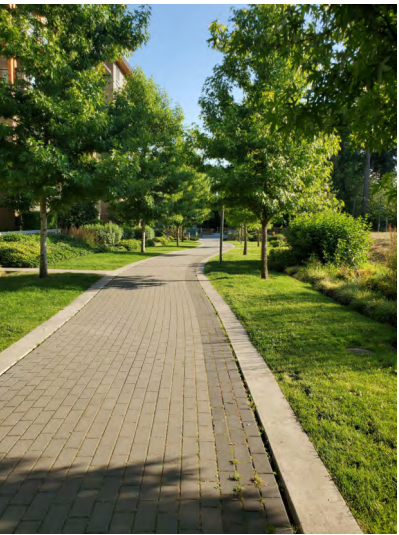
D - From UBC Farm Entrance



B - Mundell Park Connection



E - Birney Avenue - Looking South



C - Scholars Greenway



F - Birney Avenue at Webber Lane



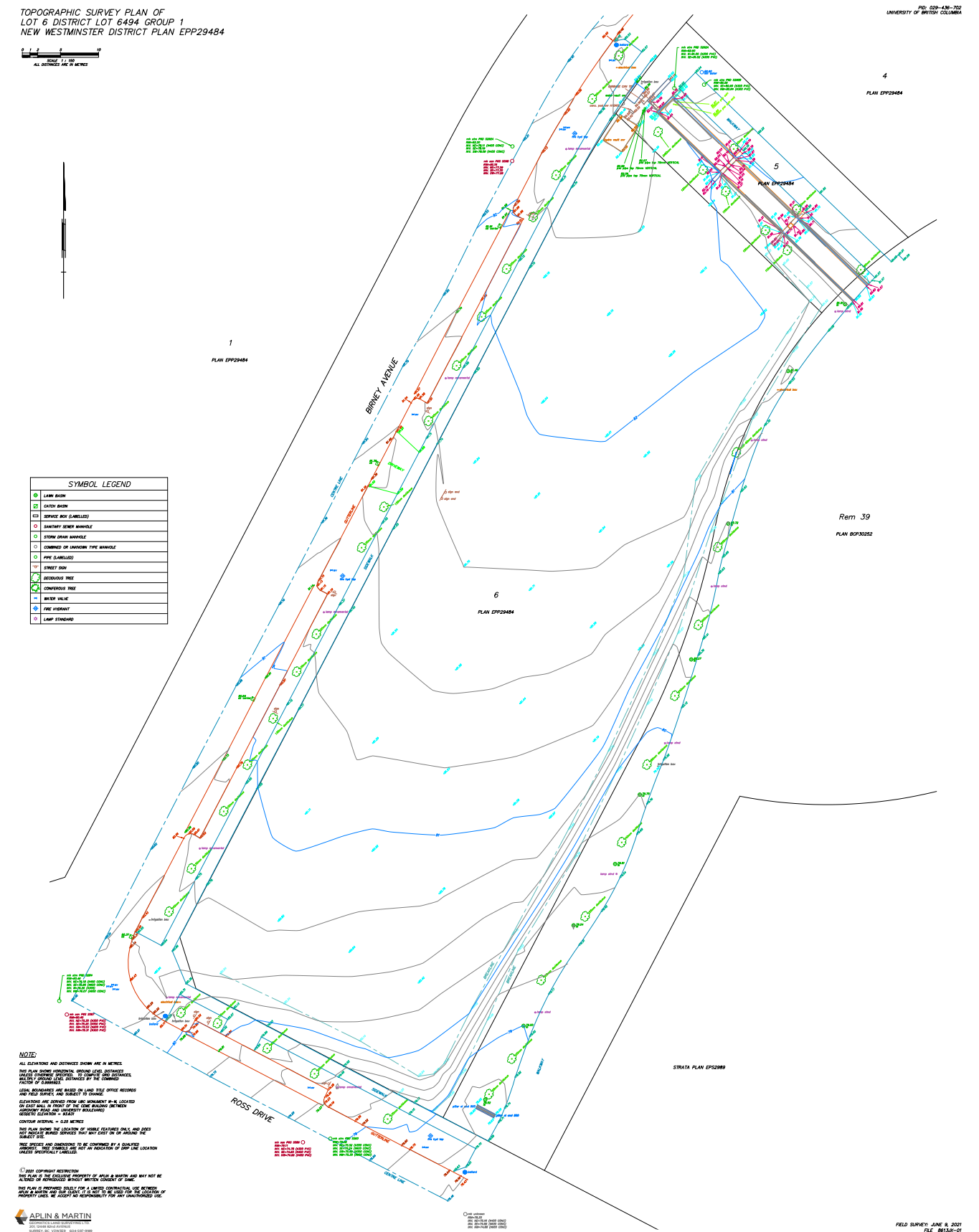
Aerial View - Looking Southwest



Aerial View - Looking Northeast



## SITE SURVEY





PROGRAM

The proposed Lot 6 development consists of a 16-storey residential tower component located at the northern portion of the site. Twenty 3-storey city homes are located in the southern portion of the site, organized in groups, fronting Birney Avenue, Ross Drive, and Scholar’s Greenway. Passageways in between groups allow for access through to the semi-private courtyard space. The below grade parking access is discretely located at the southeastern corner of the site, which is a natural low point that minimizes the extent of exposed ramp entry, with the remainder screened by an overhead trellis structure.

The tower contains 220 suites, predominantly 1-2 bedroom units with some studios and five 3 bedroom penthouse suites. The entry lobby is located at the southwest corner of the tower and adjacent amenity room space fronts onto the common courtyard with the city homes. The development guidelines specific to this site allow for a 16 storey tower (not to exceed 48m). However, given the existing topography which slopes both the length and across the site, the proposed 16 storey tower exceeds the 48m height limit. A request for height variance of 4’-6” is included with this submission. The height calculation method (base plane) employed was based on the City of Vancouver zoning method (which effectively generates a diagonal maximum height envelope).

The city homes are connected in clusters of two and four homes, and maintain a 3-storey volume where they face onto Birney Avenue, Ross Drive and the greenway to provide continuous street edge, and to better relate to scale and massing of adjacent developments. Street level entries and private patios at most homes step up or down as grade falls away over the length of the site and in cross section across the courtyard, to create a sense of individuality for each home. On the courtyard side, the city homes are terraced at the upper level. The semi-private courtyard provides a focal point the forest at the south and connection to the tower to the north.

Underground parking will be provided for both residents and visitors. The penthouse units will each have designated secure private garages. Secure bicycle storage, storage lockers, garbage & recycling facilities and service rooms will also be provided below grade.

This development is designed to REAP Gold standards and Step 2 of the BCBC Energy Code.







Fall Equinox - 08:30am



Spring Equinox - 10:00am



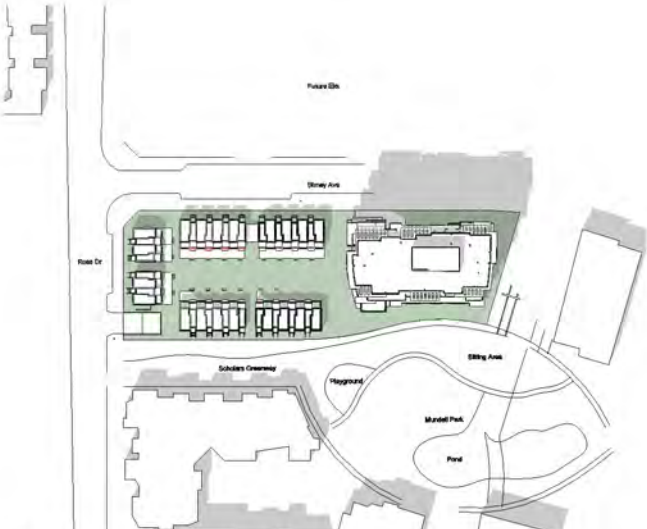
Spring Equinox - 12:00pm



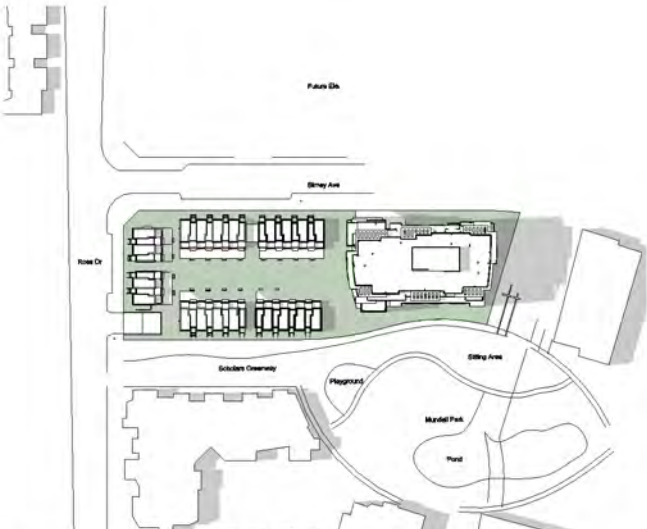
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Summer Solstice - 10:00am



Summer Solstice - 12:00pm



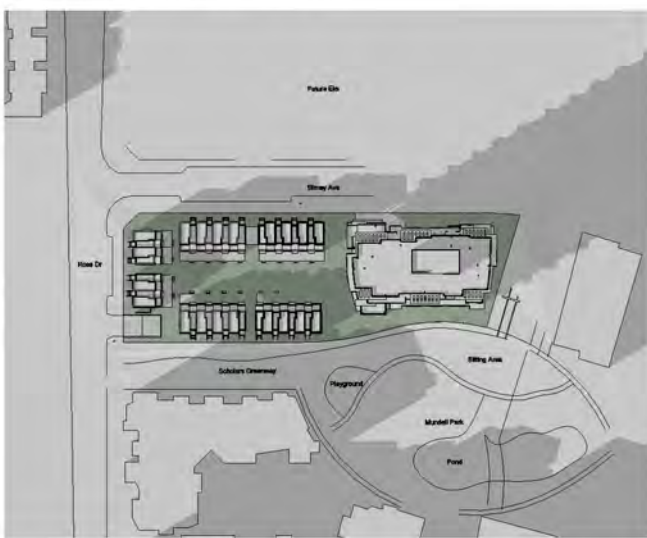
Summer Solstice - 02:00pm



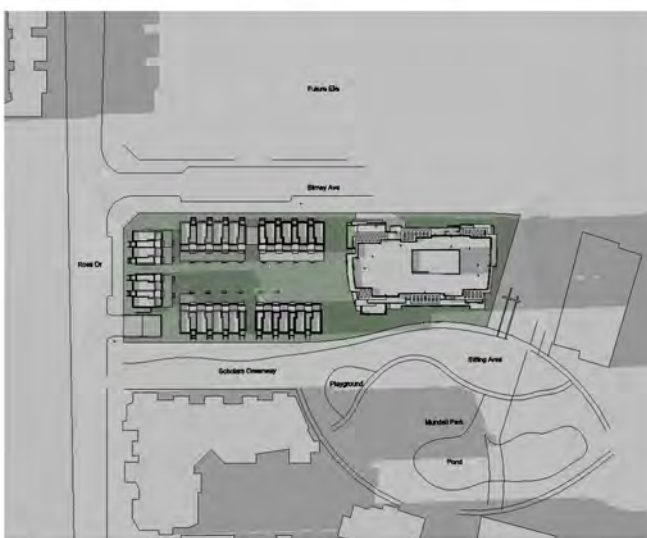
Winter Solstice - 08:30am



Winter Solstice - 10:00am



Winter Solstice - 12:00pm



Winter Solstice - 02:00pm

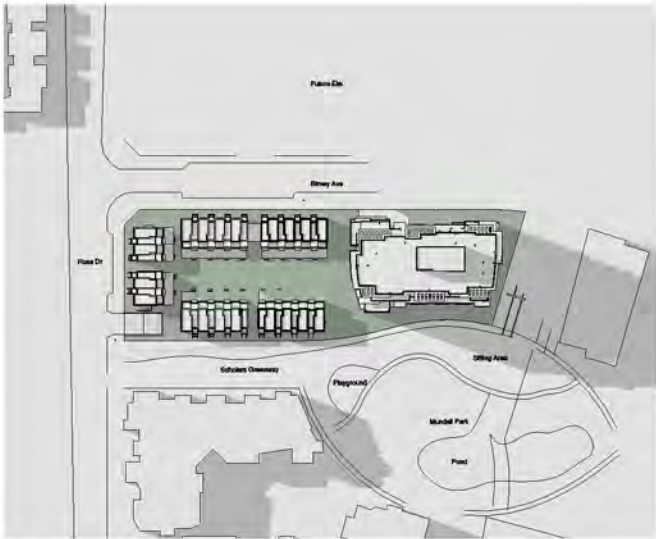




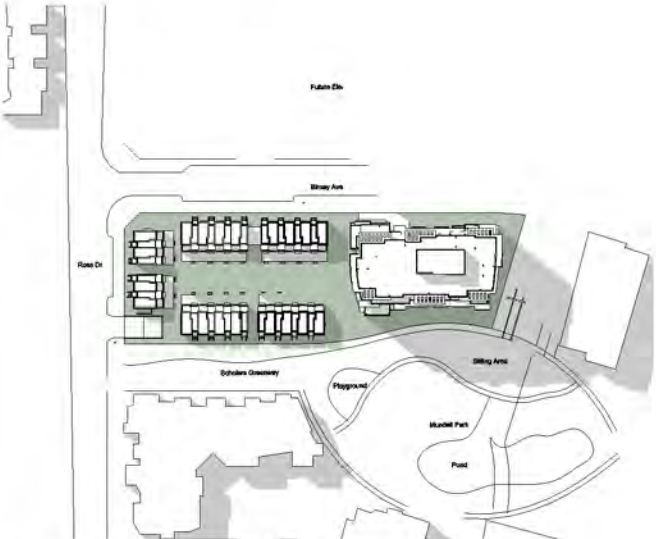
SHADOW ANALYSIS  
ADDITIONAL STUDIES

The effects of shadowing by the proposed development (and adjacent existing developments) on Mundell Park and the future elementary school site have been studied at the prescribed dates and times.

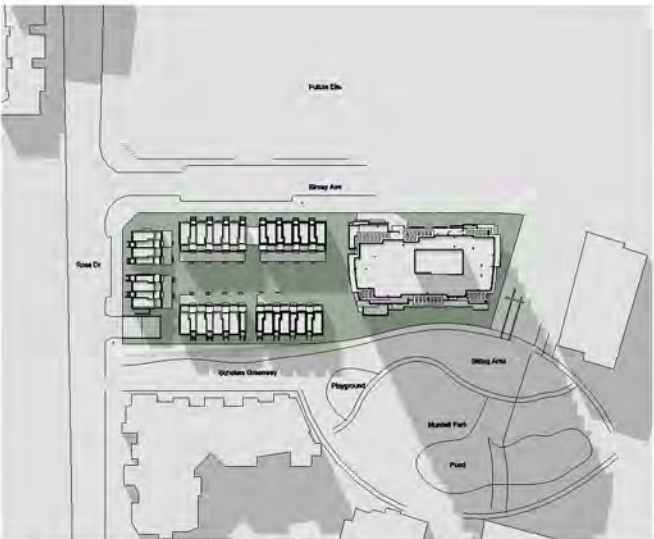
Additional times have also been studied, where use of these public spaces would be commonplace such as in late afternoon, early evening in summertime, and pre-school hours at the future school site.



Spring Equinox - 04:00pm



Summer Solstice - 04:00pm



Summer Solstice - 06:00pm



Summer Solstice - 08:00pm

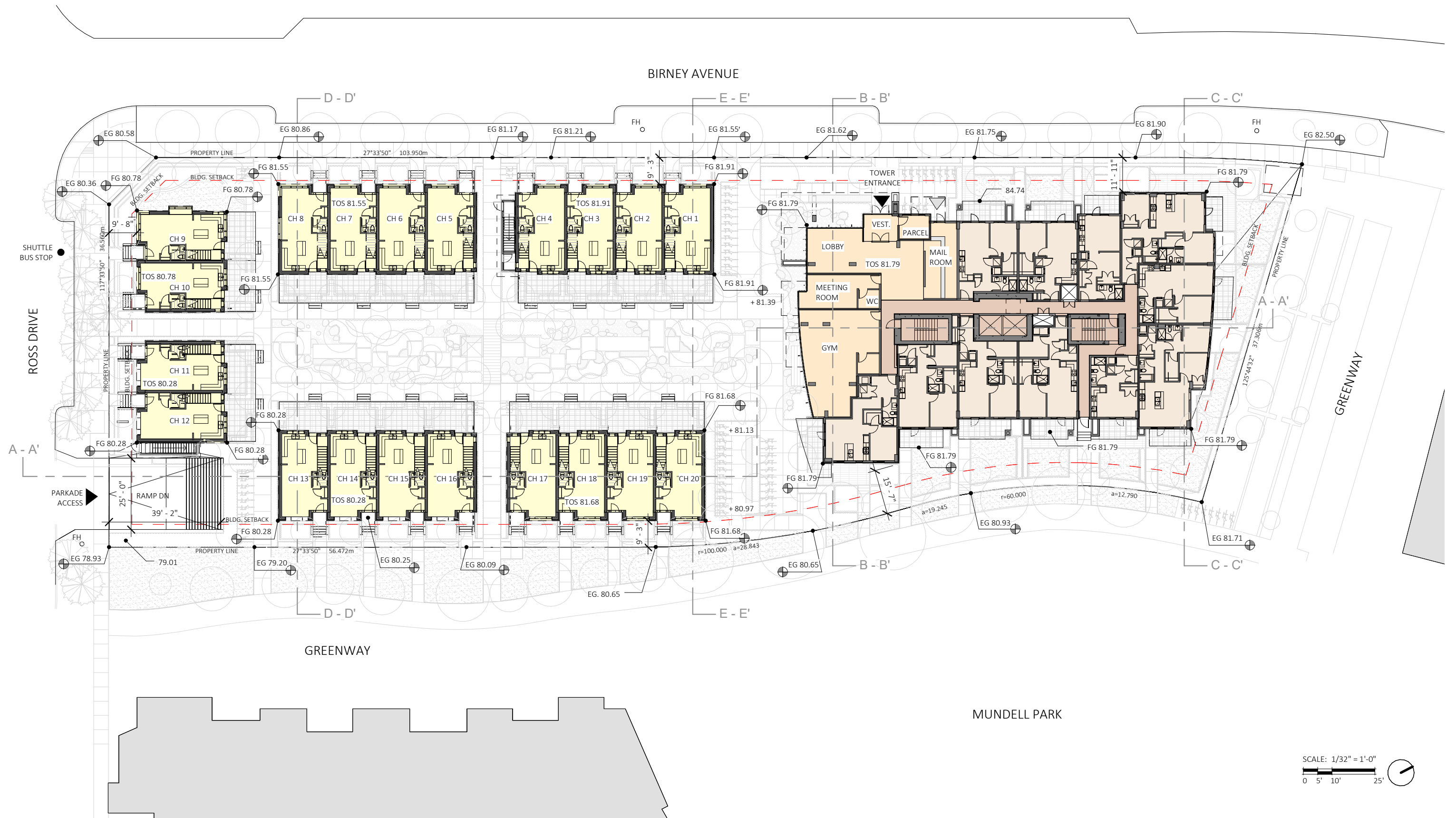


Winter Solstice - 04:00pm





## SITE PLAN





Background

The UBC Wesbrook Place Neighbourhood plan (illustrative plans P-10 & P-11) indicates a massing distribution across Lot 6, with a 16-storey tower located at the northern portion of the site, roughly square in proportion, and the remainder of the site as three storey townhomes. The site coverage shown is distributed approximately as a split of 1/3 tower and 2/3 townhomes, with a permitted density up to FSR of 3.5.

We understand overshadowing of Mundell Park and the future school site by the tower component was a primary consideration in determining the tower placement prescribed in the neighbourhood plan.

**Pre-AUDP Stage Review** - Through commentary received at the Pre-AUDP and discussions with UBC CC&P, the design team was encouraged to re-examine the design in accordance to a number of overall guiding principles for this site and consider revisions including the following:

- Maintain (as closely as possible) the intent of site massing and density as shown in illustrative plans P-10 & P-11 of the neighbourhood plan:
- Increase proportion (density and site coverage) of City Homes to reduce Tower footprint
- Maintain prescribed site division line (~1/3 to 2/3 proportion) between Tower and City Homes
- Study tower base (podium) and relationships to grade
- Study effects of tower placement and tower form on overshadowing adjacent public spaces and ways to mitigate



LEGEND

- |   |   |
|---|---|
| Maximum 3.5 FSR<br>High Rise with Low Rise/Townhouses | Maximum Number of Storeys                 |
| Maximum 2.8 FSR<br>High Rise with Townhouses          | Internal Site Height Transitions          |
| Maximum 3.5 FSR                                       | Street Wall Massing<br>6 Storeys or less  |
| Maximum 2.8 FSR                                       | Mixed-Use Commercial Centre               |
| Maximum 2.0 FSR                                       | Schools                                   |
| Maximum 1.2 FSR                                       | Green Edge                                |
|   | Usable Neighbourhood<br>Open Space (UNOS) |
|   | Greenway                                  |

Lot 6



Images: Illustrated Land Use Plan and 3D Illustrative Plan from Wesbrook Neighbourhood Plan (P-11 & P-12)



Proposed Development

The proposed form of development has been revised in consideration of this guidance, to more closely respect the policies of the Wesbrook Place Neighbourhood Plan. Overall siting revisions can be summarized as follows:

The revised overall site division proportion between City Homes and Tower now closely approximates the prescribed 1/3 to 2/3 division and maintains FSR 3.5.

The density of the City Homes is increased significantly. Twenty homes are provided facing Birney Avenue, Ross Drive, and Scholars Greenway. These are re-shaped into a deeper row house proportion, while the area of each remains unchanged. The City Homes are grouped into clusters to maintain visual and pathway connections to the semi-private interior courtyard.

The tower massing is redefined to fall within the overall prescribed site division and to reduce over-shadowing of Mundell Park and the future school site. The tower plate is reduced in length significantly and is pulled further north toward the building setback. The tower is re-shaped and internally re-planned (incorporating separate internal cores) in order to extend units outward, closer to the west and east building setback lines.

The tower extends to 16 storeys as permitted, however a height variance of up to 4'-6" is requested. The 48m height limit across this sloped site would not otherwise allow for an accessible ground level at 16 storeys in building height.

Articulation of the tower base (podium) and grade relationships have been refined, and are described in the building massing design rationale. Courtyard and semi-public passageways and access through the site is discussed in more detail with the design rationale provided by the Landscape Architect.

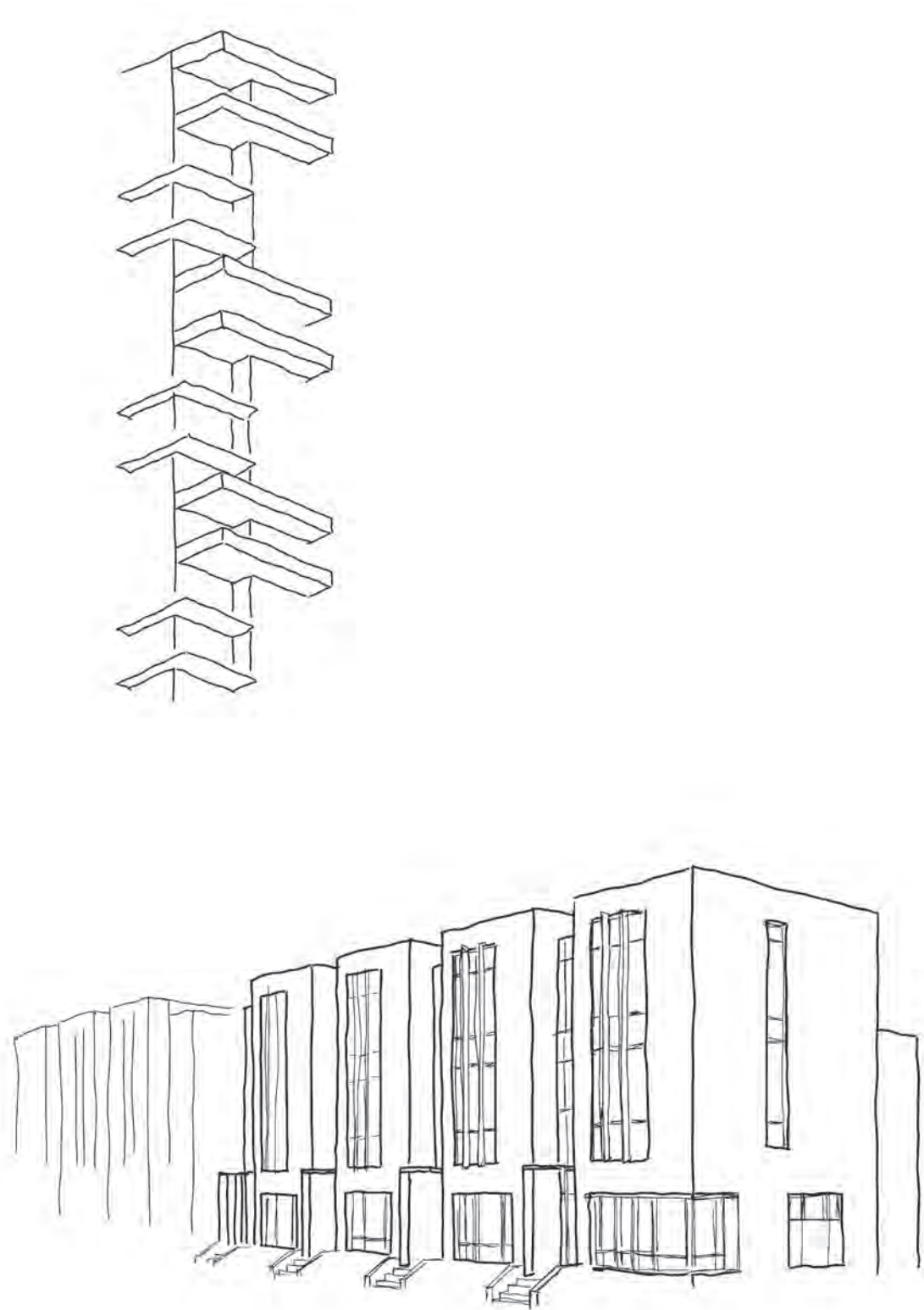
Building Form and Material

**Tower** - A series of form manipulations are introduced to break down the overall mass of the tower into more discernible elements and provide a finer level of detail at a human scale.

Beyond siting of the tower, our shadow analysis identified the southeast tower corner as having the greatest impact on shadows cast on Mundell Park. Accordingly the tower is carved back above level 11 at this corner.

Architecturally, this form is expressed as a scaled version of the three-storey City Home brick volume. Additional three-storey brick forms are then introduced and repeated at the tower base, defining a podium level and common street front language, without interrupting the vertical rhythms of the tower. This approach is applied at the northwest corner to breakdown the Birney facade.

Given the tower proportions (height-to-floor plate), efforts are made to emphasize a more slender appearance by using facade elements, colours, and tones organized vertically. At the north and south facades, and the corners, grey metal spandrel panel runs vertically. At the west and east elevations, the main fields of wall are rendered in coloured metal spandrel panel in variegated terra cotta tones. These areas are nearly square in proportion and become a background, behind which white painted balconies project, stacked vertically in a rhythm.





Building Form and Material

Tower (continued from previous page) -

The north and south facades incorporate a gentle curved sweep, to soften and relate to the crescent shaped language of adjacent Mundell park.

The tower entry and sense of arrival is signalled by a three-storey white (metal panel clad) folded plate form, glass canopy and ‘V’ shaped column to maintain open ground plane at the corner to the double-height lobby

The material palette is common to both the Tower and City Homes, to read as a single cohesive development while providing opportunities for accents at different levels of detail and at human scale.

**City Homes** - The City Homes are defined in row house form with a three-storey frontage, stepped parapet line, and set back entry with a raised stoop. The homes are grouped into clusters, each stepping down as the grade falls away. Passageways provide glimpses into the courtyard. The homes are terraced with outdoor decks overlooking the courtyard.

A common stairway is articulated with glass and brick to identify an arrival point for City Home residents and passageway to the courtyard beyond.

Architecturally, the language is clean and minimal. A simple three-storey brick volume is defined with punched openings and repeated. In between, a neutral slot is formed, denoting vertical circulation within the home, clad with metal spandrel panel and glazing. Accent coloured entry doors, metal entry canopies, vertical fins and window shrouds provide human scaled detail, and reinforce a sense of individuality. On the courtyard side, metal panel cladding provides a common base and ties the groupings together as a single building.

The colour palette is tonal, dark charcoal grey brick, warm medium gray metal panel and spandrel panel, with accent coloured elements (entry doors, canopies) in the terra cotta tones.





**PERSPECTIVE RENDERING**  
VIEW FROM BIRNEY AVE & WEBBER LANE





**PERSPECTIVE RENDERING**  
VIEW FROM ROSS DRIVE & BIRNEY AVE







TOWER ENTRY



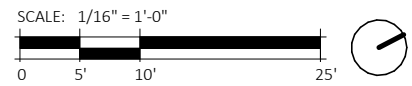
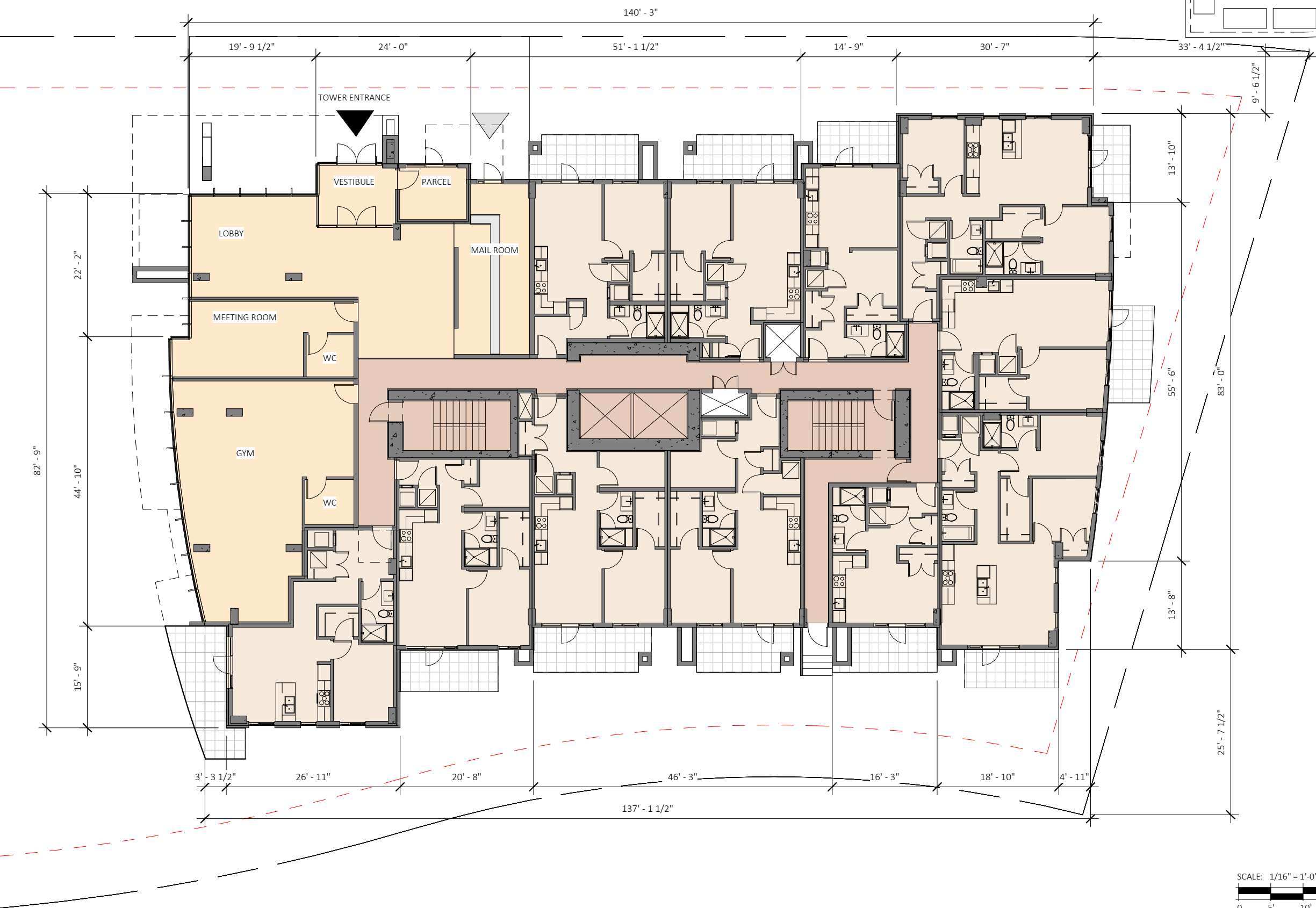
PASSAGEWAY TO COURTYARD & PARKADE ENTRY (BETWEEN CITYHOMES 4 & 5)





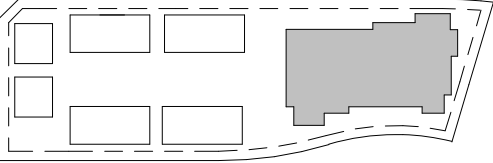
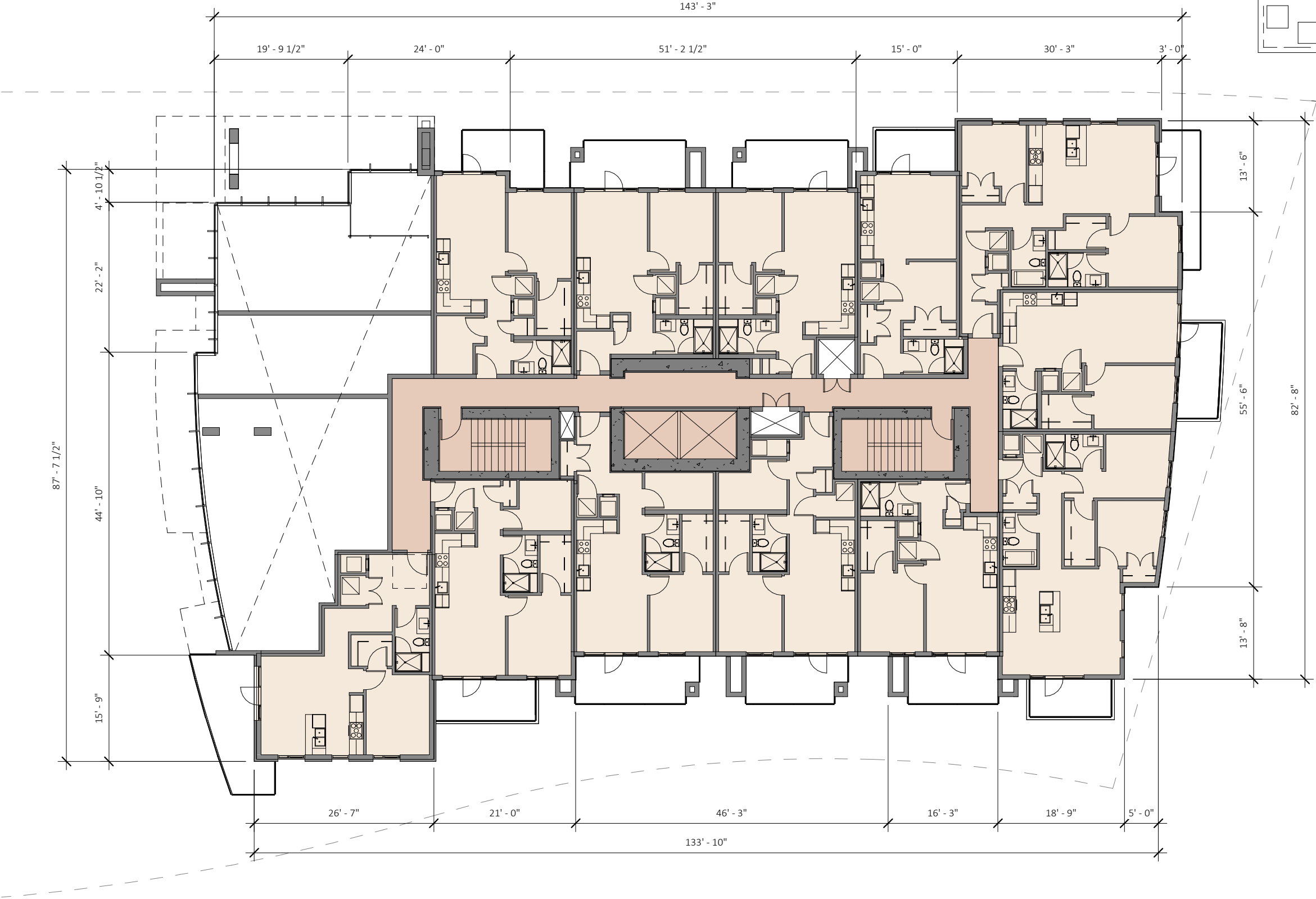


FLOOR PLANS  
TOWER GROUND LEVEL



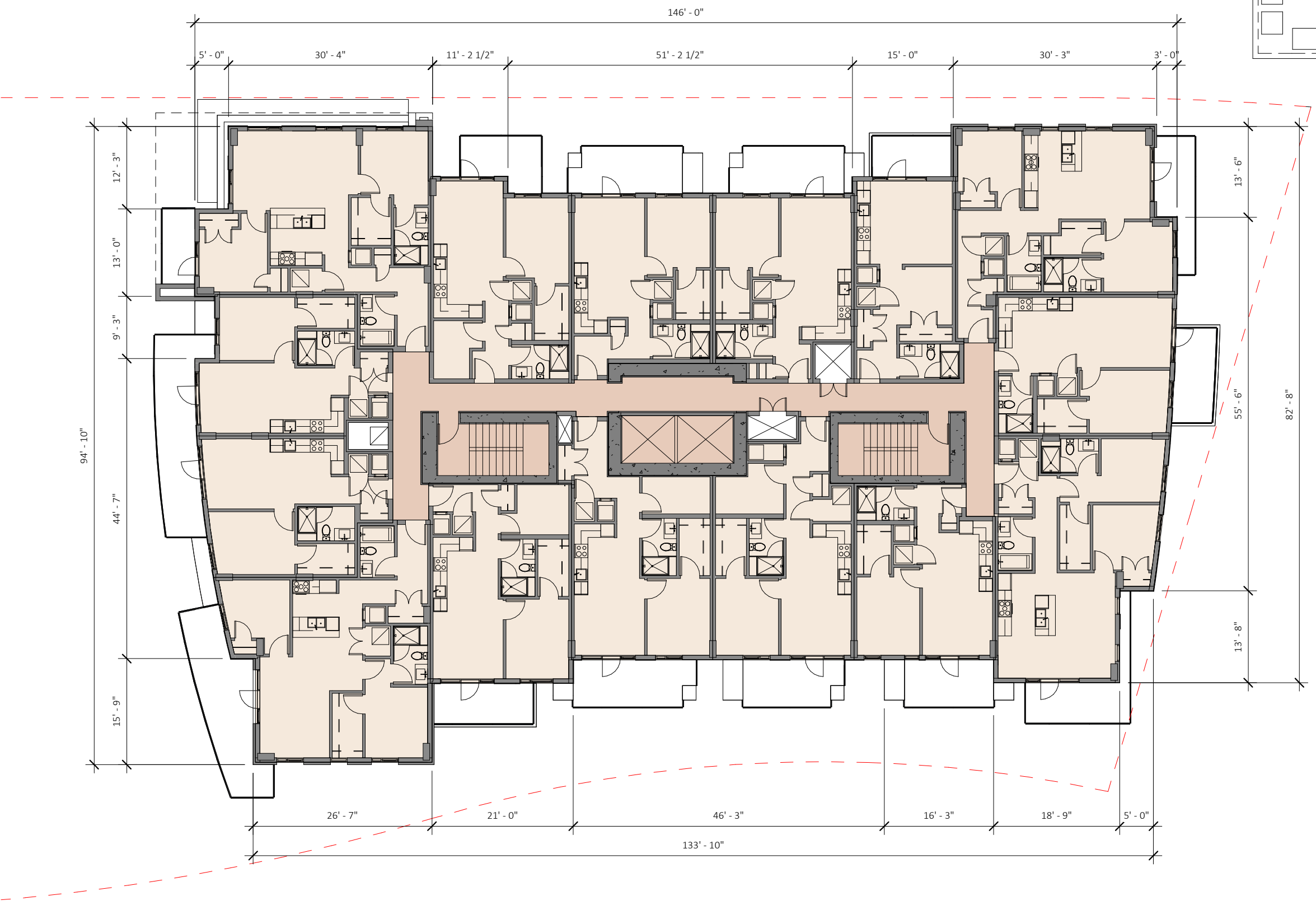
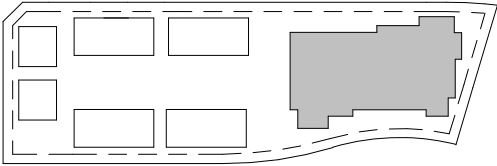


FLOOR PLANS  
TOWER LEVEL 2



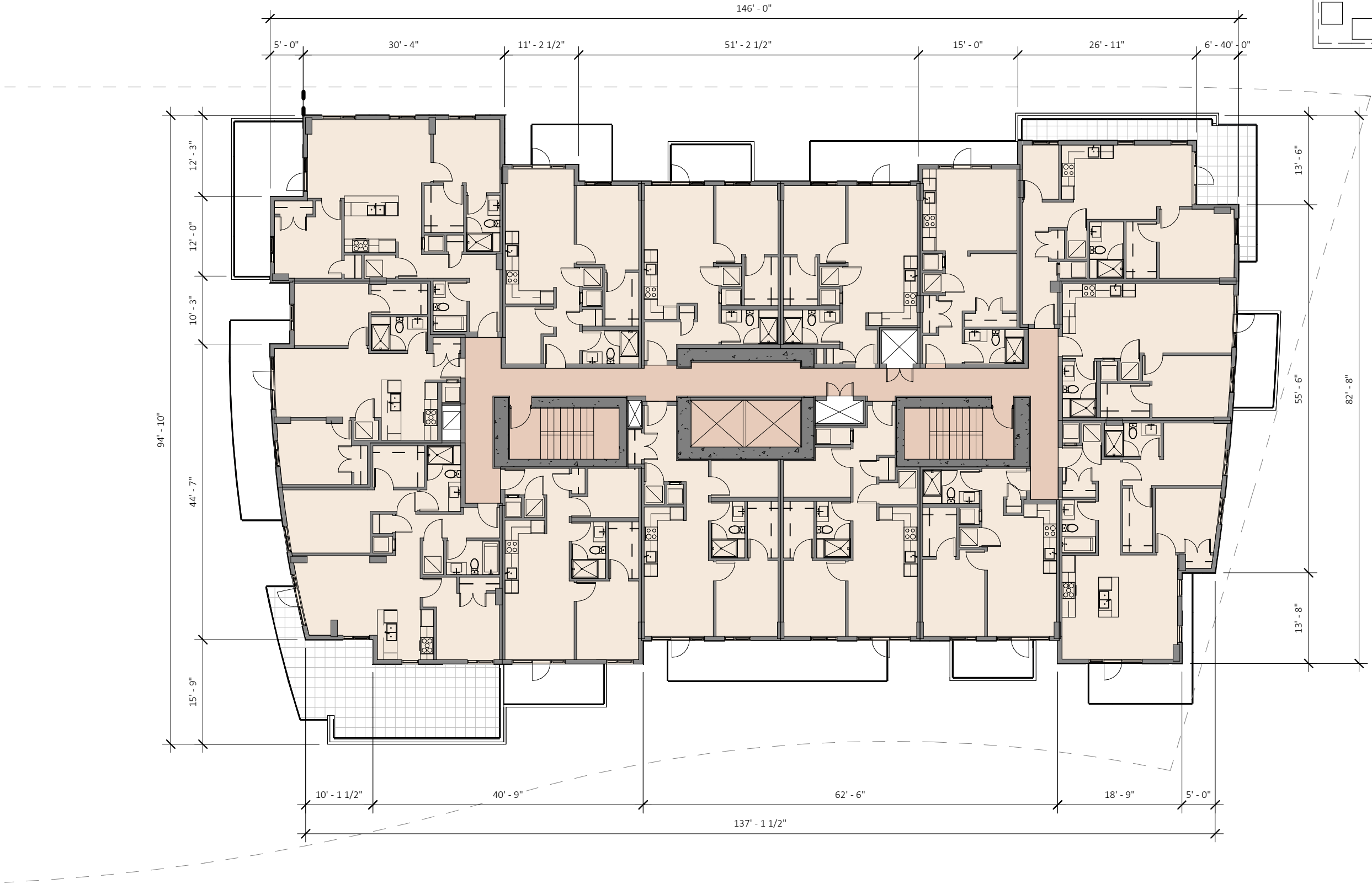
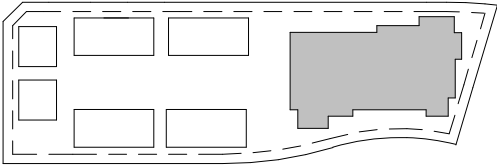


FLOOR PLANS  
TOWER LEVEL 3-11



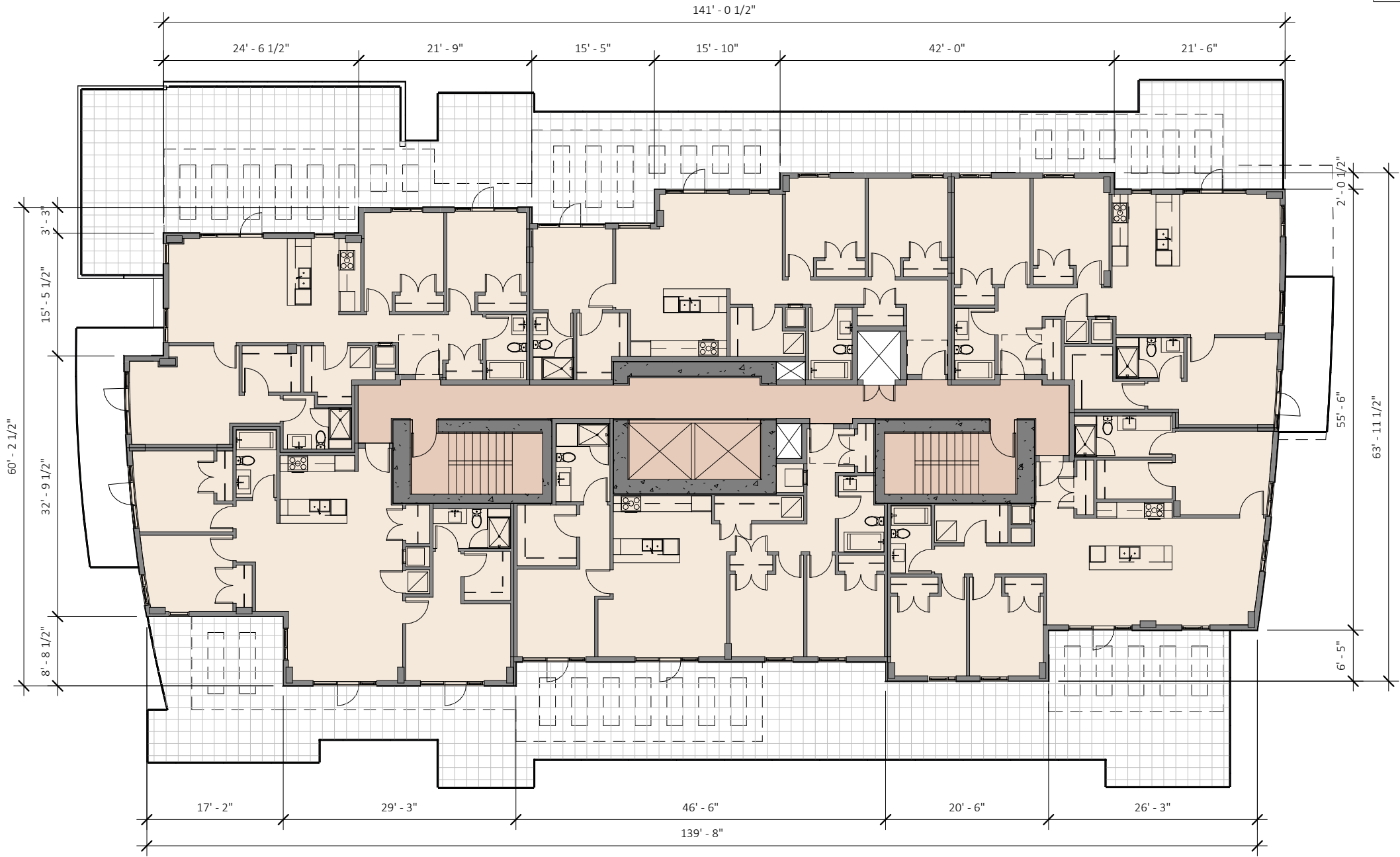
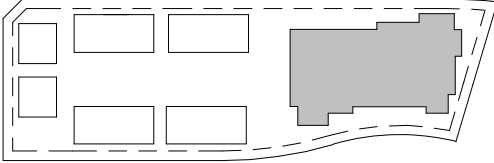


FLOOR PLANS  
TOWER LEVEL 12-15



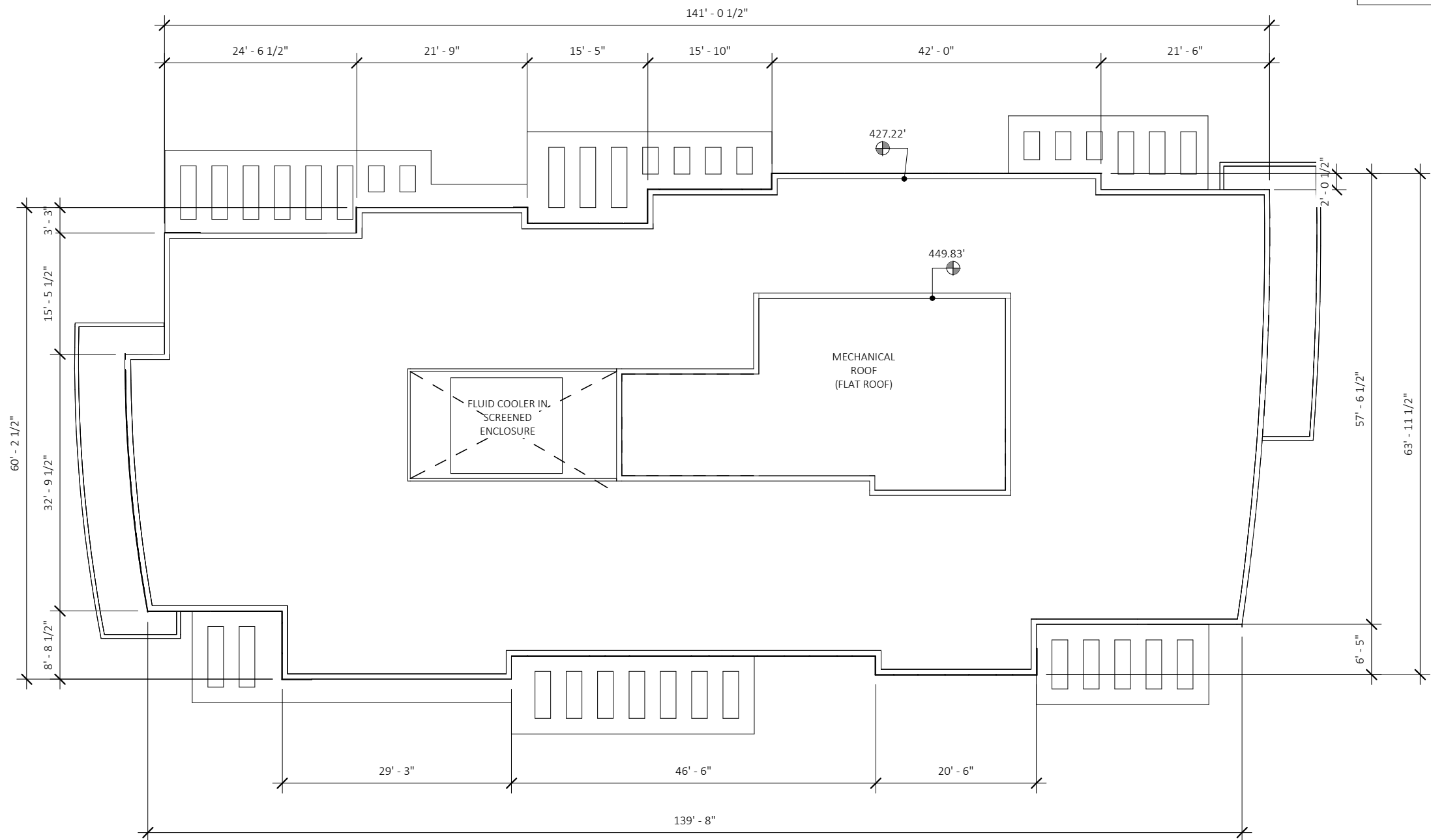
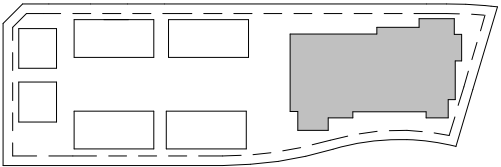


FLOOR PLANS  
TOWER LEVEL 16





FLOOR PLANS  
TOWER - ROOF LEVEL





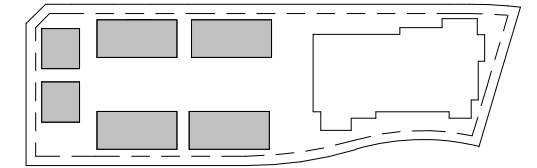
FLOOR PLANS  
CITY HOMES GROUND LEVEL





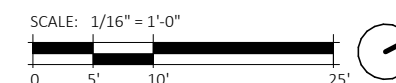
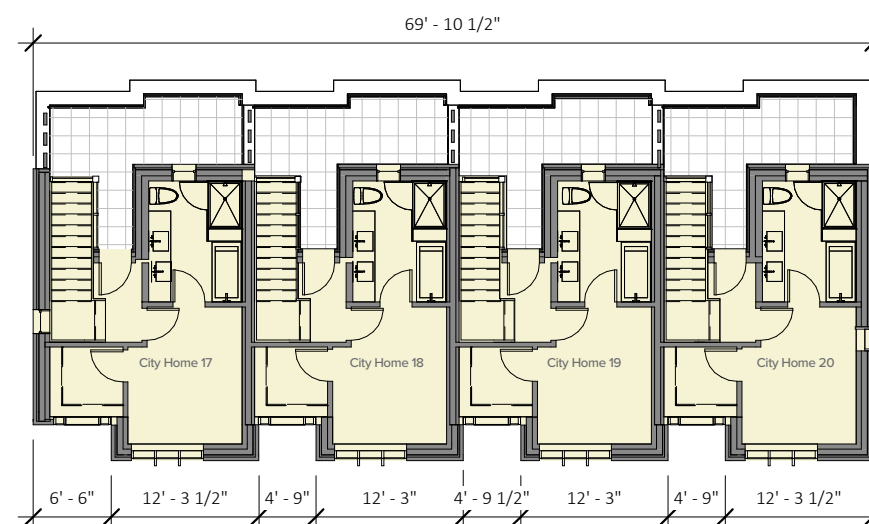
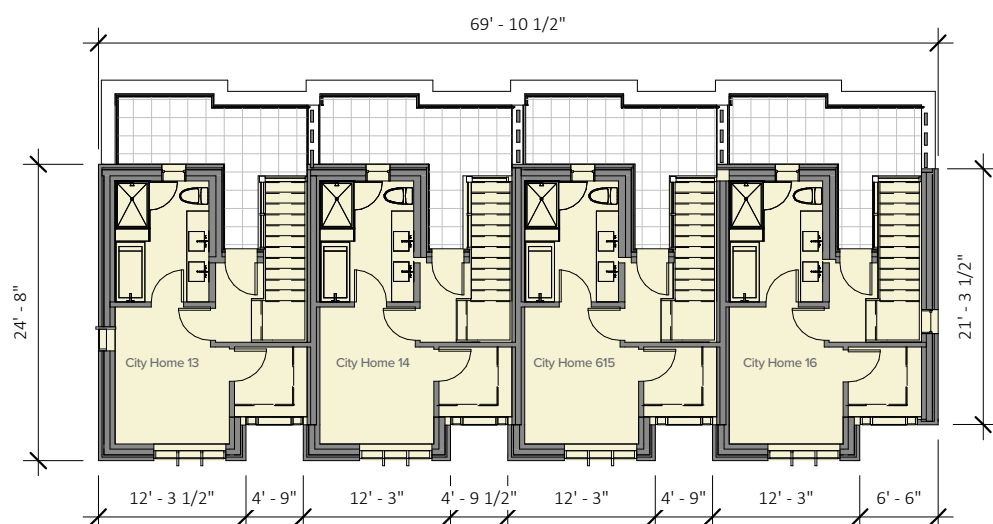
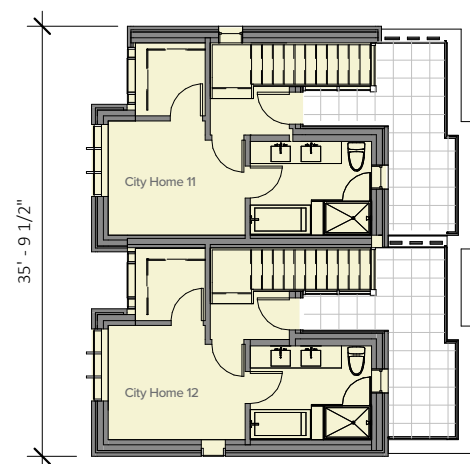
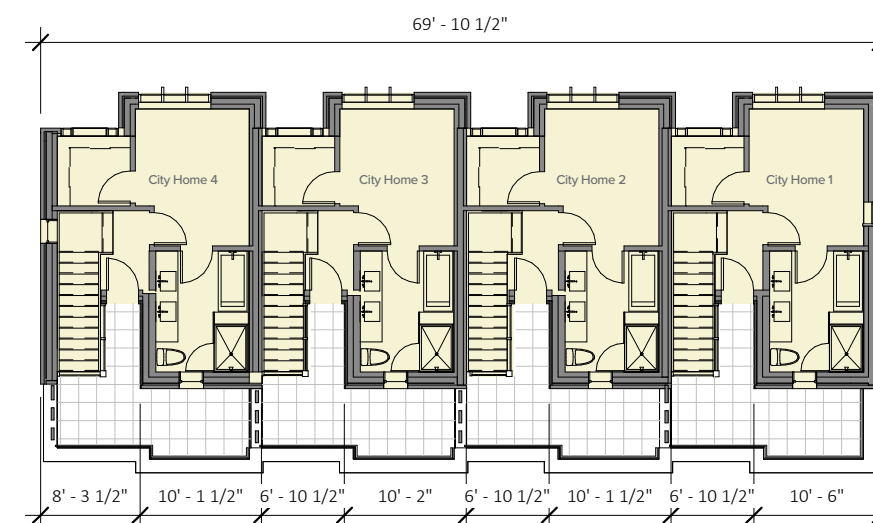
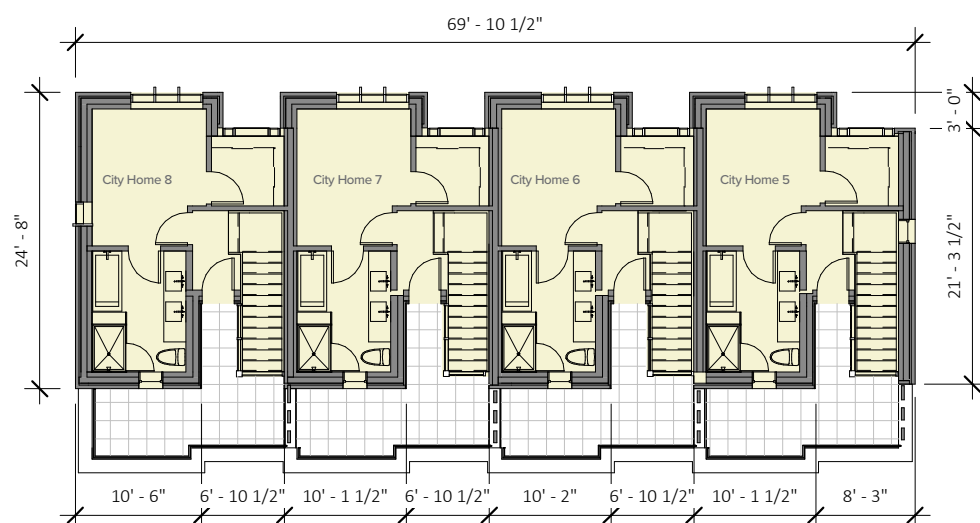
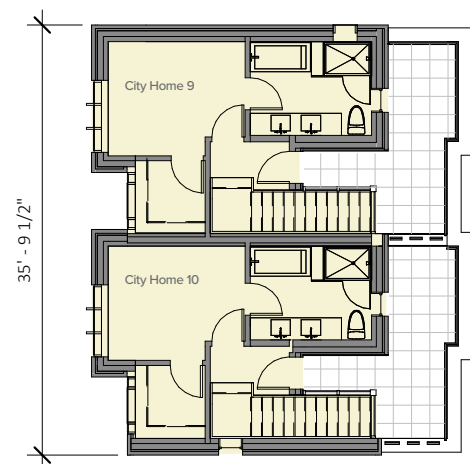
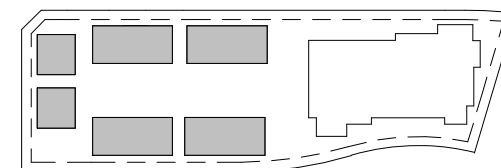
# FLOOR PLANS

## CITY HOMES LEVEL 2



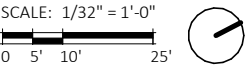
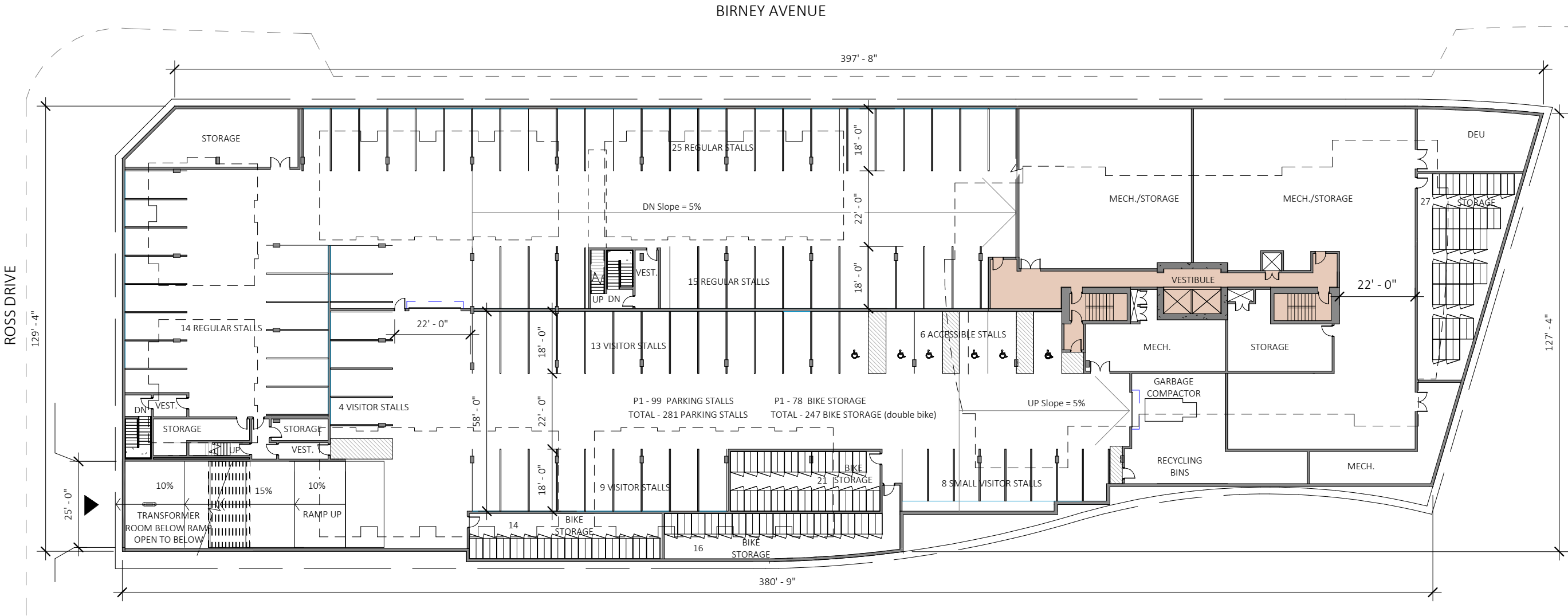
# FLOOR PLANS

## CITY HOMES LEVEL 3

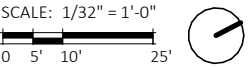
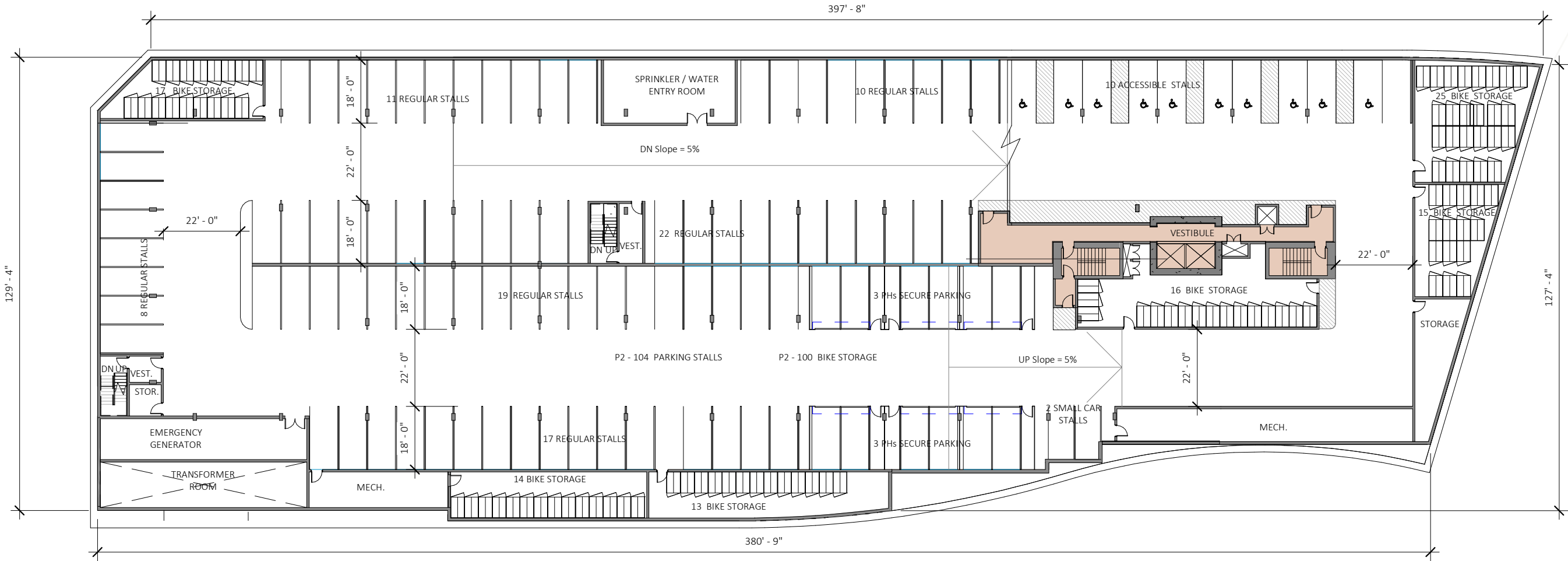




FLOOR PLANS  
PARKING LEVEL 1

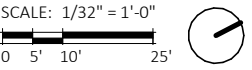
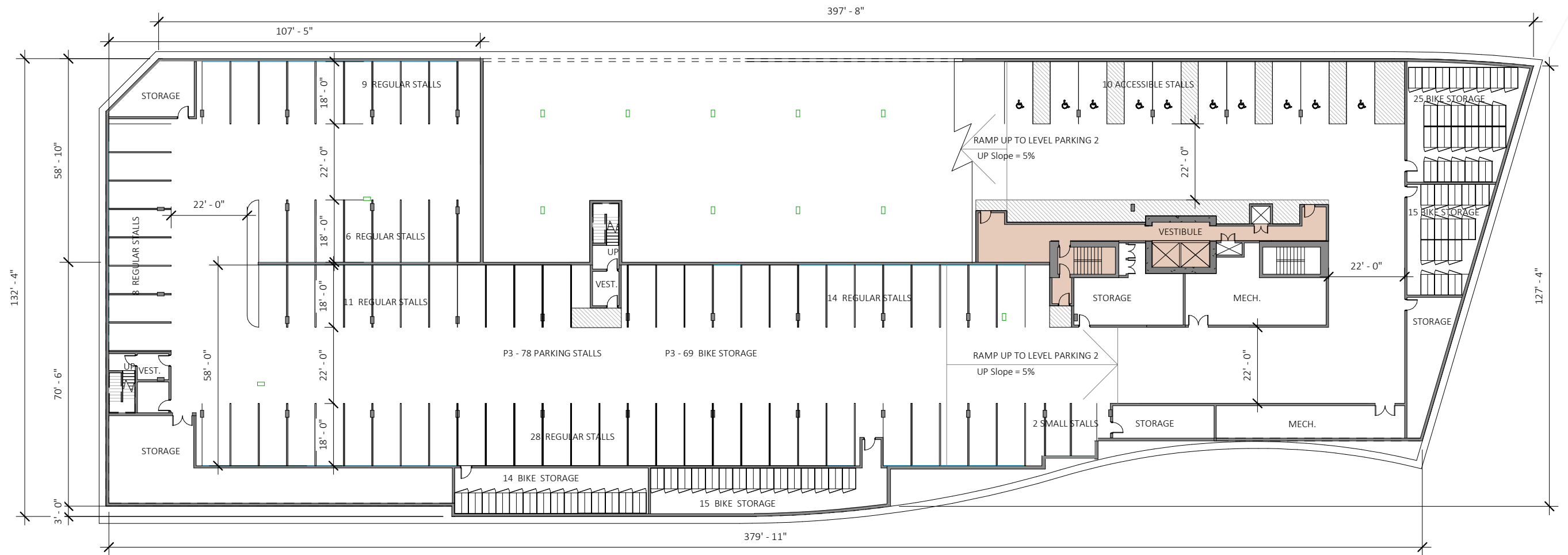


FLOOR PLANS  
PARKING LEVEL 2

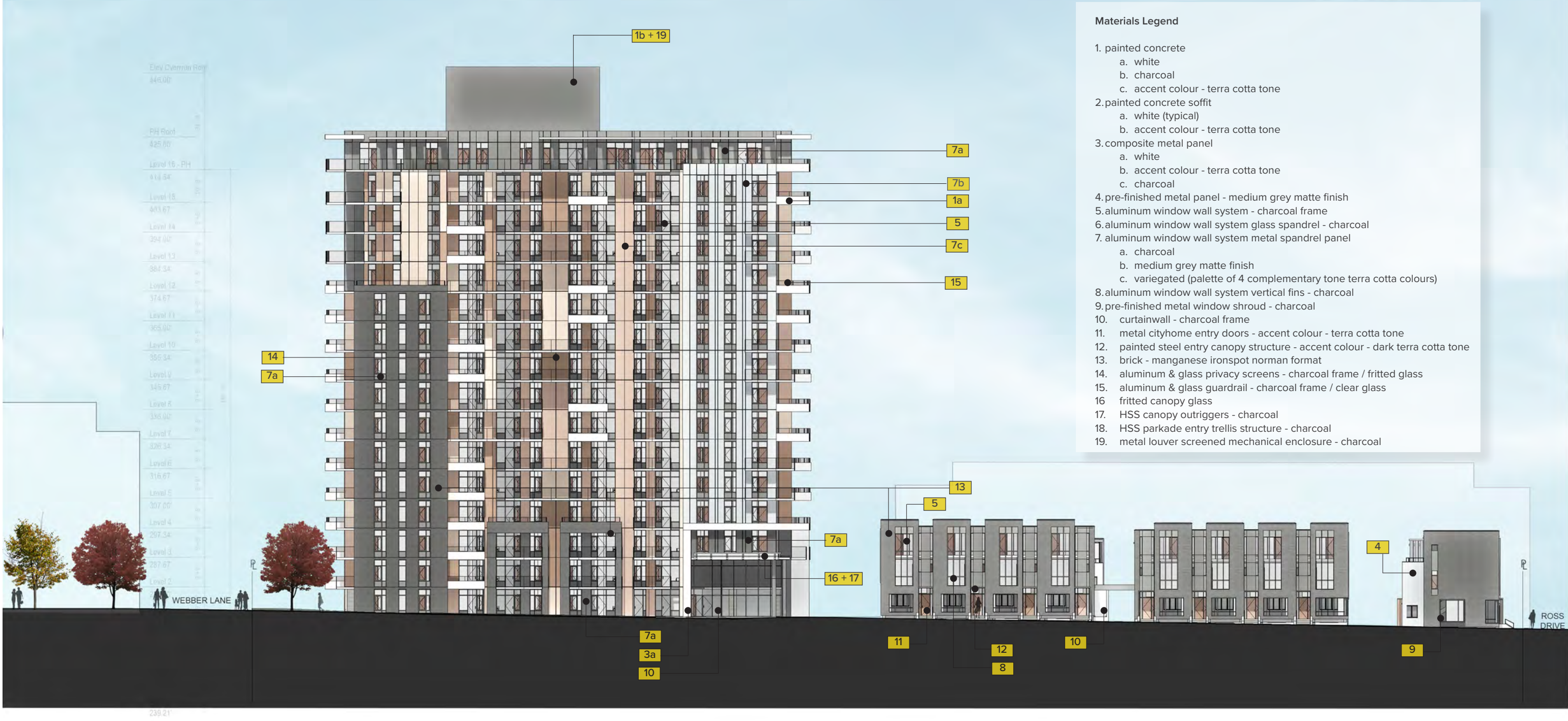
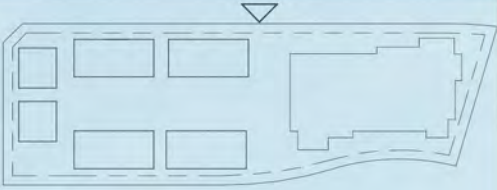




FLOOR PLANS  
PARKING LEVEL 3



ELEVATIONS  
WEST ELEVATION BIRNEY AVENUE

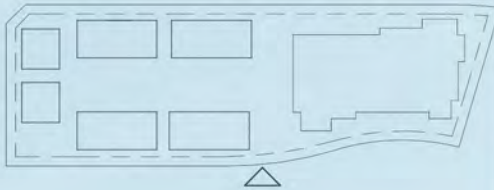


SCALE: 1/32" = 1'-0"  
0 5' 10' 25'



Materials Legend

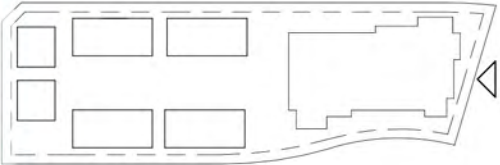
- 1. painted concrete
  - a. white
  - b. charcoal
  - c. accent colour - terra cotta tone
- 2. painted concrete soffit
  - a. white (typical)
  - b. accent colour - terra cotta tone
- 3. composite metal panel
  - a. white
  - b. accent colour - terra cotta tone
  - c. charcoal
- 4. pre-finished metal panel - medium grey matte finish
- 5. aluminum window wall system - charcoal frame
- 6. aluminum window wall system glass spandrel - charcoal
- 7. aluminum window wall system metal spandrel panel
  - a. charcoal
  - b. medium grey matte finish
  - c. variegated (palette of 4 complementary tone terra cotta colours)
- 8. aluminum window wall system vertical fins - charcoal
- 9. pre-finished metal window shroud - charcoal
- 10. curtainwall - charcoal frame
- 11. metal cityhome entry doors - accent colour - terra cotta tone
- 12. painted steel entry canopy structure - accent colour - dark terra cotta tone
- 13. brick - manganese ironspot norman format
- 14. aluminum & glass privacy screens - charcoal frame / fritted glass
- 15. aluminum & glass guardrail - charcoal frame / clear glass
- 16. fritted canopy glass
- 17. HSS canopy outriggers - charcoal
- 18. HSS parkade entry trellis structure - charcoal
- 19. metal louver screened mechanical enclosure - charcoal





# ELEVATIONS

## TOWER NORTH ELEVATION - WEBBER LANE



### Materials Legend

1. painted concrete
  - a. white
  - b. charcoal
  - c. accent colour - terra cotta tone
2. painted concrete soffit
  - a. white (typical)
  - b. accent colour - terra cotta tone
3. composite metal panel
  - a. white
  - b. accent colour - terra cotta tone
  - c. charcoal
4. pre-finished metal panel - medium grey matte finish
5. aluminum window wall system - charcoal frame
6. aluminum window wall system glass spandrel - charcoal
7. aluminum window wall system metal spandrel panel
  - a. charcoal
  - b. medium grey matte finish
  - c. variegated (palette of 4 complementary tone terra cotta colours)
8. aluminum window wall system vertical fins - charcoal
9. pre-finished metal window shroud - charcoal
10. curtainwall - charcoal frame
11. metal cityhome entry doors - accent colour - terra cotta tone
12. painted steel entry canopy structure - accent colour - dark terra cotta tone
13. brick - manganese ironspot norman format
14. aluminum & glass privacy screens - charcoal frame / fritted glass
15. aluminum & glass guardrail - charcoal frame / clear glass
16. fritted canopy glass
17. HSS canopy outriggers - charcoal
18. HSS parkade entry trellis structure - charcoal
19. metal louver screened mechanical enclosure - charcoal

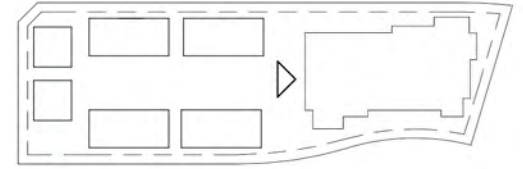


SCALE: 1/32" = 1'-0"  
0 5' 10' 25'



# ELEVATIONS

## TOWER SOUTH ELEVATION



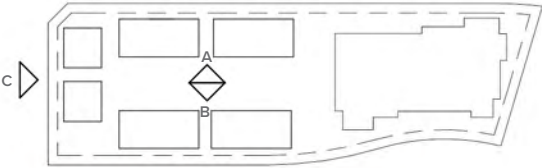
- Materials Legend**
1. painted concrete
    - a. white
    - b. charcoal
    - c. accent colour - terra cotta tone
  2. painted concrete soffit
    - a. white (typical)
    - b. accent colour - terra cotta tone
  3. composite metal panel
    - a. white
    - b. accent colour - terra cotta tone
    - c. charcoal
  4. pre-finished metal panel - medium grey matte finish
  5. aluminum window wall system - charcoal frame
  6. aluminum window wall system glass spandrel - charcoal
  7. aluminum window wall system metal spandrel panel
    - a. charcoal
    - b. medium grey matte finish
    - c. variegated (palette of 4 complementary tone terra cotta colours)
  8. aluminum window wall system vertical fins - charcoal
  9. pre-finished metal window shroud - charcoal
  10. curtainwall - charcoal frame
  11. metal cityhome entry doors - accent colour - terra cotta tone
  12. painted steel entry canopy structure - accent colour - dark terra cotta tone
  13. brick - manganese ironspot norman format
  14. aluminum & glass privacy screens - charcoal frame / fritted glass
  15. aluminum & glass guardrail - charcoal frame / clear glass
  16. fritted canopy glass
  17. HSS canopy outriggers - charcoal
  18. HSS parkade entry trellis structure - charcoal
  19. metal louver screened mechanical enclosure - charcoal

SCALE: 1/32" = 1'-0"

0 5' 10' 25'



ELEVATIONS  
CITY HOMES EAST & WEST COURTYARD ELEVATIONS



ELEVATION A City Homes 1 to 8 - East Elevation (Courtyard)



ELEVATION B City Homes 13 to 20 - West Elevation (Courtyard)

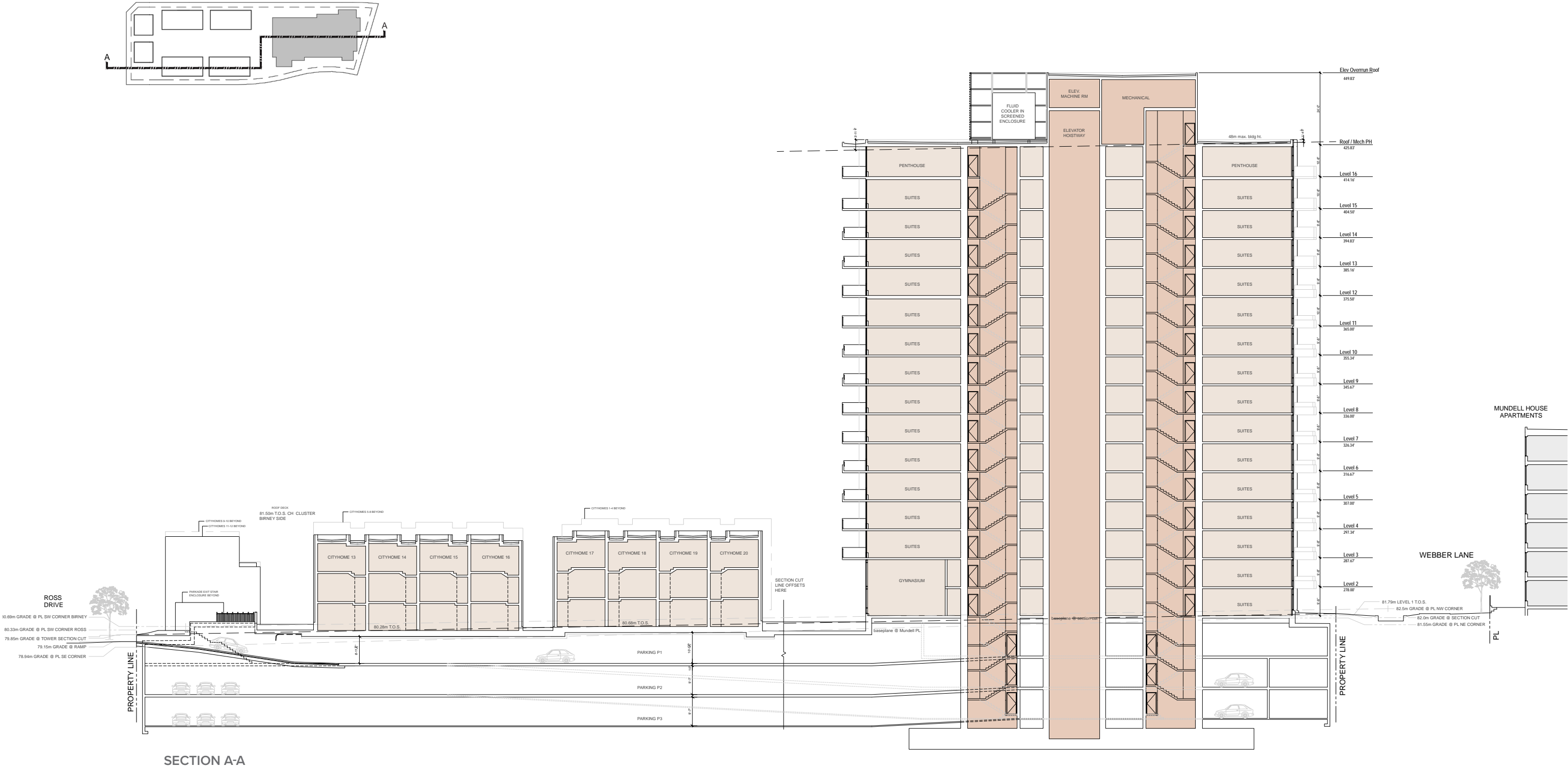


ELEVATION C City Homes 9 to 12 - South Elevation (Ross Drive)

SCALE: 1/32" = 1'-0"  
0 5' 10' 25'

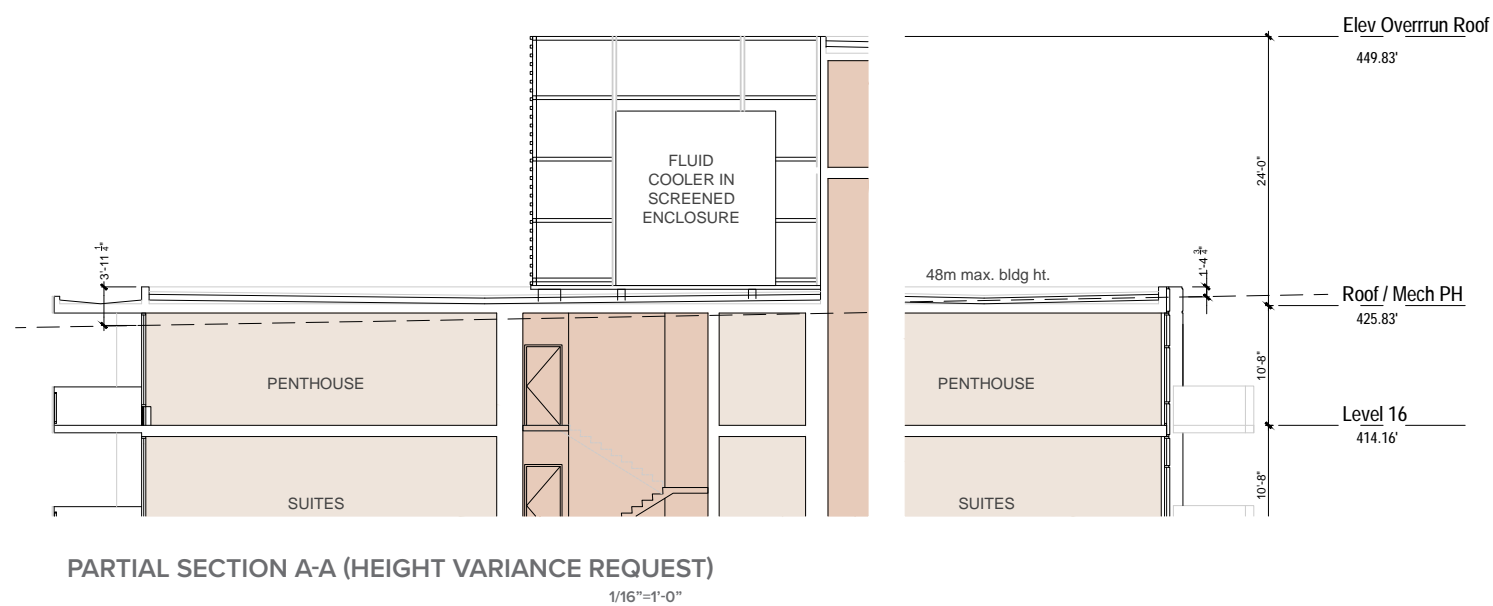
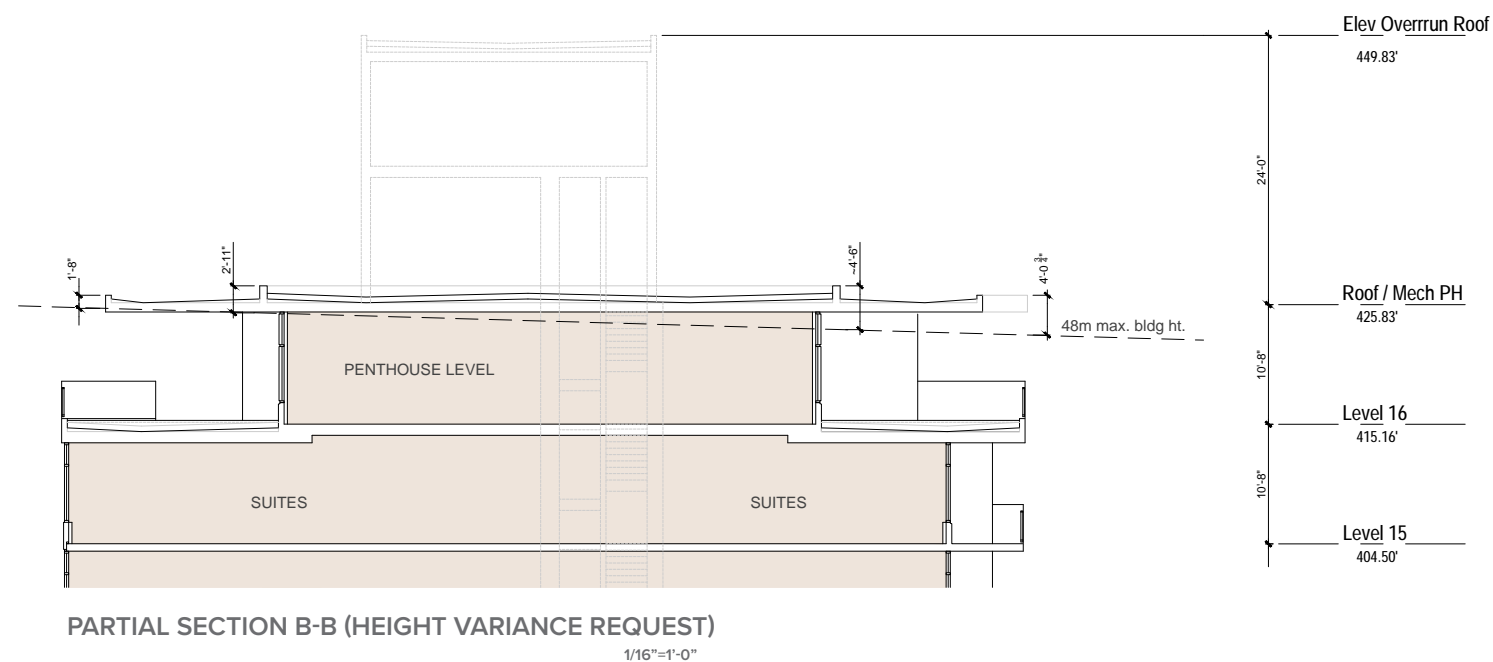
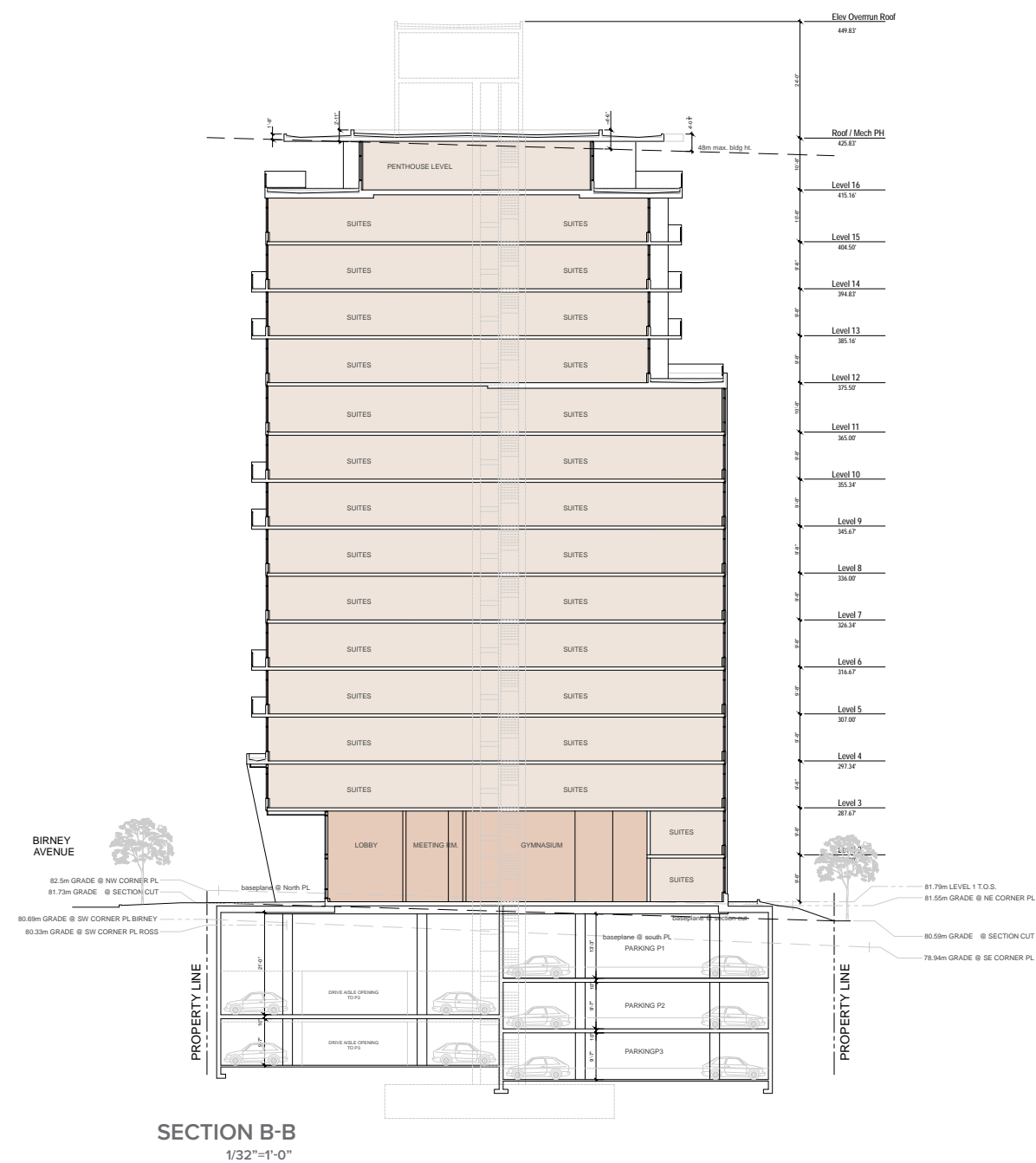
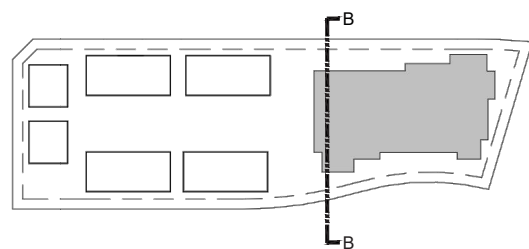


SITE SECTIONS  
TOWER LONGITUDINAL SECTION



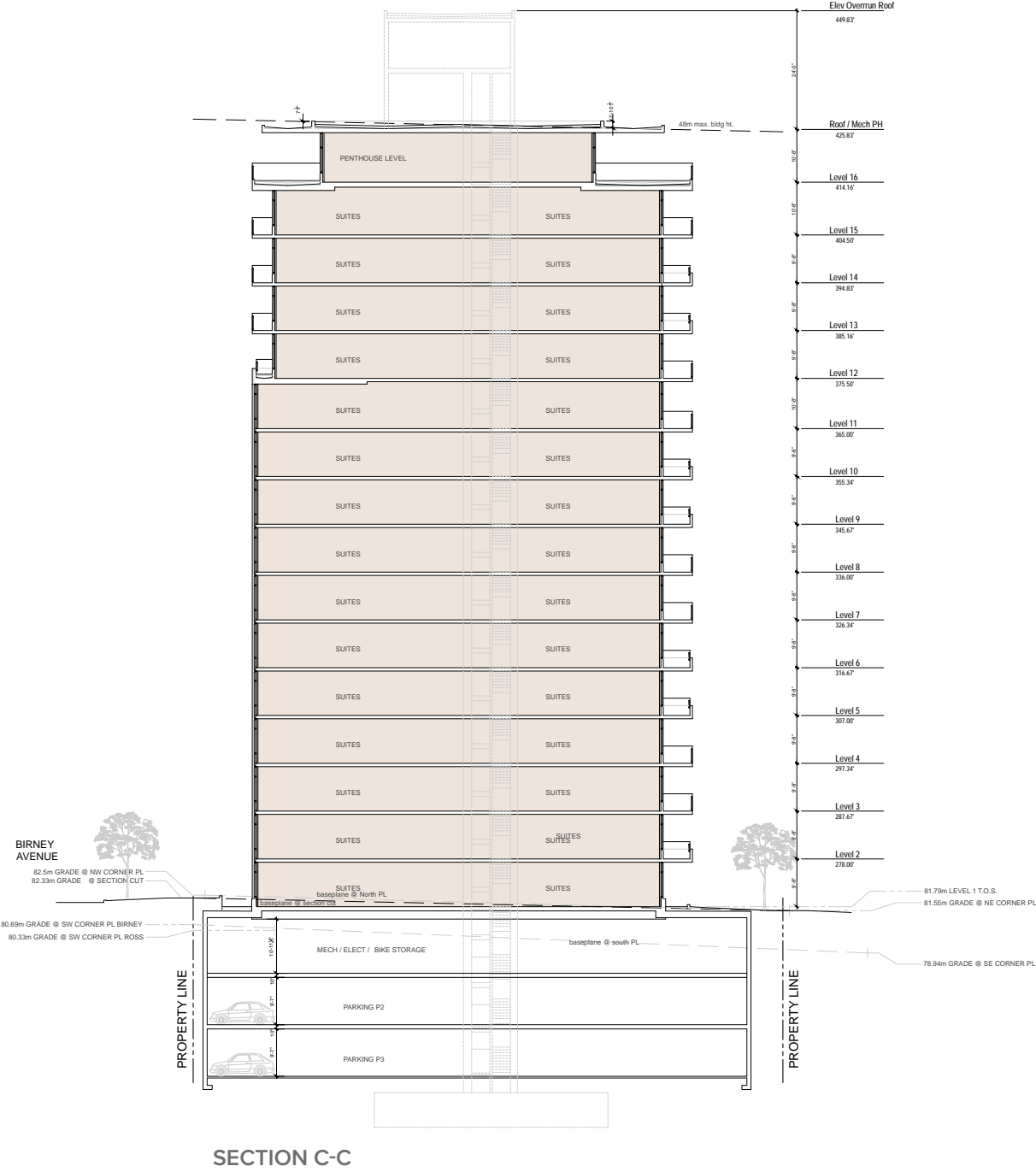
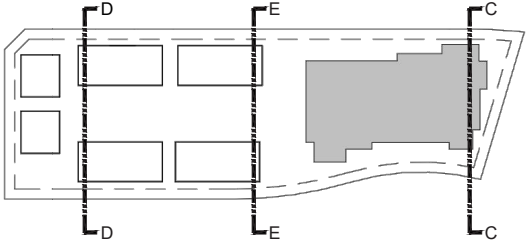
## SITE SECTIONS

### TOWER CROSS SECTIONS

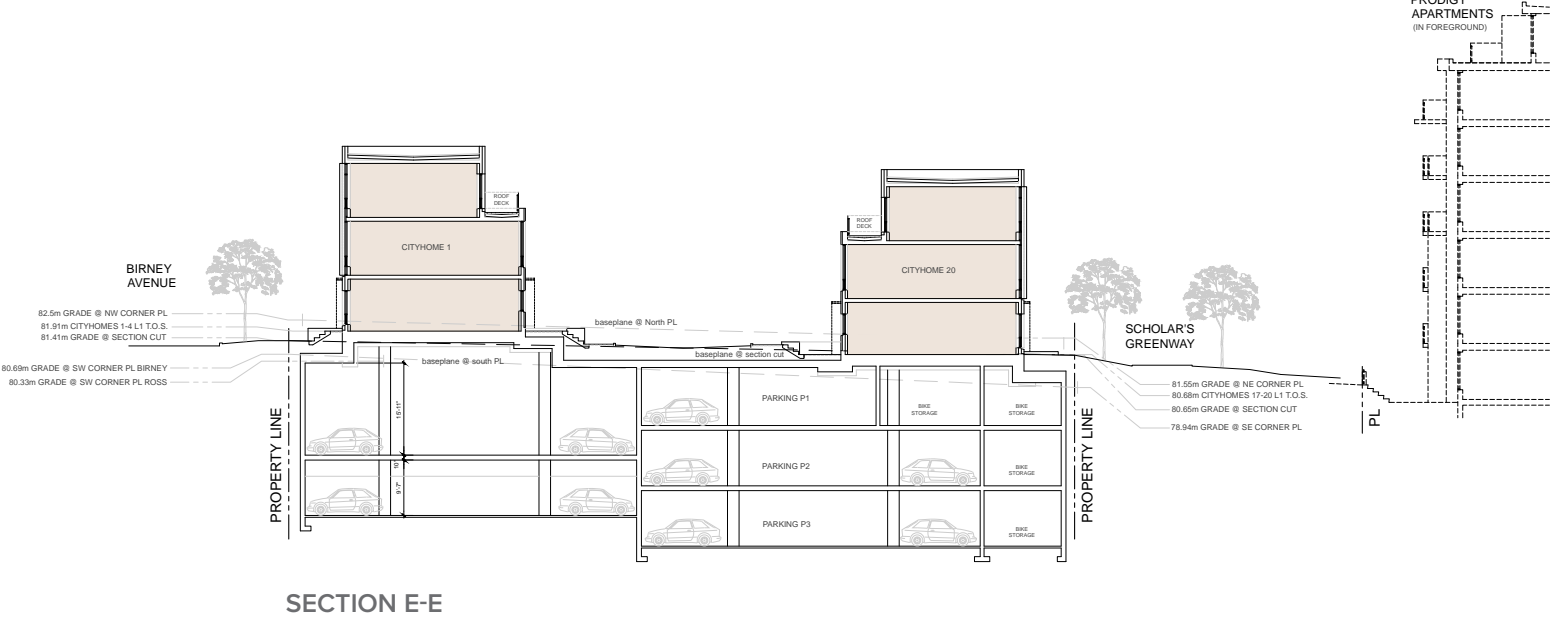




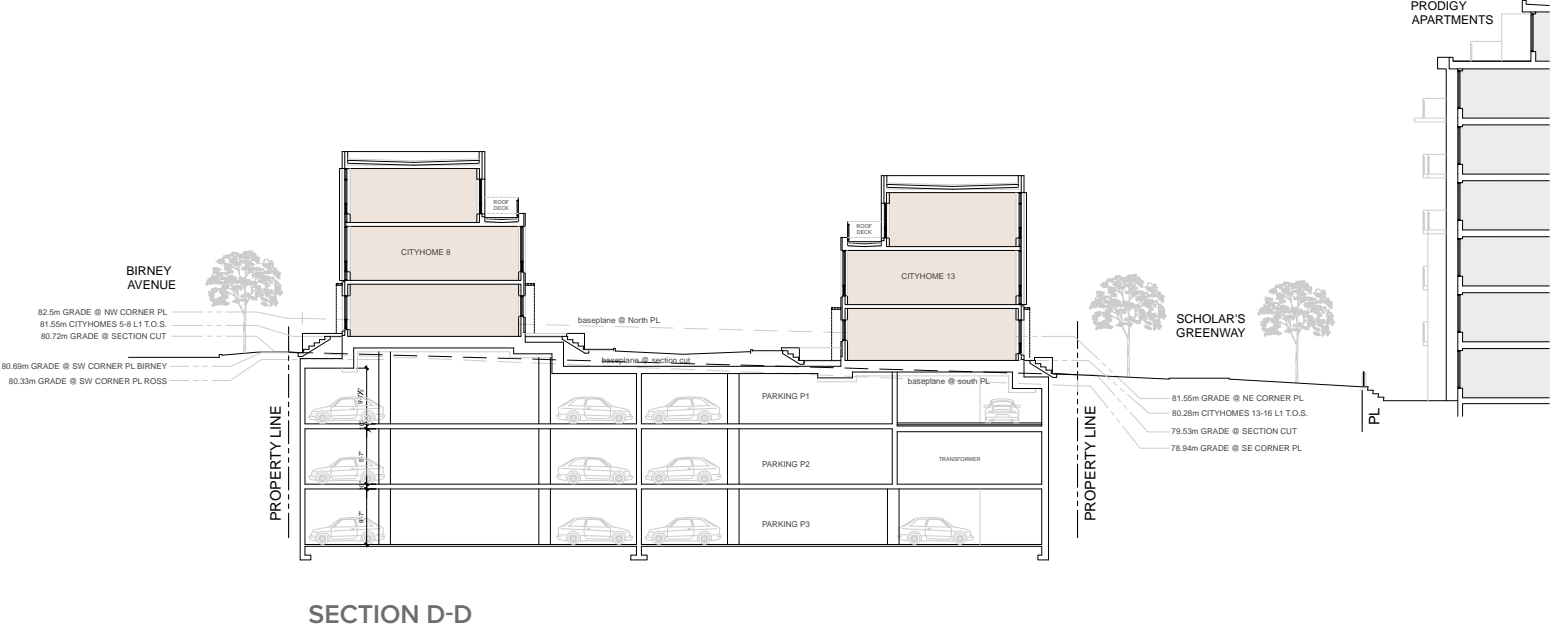
SITE SECTIONS  
CROSS SECTIONS TOWER AND CITY HOMES



SECTION C-C



SECTION E-E



SECTION D-D

