



URBAN DESIGN BRIEF

# Odayanhaway 30 Cleary Ave.

Project # : 2314

November 2023



# Contents

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# Welcome to Odayanhaway

From the onset of this project, we have been inspired by this amazing hidden little village on Cleary. Our goal was not to reinvent it through redevelopment, but instead to create a holistic design which would highlight its innate value and potential. Inspired by 'Little Village', Odayanhaway aspires to complete the master plan of this site by investing in two new buildings and programs that will help provide much needed affordable housing.

First Unitarian has long stood for justice, for community, and for sustainability in Ottawa. Over the past few months, Figurr, Theia Partners, and OAHS have been working collaboratively with First U in a development opportunity that will deliver affordable housing, while creating a revenue stream for the congregation ensuring long-term financial sustainability. Through this development First U will have the opportunity to live their values and transform a largely vacant area of the campus to provide much needed affordable housing, a showpiece for sustainability, and a revenue stream that can be partially used for philanthropy and much needed affordable and market housing.

Reconciliation has been a strong theme for this project, with a challenge to think about how this 'Little Village' could tangibly help efforts of reconciliation with the Indigenous community. The engagement of the Ontario Aboriginal Housing Services (OAHS) to be the long-term owner / operator of the non-profit building will help deliver much needed housing to Indigenous community members in Ottawa.

This proposal – as it now moving beyond conceptual thinking, and into implementation - will demonstrate leadership in the City and establish a model for other faith and community groups on how to redevelop underutilized lands through the inclusion of much needed affordable housing.

As presented in this document, the proposal is for a two-building solution. The first building is approximately 66 units, a 6-storey affordable housing

solution that is non-profit owned and managed. The building units will include a range of 1-bed, 2-bed and 2-bed+den units to meet the needs of OAHS. The building size will be roughly over 11,000 SF in footprint with a gross building area of around 65,400 SF. The building, as seen in the proposed site plan and renderings, would occupy the North-Western most part of the lands immediately adjacent to the NCC parkway. This would provide OAHS with symbolic connection to the existing green spaces and the Ottawa River.

The second building is a 16-storey market affordable building, aimed at balancing affordability and the desire to create a revenue stream for the Church. The intention for this building is to use the CMHC Rental Construction Financing Initiative program, with most of the units in the building meeting or exceeding CMHC's definition of affordable housing in Ottawa. This building will provide close to 150 units of various types. This building is currently proposed to be located just North of the River Parkway Childcare Centre and around 14m from the West property line at the podium levels and 16.1m at the tower portion. The building's area includes a 4-storey podium of around 10,700 SF/ floor in foot print, and tower area of around 8,070 SF / floor. This building will be served by an underground parking garage with around 96 spaces and an additional 10 spaces at grade. Required visitor parking will be provided at various locations at grade, including at an existing gravel area at the Southern end of the property.

With regards to bicycle parking, the project will provide a 1:1 ratio in order to encourage the use of the existing paths and trails in the neighbourhood and along the parkway along the river.

We believe that this proposal meets the ambitious objectives provided to us by First U for the redevelopment of this property:

## Objective 1:

### The Delivery of Affordable Housing

With 66 units of affordable housing within the OAHS low-rise, and 148 units of mixed market offerings in the taller rental tower, this proposal balances the requirement for much needed affordable housing and all the other requirements to make this project feasible for OAHS, First Unitarian, and Theia.

## Objective 2:

### Create a Sustainability Showpiece

The proposed master plan was conceived with sustainable design approaches as a key aspect.

The taller building limits the ratio of glass to solid panel to less than 40% to allow for better energy performance through the use of more solid wall assemblies. It is also aiming to use photovoltaic cladding on the South side.

The most important factor contributing to sustainable design is the saving and enhancement of the existing gardens into the urban design of the master plan. Saving mature green space is not only a sustainable strategy, but also because we understand the emotional connection that these gardens have for members of the congregation and Unitarian House. The inclusion (and enhancement) of these gardens with pedestrian paths and outdoor public spaces encourages healthier choices in walking and using bicycles. These paths will also support many of the residents of Unitarian House who use the grounds for daily walks. Instead of walking along uninspiring asphalt parking areas, all residents of this 'Little Village' will have access to a variety of outdoor paths, boardwalks and public spaces to explore.

The project will also encourage the use of the existing natural swale along the North-West property line in the future design of the storm water management plan. Using this swale, a natural approach to storm water management, can also be a source of education through the inclusion of a boardwalk so that everyone in the community can enjoy some of

the natural features of the site. The project is also exploring and intends to use Geothermal energy.

## Objective 3:

### Provide a Tangible Step Towards Reconciliation

The inclusion of OAHS as the affordable housing provider was an obvious choice in helping meet the goal of reconciliation. The OAHS building was located - at the request of First U - at the most important available spot on the land against the existing NCC lands and in closer proximity to the Ottawa River. The use of natural materials, Indigenous plantings and green spaces and gathering spaces will be highly inspired by Indigenous Peoples values.

## Objective 4:

### Create an Enduring Revenue Stream Helping Support Mission into the Indefinite Future

Through the development of a market building that generates positive revenue, the congregation is thinking long-term. The proposal leverages under-utilized parts of the campus; a primarily empty asphalt parking lot. This will help supplement congregation finances and will help ensure a presence in the community far into the future, being advocates for justice, tolerance, and sustainability.

PROPERTY DESCRIPTION	
6 & 16 STOREY RESIDENTIAL BUILDINGS	
CITY OF OTTAWA PIN NUMBER	04751-0119
MUNICIPAL ADDRESS	30 Cleary ave
SITE INFORMATION	
LOT AREA:	20,680 sqm
LOT FRONTAGE:	237.3m
LOT DEPTH:	112.8m
BUILDING INFORMATION	
BUILDING AREA: MARKET BUILDING = 994sqm, OAHS Building= 930 sqm	
BUILDING FLOOR AREA: OAHS BLDG = 6080 sqm, MARKET BLDG=12832 sqm, P1=2898sqm, P2=1953sqm	
PROPOSED USE: APARTMENT DWELLINGS	
<b>UNIT BREAKDOWN - MARKET BUILDING:</b>	<b>UNIT MIX:</b>
LEVEL 1: 9 UNITS	4x 1BD, 2x 1BD+D, 1x 2BD, 2x 2BD+D
LEVEL 2-4: 11 UNITS	2x 1BD, 4x 1BD+D, 3x 2BD, 2x 2BD+D
LEVEL 5-15: 9 UNITS	5x 1BD, 1x 1BD+D, 3x 2BD
LEVEL 16: 7 UNITS	3x 1BD, 2x 1BD+D, 2x 2BD
<b>TOTAL</b>	<b>148 UNITS</b>
<b>UNIT BREAKDOWN - OAHS BUILDING:</b>	<b>UNIT MIX:</b>
LEVEL 1: 6 UNITS	4x 1BD, 2 x 2BD
LEVEL 2-6: 12 UNITS	6x 1BD, 1x 1BD+D, 4x 2BD, 1 x 2BD+D
<b>TOTAL</b>	<b>66 UNITS</b>
<b>MARKET &amp; OAHS BUILDINGS TOTAL</b>	<b>214 UNITS</b>

ZONING TABLE		11A[314]H(13.8)
CITY OF OTTAWA ZONING BY-LAW No. 2008-250	REQUIRED	PROPOSED
MINIMUM LOT AREA	400m <sup>2</sup>	TOTAL LOT AREA=20,680sqm
MINIMUM LOT WIDTH	15m	237.3m
MINIMUM FRONT YARD SETBACK	3m	22.7m
MINIMUM INTERIOR SIDE YARD SETBACK	7.5m	10.5m
MINIMUM REAR YARD SETBACK	Abutting R1, R2 or R3:7.5m Other cases: 4.5m	6.19m
MAXIMUM BUILDING HEIGHT	13.8m	MARKET BUILDING= 49.75m(WITHOUT PENTHOUSE) 53.75m(WITH PENTHOUSE) OAHS= 19m (WITHOUT PENTHOUSE) 23m (WITH PENTHOUSE)
VEHICLE PARKING REQUIREMENTS (AREA Z)	No off-street motor vehicle parking is required to be provided within Area Z (By-law 2016-249)	UNDERGROUND=96 SPACES ABOVE GROUND=15 SPACES TOTAL=111 SPACES
VISITOR VEHICLE PARKING REQUIREMENTS	0.2 Spaces per unit <i>Despite (1), within Areas B, X, Y and Z, no visitor parking spaces are required for the first twelve dwelling units on a lot. (By-law 2016-249).</i> <i>Despite (1), within Areas X, Y and Z, no more than thirty visitor parking spaces are required per building (By-law 2016-249).</i>	MARKET=148 UNITS X0.2 SPACES=30 VISITOR PARKING SPACES  OAHS=66 UNITS X 0.2= 14 VISITOR SPACES
AMENITY AREA REQUIREMENTS	6m <sup>2</sup> per dwelling unit, and 10% of the gross floor area of each rooming unit. Minimum 50% of the required total amenity area to be communal.  MARKET= 6m <sup>2</sup> x 148 units=888sqm OAHS= 6m <sup>2</sup> x 66 units= 396 sqm	MARKET BUILDING= 687 sqm PRIVATE 445 sqm COMMUNAL 1132 sqm TOTAL  OAHS BUILDING=397 sqm (ALL COMMUNAL)
BICYCLE PARKING SPACES	0.5 per dwelling unit	MARKET BUILDING=118 HORIZONTAL SPACES, STACKED=18X2=36 SPACES 154 SPACES TOTAL  OAHS= 33 HORIZONTAL STACKED= 16X2=32 SPACES 65 SPACES TOTAL



















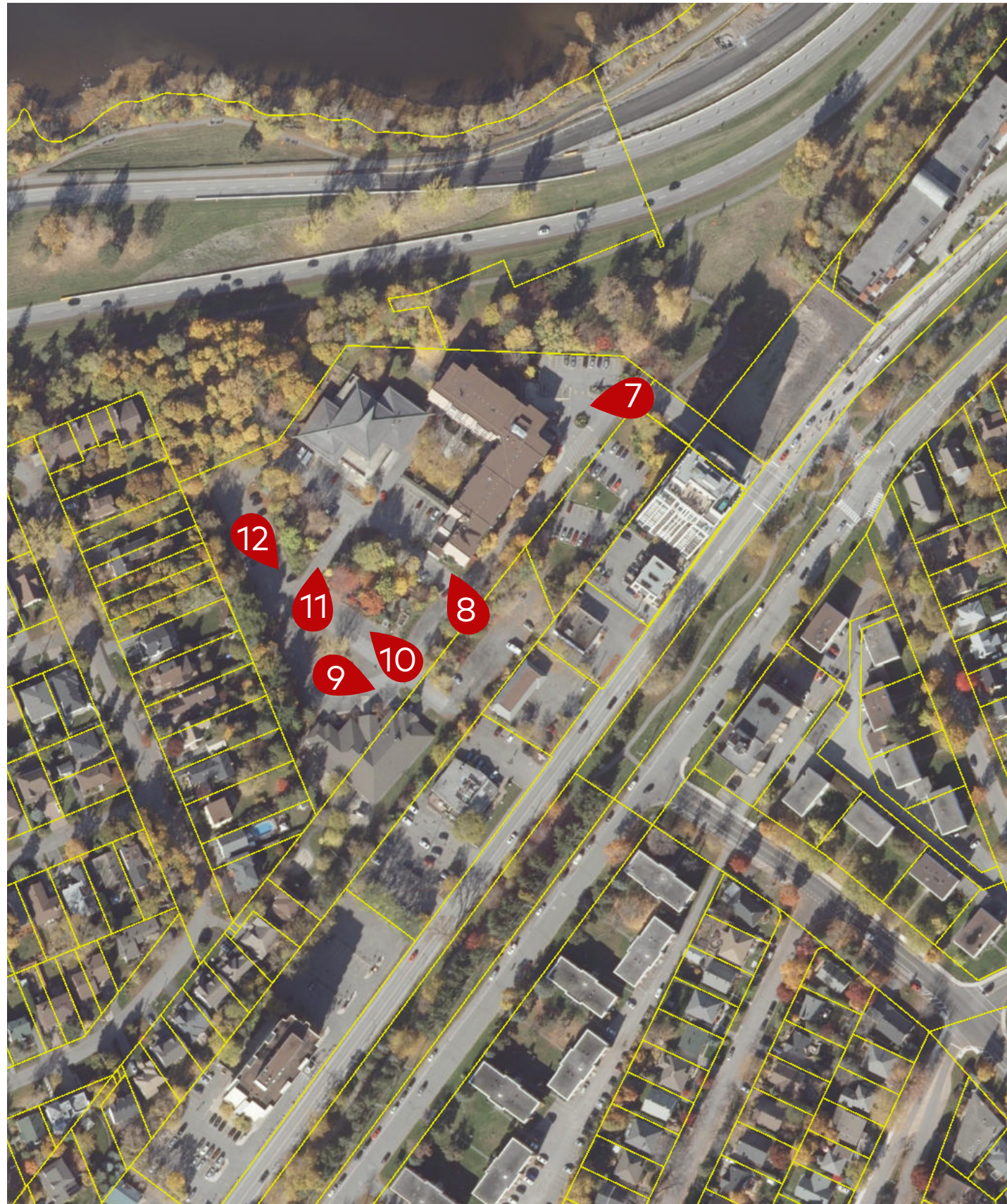


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PROPOSED DEVELOPMENT LOCATION



PROPOSED DEVELOPMENT LOCATION



PROPOSED DEVELOPMENT LOCATION



PROPOSED DEVELOPMENT LOCATION





FIRST UNITARIAN CHURCH



EXISTING GARDENS



EXISTING GARDENS

**"The gardens represent an excellent mix of native species and species at risk. They could not be easily replicated"**

Casey Little, Biologist, CIMA+

**"Protecting the trees is of significant cultural importance and will provide a key connection to nature"**

Cathy Connor, Director of Housing Development, OAHS

**"The gardens represent decades of meticulous cultivation and care. Their protection for future generations is a priority for the congregation"** Terry Kimmel, First Unitarians of Ottawa



# Official Plan - Designation

- / Designated **Neighbourhood**
- / Located in an **Evolving Neighbourhood** Overlay
- / Overlay is applied to areas close to Hubs and Corridors to signal future intensification over time
- / Typically low-rise development permitted, greater heights allowed in close proximity other taller buildings



Schedule B2 - Inner Urban Transect, City of Ottawa Official Plan

# Secondary Plan - Vision and Guiding Principles

## Vision

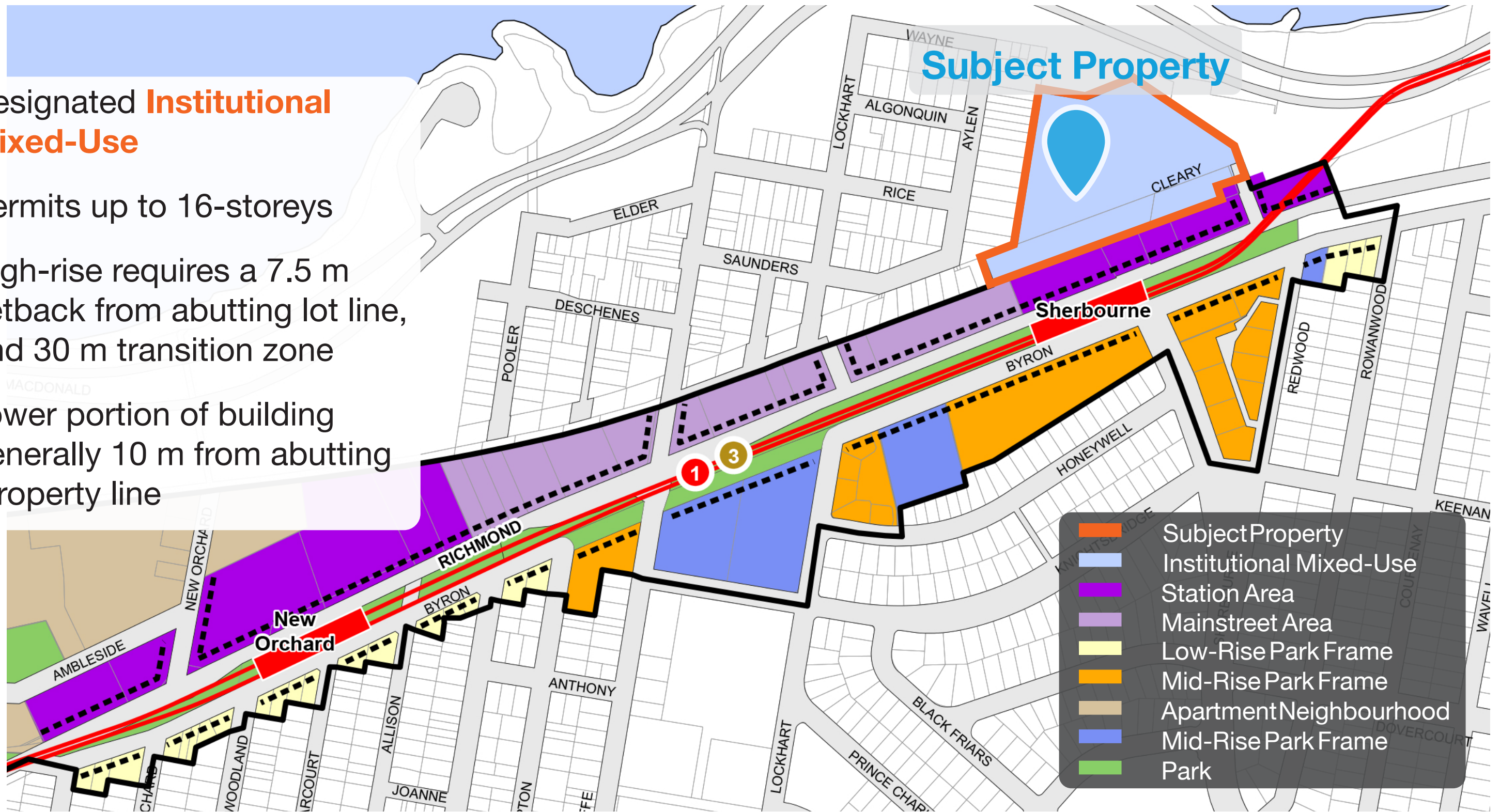
- / The area will continue to evolve into an attractive and liveable urban community, with prominent greenspace components as well as a wide mix of uses; and
- / Intensification will be compatible and compliment adjacent neighbourhoods, with an emphasis on “human-scale” pedestrian interaction

## Guiding Principles

- / All usable public greenspace and recreational facilities will be retained and will be increased or expanded where possible; and
- / The scale and character of existing neighbourhoods will be preserved through appropriate height transitions of new development, with an emphasis on ensuring that new development supports the O-Train

# Secondary Plan - Designation

- / Designated **Institutional Mixed-Use**
- / Permits up to 16-storeys
- / High-rise requires a 7.5 m setback from abutting lot line, and 30 m transition zone
- / Tower portion of building generally 10 m from abutting property line



Schedule A – Designation Plan, Sherbourne and New Orchard Secondary Plan

# Secondary Plan - Site Specific Policy

## Institutional Mixed-Use Area

17. Redevelopment of this area will be with buildings in a range of heights, in accordance with the following:

a) The portions of the lot adjacent and closest to a residential zone must comprise of a transition zone, **generally 30 metres in depth**, which includes a **7.5 metre setback**, measured from the residential lot line, with a low-rise built form.

b) Mid-rise buildings for the portion of the lot with street frontage on Cleary Avenue.

c) High-rise buildings up to 16 storeys are permitted and must be located:

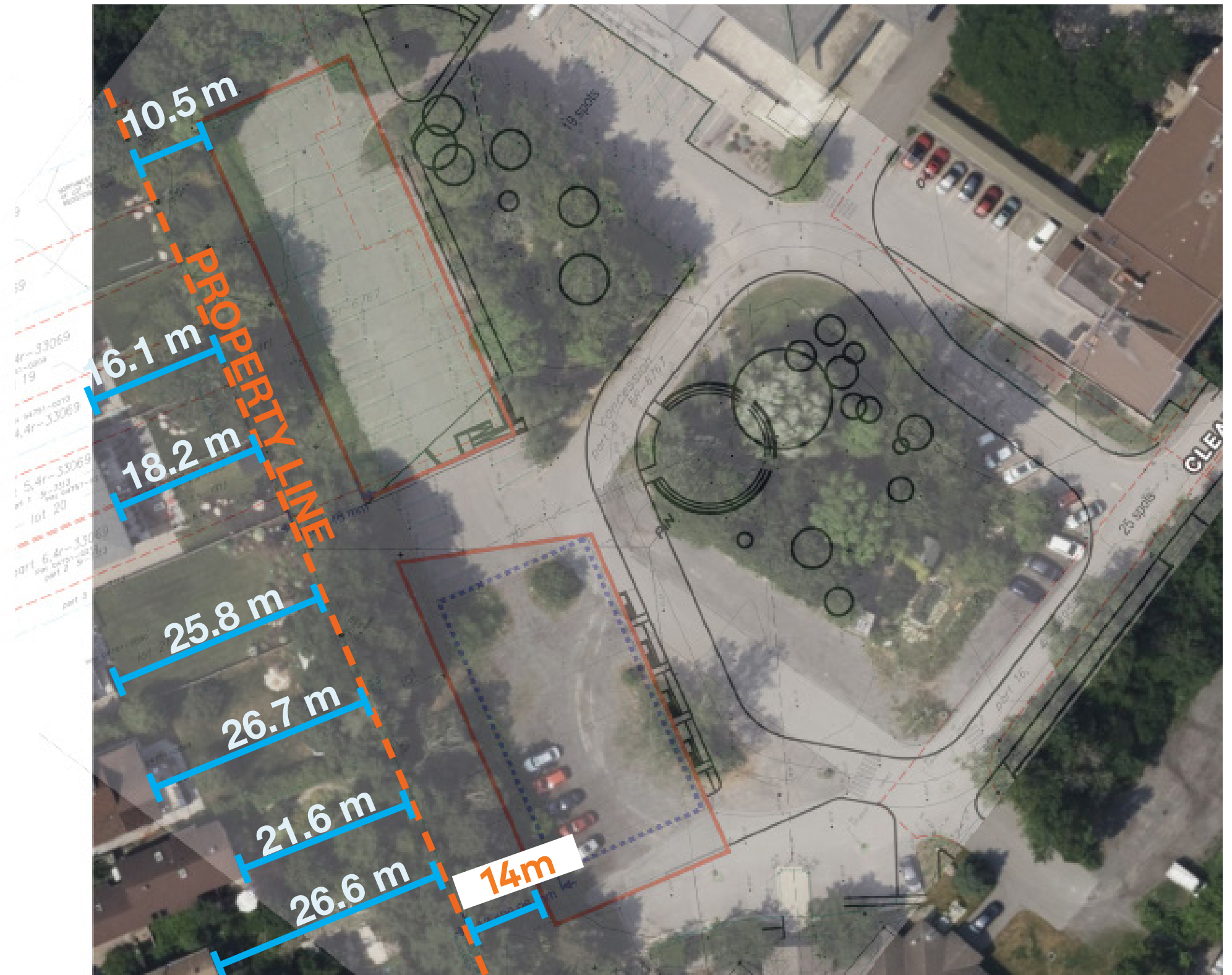
i) Must be located and designed to minimize the shadow impacts on the adjacent low-rise neighbourhood community.

ii) In a position with minimal view impacts on adjacent high-rise buildings.

iii) Be located close to the NCC corridor or in a location that will break up the cumulative massing along Richmond Road.

# Preliminary Site Plan - Transition and Setbacks

- / Proposed high-rise development contemplates a **35.6 m average setback** from existing low-rise properties
- / Proposed mid-rise development contemplates a **28.7 m average setback** from existing low-rise properties
- / Mid-rise building has a **10.5 m setback** from the property line
- / High-rise building has a **14m setback** from the property line

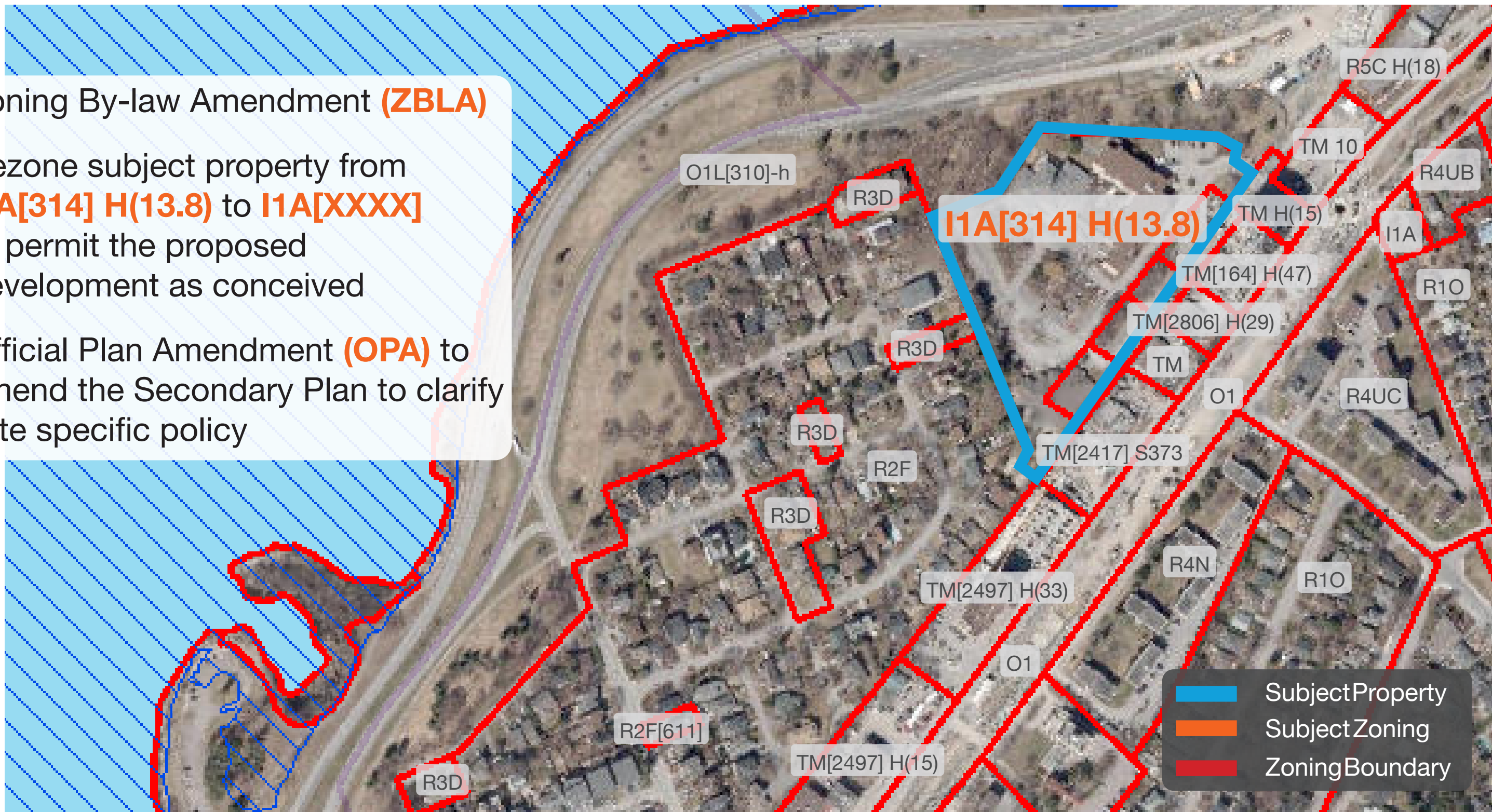


Location of proposed development and associated setbacks



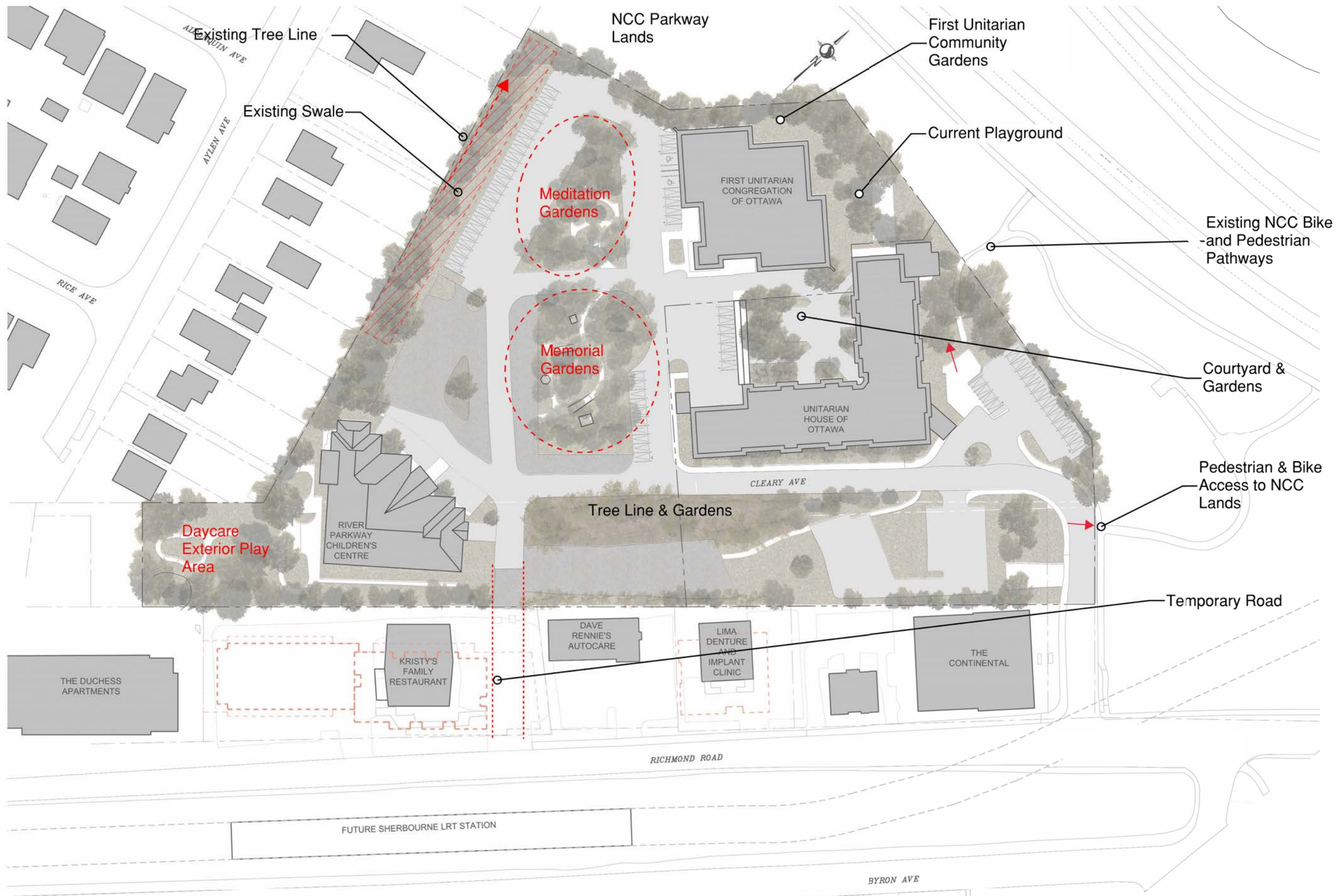
# Development Applications - ZBLA & OPA

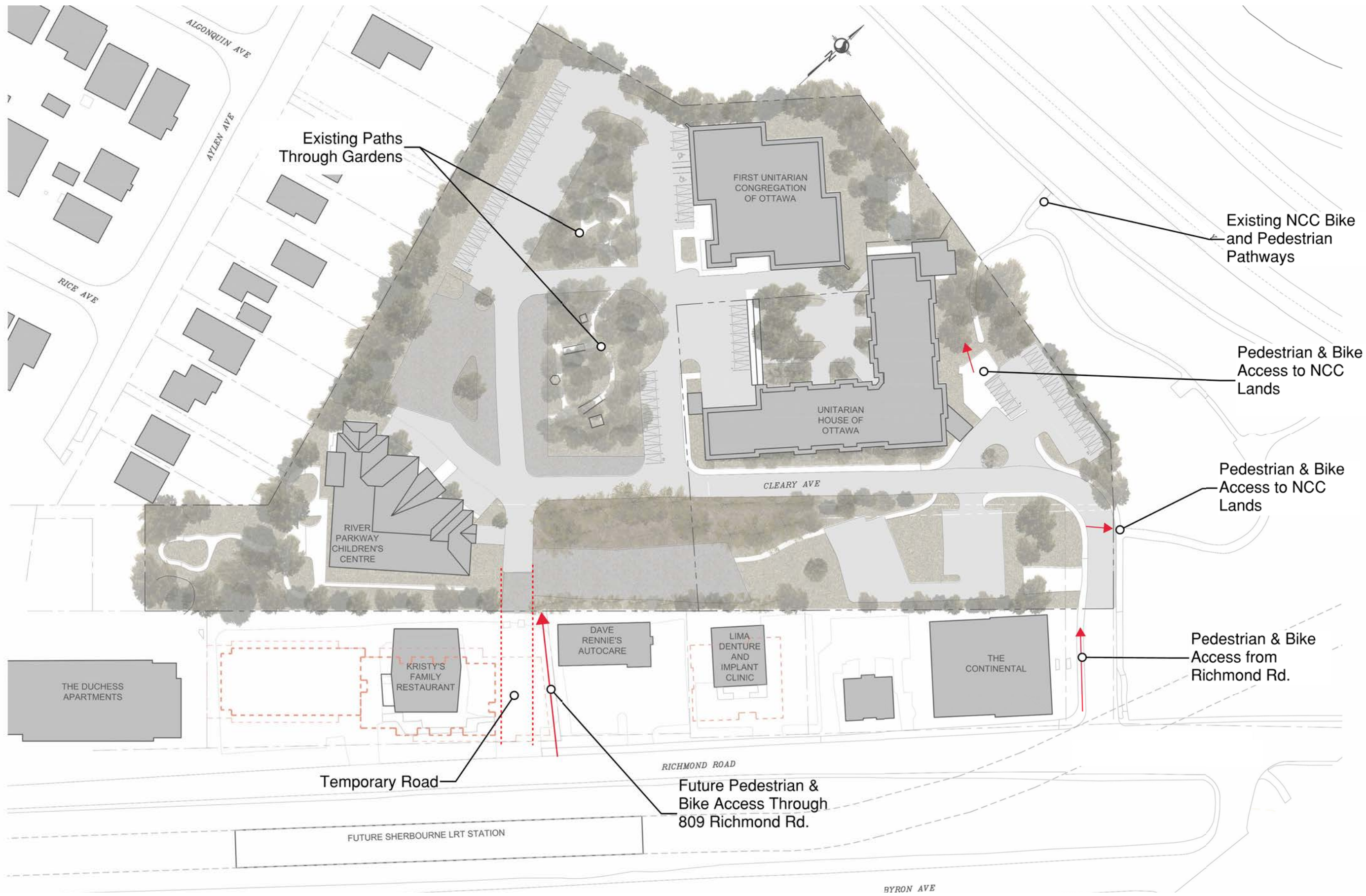
- / Zoning By-law Amendment (ZBLA)
- / Rezone subject property from **I1A[314] H(13.8)** to **I1A[XXXX]** to permit the proposed development as conceived
- / Official Plan Amendment (OPA) to amend the Secondary Plan to clarify site specific policy

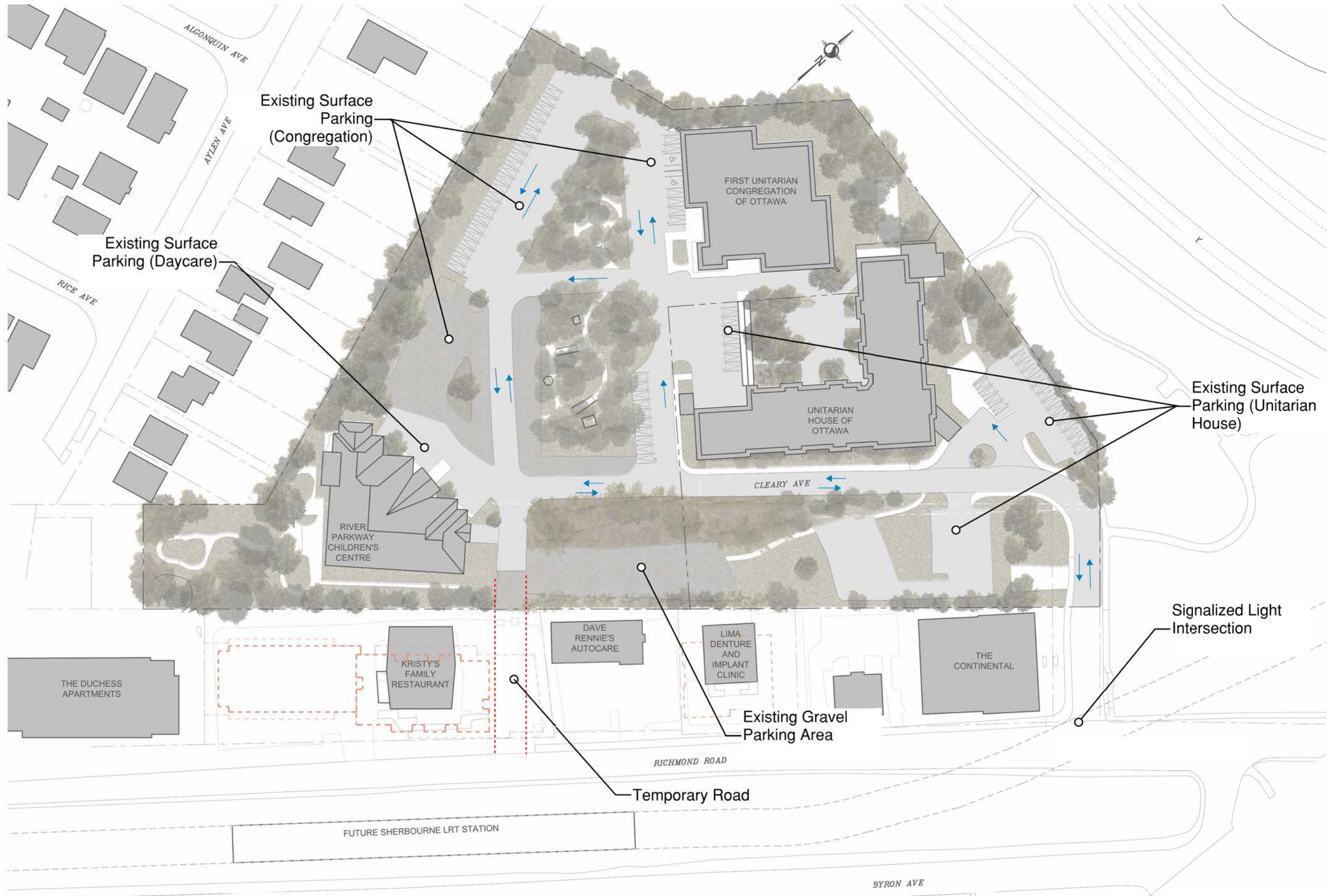


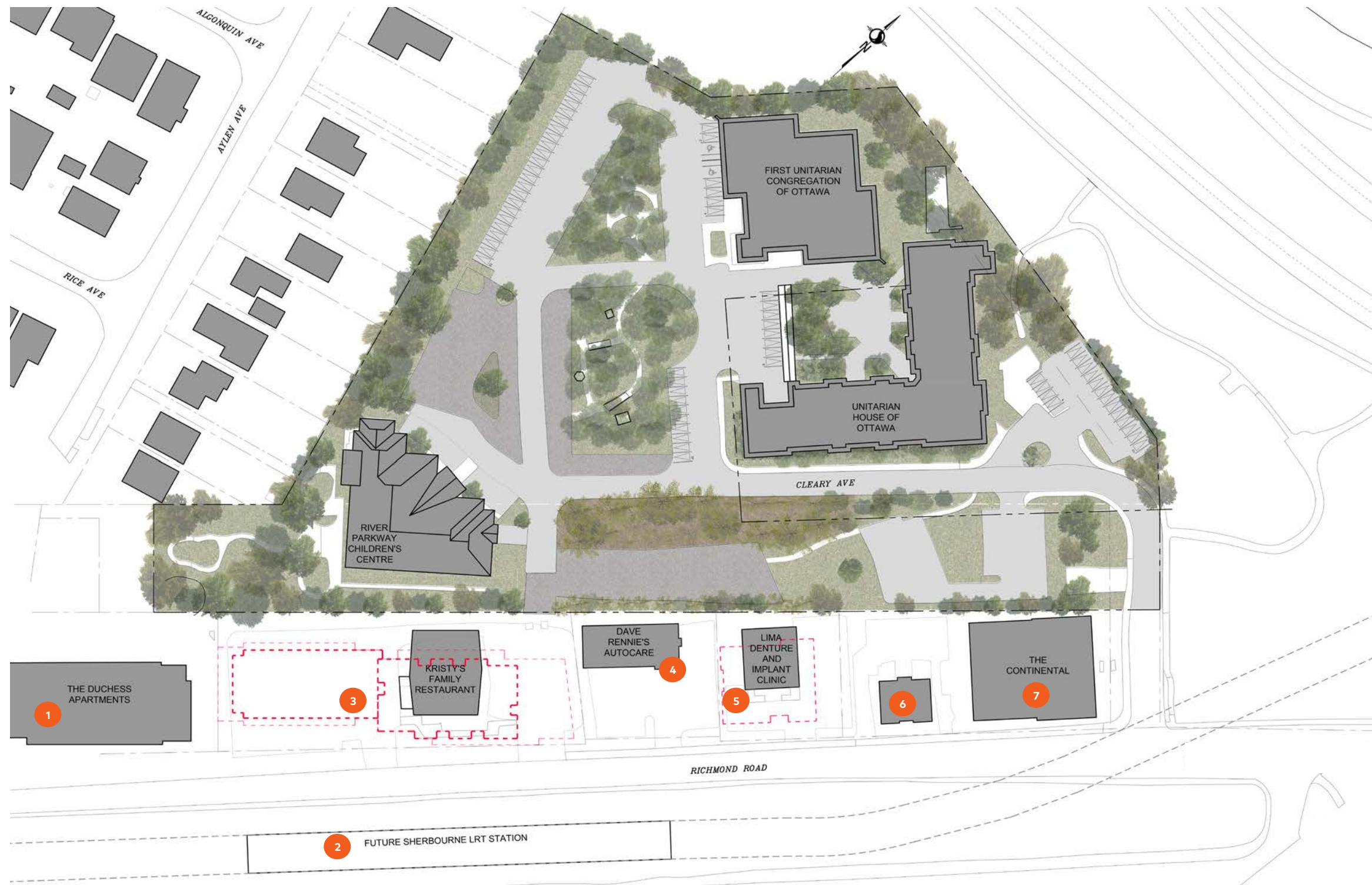
Subject property and surrounding area zoning











**833 RICHMOND RD.**  
11-STORY APARTMENT BUILDING



**FUTURE LRT SHERBOURNE STATION**



**809 RICHMOND RD.**  
EXISTING 1-STORY RESTAURANT



**809 RICHMOND RD.**  
ZONING APPROVED - 24-STORY  
COMMERCIAL/ RESIDENTIAL TOWER



**801 RICHMOND RD.**  
EXISTING 1-STORY AUTO SHOP



**797 RICHMOND RD.**  
EXISTING 1-STORY DENTAL OFFICE



**797 RICHMOND RD.**  
PROPOSED 10-STORY RENTAL  
BUILDING



**773 RICHMOND RD.**  
3-STORY RESIDENTIAL BUILDING



**75 CLEARY AVE.**  
16-STORY RESIDENTIAL BUILDING



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## Definition of Success

### Aspirational

The project will be aspirational – it will be beautiful and remarkable, demonstrating leadership on housing and sustainability; it will be fun for all ages, and energizing for the congregation.

Key words for aspirational include:

- Beautiful
- Demonstrates Leadership
- Remarkable
- Fun
- Inspiring
- Energizing

## Definition of Success

### Inclusive

The project will be accessible and inclusive – communities, like ecosystems, benefit from great diversity. The project will include accessible units, will invite in a diversity of community members, and will create an indigenous presence on site.

Key words for accessible and inclusive include:

- Accessible & Inclusive:
- Pedestrian friendly
- Intergenerational
- Diverse
- Open to public
- Creates an indigenous presence
- Facilitates anti-racism

## Definition of Success

### Sustainable

The project will be inspired by nature and sustainable – recognizing the inherent sustainability benefit of putting homes on LRT routes and on a previously developed site, the project will listen to nature, protecting and promoting a green oasis on-site. Transit, cycling and walking will be prioritized.

Key words for nature inspired and sustainable include:

- Celebrates stormwater
- Uses some natural materials
- Protects an oasis
- Integrates with cycling
- Transit-oriented

## Definition of Success

### Feasible

The project will be achievable and feasible – success is measured through providing good homes, and not just platitudes and ideas. Ultimately, the project must be able to be built with people living in quality new homes on site..

Key words for achievable and feasible include:

- Worthwhile
- Realistic
- Affordable



# ASPIRATIONAL

Precedents



# INCLUSIVE

Precedents



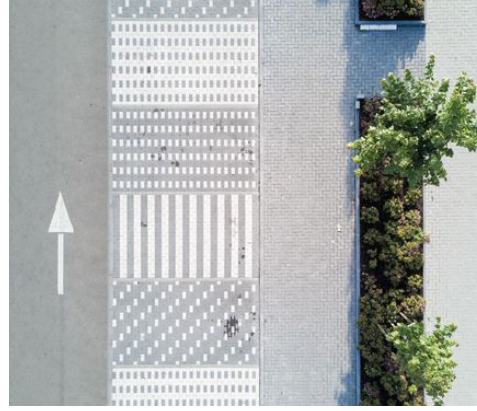
# SUSTAINABLE

Precedents



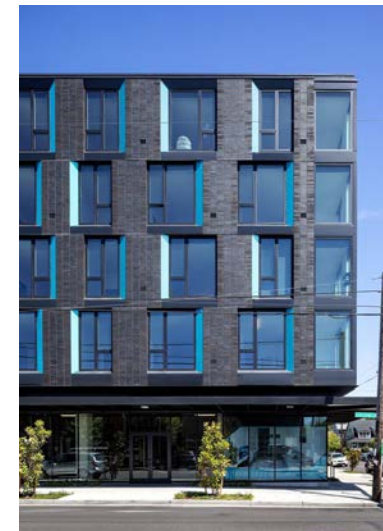
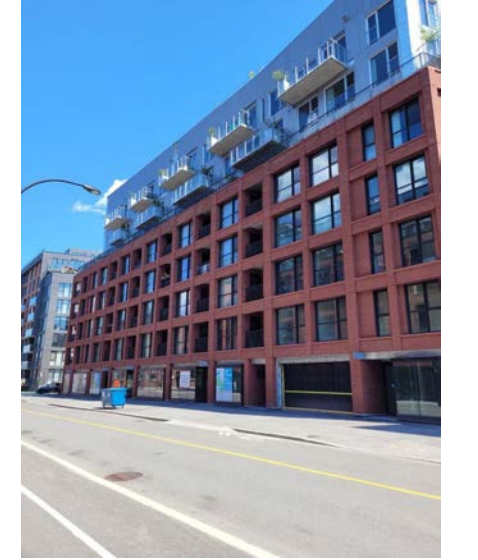
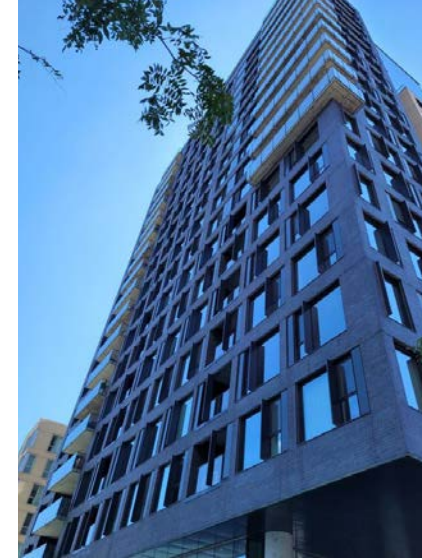
# FEASIBLE

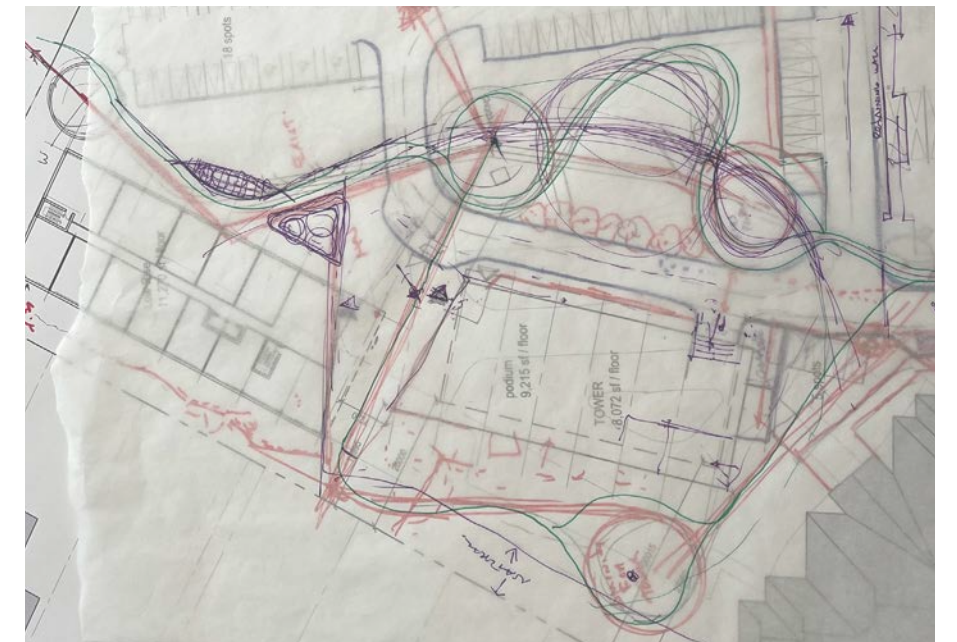
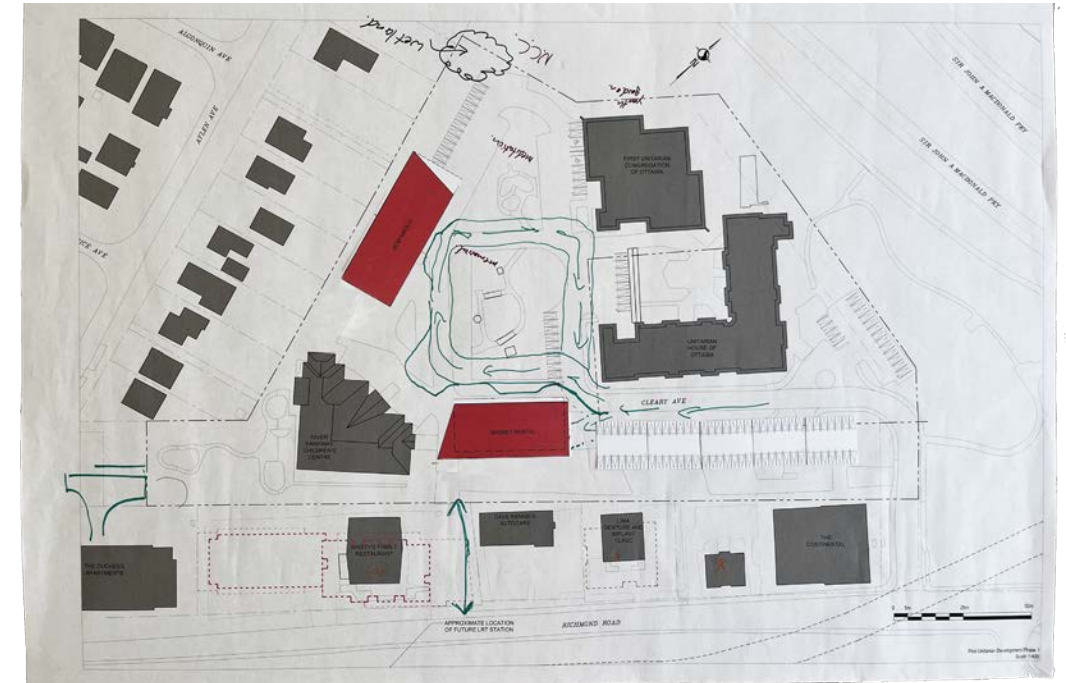
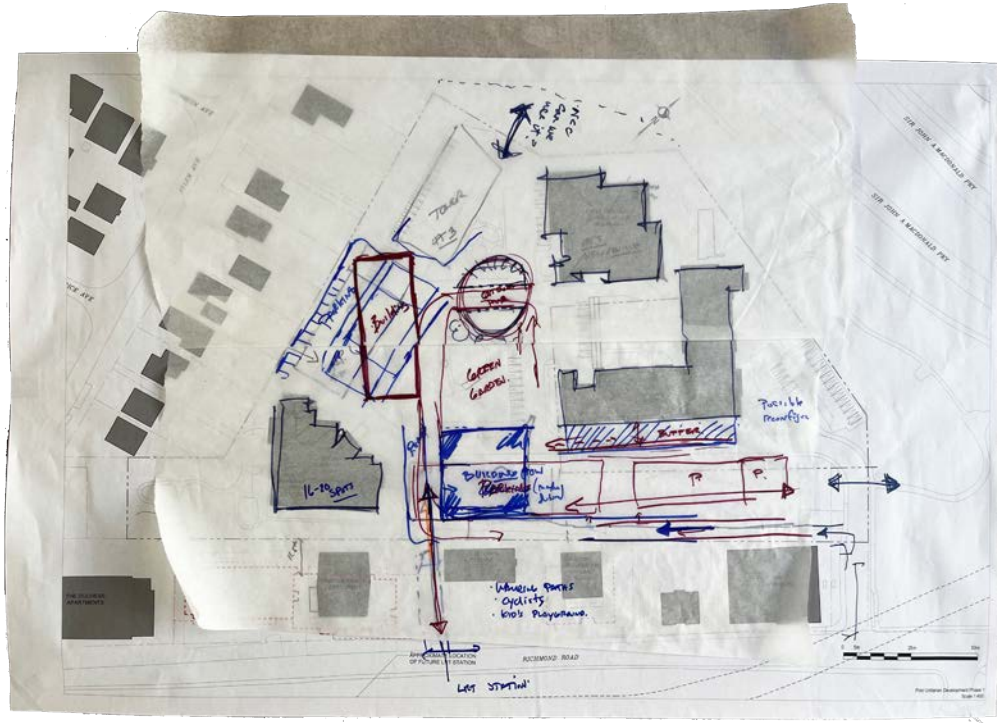
Precedents



# BUILDING

Precedents





CONCEPT 1A - PLAN

CONCEPT 1A | PRELIMINARY DESIGN OPTIONS



CONCEPT 1B - PLAN

CONCEPT 1B | PRELIMINARY DESIGN OPTIONS



CONCEPT 1B (OPTIONAL) - PLAN

CONCEPT 1B | PRELIMINARY DESIGN OPTIONS



CONCEPT 2 - PLAN

CONCEPT 2 | PRELIMINARY DESIGN OPTIONS



CONCEPT 3 - PLAN

CONCEPT 3 | PRELIMINARY DESIGN OPTIONS



CONCEPT 3 (OPTIONAL) - PLAN

CONCEPT 3 | PRELIMINARY DESIGN OPTIONS





1. Preliminary building placement



2. High-rise shift for increased separation and views

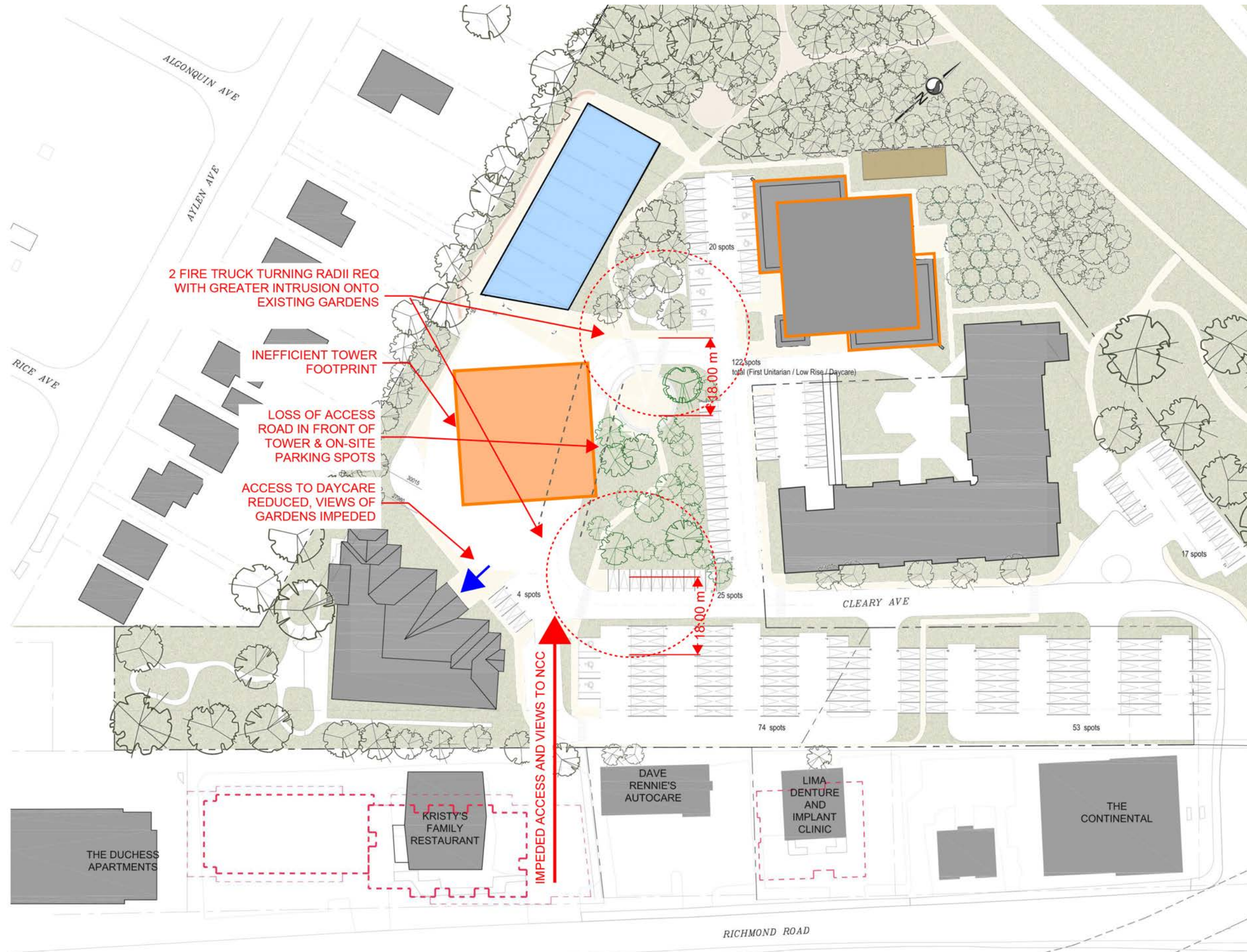


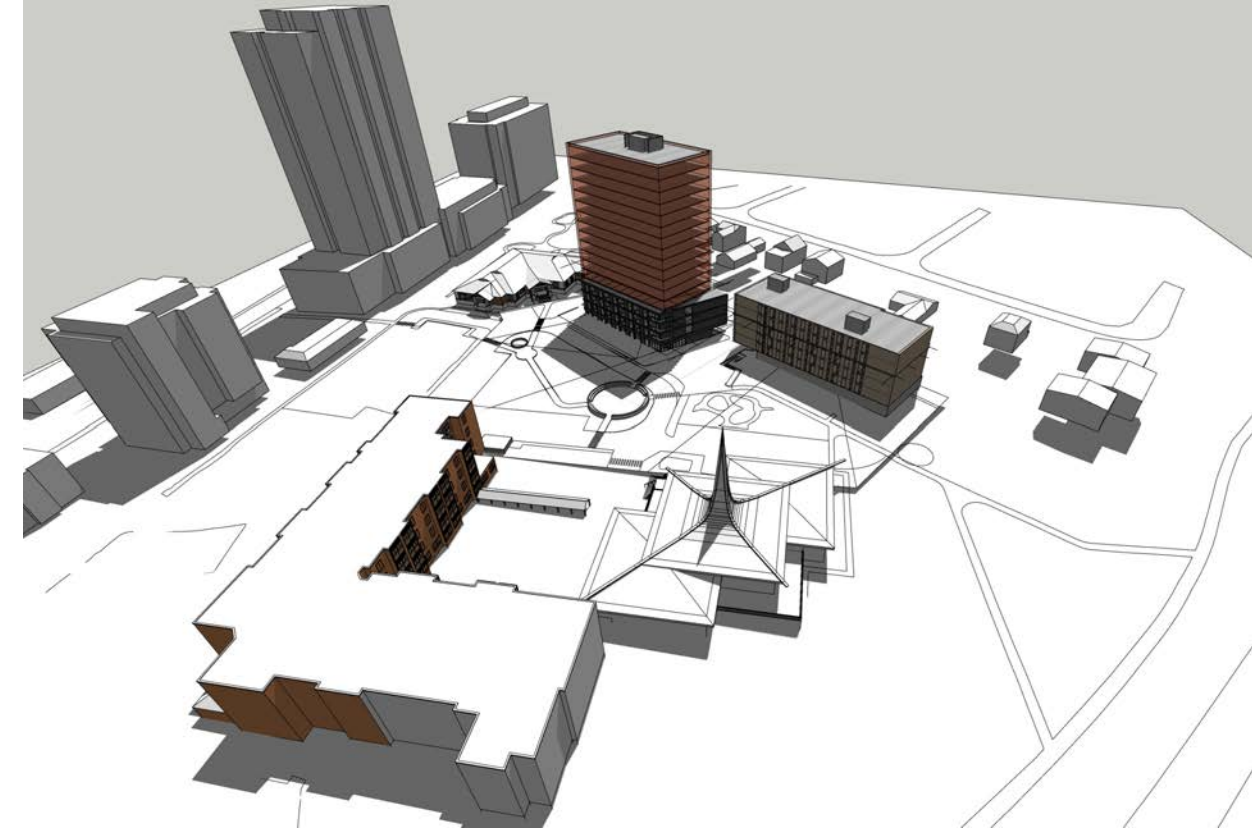
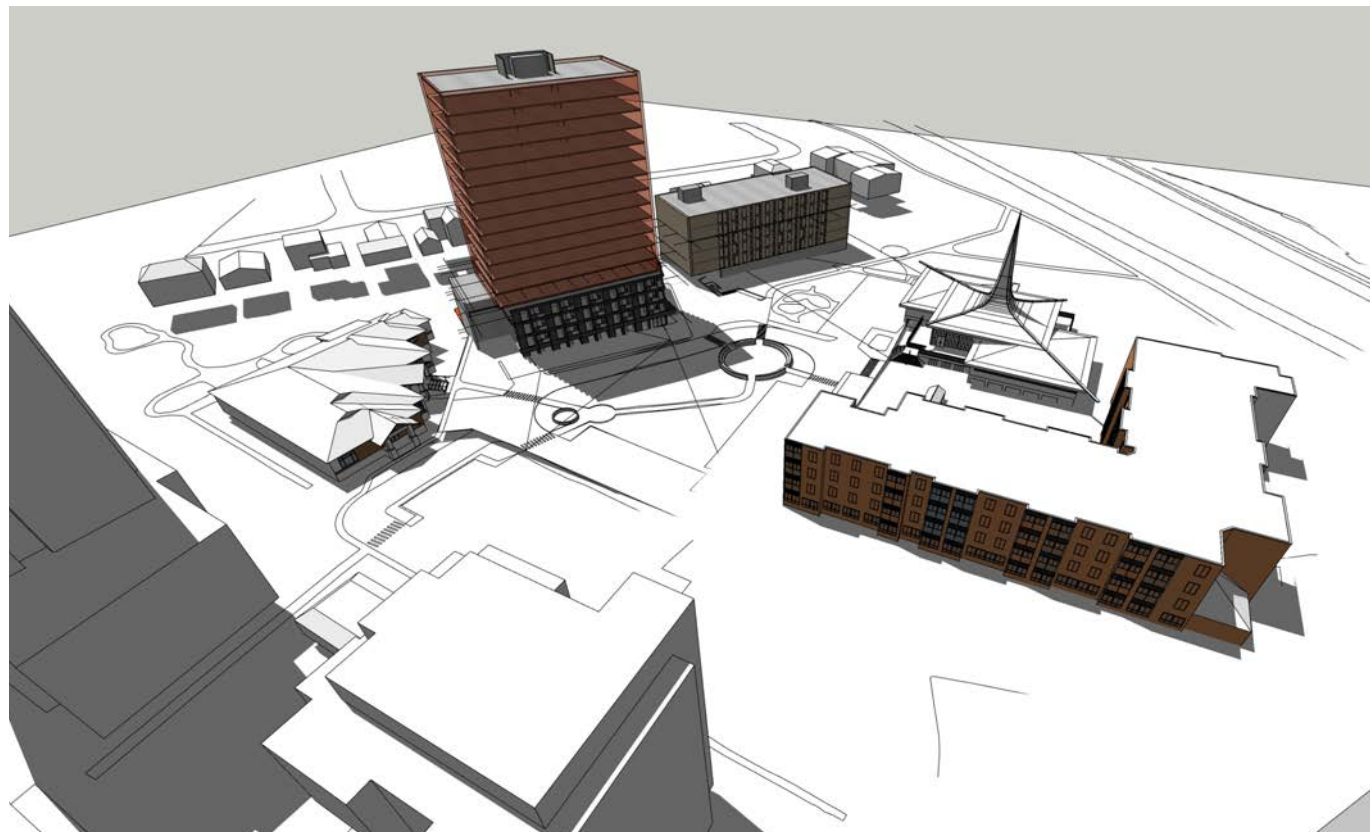
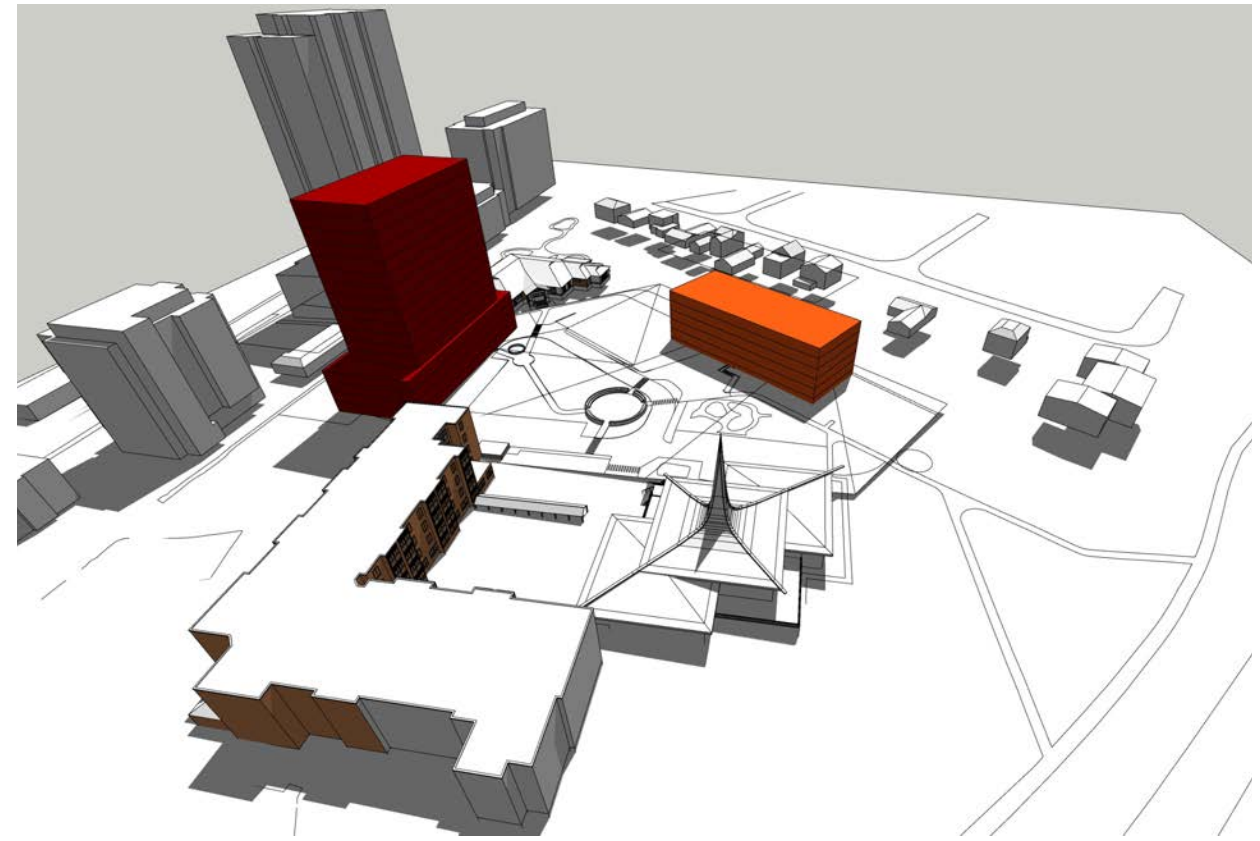
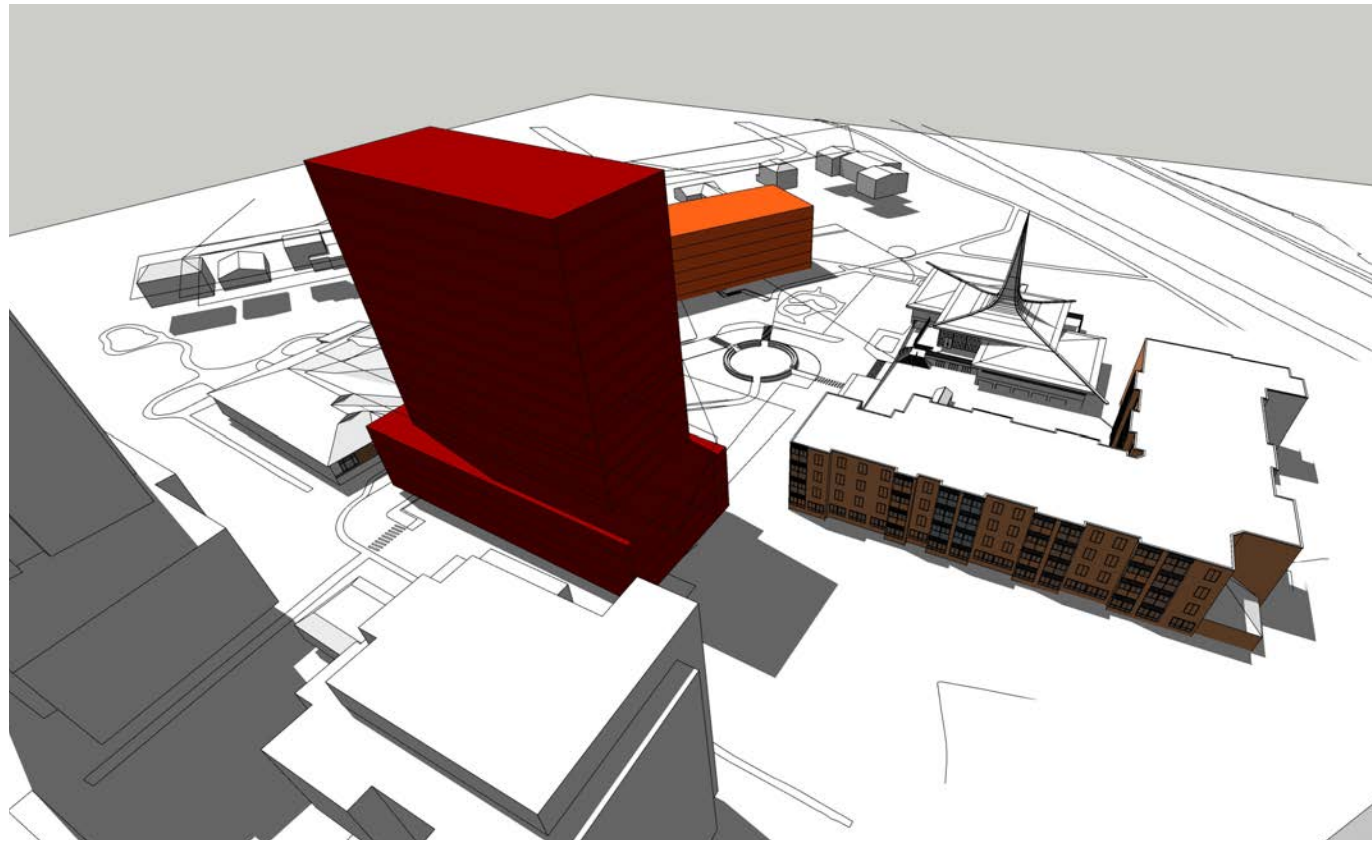
3. Define entry plaza

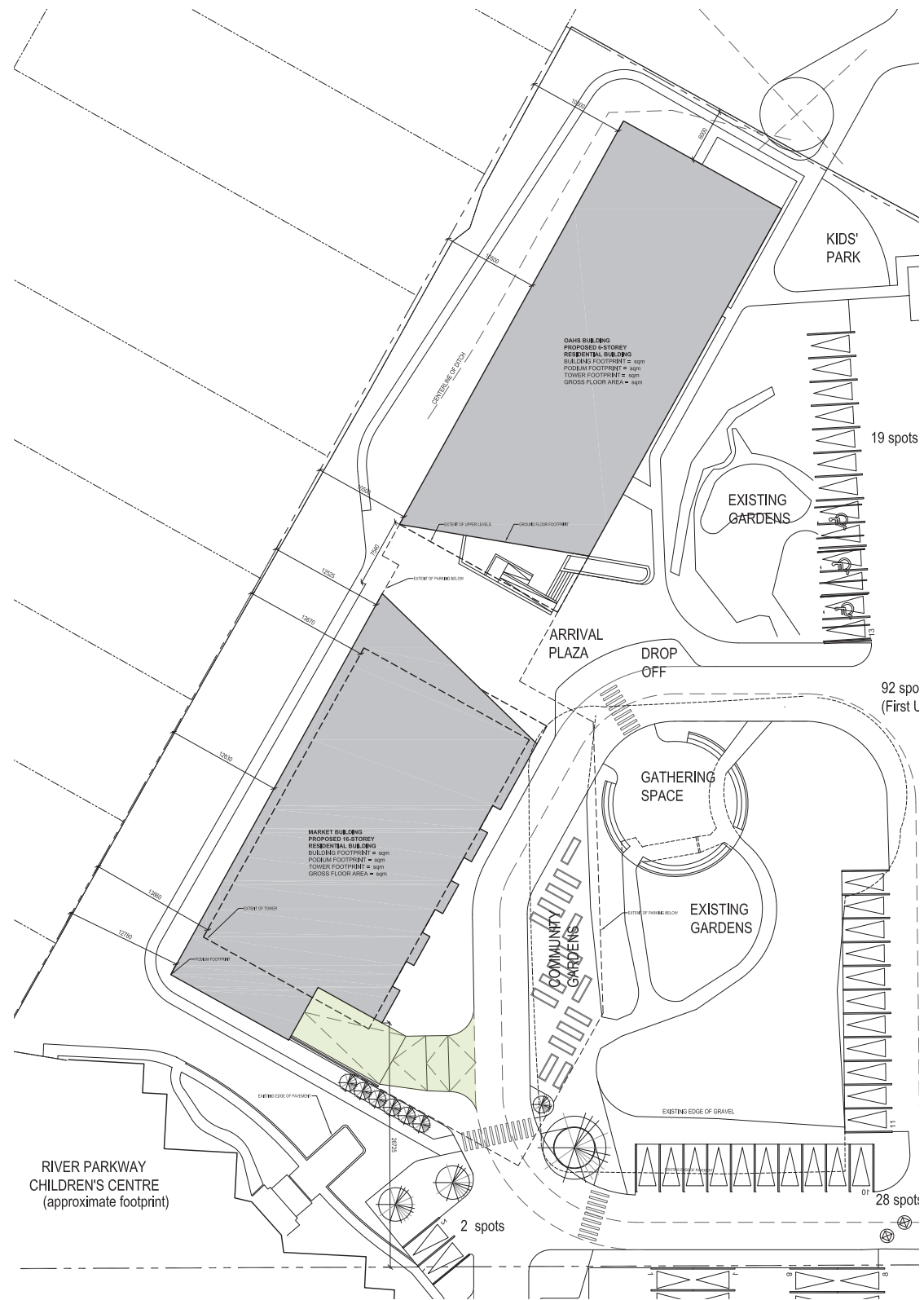


4. Greenspaces and Pedestrian Network

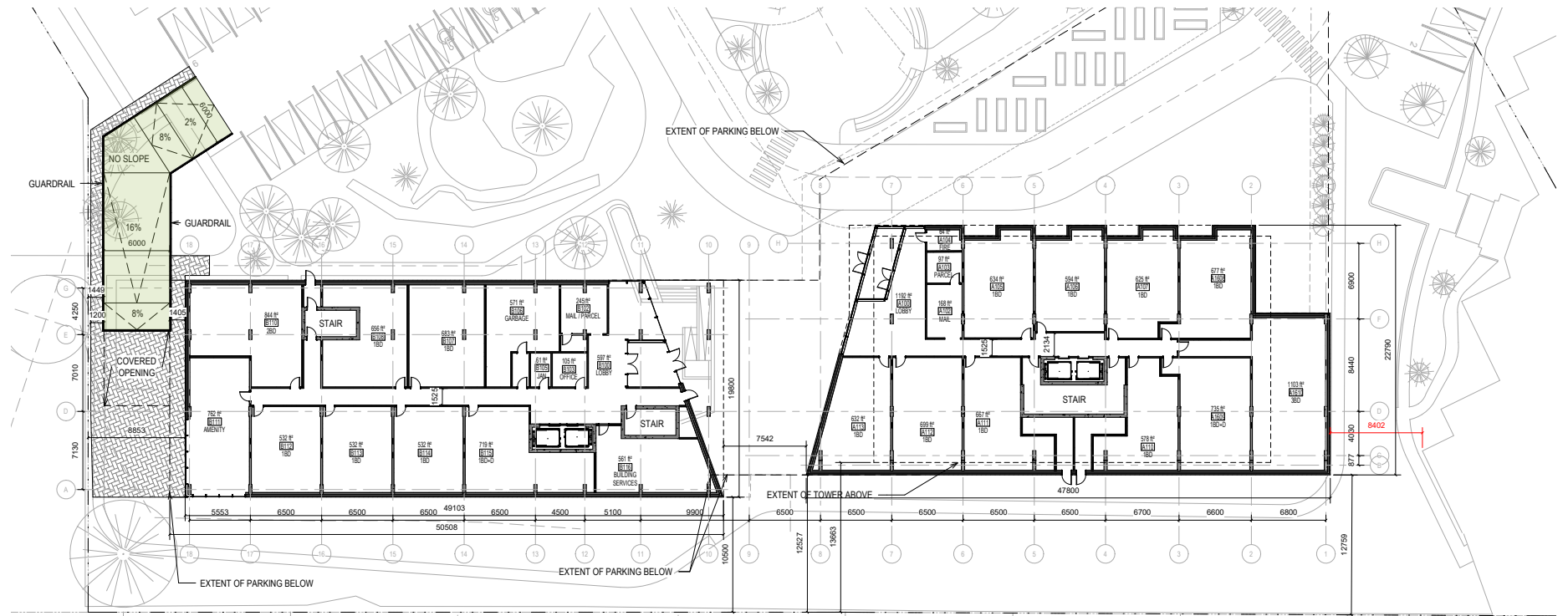
- A Meditation Garden
- B Memorial Garden
- C Proposed low-rise building (4 stories) - 11,200sf
- D Proposed high-rise building (16 stories) - 8,000sf
- E Kids playground
- F Gathering circle
- G Reserved
- H Existing tree line
- I New orchard
- J Existing community gardens
- K OAHS circle
- L Drop off
- M Existing NCC tree line



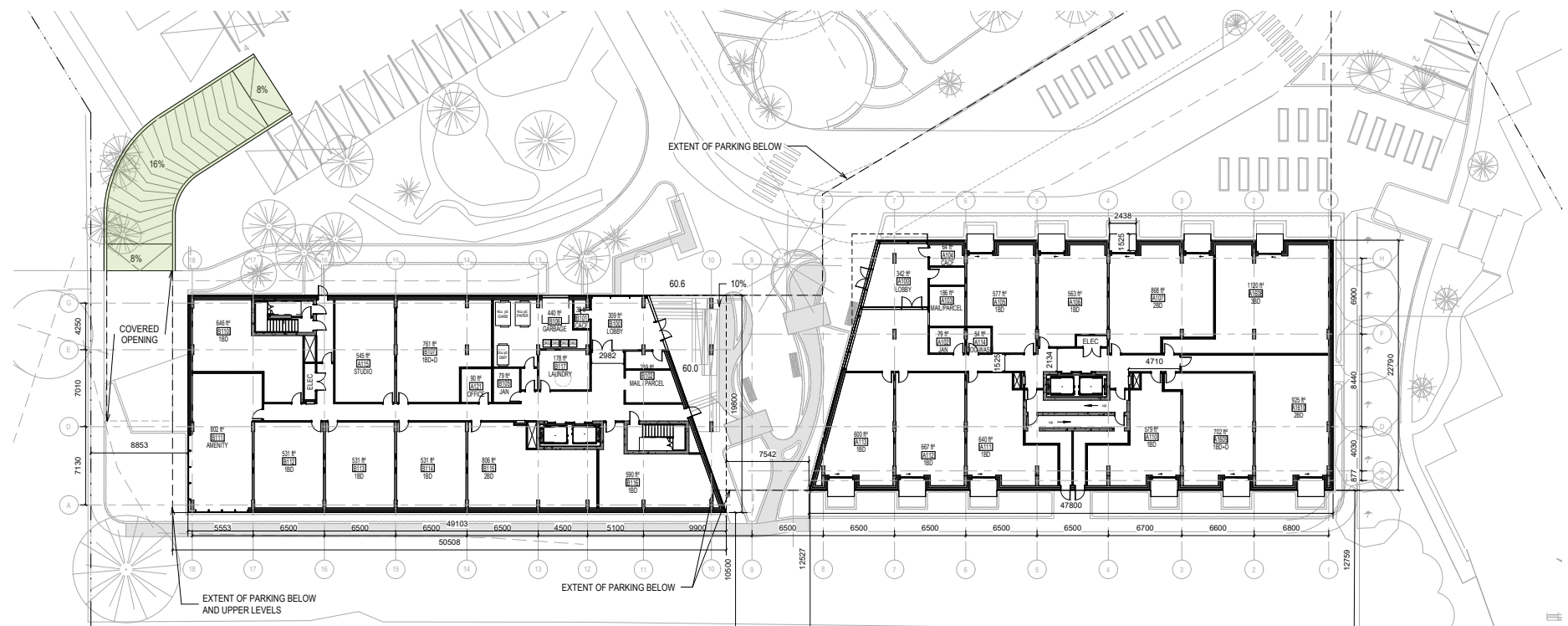




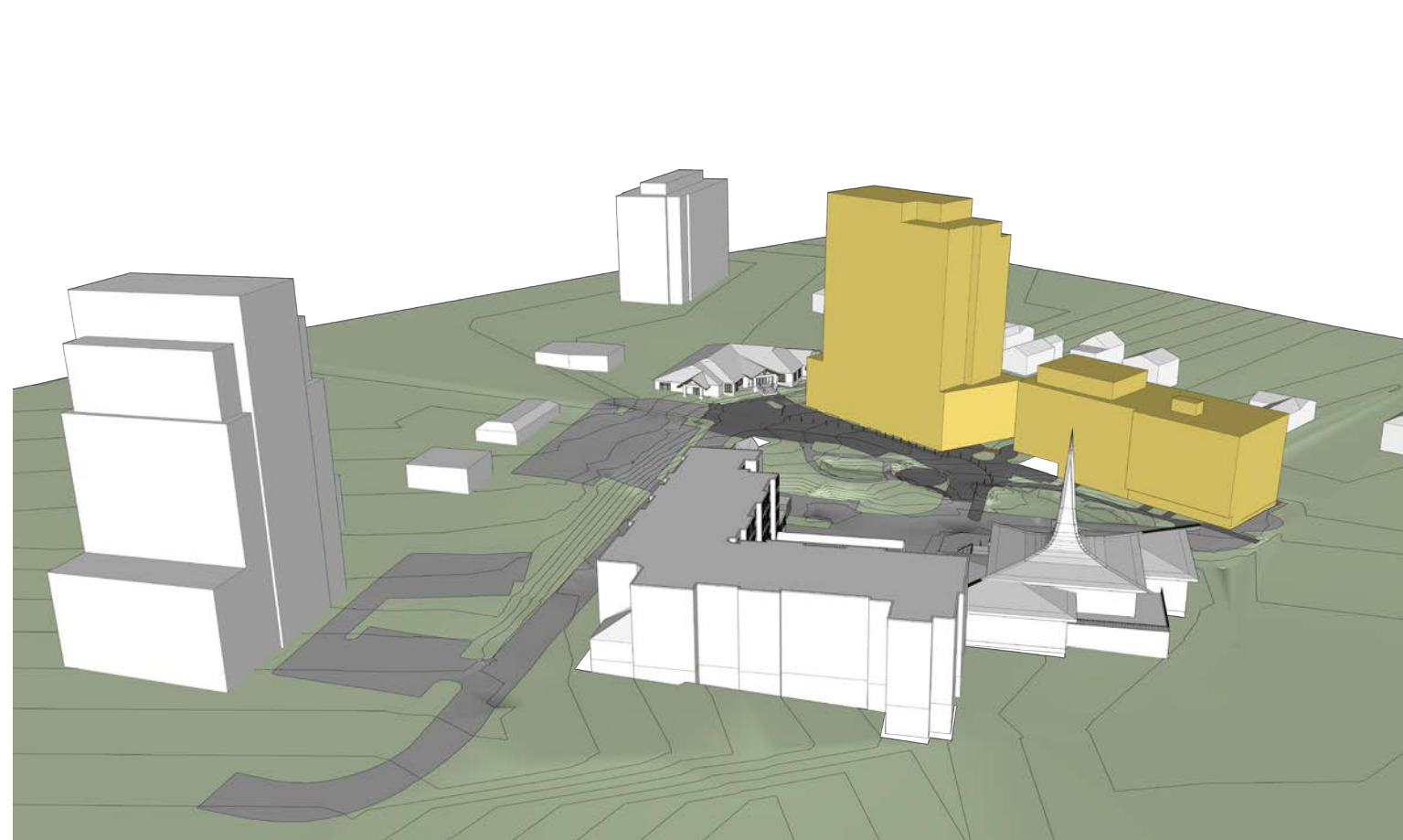
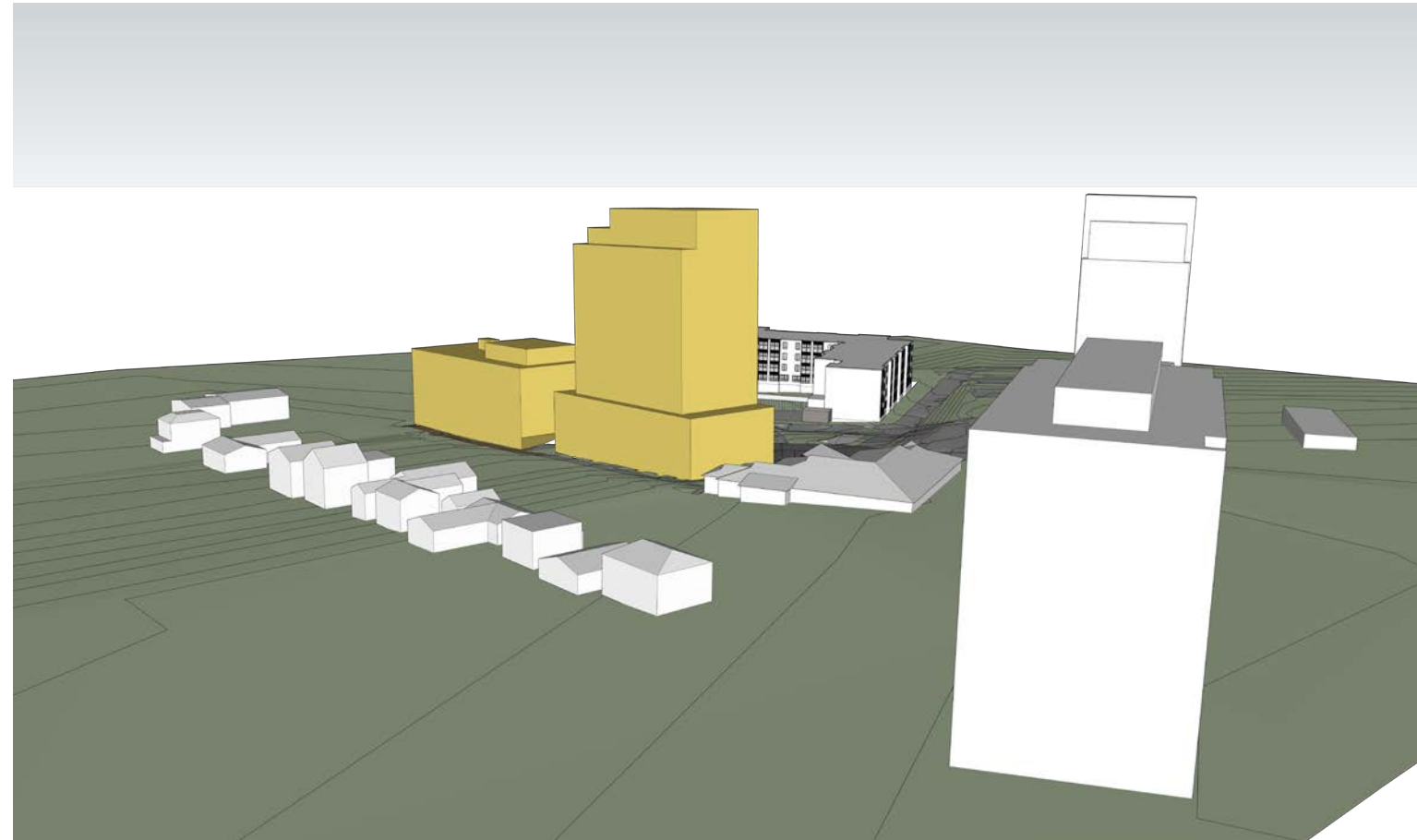
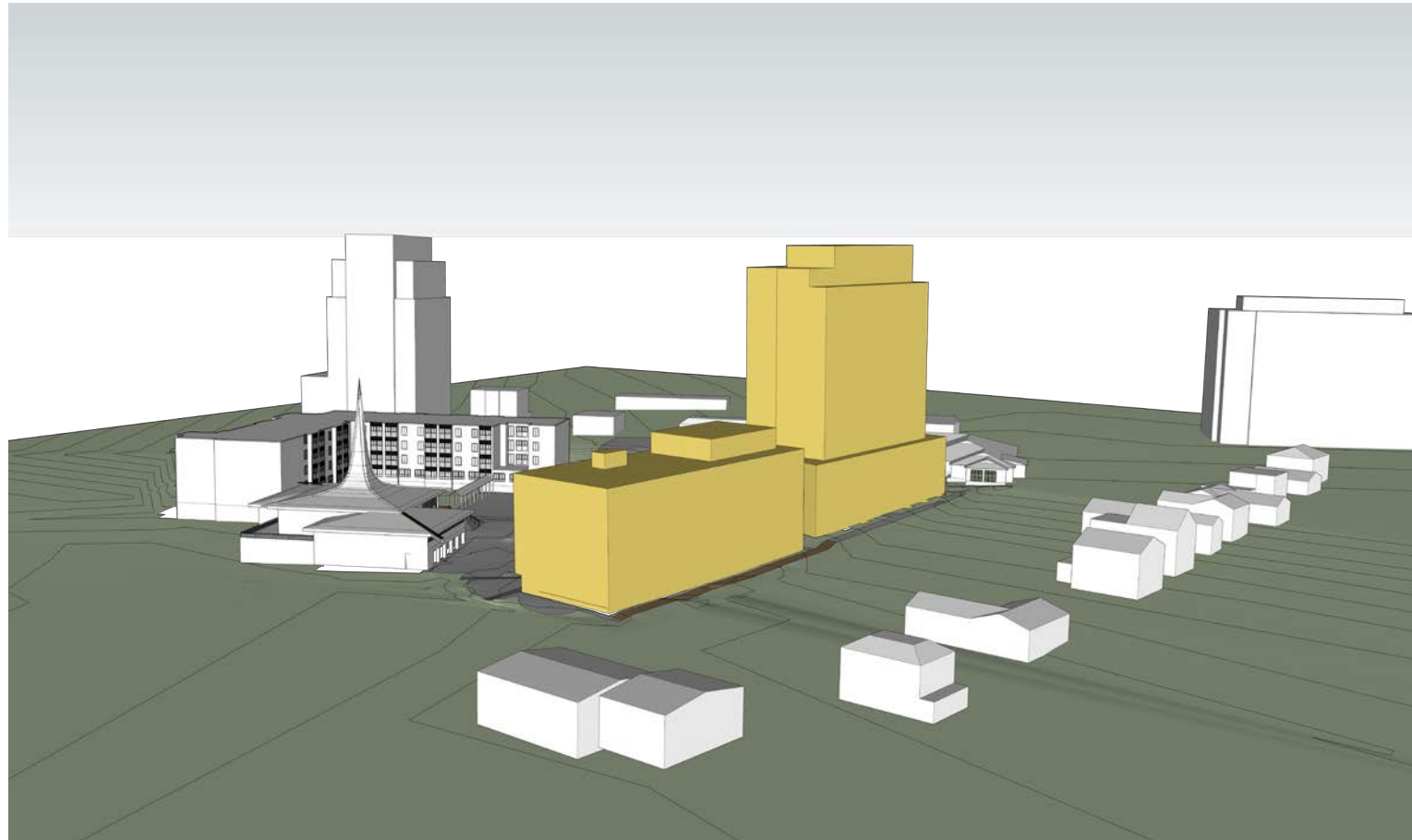
Ramp Entry A: Direct access into Market Building



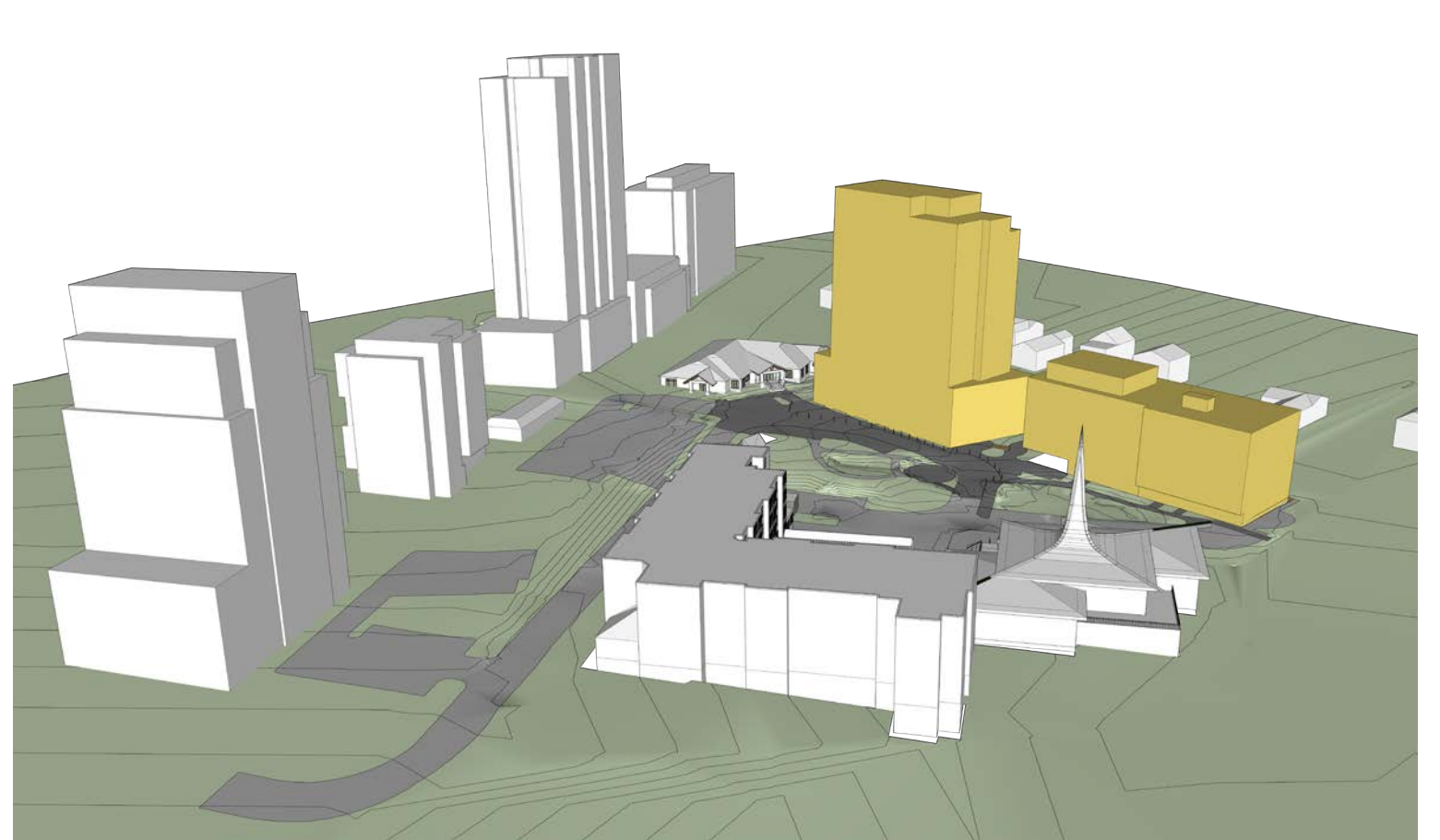
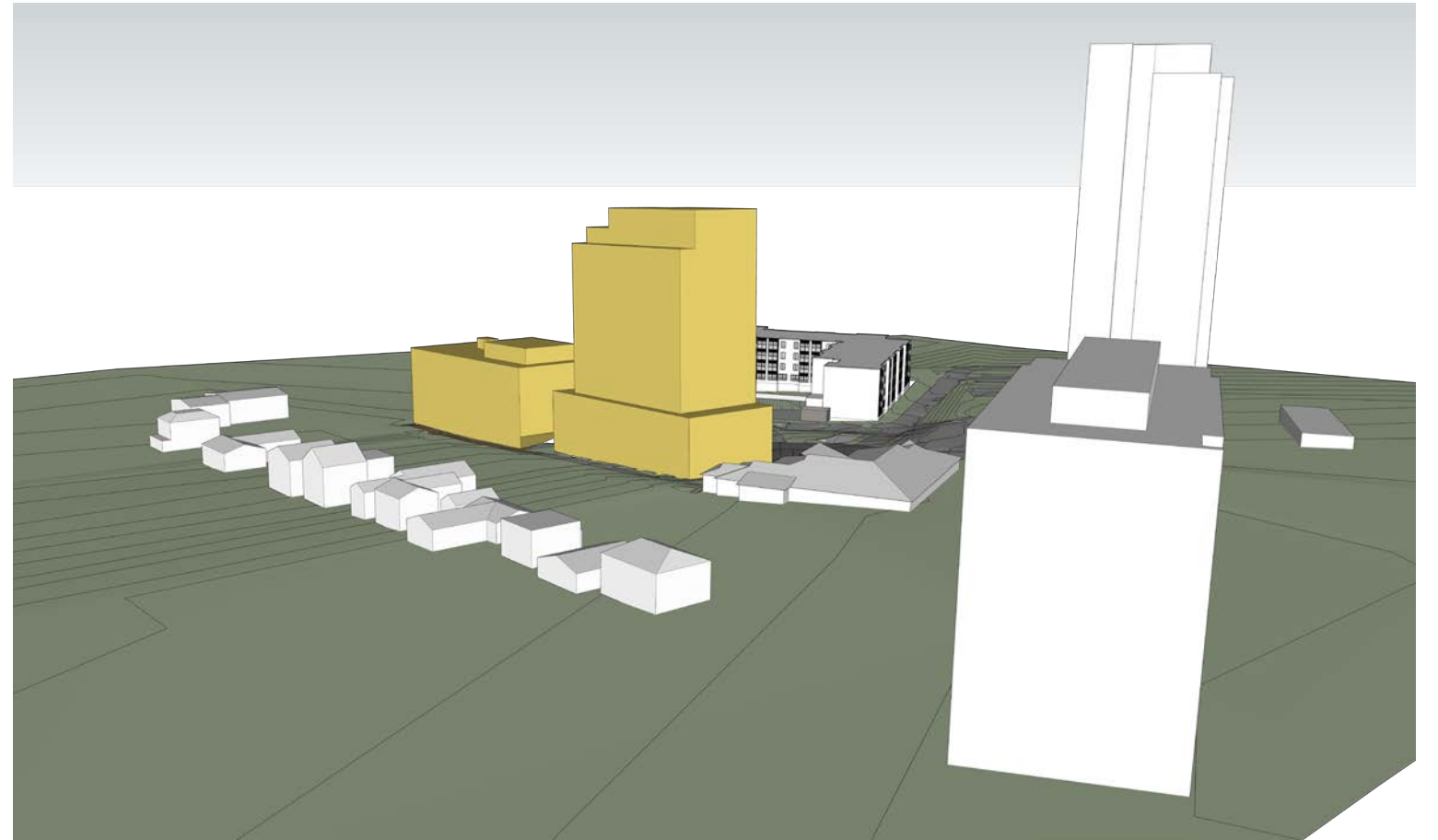
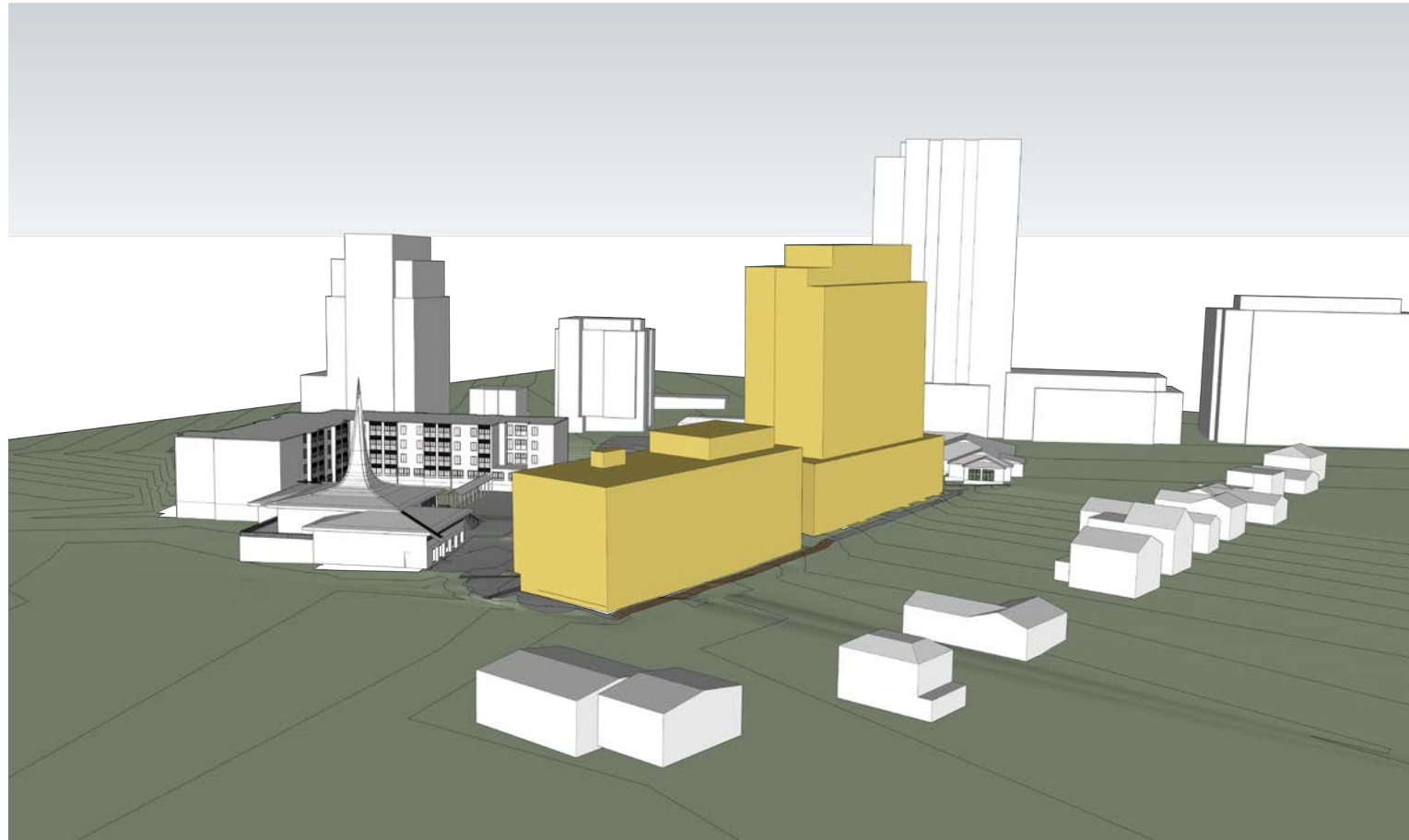
Ramp Entry B: Direct access into OAHS Building



Ramp Entry B(Refined): Direct access into OAHS with Direct access to NCC lands







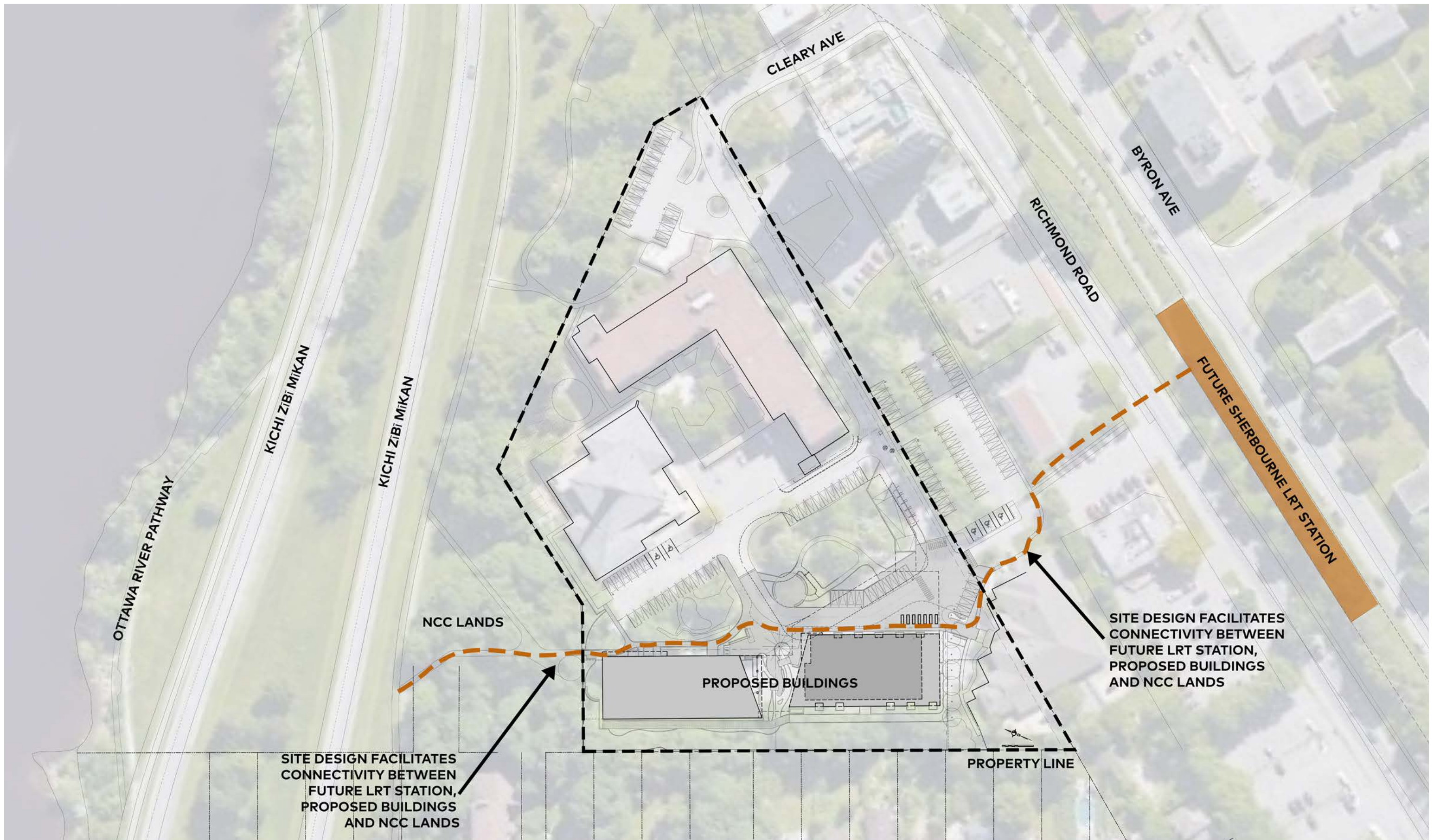


View from Ottawa River Parkway



View from Ayleen ave.





## Sustainability & Bird safety

One of the primary objective's of this project is to create a sustainability showpiece. The proposed master plan explores multiple solutions to contribute to sustainable design.

The most important factor contributing to sustainable design is the saving and enhancement of the existing gardens into the urban design of the master plan. Saving mature green space is not only a sustainable strategy, but also because we understand the emotional connection that these gardens have for members of the congregation and Unitarian House. The inclusion (and enhancement) of these gardens with pedestrian paths and outdoor public spaces encourages healthier choices in walking and using bicycles. These paths will also support many of the residents of Unitarian House who use the grounds for daily walks. Instead of walking along uninspiring asphalt parking areas, all residents of this 'Little Village' will have access to a variety of outdoor paths, boardwalks and public spaces to explore.

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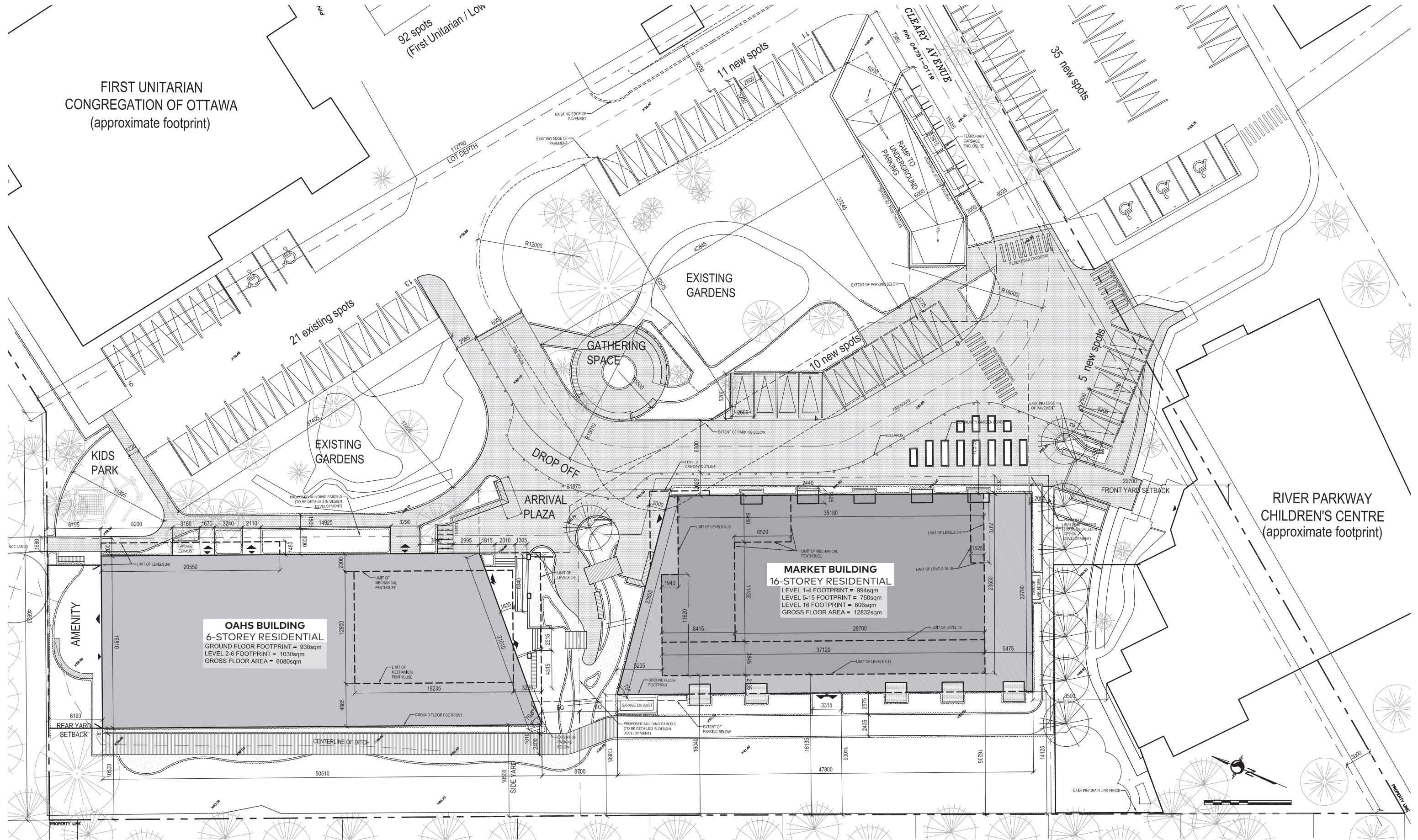
Additionally, the project will have to meet The City of Ottawa's High Performance Development Standard has been introduced as part of the new Official Plan to realize the objectives of sustainable and resilient design; a major priority project identified in the Energy Evolution Strategy to reduce greenhouse gas emission in Ottawa to zero by 2050. The requirements for these standards will however not be explored until specific Site Plan Control applications are submitted.

These buildings will also be subject to SB10 of the Ontario Building Code that requires the buildings' energy performance levels to beat the National Energy Code by 30% for standard projects of this type. This requirement helps stakeholders meet energy efficiency requirements in the Building Code and came into force on January 1, 2017. Ontario continues to promote some of the most progressive regulations in North America for reductions of Green House Gas (GHG) emissions and improvements for energy conservation in buildings. To meet these high standards, the project must provide an energy model that looks at the balance between the use of high-performance building envelope systems, the percentage amount of glazing and the mechanical systems required to heat and cool the building through the 4 seasons. An energy model will provide the design team with the best strategies to effectively and economically meet the high standards of the OBC. Other aspects that will be considered will be bird safe glazing for any large street facing curtainwall. As well as the use of white reflective roofing membranes to minimize heat island effect created from sun absorption at the roof horizontal surfaces.



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<b>Project Description</b>	<b>3-12</b>
<b>Design Directives</b>	
<i>Refer to accompanying Planning Rationale submitted by Fotenn for detailed Policy and Regulatory Criteria.</i>	
<b>Site, Context and Analysis</b>	<b>14-30</b>
<b>Design Research</b>	<b>32-45</b>
<b>Additional Materials - Appendix</b>	<b>47-72</b>

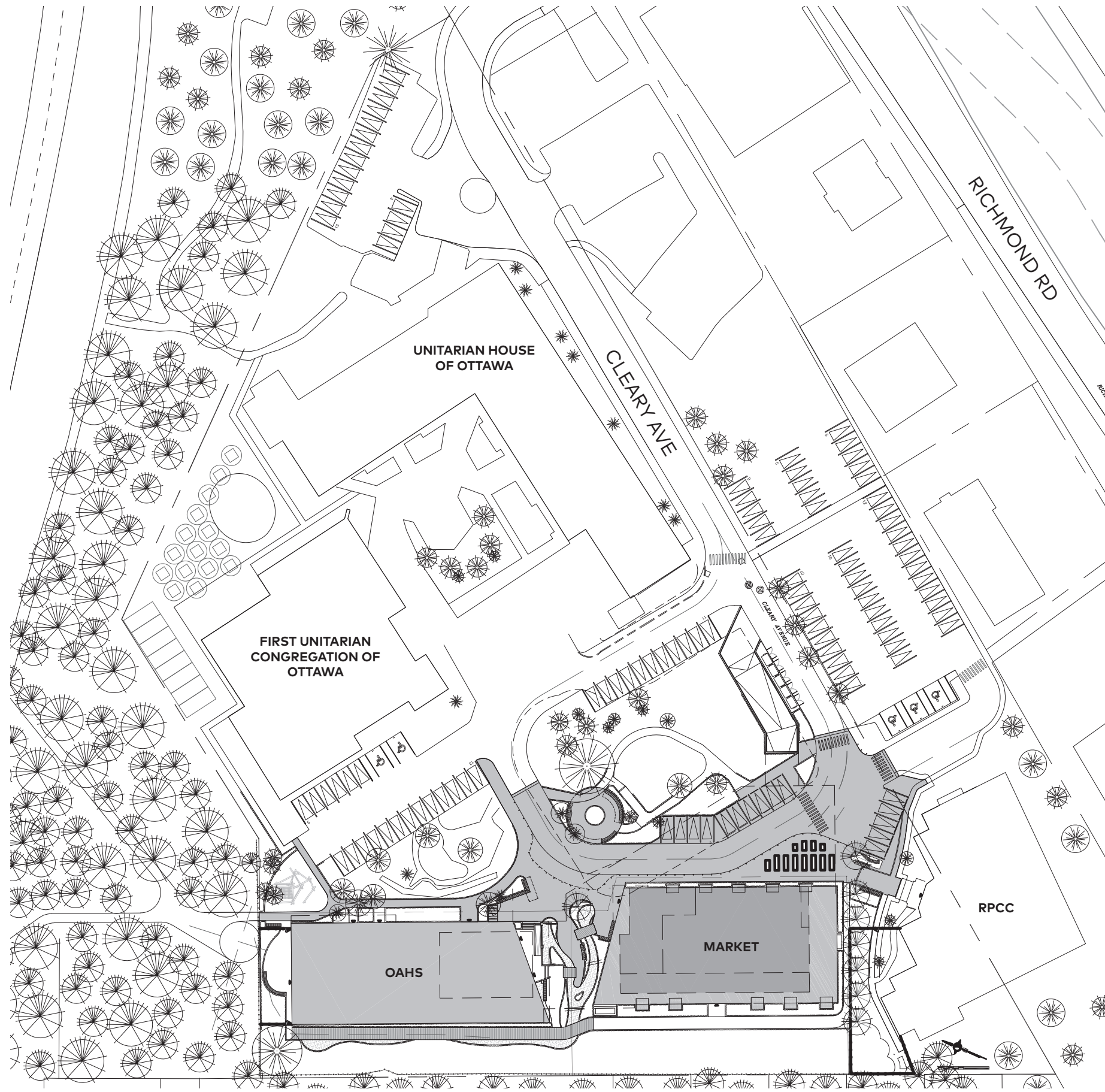


FIRST UNITARIAN  
CONGREGATION OF OTTAWA  
(approximate footprint)

RIVER PARKWAY  
CHILDREN'S CENTRE  
(approximate footprint)









**OAHS BUILDING**  
6-STOREY RESIDENTIAL  
GROUND FLOOR FOOTPRINT = 930sqm  
LEVEL 2-6 FOOTPRINT = 1030sqm  
GROSS FLOOR AREA = 6080sqm

**MARKET BUILDING**  
16-STOREY RESIDENTIAL  
LEVEL 1-4 FOOTPRINT = 994sqm  
LEVEL 5-15 FOOTPRINT = 750sqm  
LEVEL 16 FOOTPRINT = 606sqm  
GROSS FLOOR AREA = 12832sqm





legend / légende

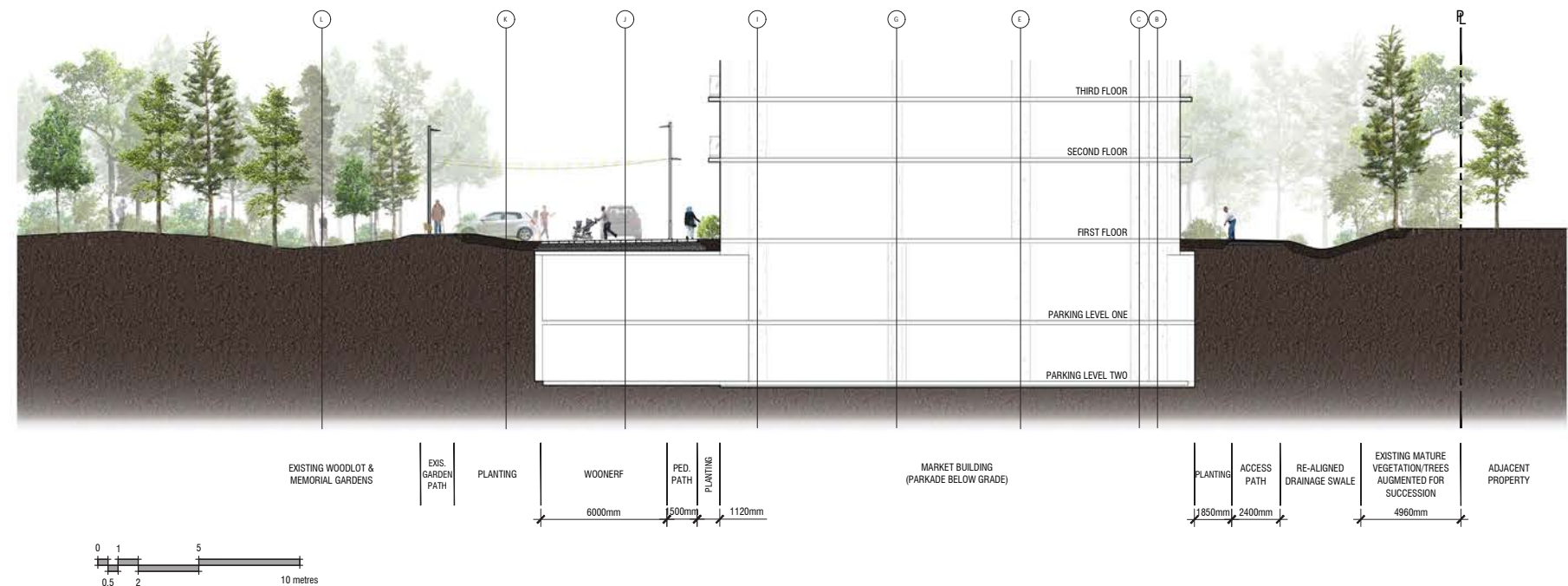
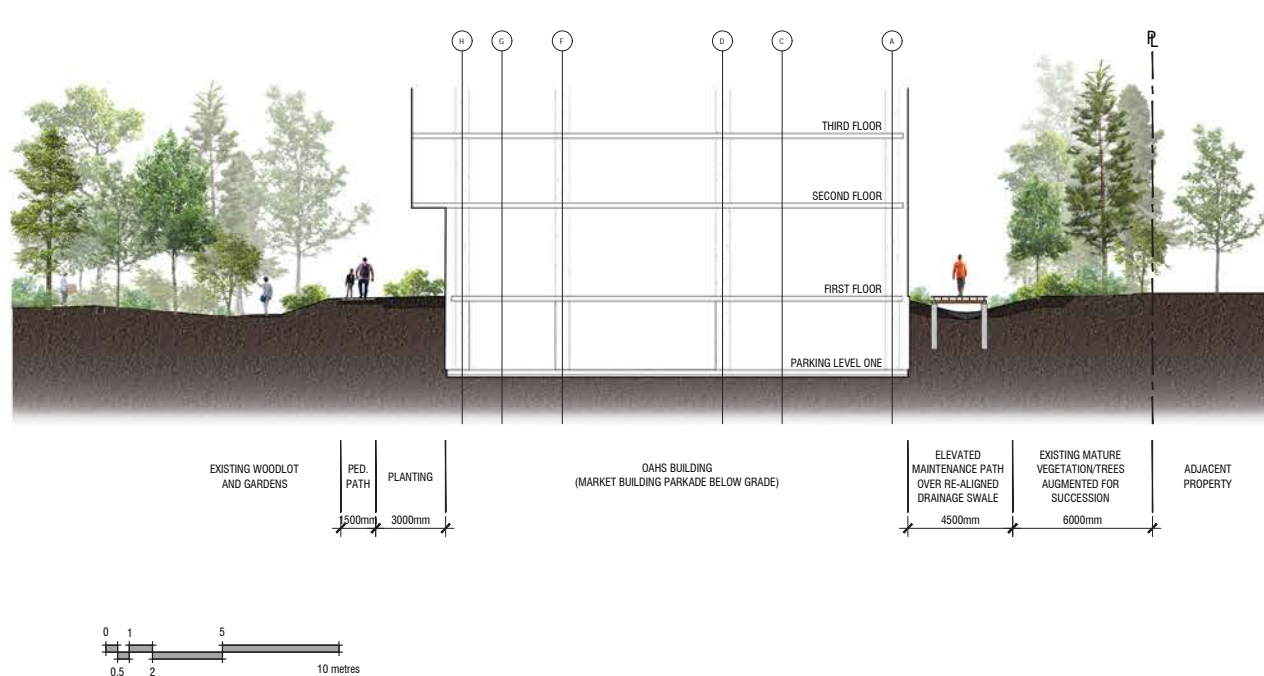
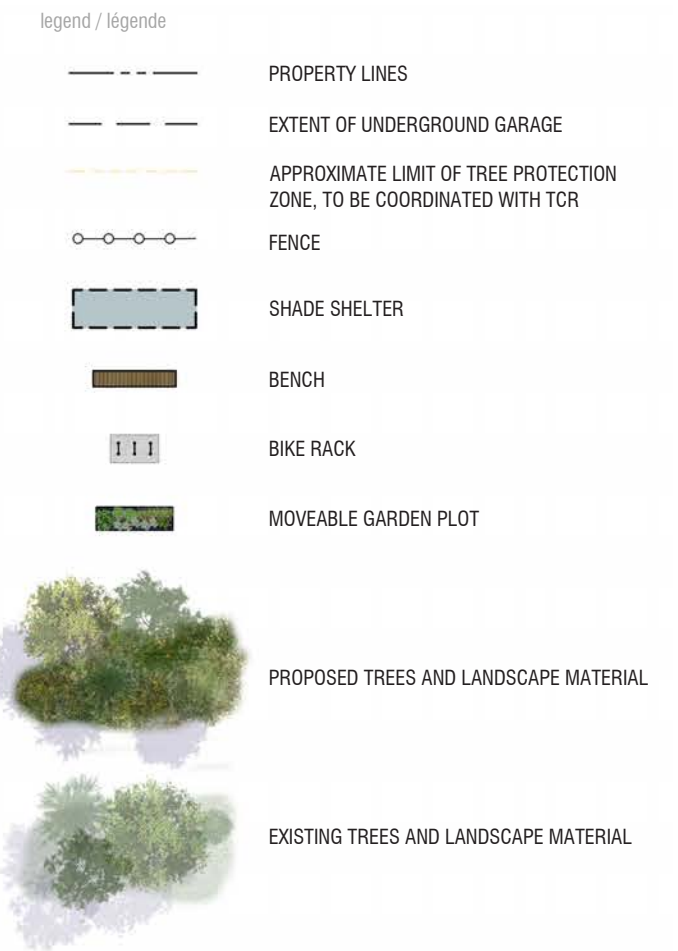
-  PROPERTY LINES
-  EXTENT OF UNDERGROUND GARAGE
-  APPROXIMATE LIMIT OF TREE PROTECTION ZONE, TO BE COORDINATED WITH TCR
-  FENCE
-  SHADE SHELTER
-  BENCH
-  BIKE RACK
-  MOVEABLE GARDEN PLOT
-  PROPOSED TREES AND LANDSCAPE MATERIAL
-  EXISTING TREES AND LANDSCAPE MATERIAL



**3 LANDSCAPE CONCEPT PLAN**

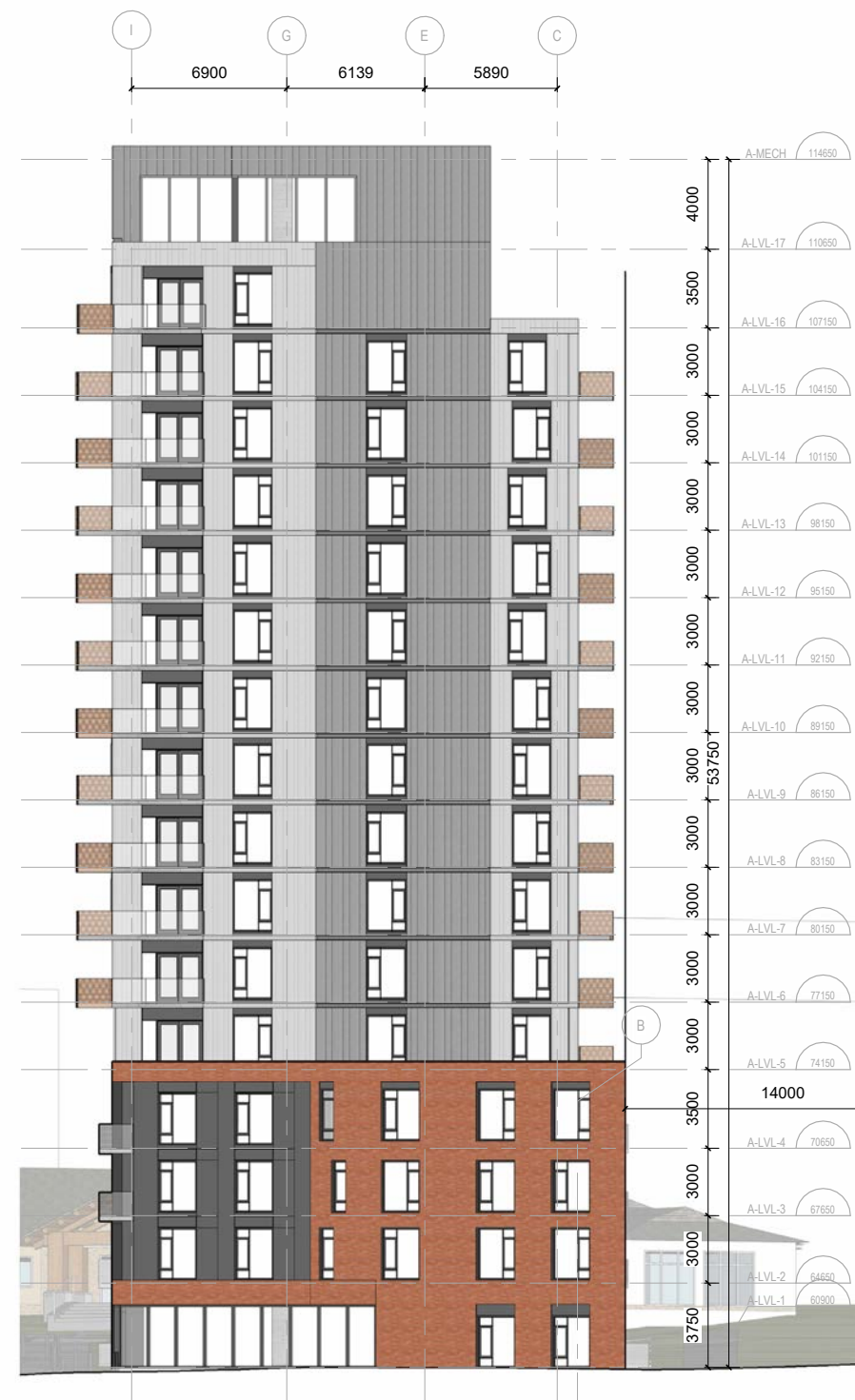


KEY PLAN









EAST ELEVATION



NORTH ELEVATION

-  Masonry  
Colour: Red Brick
-  Panels  
Colour: Charcoal Grey
-  Metal & Solar cladding  
on South side  
Colour: Light Grey
-  Metal & Solar cladding  
on South side  
Colour: White
-  Panels  
Colour: Orange
-  Perforated metal  
Colour: Grey
-  Perforated metal  
Colour: Orange

MATERIALS TO BE FINALIZED IN SPC



WEST ELEVATION



SOUTH ELEVATION

-  Masonry  
Colour: Red Brick
  -  Panels  
Colour: Charcoal Grey
  -  Metal & Solar cladding  
on South side  
Colour: Light Grey
  -  Metal & Solar cladding  
on South side  
Colour: White
  -  Panels  
Colour: Orange
  -  Perforated metal  
Colour: Grey
  -  Perforated metal  
Colour: Orange
- MATERIALS TO BE FINALIZED IN SPC



EAST ELEVATION



NORTH ELEVATION

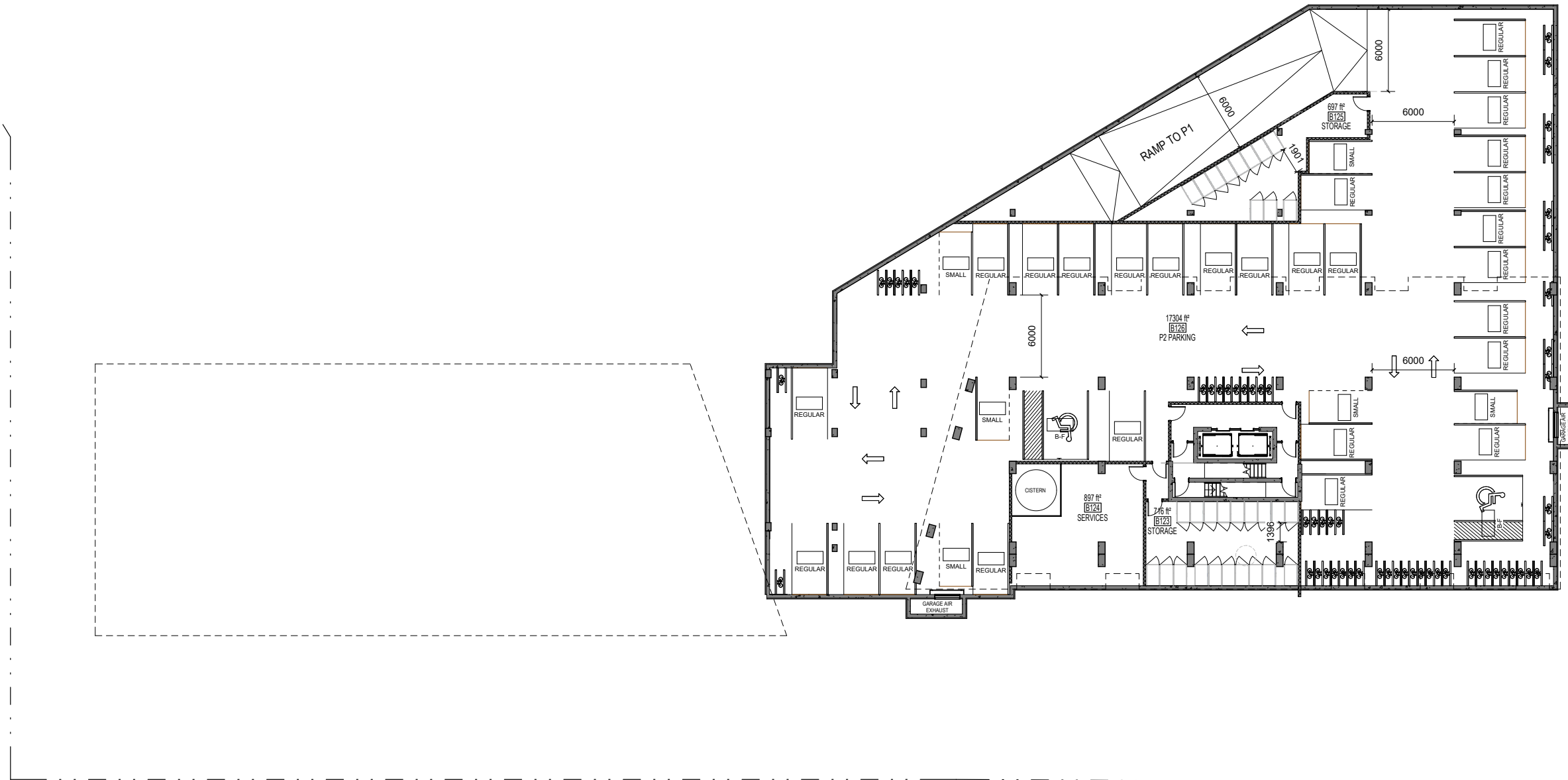


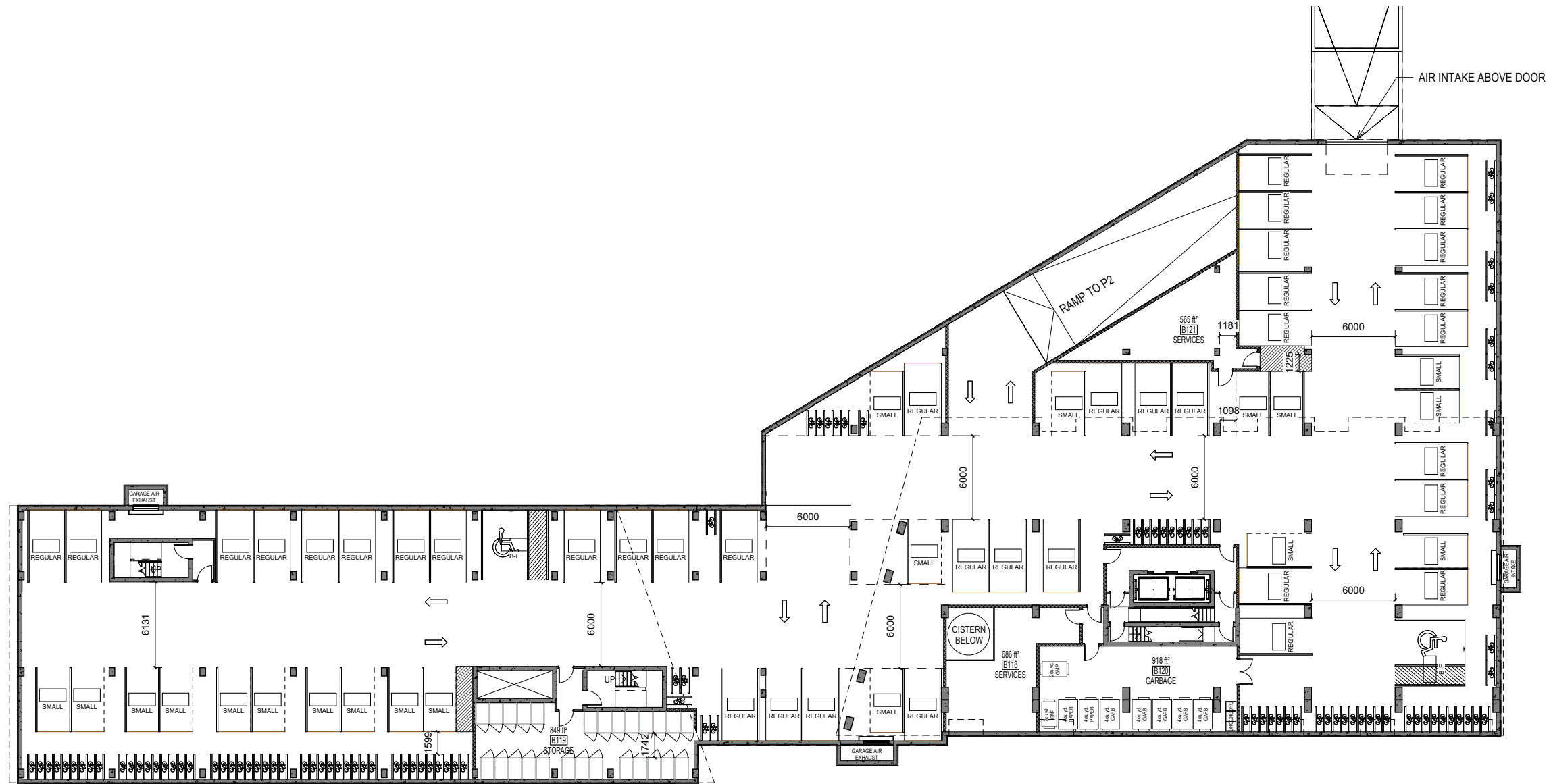
WEST ELEVATION

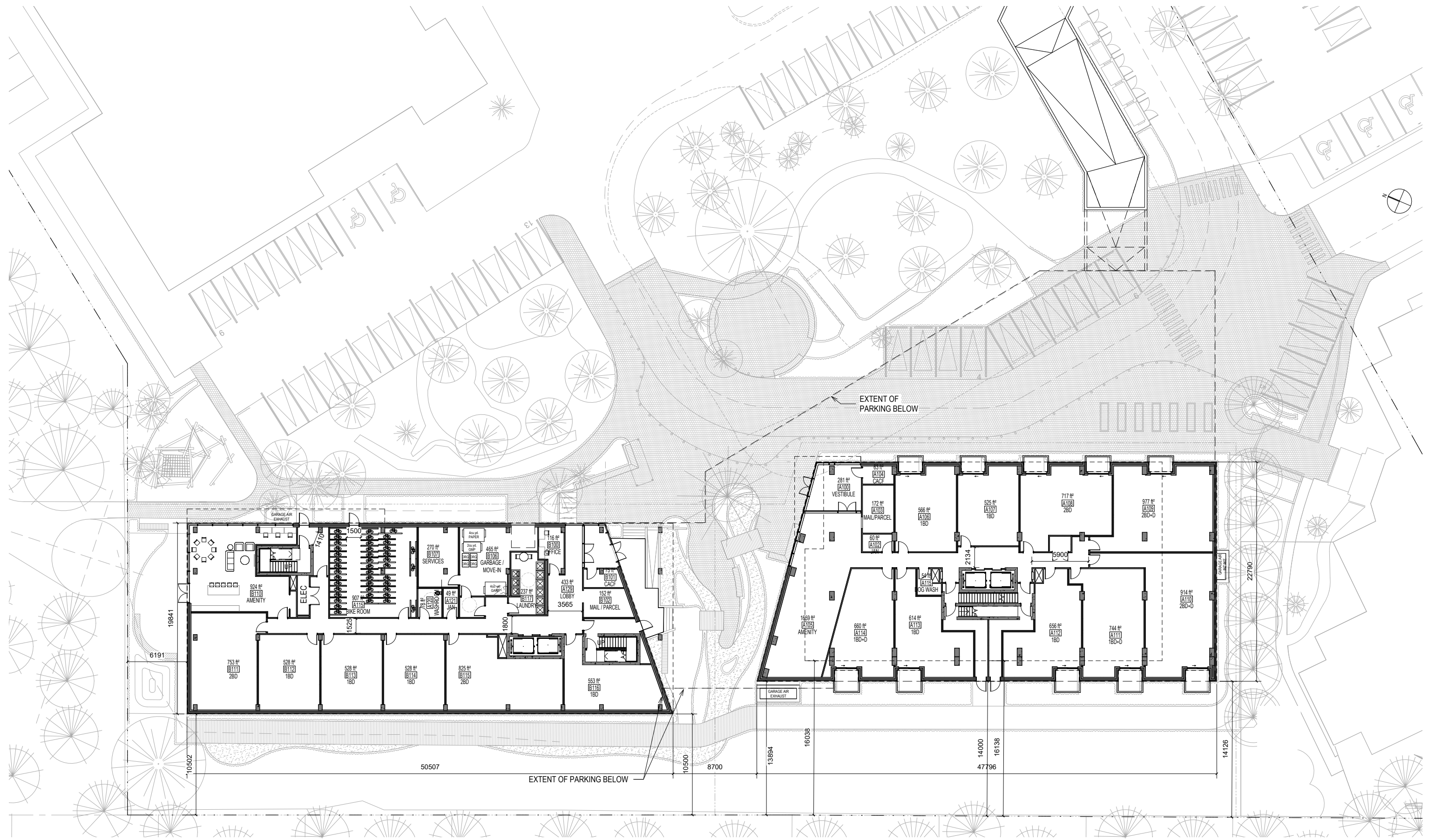


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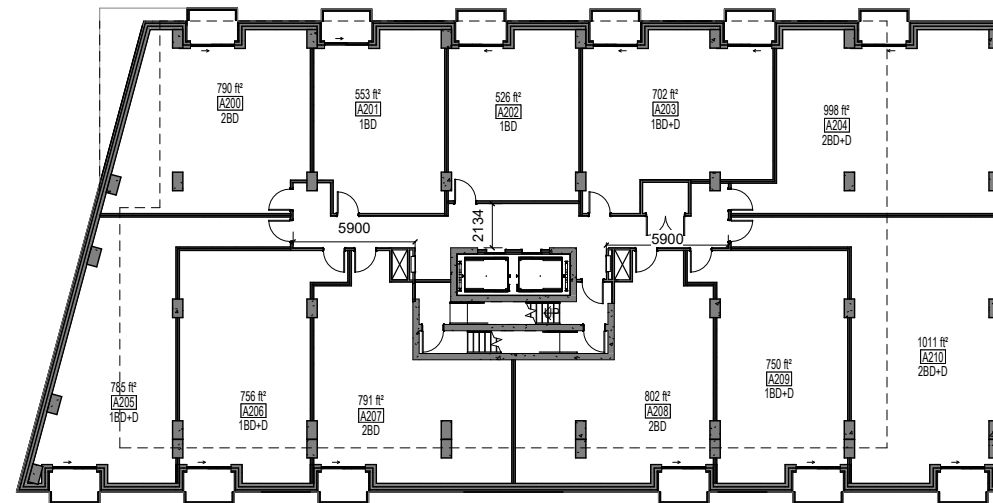
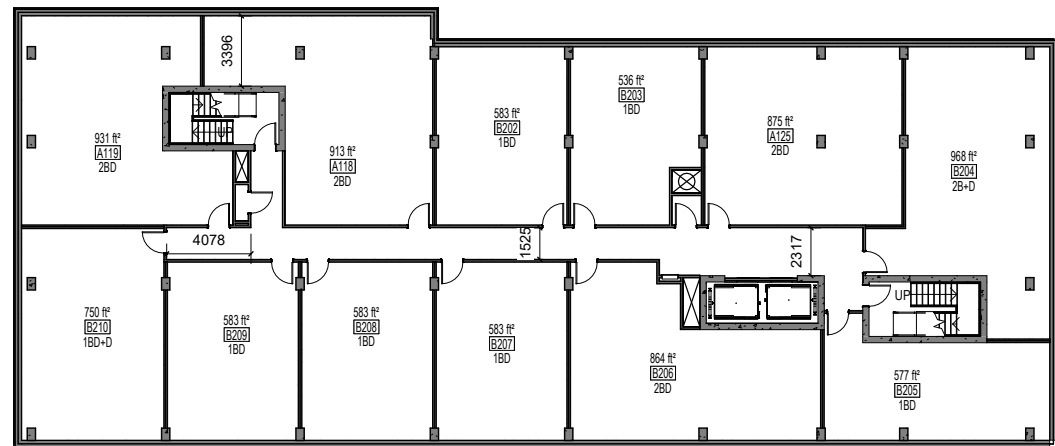
-  Panels  
Colour: Dark Red to match red wood panels
  -  Panels  
Colour: Charcoal Grey
  -  Panels  
Colour: White
  -  Panels  
Colour: Red 'wood-look' panels
  -  Yellow on interior side of sun shade fin (typ)
- MATERIALS TO BE FINALIZED IN SPC

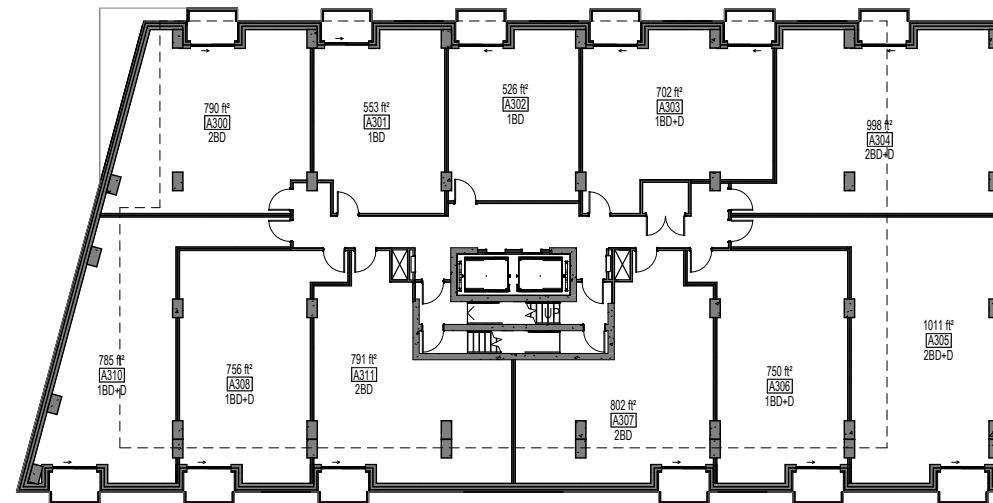


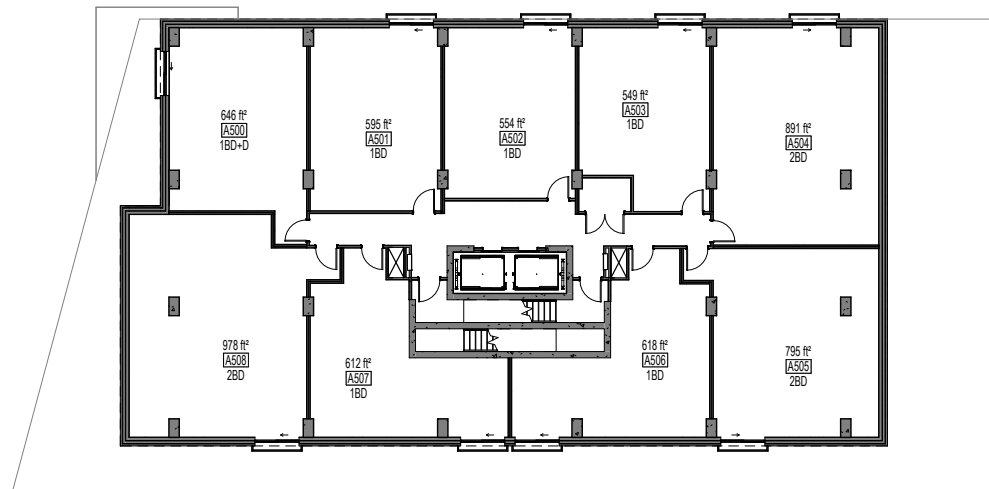
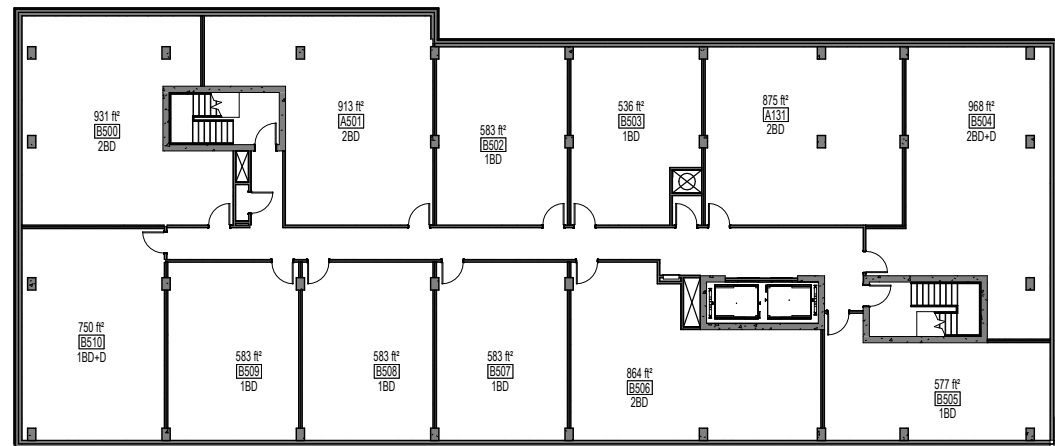


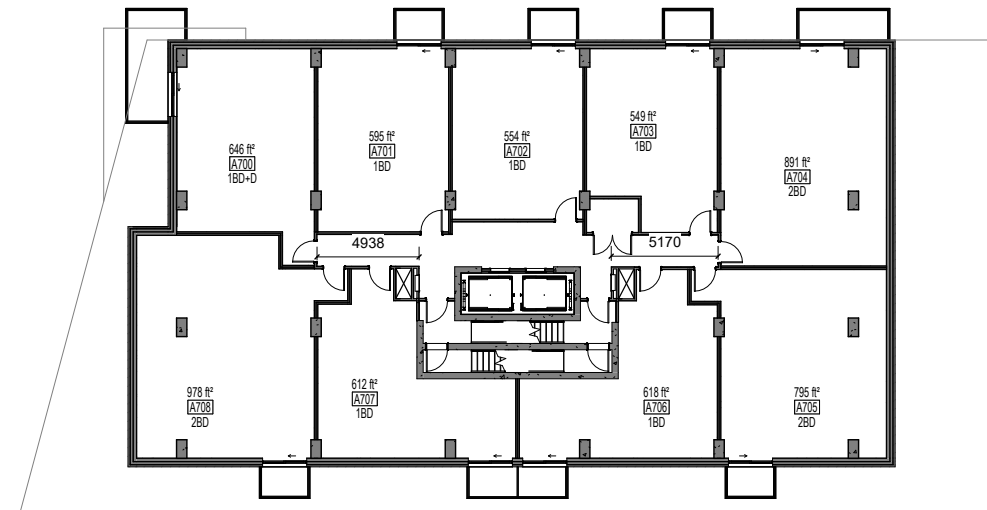
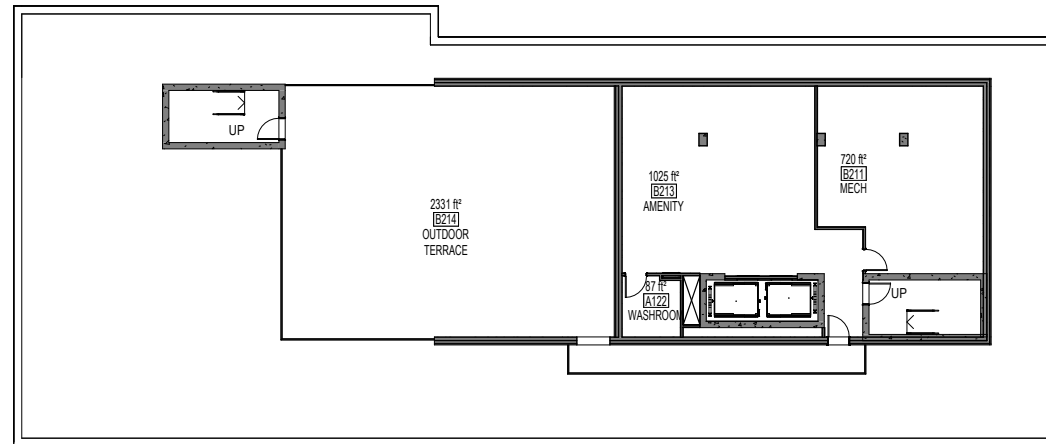


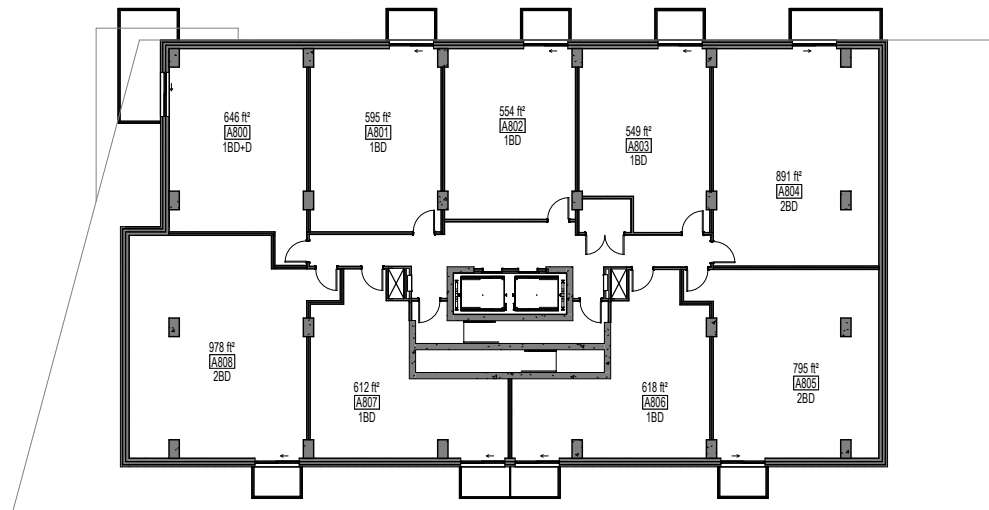
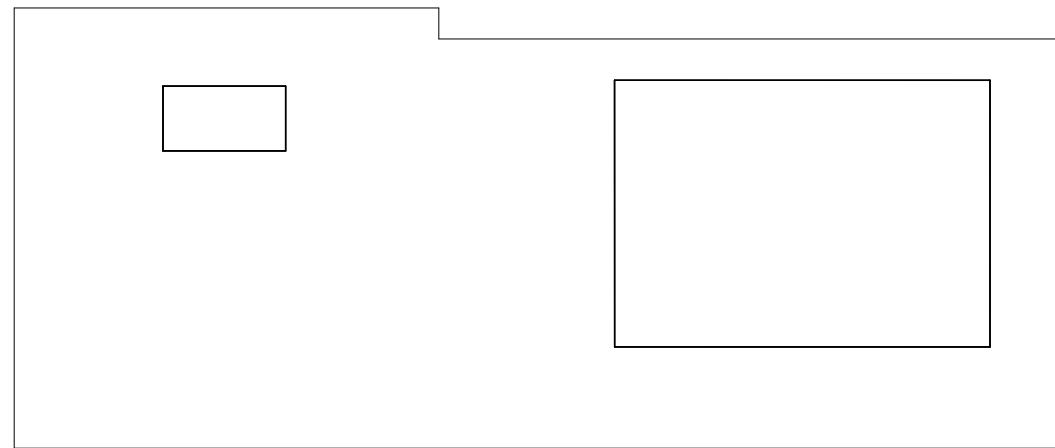


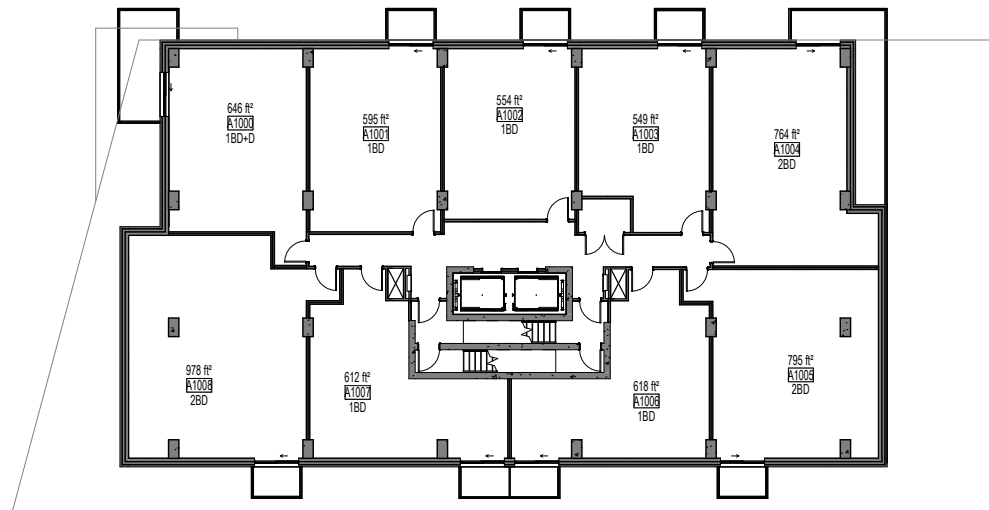
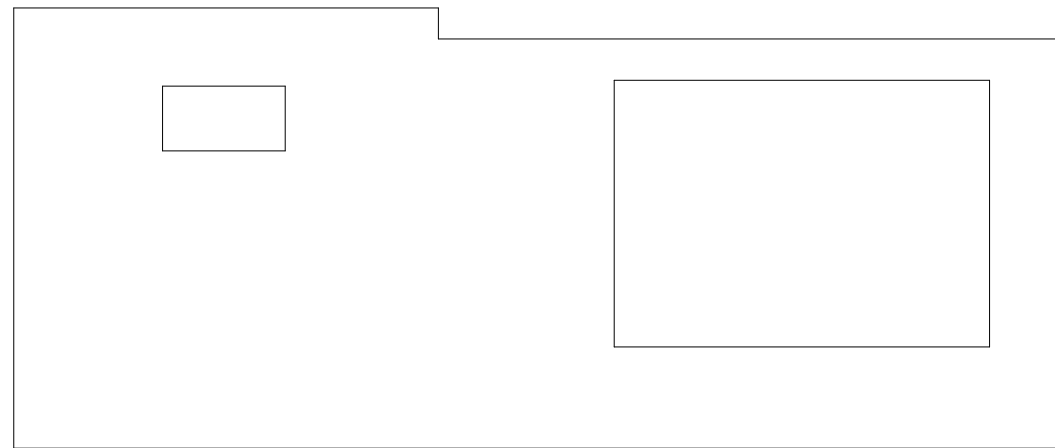


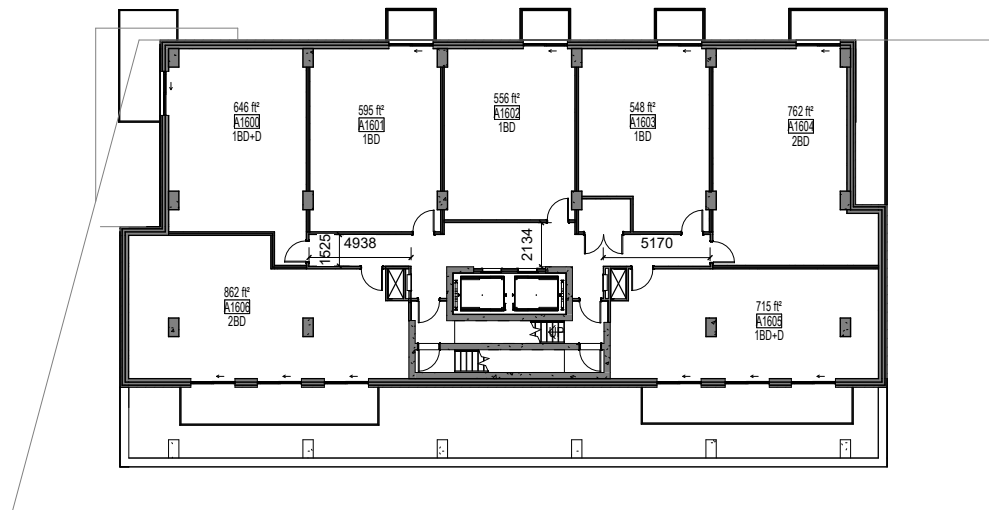
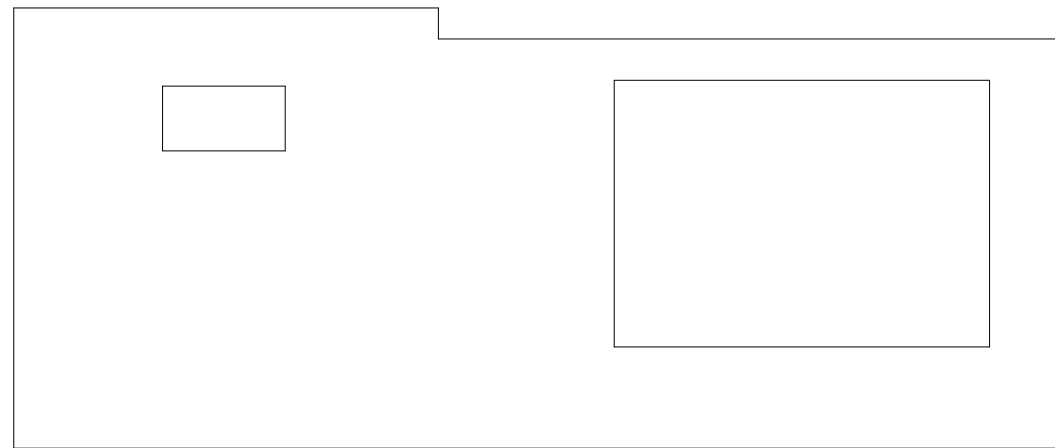


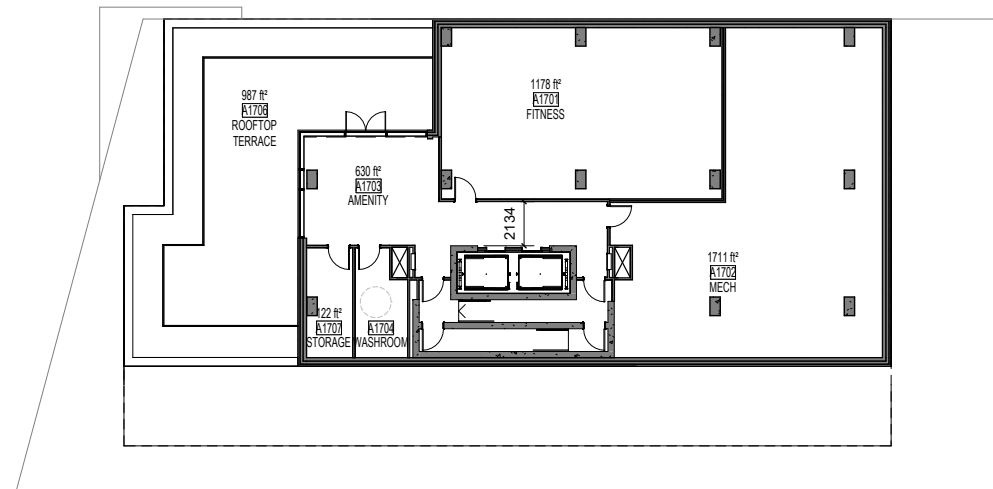
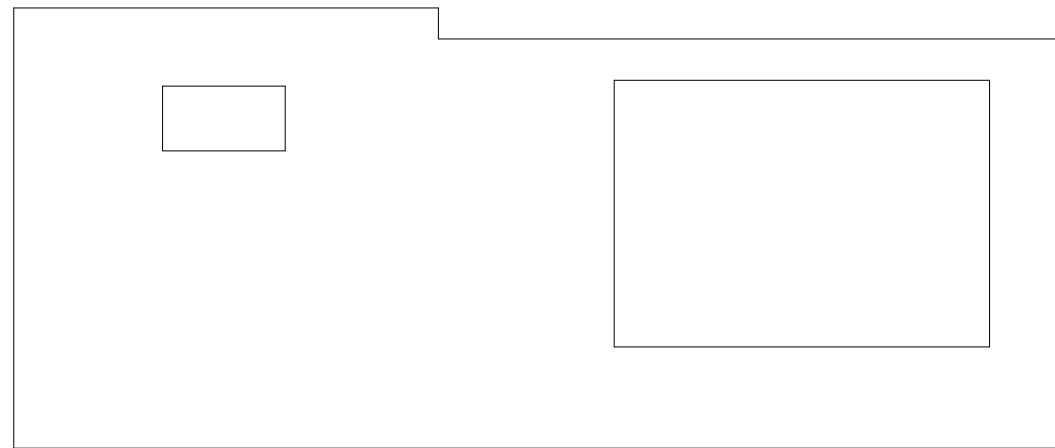




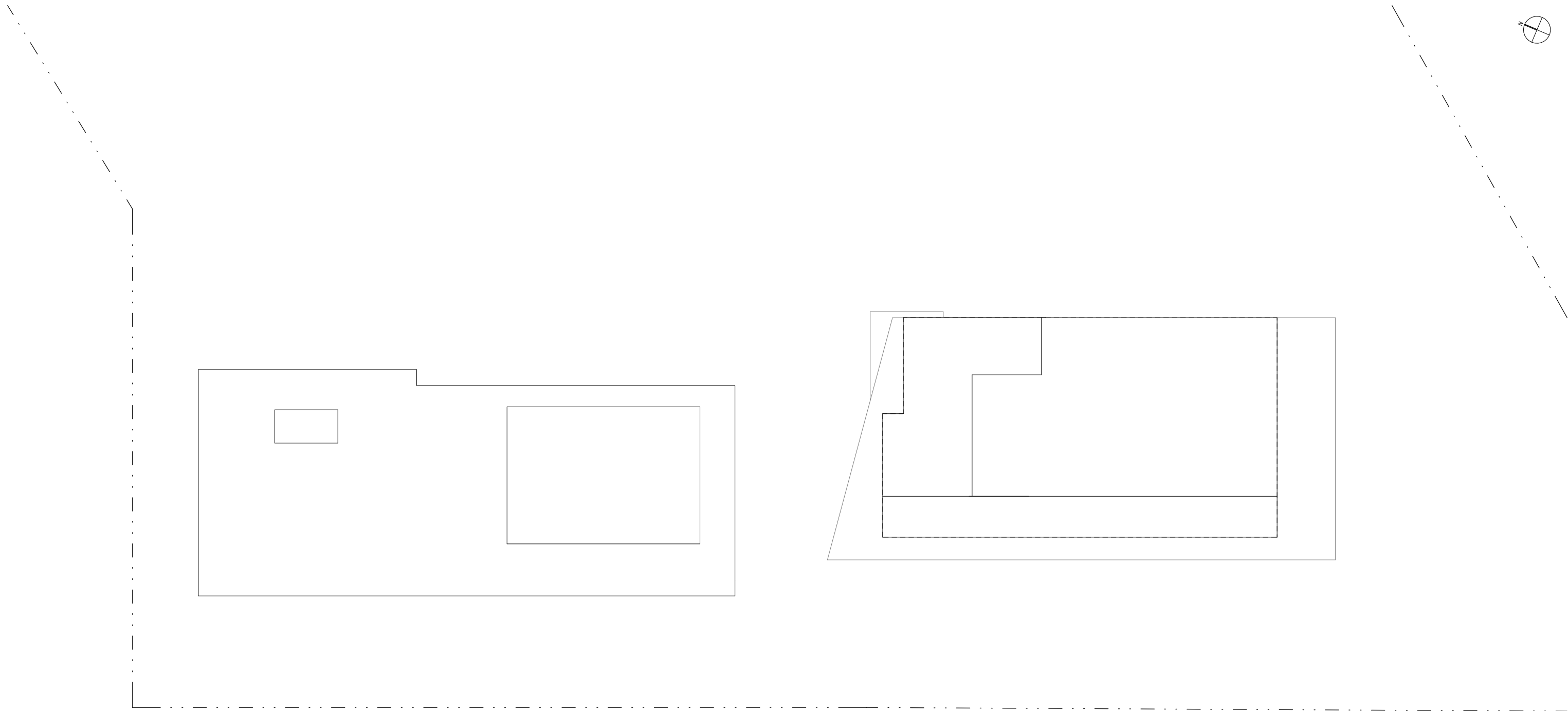












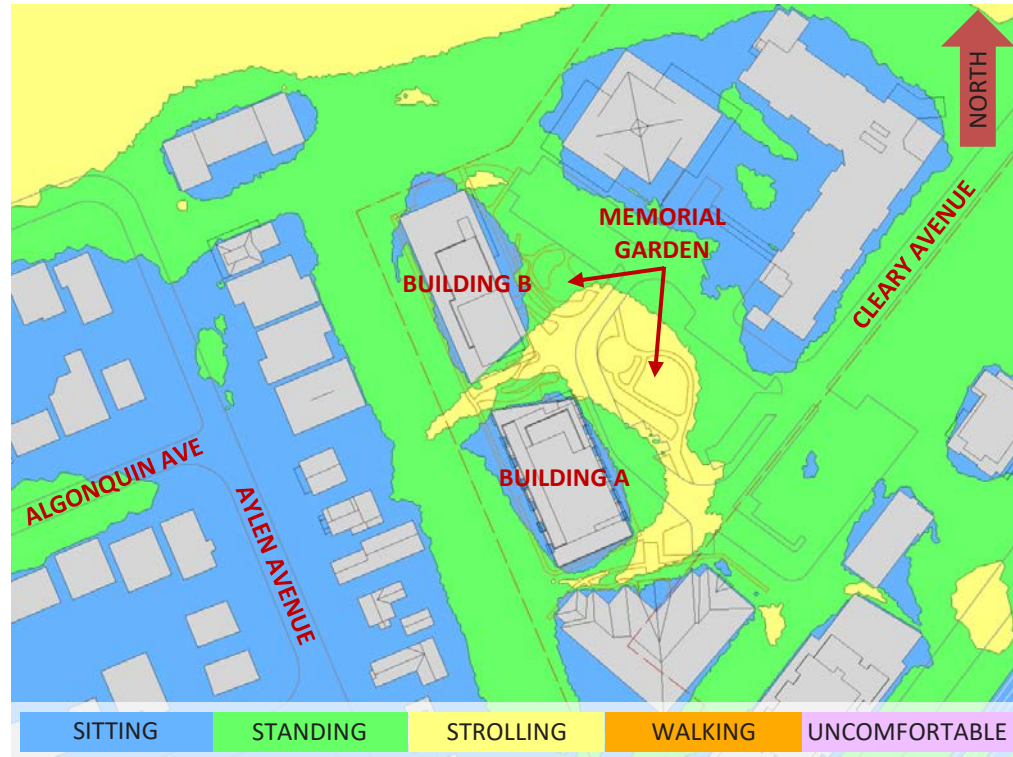


FIGURE 3A: SPRING – WIND COMFORT, GRADE LEVEL – PROPOSED MASSING

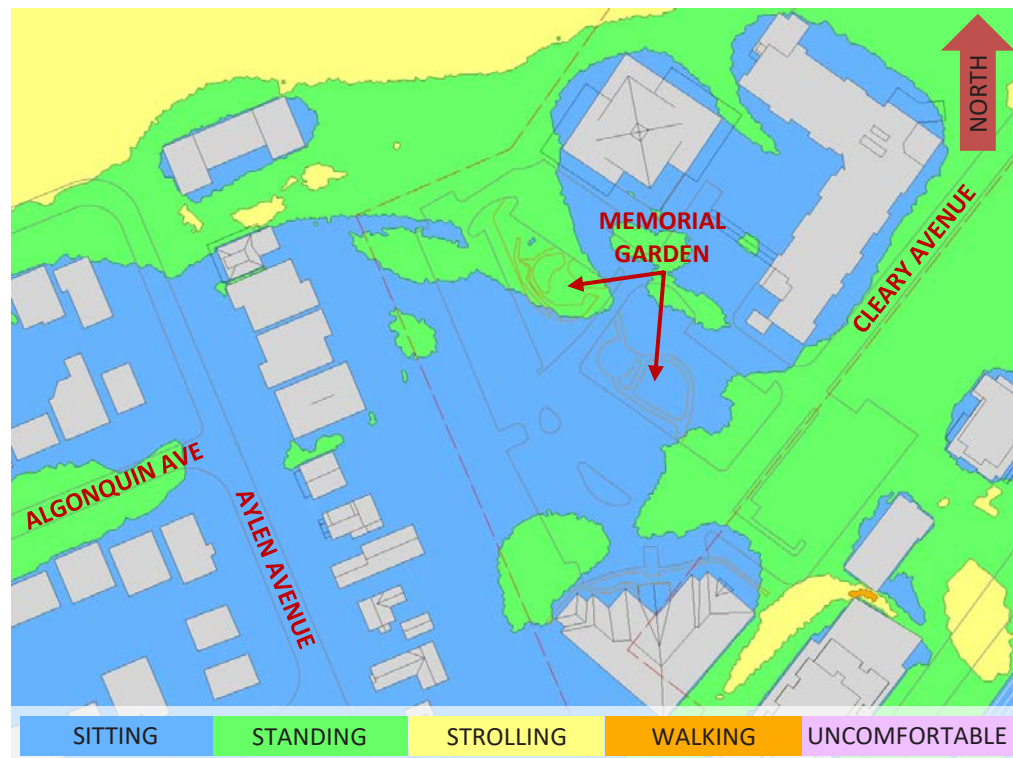


FIGURE 3B: SPRING – WIND COMFORT, GRADE LEVEL – EXISTING MASSING

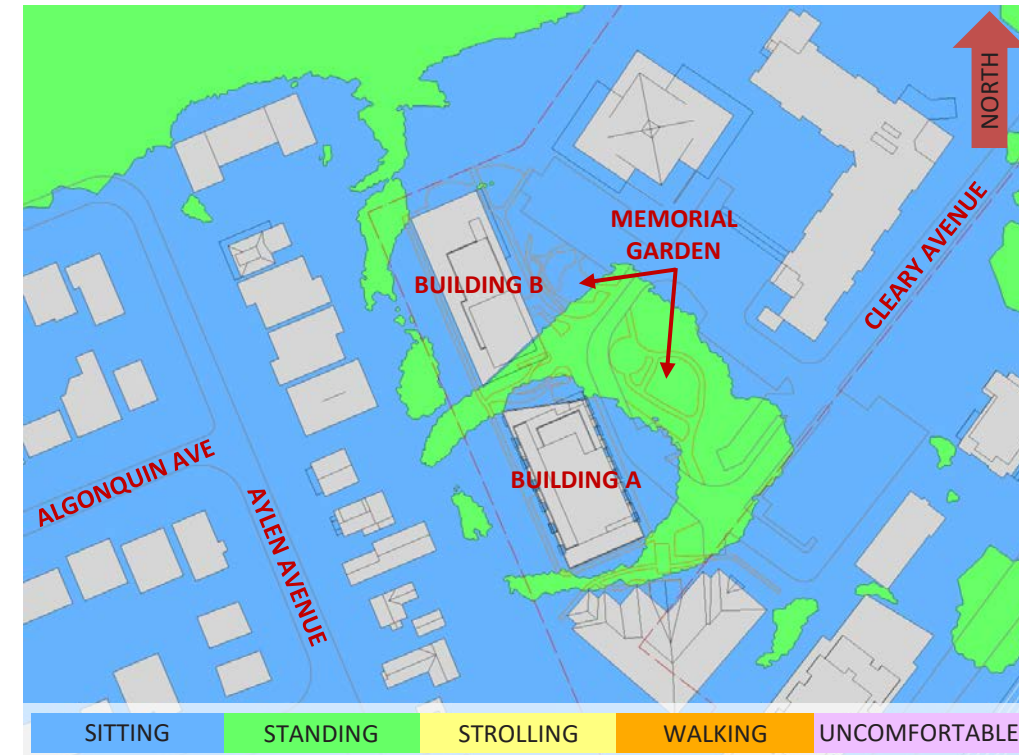


FIGURE 4A: SUMMER – WIND COMFORT, GRADE LEVEL – PROPOSED MASSING

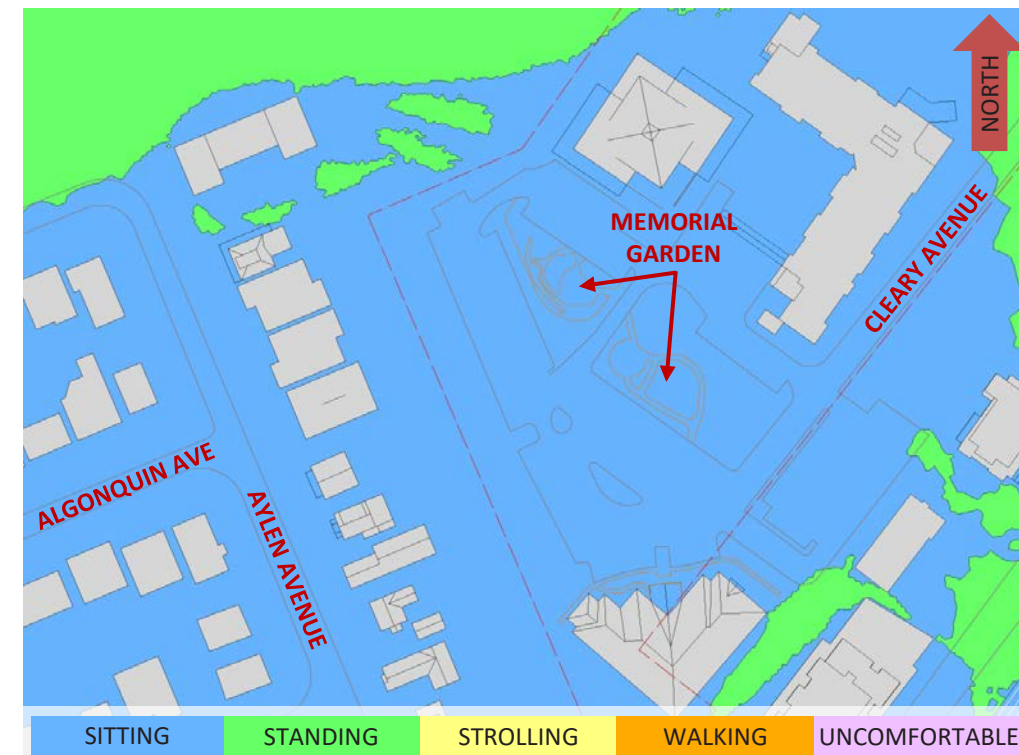


FIGURE 4B: SUMMER – WIND COMFORT, GRADE LEVEL – EXISTING MASSING

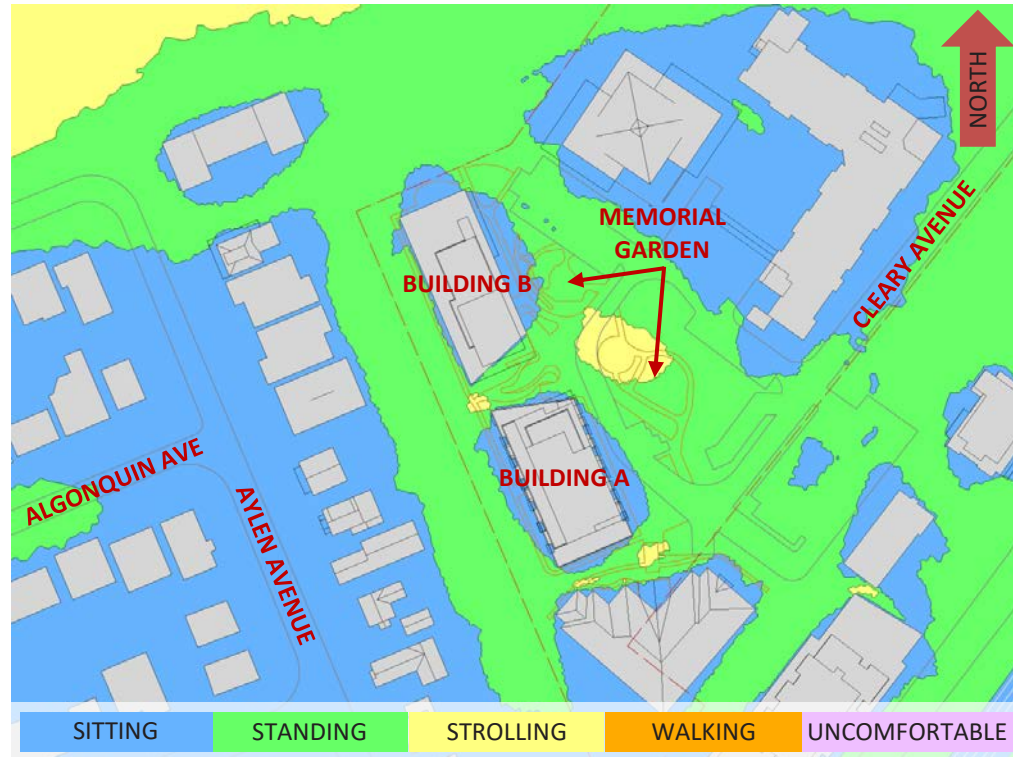


FIGURE 5A: AUTUMN – WIND COMFORT, GRADE LEVEL – PROPOSED MASSING

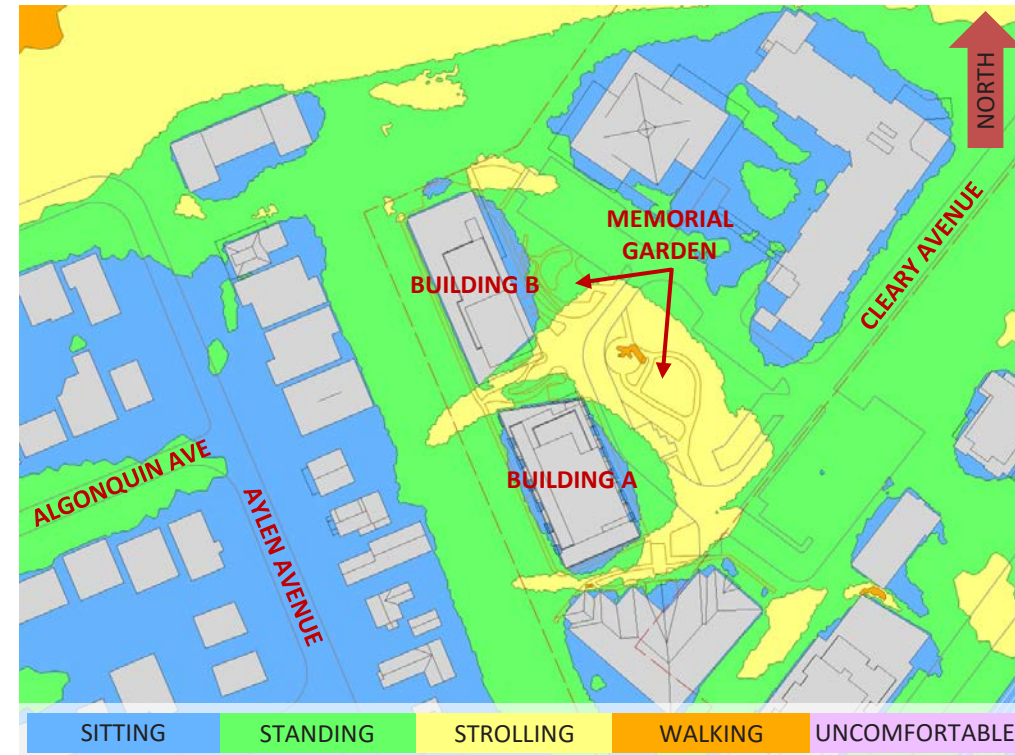


FIGURE 6A: WINTER – WIND COMFORT, GRADE LEVEL – PROPOSED MASSING

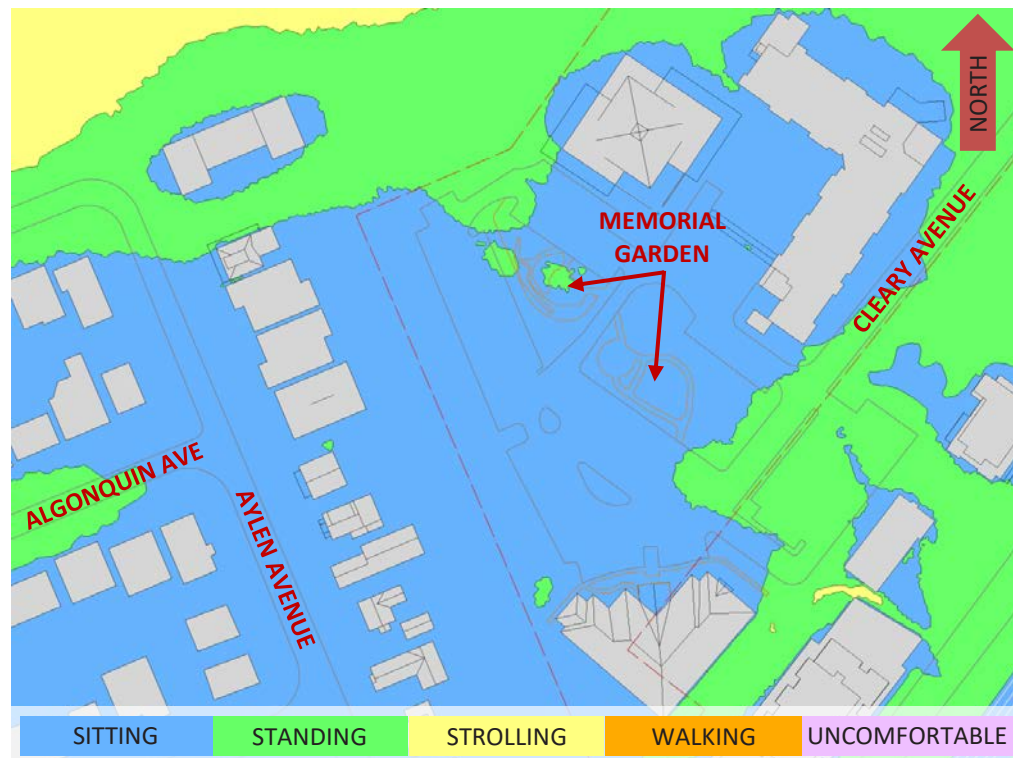


FIGURE 5B: AUTUMN – WIND COMFORT, GRADE LEVEL – EXISTING MASSING

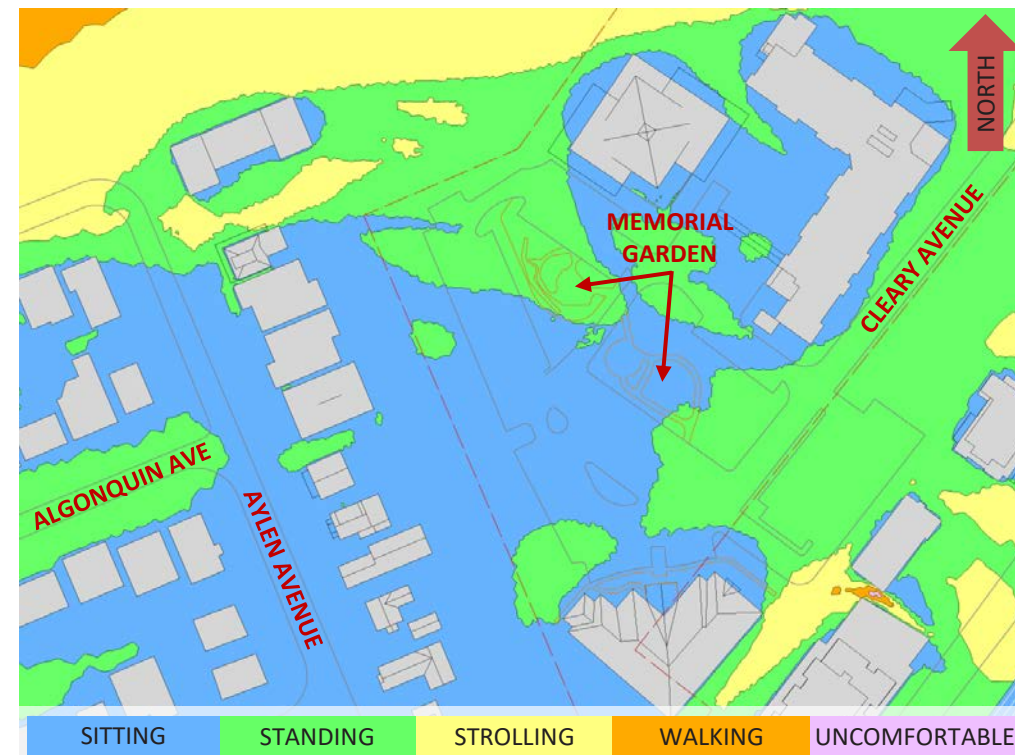


FIGURE 6B: WINTER – WIND COMFORT, GRADE LEVEL – EXISTING MASSING

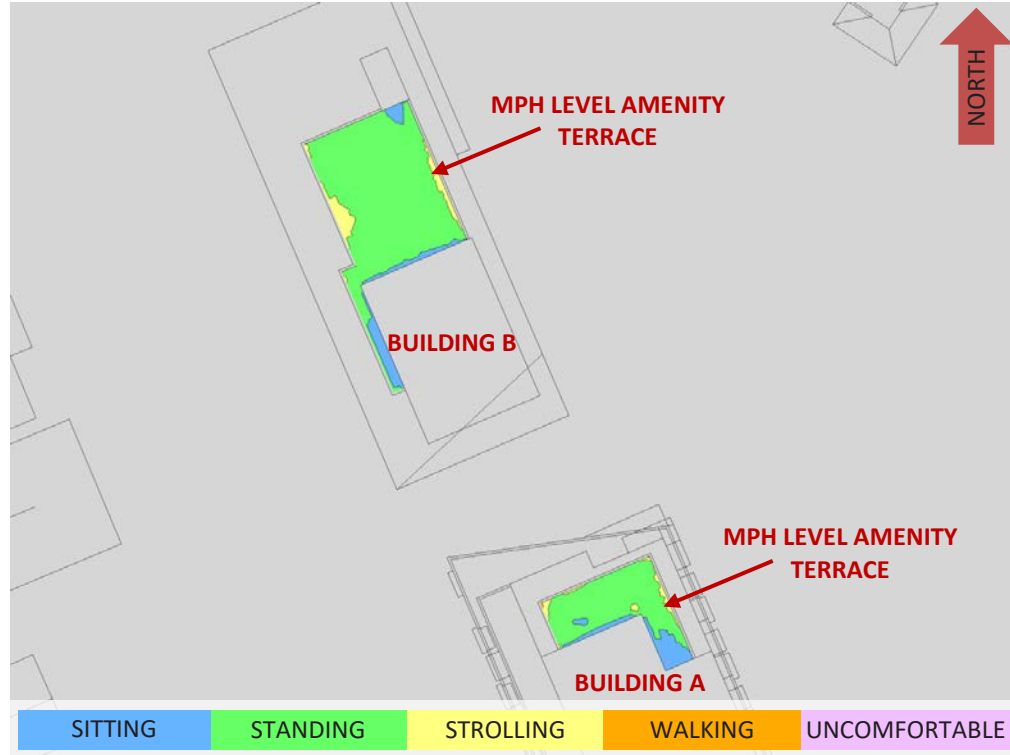


FIGURE 8A: SPRING – WIND COMFORT, MPH LEVEL AMENITY TERRACES

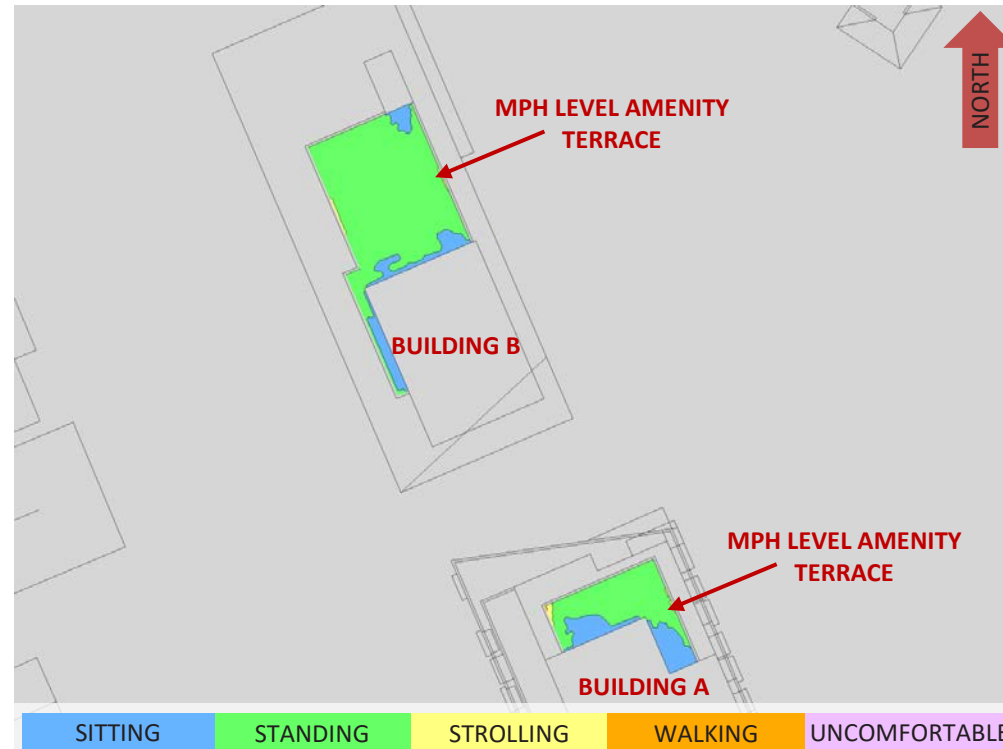


FIGURE 8C: AUTUMN – WIND COMFORT, MPH LEVEL AMENITY TERRACES

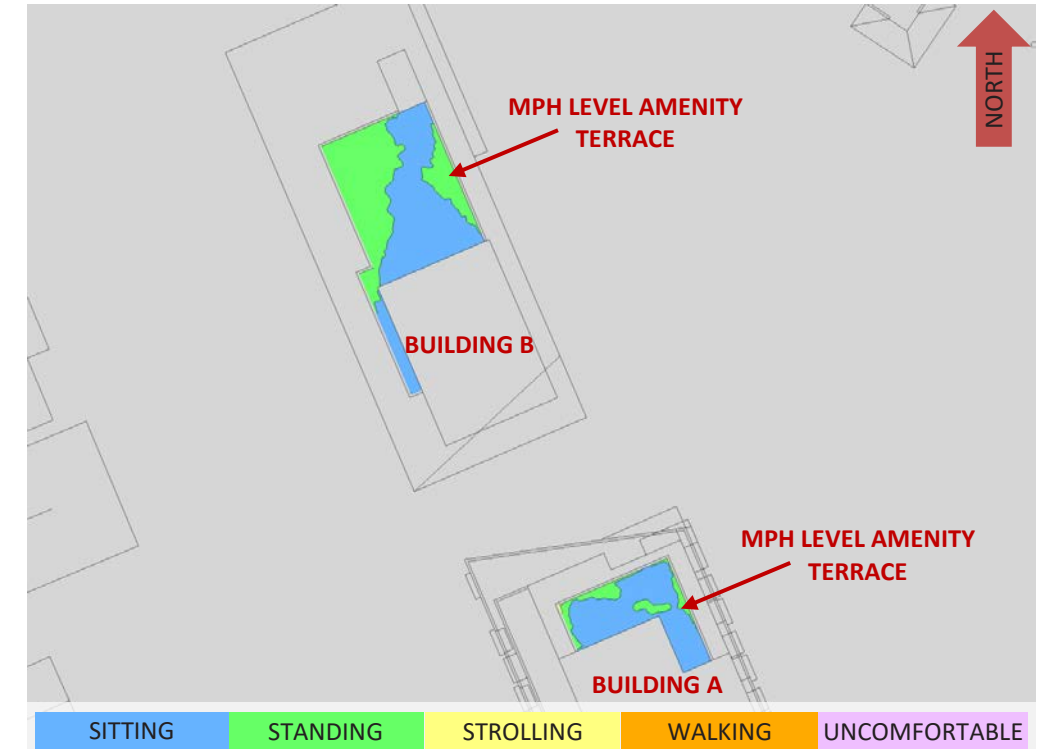


FIGURE 9: TYPICAL USE PERIOD – WIND COMFORT, MPH LEVEL AMENITY TERRACES

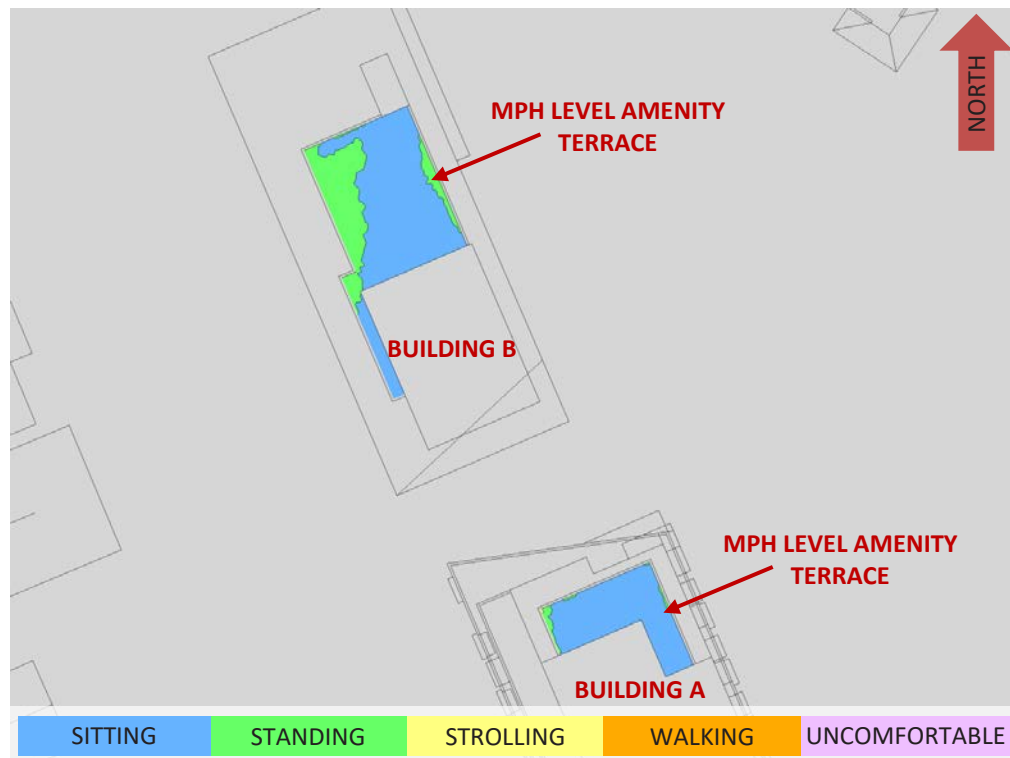


FIGURE 8B: SUMMER – WIND COMFORT, MPH LEVEL AMENITY TERRACES

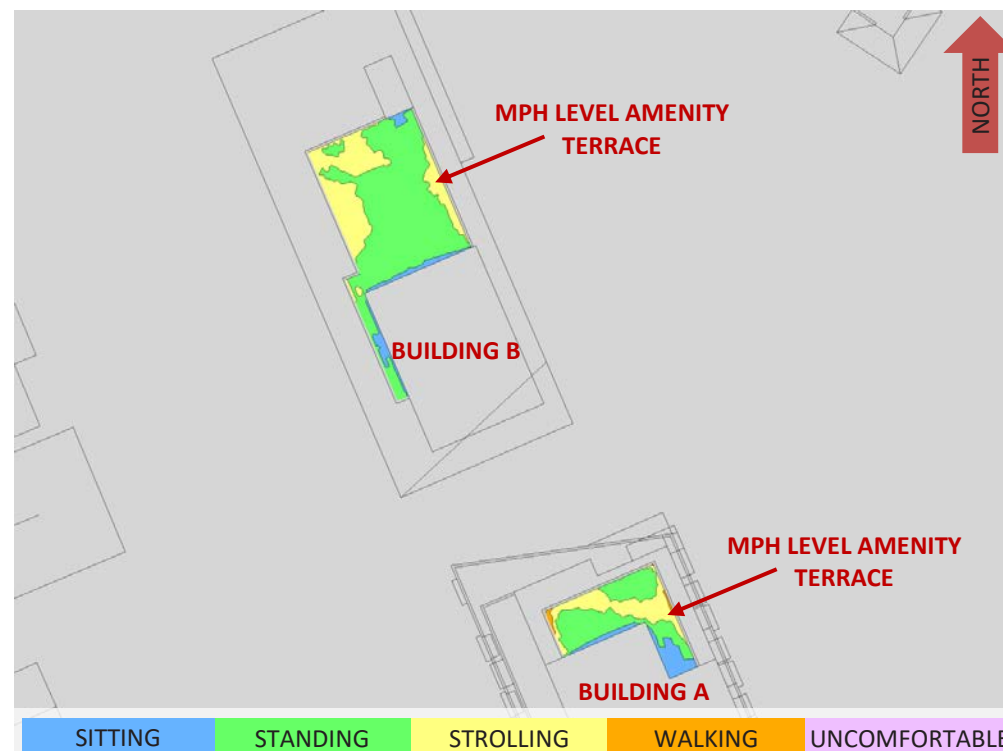


FIGURE 8D: WINTER – WIND COMFORT, MPH LEVEL AMENITY TERRACES



5:15am



6:00am



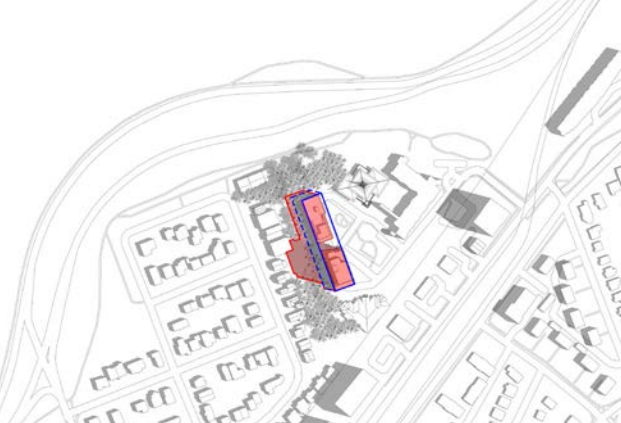
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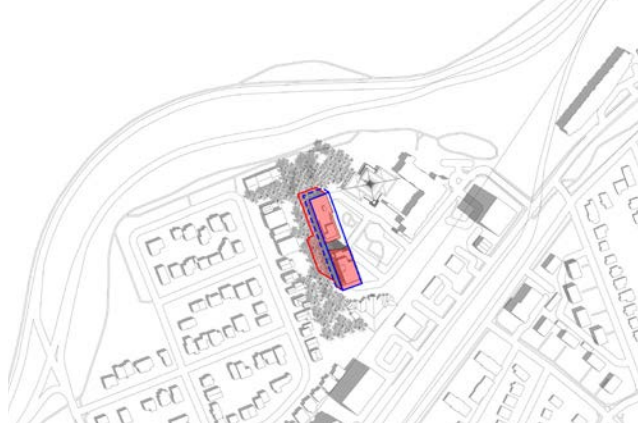
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9:00am



10:00am



11:00am



12:00pm



1:00pm



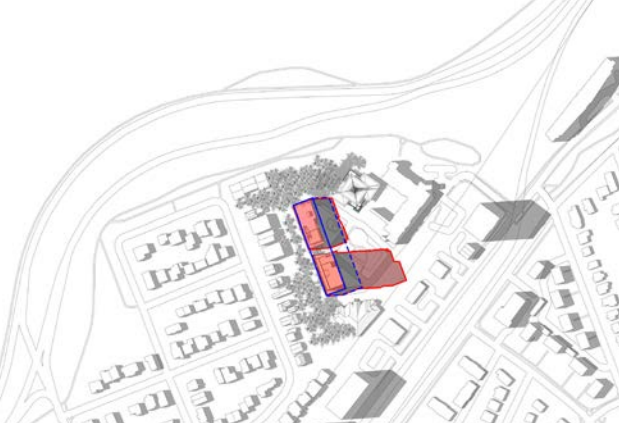
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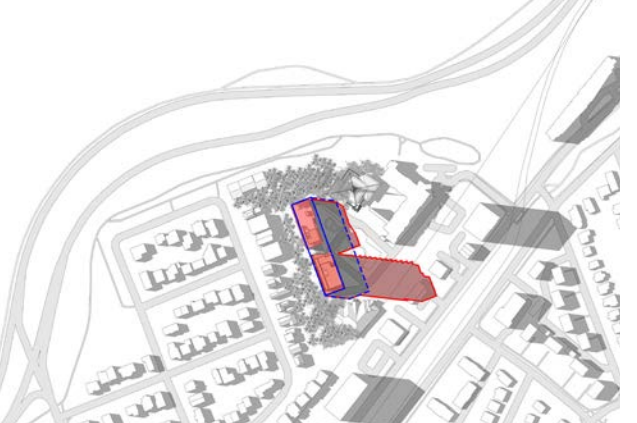
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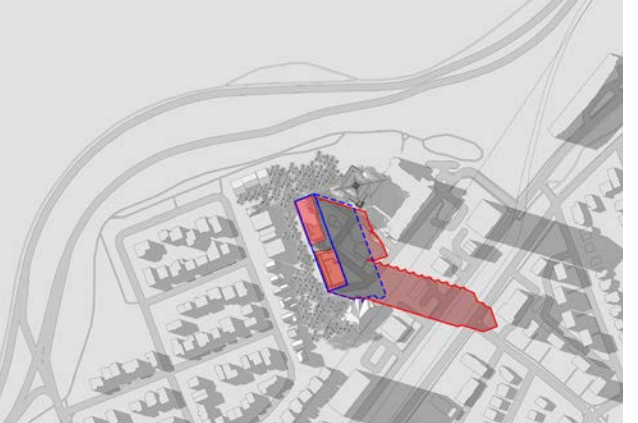
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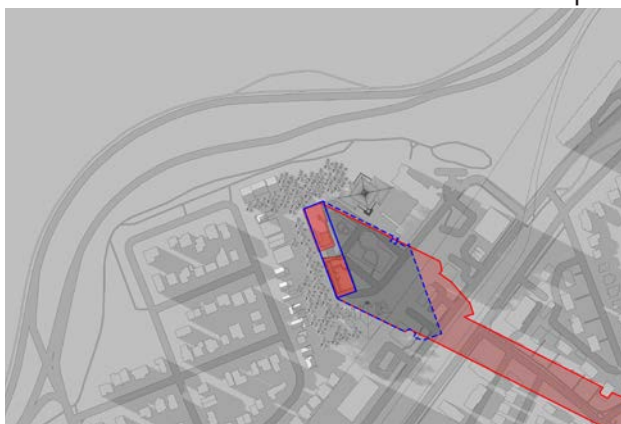
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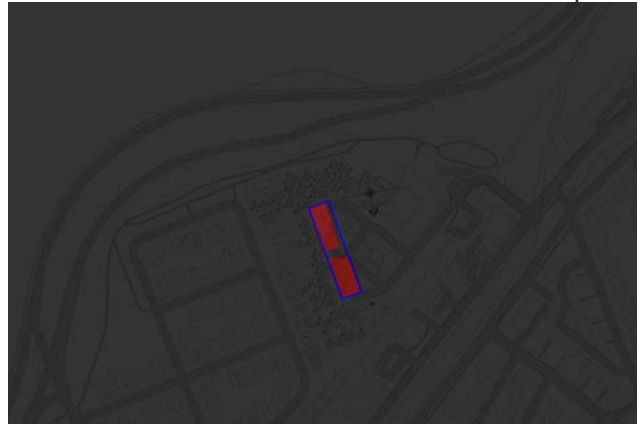
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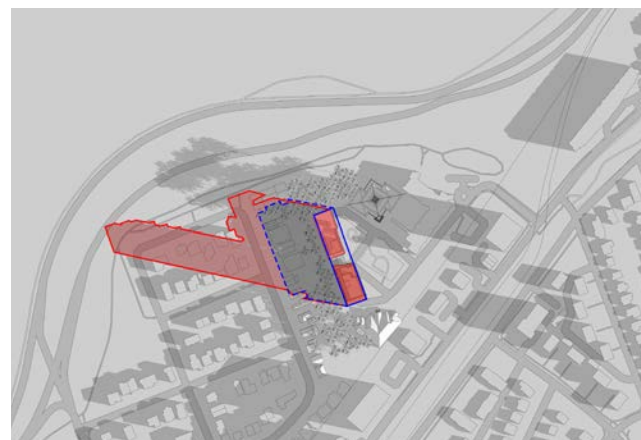
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**LEGEND**

- PROPOSED DEVELOPMENT
- AS OF RIGHT OUTLINE
- NEW NET SHADOW
- PROPOSED SHADOW OUTLINE
- AS OF RIGHT SHADOW OUTLINE



6:49am



8:00am



9:00am



10:00am



11:00am



12:00pm



1:00pm



2:00pm



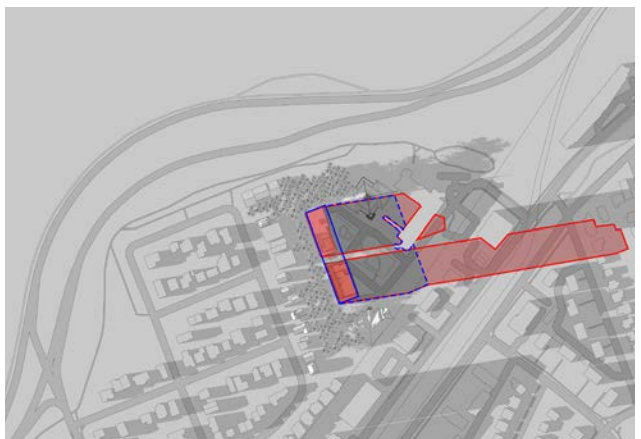
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4:00pm



5:00pm








6:00pm



7:01pm

**LEGEND**

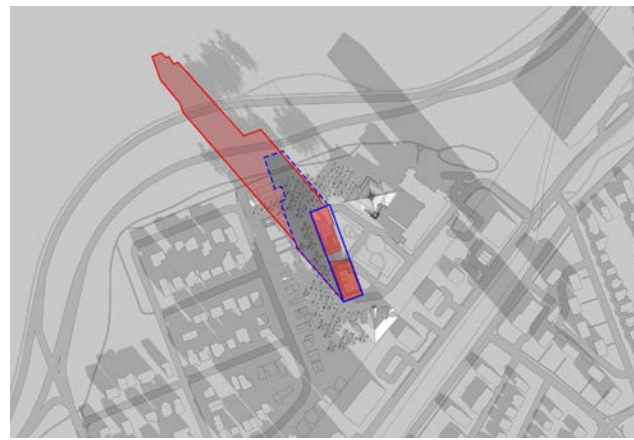
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-  PROPOSED SHADOW OUTLINE
-  AS OF RIGHT SHADOW OUTLINE



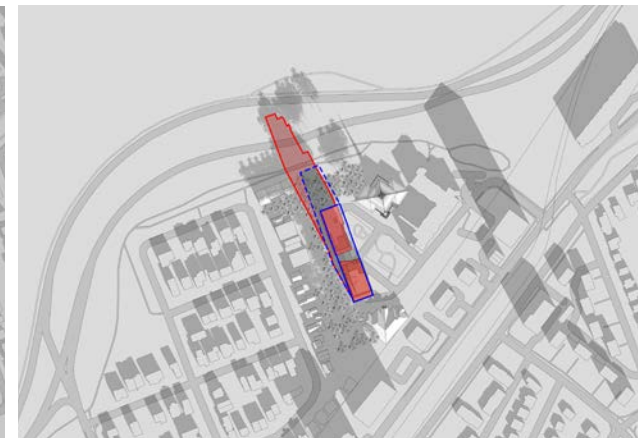
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8:00am



9:00am



10:00am



11:00am



12:00pm



1:00pm



2:00pm



3:00pm



4:00pm



4:22pm

**LEGEND**

- PROPOSED DEVELOPMENT
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- NEW NET SHADOW
- PROPOSED SHADOW OUTLINE
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