

1940 CARLING AVENUE

7-STOREY RENTAL APARTMENTS

DESIGN BRIEF

22 NOVEMBER 2021



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1. INTRODUCTION AND BACKGROUND TO THE PROJECT

Located in the neighbourhood of Carlingwood West - Glaber Park - McKellar Heights, the project site 1940 Carling Avenue, engulfs a land parcel of 1457.22 sqm (15685.37 sqft) along with a perimeter length of 155.36 m (509.71 ft) while facing north-west towards the Carling Avenue, to be precise.

Currently, the site is occupied by a single family detached house with frontage facing the Carling Avenue. The existing structure is conventional wood-frame construction with brick cladded walls above grade and sitting on top of a stone masonry foundation wall with sloped roofing finished with shingles.

In the radius of 1km of the property some nodal areas include Bromley Square - Homestead Land, Mc Donalds & Petro canada Gas Station at Carling - Maitland Avenue, Bromley Road Baptist Church, Carlingwood Shopping Center, Staples, Somerset Towers, etc. Apart from this an OC Transpo Bus stop at Carling/Dunlevie is present just a few meters from the site which is one of the key factors that facilitates the proposed design involving the erection of the 7-Storey Rental Apartments.

1.1. ZONING AS CONTEXT

The site falls under Ward named 'Bay', Ward No.: 7 and AM10[2181]H(20) zone which is the Arterial Main Street Zone (Section 185 and 186) allowing the construction of Mid-Rise Apartment Buildings, Mixed-Use Buildings and the overall intensification of the area while maintaining the compatibility with the existing surrounding areas and built-up masses. Also permitting the building height of no more than 30m from a property line abutting R1, R2, R3 or R4 Zones and even more than 30 meters in case the property line is abutting R1-R4 Zone.

With the commencement of the year 2021 it was very much clear that the decision taken by the government to bring the stretch of the neighbourhood that is in question along the Carling Avenue under the AM10 zoning was completely viable as the prices for the real estate in the city of Ottawa sky rockets, the new comers in the city are left to face housing shortage. The lack of affordability of real estate and an exponential increase in the rate of occupancy of the rental units clearly indicates that in order to mitigate the prevailing housing issues the city needs more rental housing. Hence, justifying the new design proposal for the 1940 Carling Avenue by Woodman Architect & Associates for the client Domenic Santaguida of Preeminent Developments Inc.

Legend

- A. Project Site
- B. OC Transpo Bus-Stop
- C. Bromley Road Baptist Church
- D. Notre Dame High School
- E. Mc Donalds
- F. Petro Canada
- G. Esso
- H. Dynacare Laboratory and Health Services Centre
- I. McKellar Park Apartments Ottawa
- J. Bromley Square Homestead Land
- K. Somerset Towers
- L. Carlingwood Shopping Centre
- M. Fairlawn Centre Shopping Mall
- N. Small / Private Business Area
- O. Weswood Park
- P. Tillbury Park
- Q. VCA Canada Ottawa Veterinary Hospital
- R. Broadview Public School



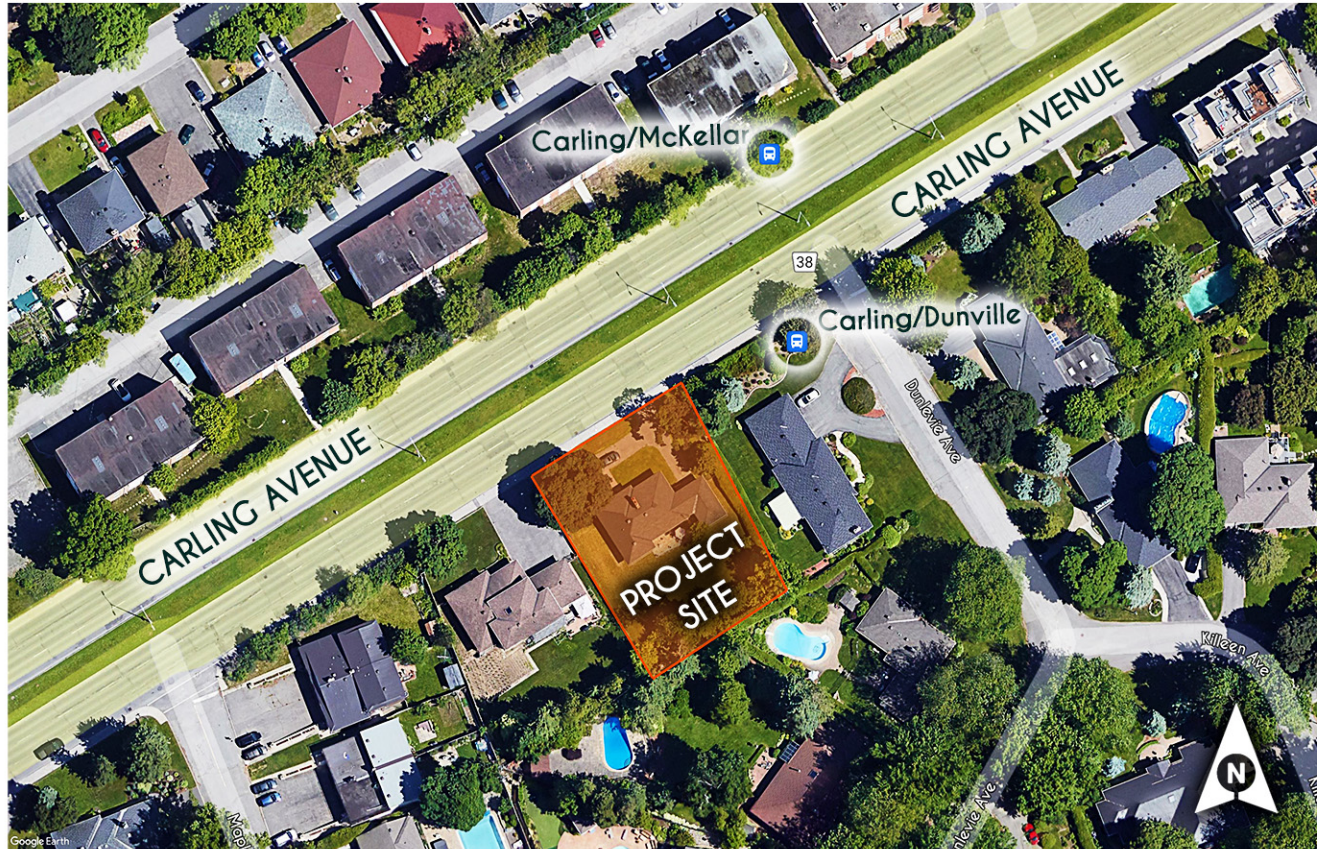
DESIGN OBJECTIVE AND PROJECT DESCRIPTION

The primary objective of the design is to provide affordable rental housing, while obeying the prevailing zoning regulations. Especially in the case of young professionals and students moving into the city of Ottawa, the project is expected to serve as their initial accommodation, keeping in mind the fact the OC Transpo Bus Stop is just a few meters away from the site so the project is deemed to attract a large chunk of the new comers.

The apartment building will be totally furnished and well equipped with an indoor & outdoor amenity component, created just so as to enhance the living experience and facilitate the element of social interactions. The units within this building are going to be a mix of barrier-free, studio, one-bedroom, two-bedroom spacious units with inbuilt laundry area. Apart From this a multi-purpose terrace area is also a part of the design which will be developed in way to facilitate the outdoor activities for the residents of all age groups.

CHARACTERISTICS OF THE SITE

The site is almost rectilinear in shape with eastern edge slightly protruding outwards along the edge of Carling Avenue. The frontage of the site abuts the Carling Avenue while maintaining a North-West orientation. A conventional asphalt driveway curves in and out of the site to serve as a drop-off as well as a pathway leading to the garage of the existing single-family detached house. The structure of the house is the traditional wood-frame clad with brick resting on a stone foundation wall. As the OC Transpo bus service has a route via Carling Avenue, the site enjoys an extremely convenient approach to the bus-stops on this road. For instance the Carling/Dunville and the Carling/McKellar are merely 30 meters and 74 meters from the site respectively.



The vicinity the site enjoys nodes like the Carlingwood Shopping Centre, Fairlawn Shopping Mall, Notre Dame high School, Broadview Public School, Canadian Tire within its 500m and 1km radius. Therefore provides an opportunity for the residents to have a convenient walk to these places.



STREET VIEWS OF THE SITE



VIEW FROM POINT - B

VIEW FROM POINT - C

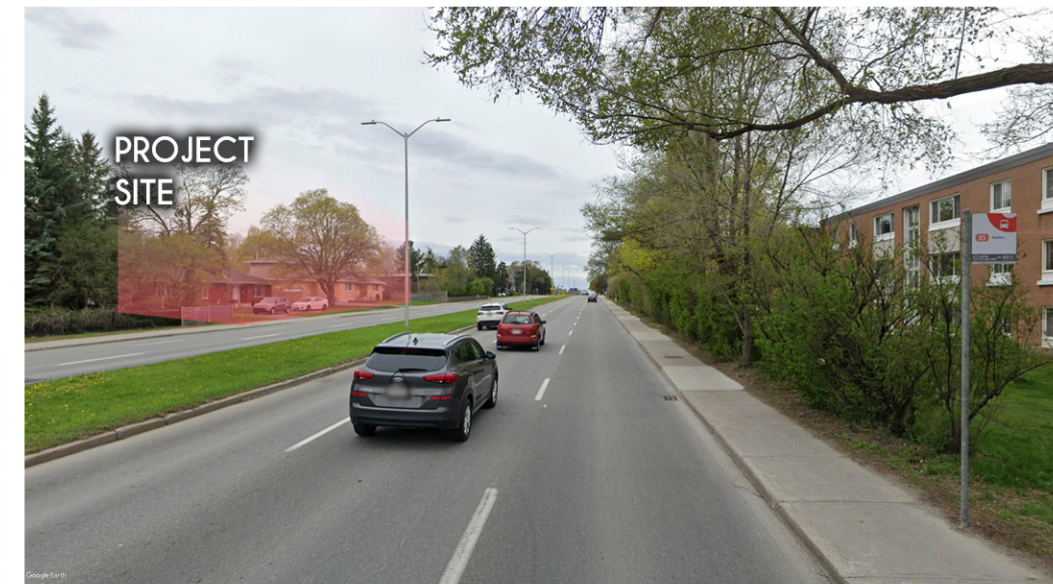
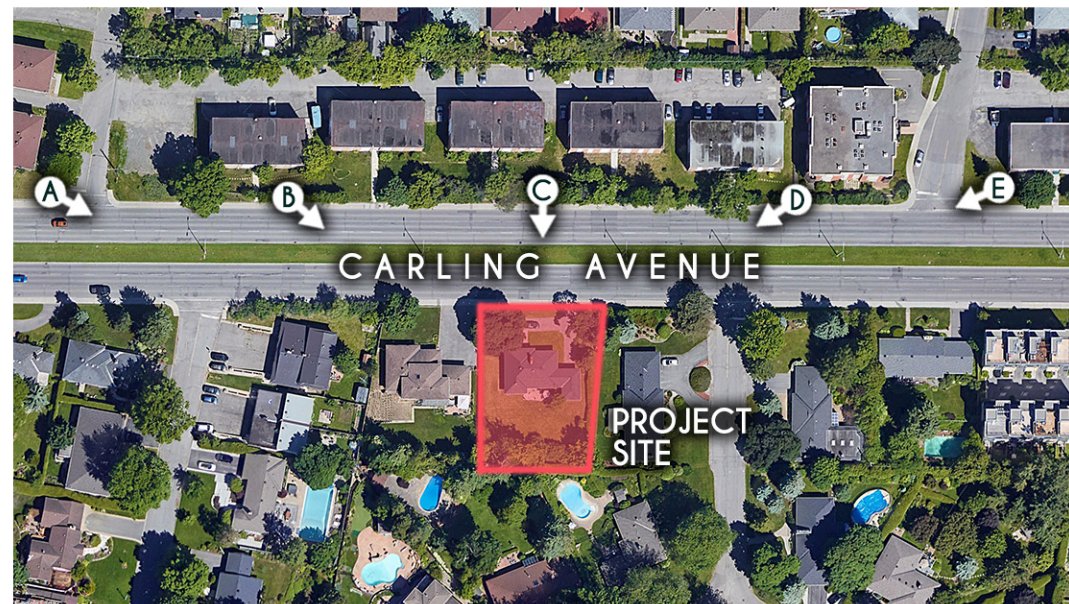


VIEW FROM POINT - D



VIEW FROM POINT - A

PROJECT KEY PLAN



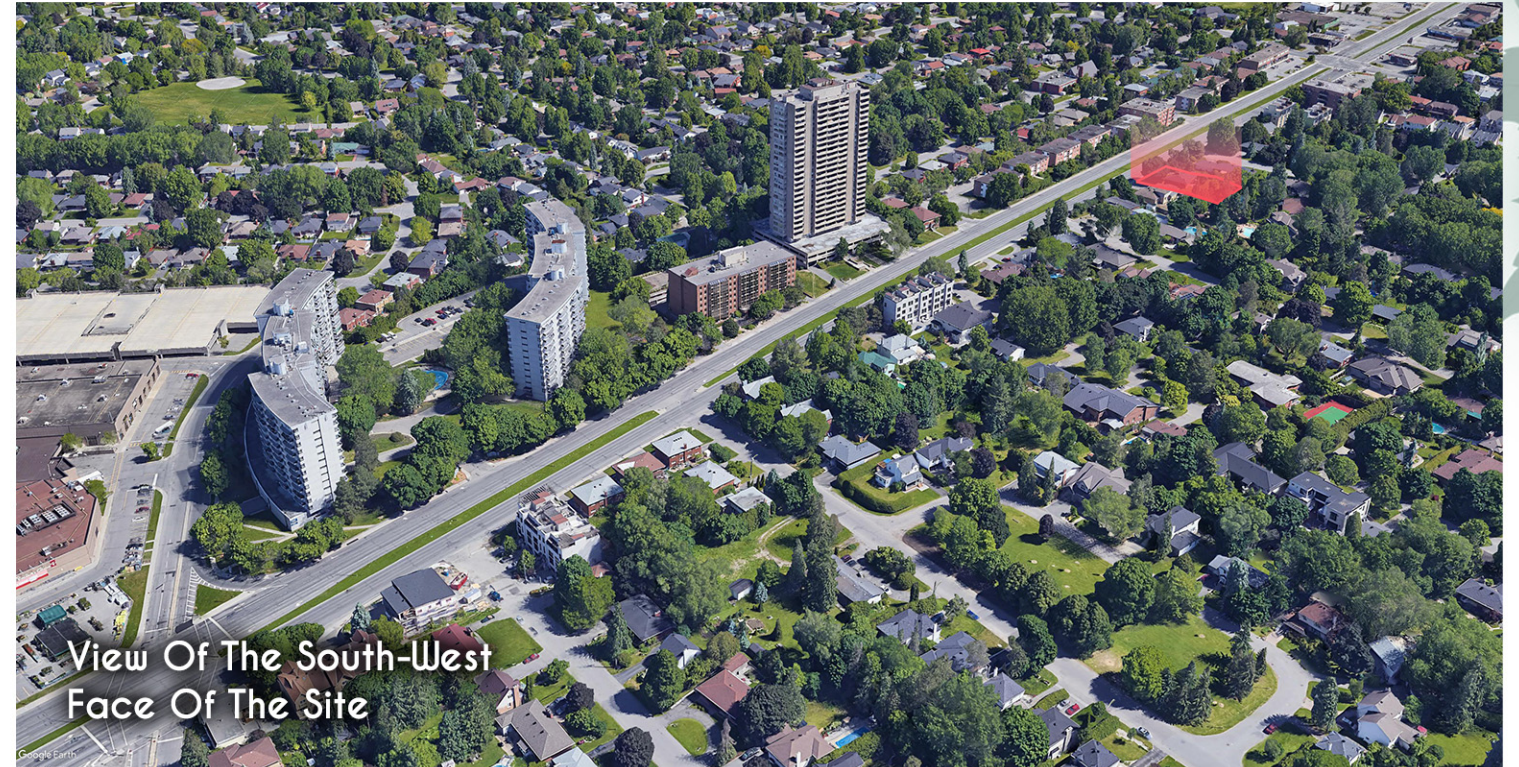
VIEW FROM POINT - E

ARIAL VIEWS OF THE SITE

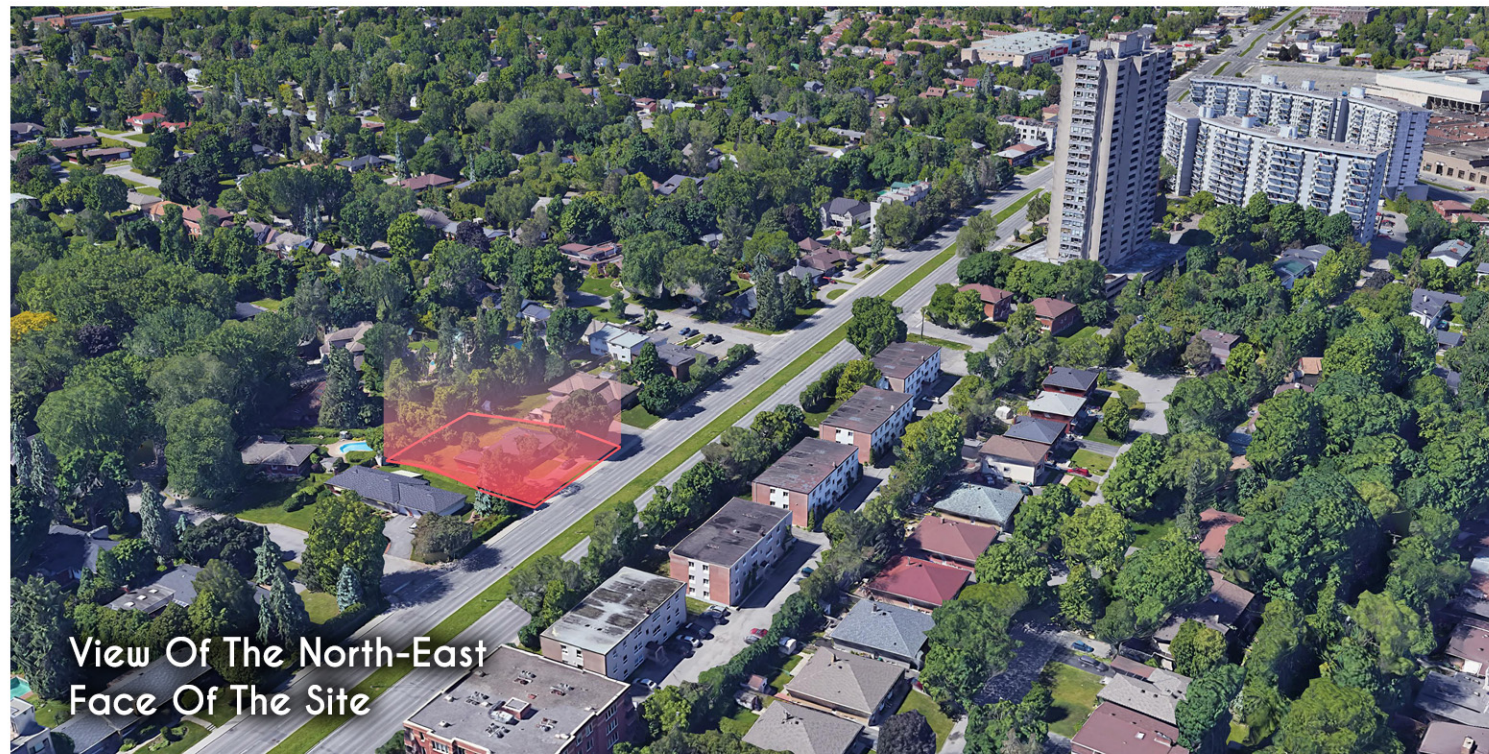
Analysing The Massing Surrounding The Site



View Of The North-West Face Of The Site



View Of The South-West Face Of The Site



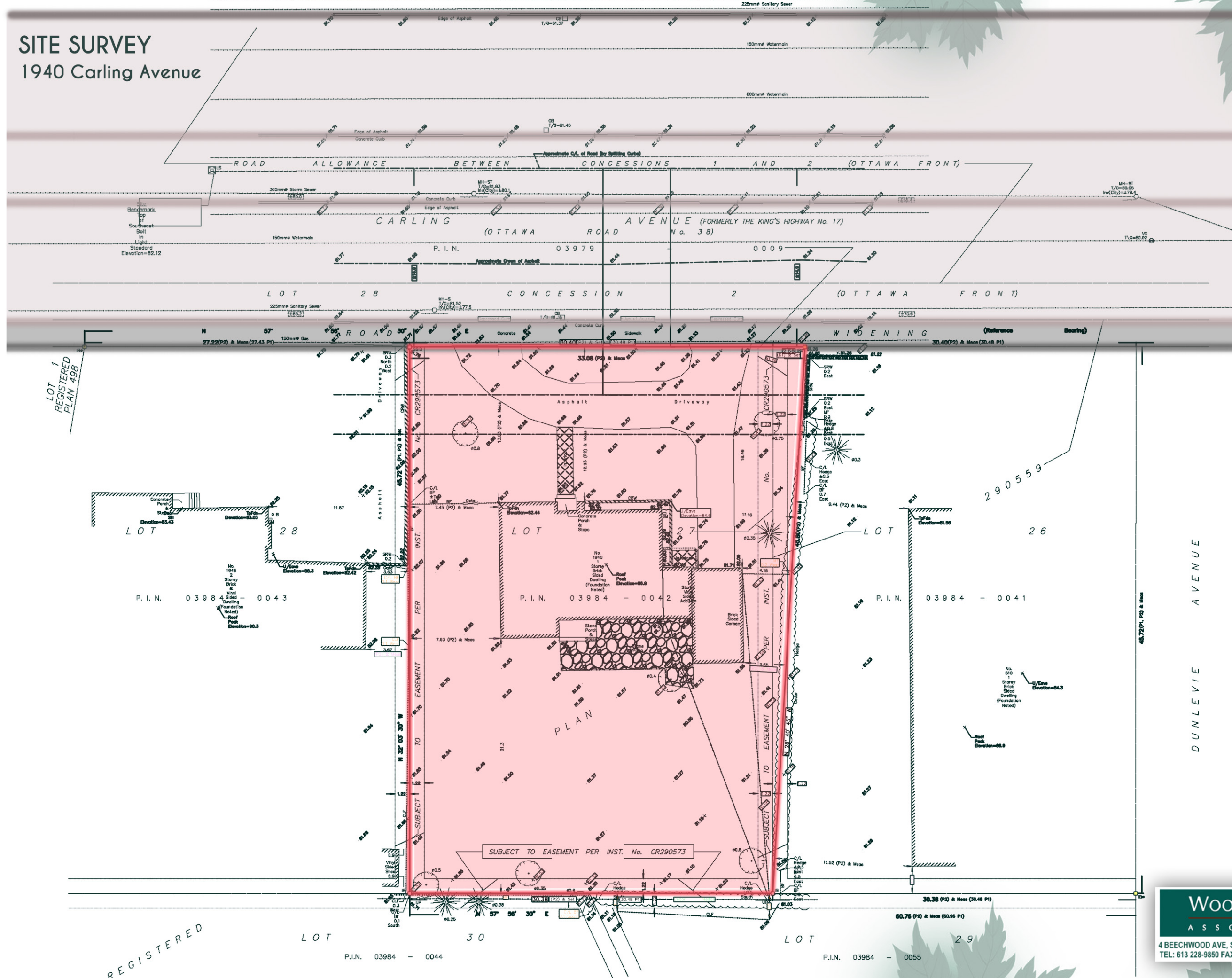
View Of The North-East Face Of The Site



View Of The South-East Face Of The Site

SITE SURVEY

1940 Carling Avenue



WOODMAN ARCHITECT
 &
 ASSOCIATES LTD.

4 BEECHWOOD AVE, SUITE 201 OTTAWA, ONTARIO, CANADA K1L 8L9
 TEL: 613 228-9850 FAX: 613 228-9848 mailbox@woodmanarchitect.com

URBAN DESIGN GUIDELINES FOR PROJECT SITE | ZONING - AM10 - ARTERIAL MAIN STREET

Mainstreets are defined in the Official Plan as "streets that offer some of the most significant opportunities in the City for intensification through more compact forms of development, a lively mix of uses and a pedestrian-friendly environment." Arterial Mainstreets, in contrast to Traditional Mainstreets, are identified as those Mainstreets developed after 1945 that generally "present an urban fabric of larger lots, larger buildings, varied setbacks, lower densities and a more automobile-oriented environment." These streets usually do not provide on-street parking. The predominant land use is often single purpose commercial, many with parking lots located between the building and the street.

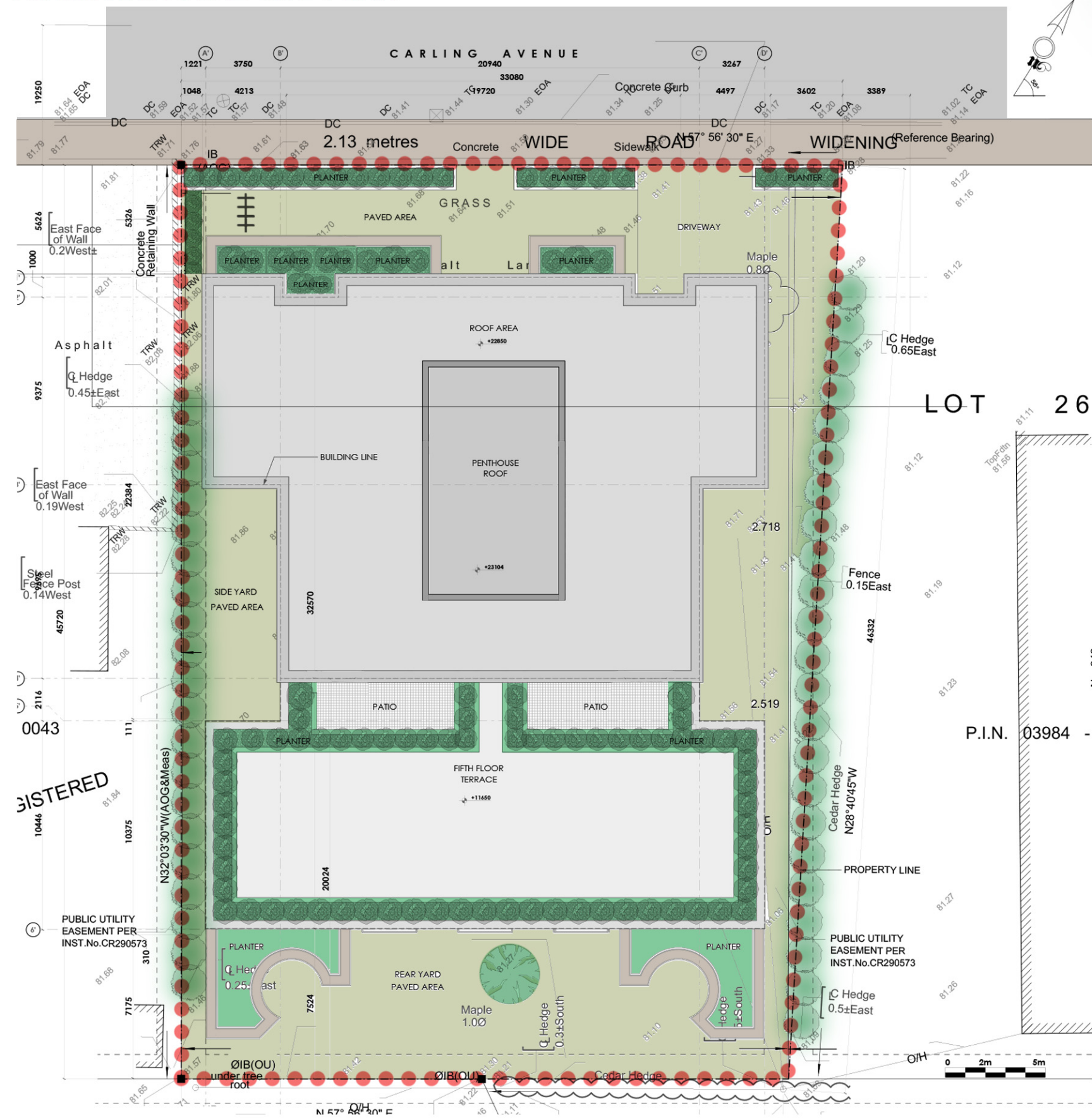
ZONING OBJECTIVES TO MEET

1. To foster compatible development that will contribute to the recognized or planned character of the streets
2. To promote a comfortable pedestrian environment and create attractive streetscapes
3. To achieve high-quality built form and establish a strong street edge along Arterial Mainstreets
4. To facilitate a gradual transition to more intensive forms of development on Arterial Mainstreets
5. To accommodate a broad range of uses including retail, services, commercial, office, institutional and higher density residential
6. To enhance connections that link development sites to public transit, roads and pedestrian walkways

CONTEXT AND CHALLENGES

Development along Arterial Mainstreets is traditionally low in profile, set back from the street, and separated from other buildings by large areas of asphalt. This type of development has created large gaps in the urban fabric and has generally produced unpleasant walking environments and incomplete streetscapes. Arterial Mainstreets are prime locations that present significant opportunities to: intensify and enhance development in a manner that creates attractive pedestrian environments; contribute to vibrant new neighbourhoods; and create transit-friendly places. The challenge is to facilitate the evolution of these Arterial Mainstreets over time to a more balanced vehicular and pedestrian environment with the streetscape defined and supported by buildings and landscape.

ARCHITECTURAL SITE PLAN



ZONING INFORMATION			
1940 CARLING AVE AM 10 (2181) H (20) WARD 7- BAY WARD	REQUIRED	PROVIDED	NOTES
LOT WIDTH	NO MIN	33.08 m	
LOT AREA	NO MIN	1451.03 m2	
MAX HEIGHT	20m & 11m	20 m & 11m	11m within 20m FROM REAR YARD ABUTTING RESIDENTIAL, REST OF SITE 20m
REQUESTED ROAD WIDENING FROM C ROAD	22.25m (7.35m INTO PROPERTY LINE)	19.25m (4m INTO PROPERTY LINE)	
FRONT YARD	0m	1.4m	AM 10 (10) b) i) MIN FRONT YARD SETBACK 0m & 50% OF FRONTAGE MUST HAVE WALLS WITHIN 4.5m
SIDE YARD	NO MIN.	WEST SIDE 1.22m EAST SIDE MIN 1.22m	FROM PROPERTY LINE TO ALLOW R.O.W. OF 19.25m
REAR YARD	7.5 m	7.5 m	

SITE DEVELOPMENT INFORMATION	
LOT AREA	1451.03 m2
NUMBER OF STOREYS	7
NUMBER OF UNITS	64
PARKING	
DWELLING UNITS - AREA "X" ON AREA "Y"	
0 FOR FIRST 12 DWELLINGS	
.5 / DWELLING UNIT	64 - 12 = 52 x .5 = 26.0
VISITOR PARKING	
0 FOR FIRST 12 DWELLINGS	
.1 / DWELLING UNIT	64 - 12 = 52 x .1 = 5.2
PROVIDED	31.2 = 31.2
AMENITY AREA	
6 m / DWELLING UNIT = 6 m x 64 = 384 m2	PROVIDED 645 m2
BICYCLE STORAGE	
.5 / DWELLING UNIT = 64 x .5 = 32	57

GARBAGE REQUIREMENT	
GARBAGE : LOOSE 0.110 cyd / UNIT	64 x 0.110 = 7.04 cyd
RECYCLING : FIBRE 0.038 cyd / UNIT	64 x 0.038 = 2.43 cyd
RECYCLING : GMP 0.018 cyd / UNIT	64 x 0.018 = 1.15 cyd

	STUDIO UNITS	1 - BED UNITS	2 - BED UNITS	TOTAL UNITS
GROUND FLOOR	2	3	-	5
2nd FLOOR	6	4	-	10
3rd FLOOR	8	6	-	14
4th FLOOR	8	6	-	14
5th FLOOR	3	2	2	7
6th FLOOR	3	2	2	7
7th FLOOR	3	2	2	7
	33	25	6	64
TOTAL NO. OF UNITS IN PROJECT = 64				

BASEMENT LEVEL PLAN



GROUND FLOOR PLAN



SECOND FLOOR PLAN



THIRD & FOURTH FLOOR PLAN



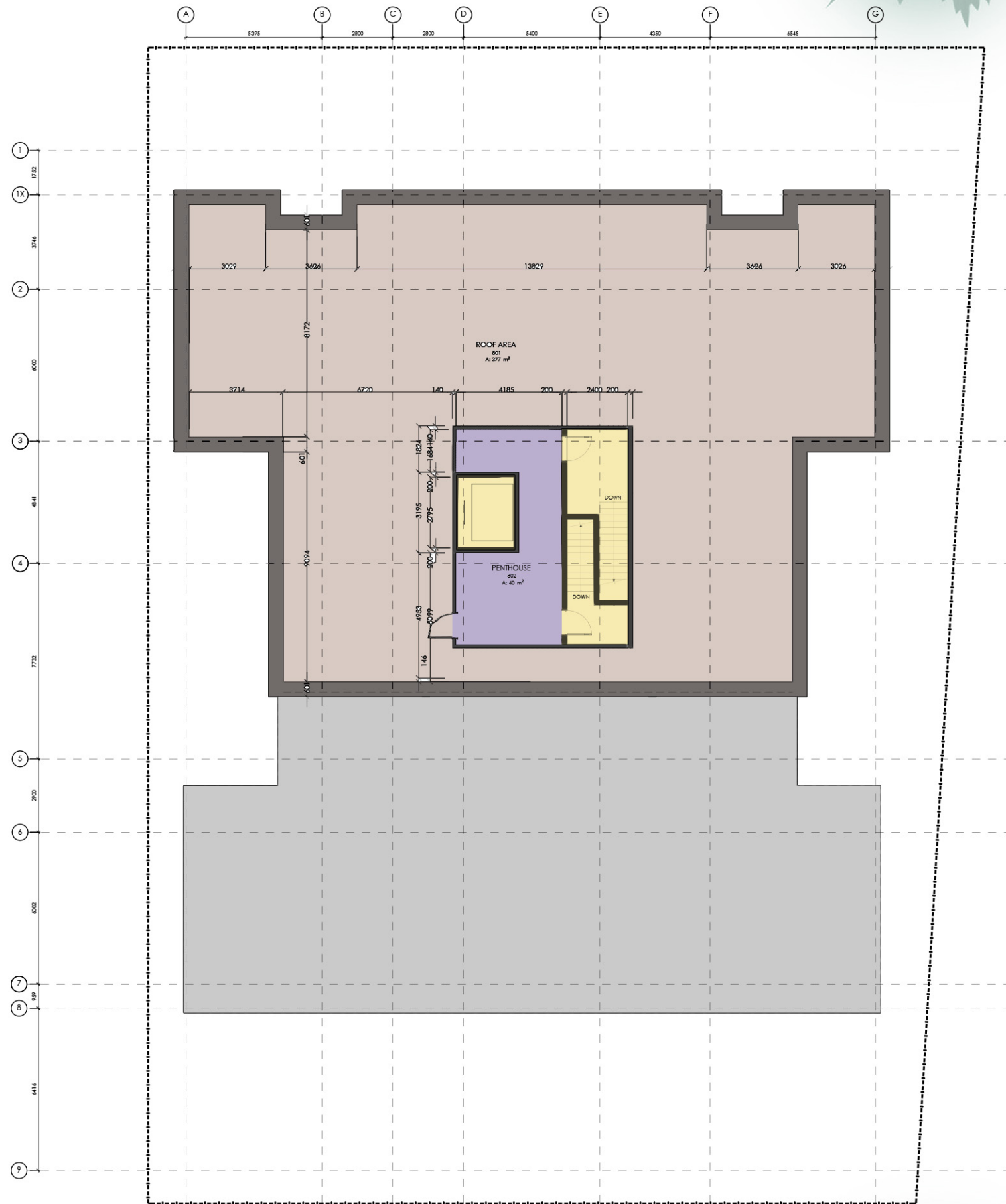
FIFTH FLOOR PLAN



SIXTH & SEVENTH FLOOR PLAN



ROOF PLAN



BUILDING ELEVATION - NORTH

FINISH SCHEDULE

1. BRICK FINISH, COLOUR TO ARCHITECTS APPROVAL
2. STONE FINISH, COLOUR TO ARCHITECTS APPROVAL
3. CLEAR ANODIZED, THERMALLY BROKEN FRAMES C/W CLEAR DOUBLE GLAZED SEALED LITES
4. PRE-FINISHED GLASS RAILINGS WITH METAL GUARDRAIL, AS PER MANUFACTURER
5. PRE-FINISHED METAL FLASHING, TYPICAL



BUILDING ELEVATION - SOUTH

FINISH SCHEDULE

1. BRICK FINISH, COLOUR TO ARCHITECTS APPROVAL
2. STONE FINISH, COLOUR TO ARCHITECTS APPROVAL
3. CLEAR ANODIZED, THERMALLY BROKEN FRAMES C/W CLEAR DOUBLE GLAZED SEALED LITES
4. PRE-FINISHED GLASS RAILINGS WITH METAL GUARDRAIL, AS PER MANUFACTURER
5. PRE-FINISHED METAL FLASHING, TYPICAL



BUILDING ELEVATION - EAST

FINISH SCHEDULE

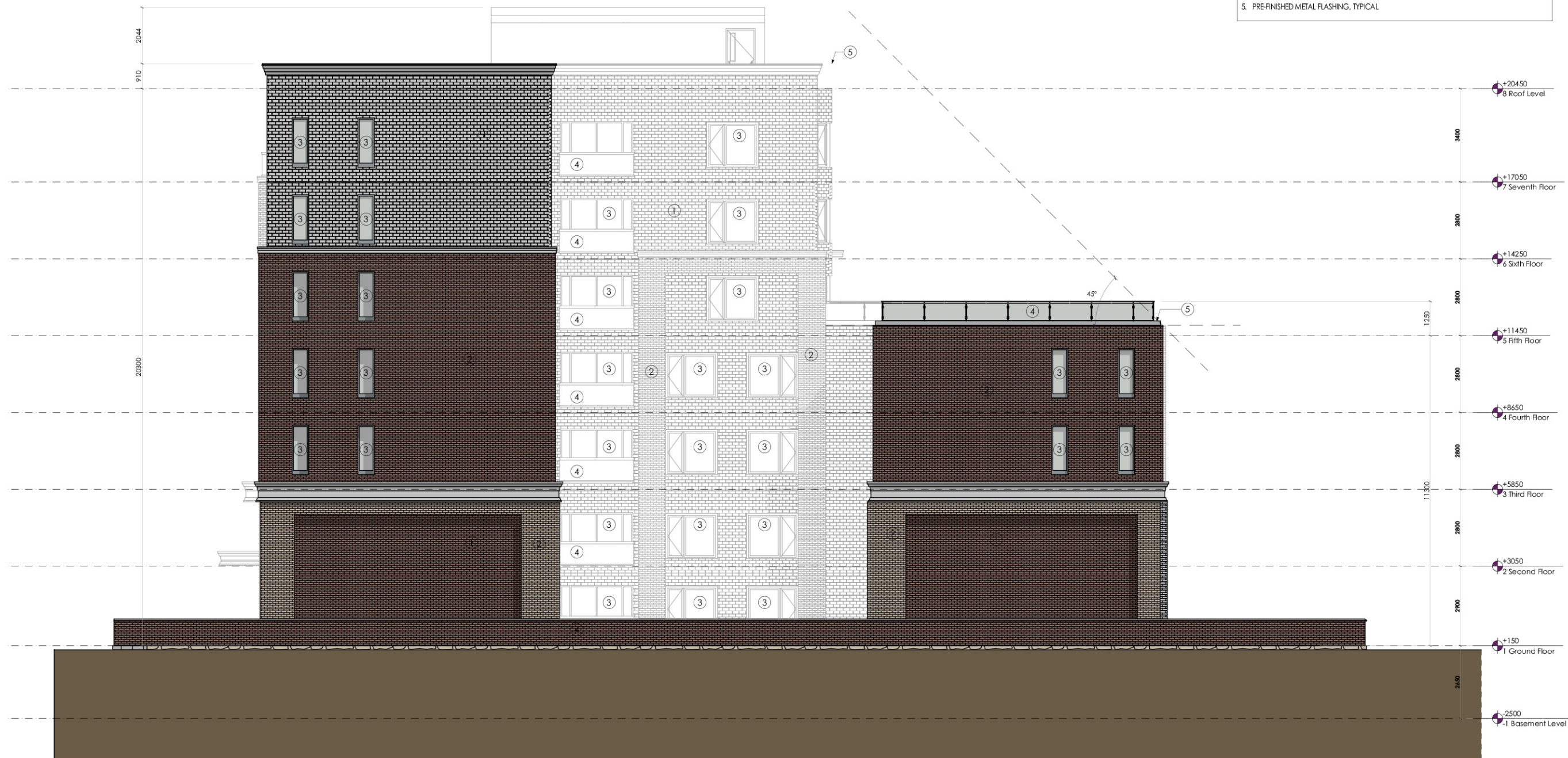
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2. STONE FINISH, COLOUR TO ARCHITECTS APPROVAL
3. CLEAR ANODIZED, THERMALLY BROKEN FRAMES C/W CLEAR DOUBLE GLAZED SEALED UNITS
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5. PRE-FINISHED METAL FLASHING, TYPICAL



BUILDING ELEVATION - WEST

FINISH SCHEDULE

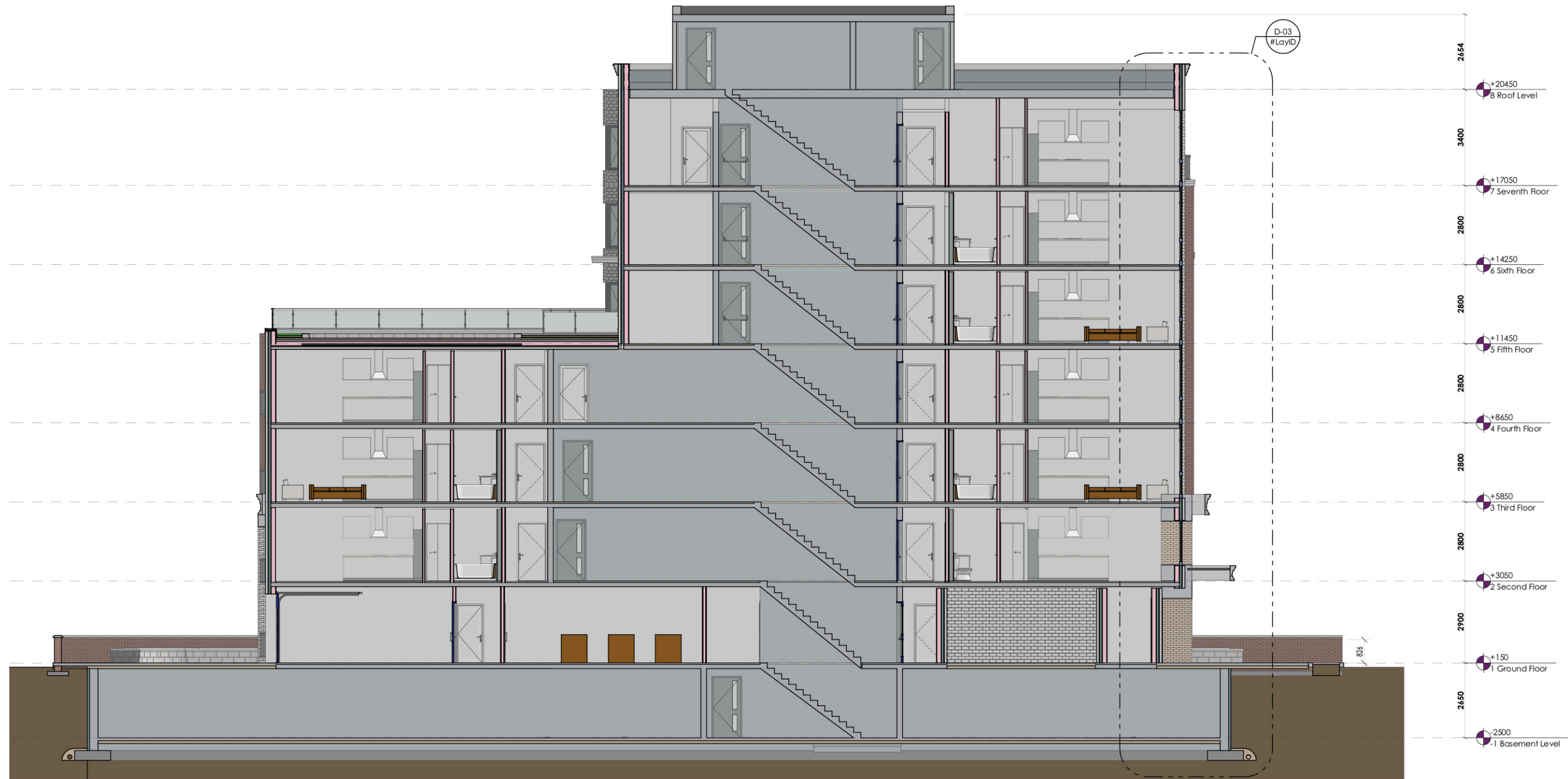
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BUILDING SECTION THROUGH BASEMENT RAMP



BUILDING SECTION THROUGH STAIR WELL









PROJECT 3D RENDERINGS



SHADOW STUDY ANALYSIS



MARCH - 9:00 a.m.



JUNE - 9:00 a.m.



DECEMBER - 9:00 a.m.



MARCH - 01:00 p.m.



JUNE - 01:00 p.m.



DECEMBER - 01:00 p.m.



MARCH - 05:00 p.m.

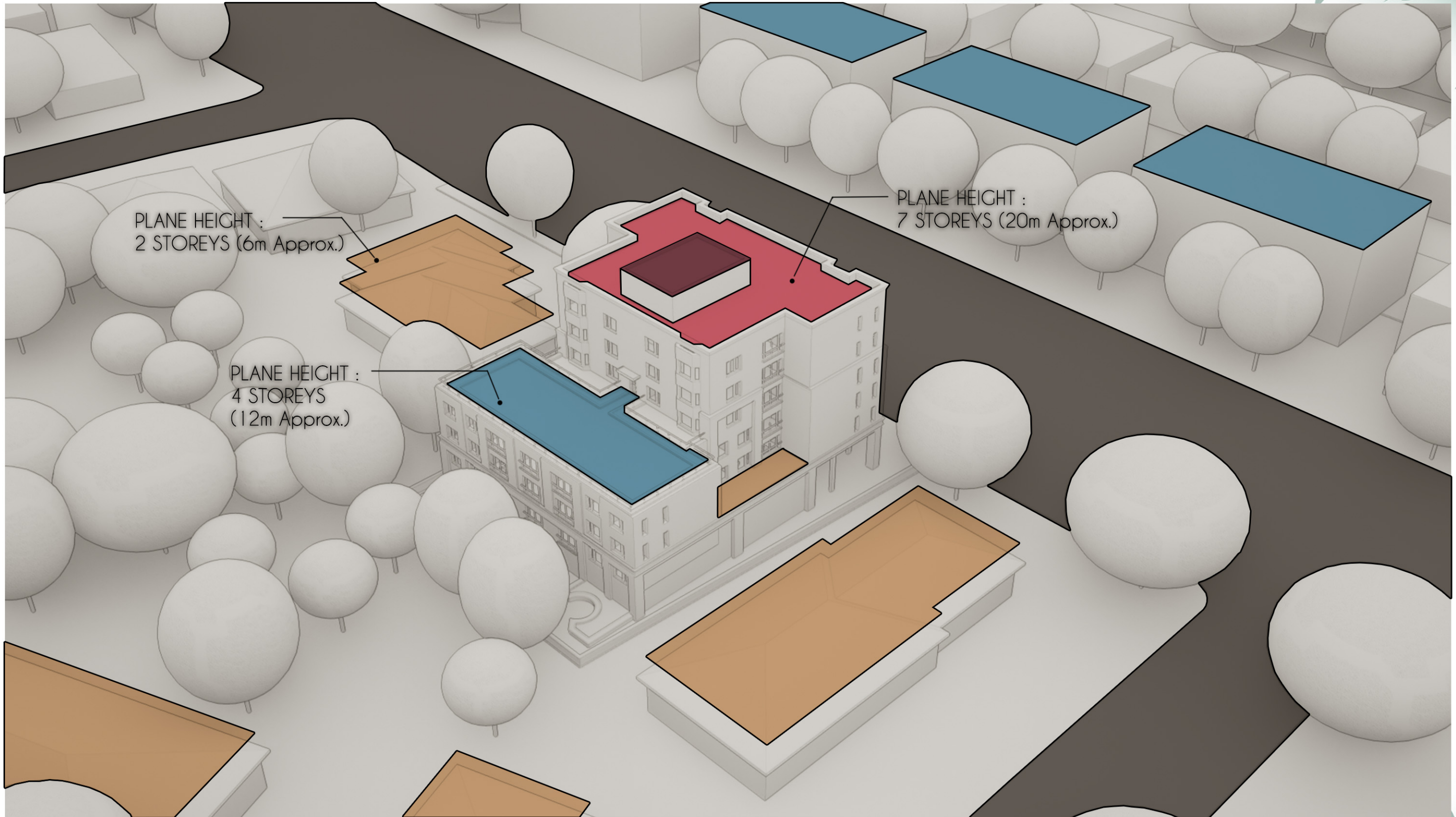


JUNE - 05:00 p.m.

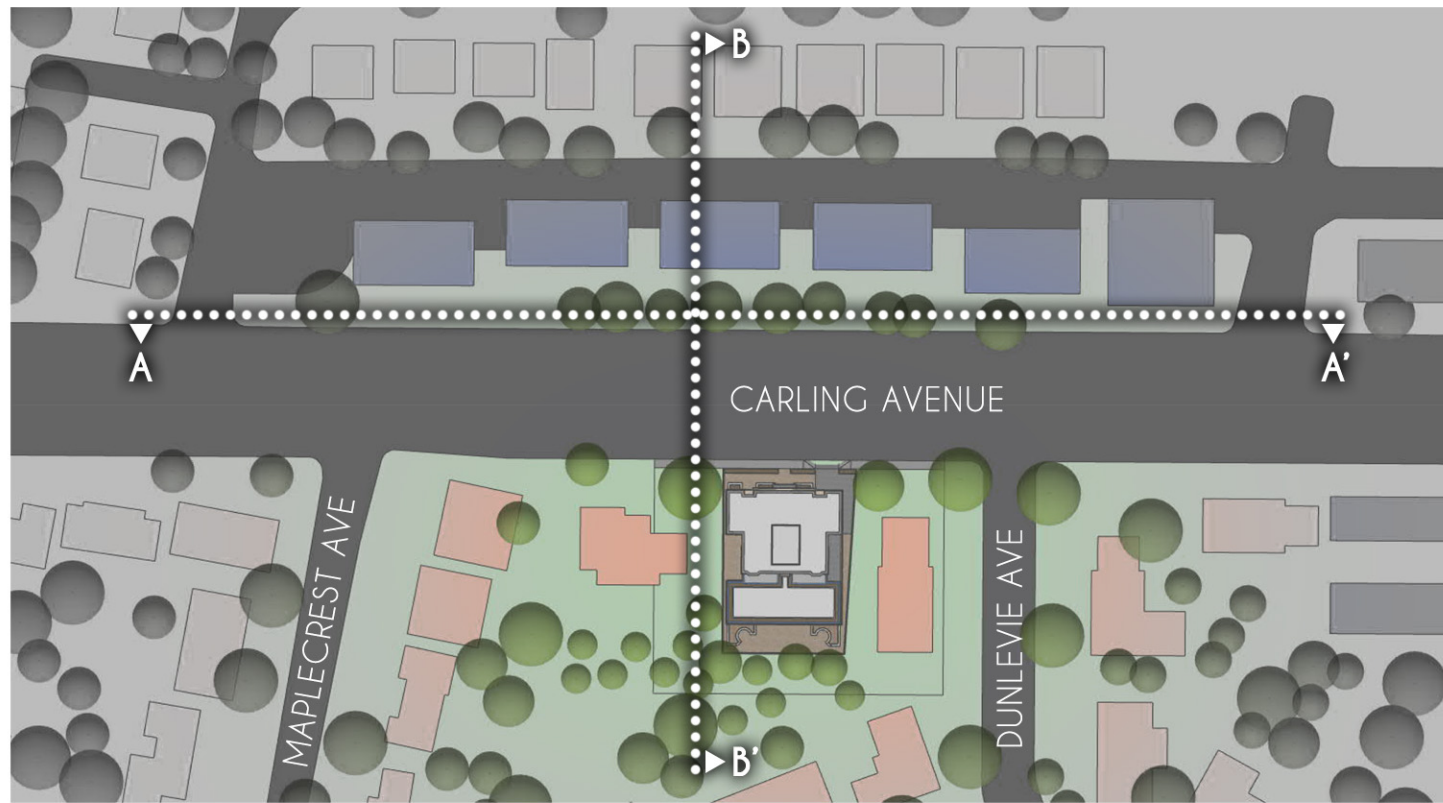


DECEMBER - 05:00 p.m.

MASSING ANALYSIS - HEIGHT & FACADE ALIGNMENT



MASSING ANALYSIS - SITE SECTIONS & CONTEXT



PROJECT SITE & SURROUNDINGS



PROJECT SITE BLOW-UP

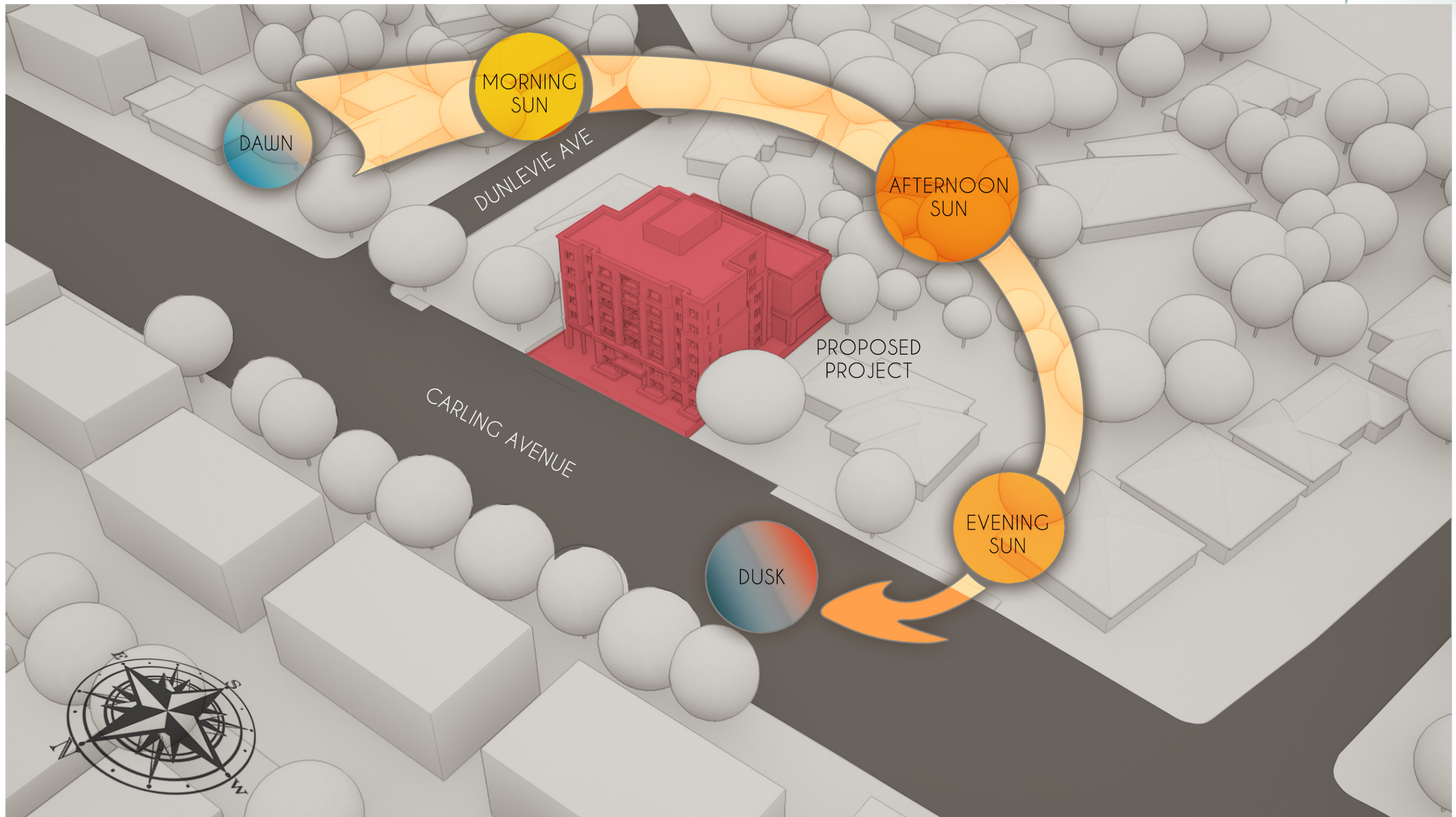


SITE SECTION AT A-A'

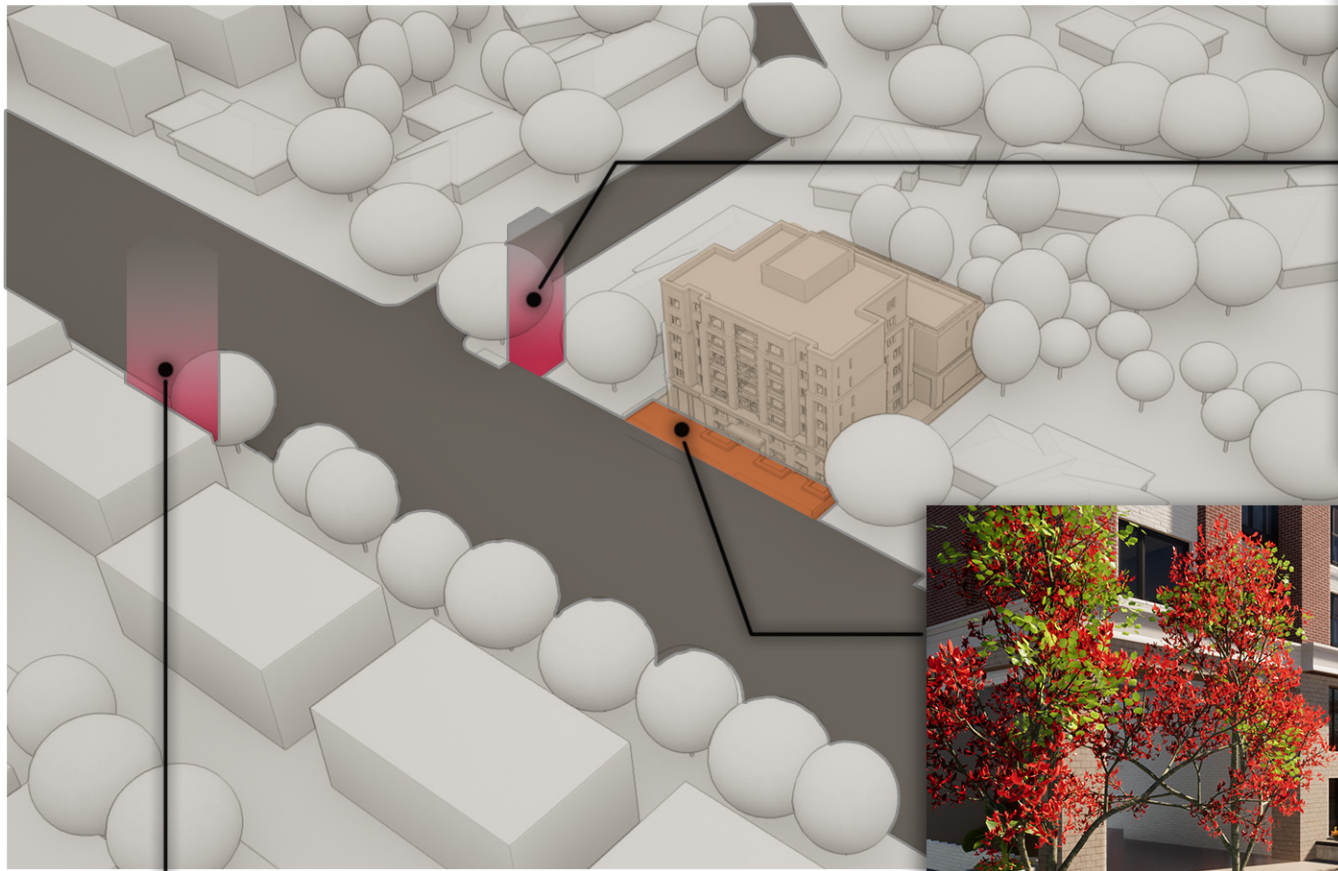


SITE SECTION AT B-B'

MASSING ANALYSIS - SUN PATH ANALYSIS



DISTRIBUTION OF FUNCTIONS ACROSS THE PROJECT



BUS-STOP AT CARLING / DUNLEVIE

AMENITY TERRACE AT FIFTH FLOOR



BUILDING ENTRANCE



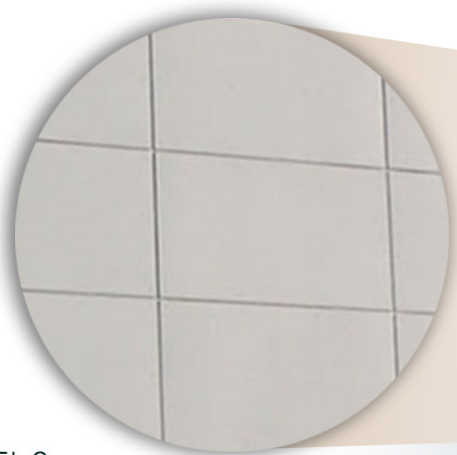
BUS-STOP AT CARLING / McKELLAR



REAR COURTYARD AMENITY



FACADE TREATMENT



CEMFORT PANELS -
12mm, Colour: Light Beige,
Consealed Cem-Core System



BRAMPTON BRICKS -
92 x 57 x 194, Colour: Moroccan Red,
Clay Bricks with Velour Finish



ARRISCRAFT -
90/190/290 x 590 x 90,
Limestone Arris-Stone Brick/Tile



MODERN JULIET
BALCONIES -
Anodised Aluminum
Handrails, With Satin
Black Finish To Match
D/W Frames & Tinted
Grey Glass Panels



DOOR-WINDOW
FRAMES - Anodised
Aluminum Extrusion,
With Satin Black Finish



BUILDING CODE MATRIX

Name of Practice:
Woodman Architect & Associates Ltd.
201-4 Beechwood Ave.
Ottawa, ON K1L 8L9

Name of Project: 1940 Carling – 7 Storey Apartment Building

Location: 1940 Carling Avenue, Ottawa ON, K2A 1E8

Date: 25TH November 2021

Ontario Building Code Data Matrix Part 3				Building Code Reference ¹																							
3.00	Building Code Version:	<u>O. Reg. 332/12</u>	Last Amendment	<u>O. Reg. 191/14</u>																							
3.01	Project Type:	<input checked="" type="checkbox"/> New <input type="checkbox"/> Addition <input type="checkbox"/> Renovation <input type="checkbox"/> Change of use <input type="checkbox"/> Addition and renovation			[A] 1.1.2.																						
	Description:	<u>7-Storey Rental Apartment Building</u>																									
3.02	Major Occupancy Classification:	<u>Occupancy</u> <u>Group C</u>	<u>Use</u> <u>Residential Occupancies</u>	3.1.2.1.(1)																							
3.03	Superimposed Major Occupancies:	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Description: <u>Residential Use Over Parking Area in the Basement.</u>			3.2.2.7.																						
3.04	Building Area (m ²)	<table border="1"> <thead> <tr> <th>Description:</th> <th>Existing</th> <th>New</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td><u>Building Area – New Construction</u></td> <td><u>0</u></td> <td><u>866.96m²</u></td> <td><u>866.96m²</u></td> </tr> <tr> <td>_____</td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td>_____</td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td>_____</td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td style="text-align: right;"><i>Insert additional lines as needed</i> Total</td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> </tbody> </table>	Description:	Existing	New	Total	<u>Building Area – New Construction</u>	<u>0</u>	<u>866.96m²</u>	<u>866.96m²</u>	_____	<u>0</u>	<u>0</u>	<u>0</u>	_____	<u>0</u>	<u>0</u>	<u>0</u>	_____	<u>0</u>	<u>0</u>	<u>0</u>	<i>Insert additional lines as needed</i> Total	<u>0</u>	<u>0</u>	<u>0</u>	[A] 1.4.1.2.
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3.05	Gross Area (m ²)	<table border="1"> <thead> <tr> <th>Description:</th> <th>Existing</th> <th>New</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td><u>Basement Level</u></td> <td><u>0</u></td> <td><u>1100.34m²</u></td> <td><u>1100.34m²</u></td> </tr> <tr> <td><u>Ground Floor</u></td> <td><u>0</u></td> <td><u>834.90m²</u></td> <td><u>834.90m²</u></td> </tr> <tr> <td><u>Second Floor</u></td> <td><u>0</u></td> <td><u>651.77m²</u></td> <td><u>651.77m²</u></td> </tr> <tr> <td><u>Third Floor</u></td> <td><u>0</u></td> <td><u>799.82m²</u></td> <td><u>799.82m²</u></td> </tr> <tr> <td><i>Insert additional lines as needed</i> <u>Fourth Floor</u></td> <td><u>0</u></td> <td><u>799.82m²</u></td> <td><u>799.82m²</u></td> </tr> <tr> <td><u>Fifth Floor</u></td> <td><u>0</u></td> <td><u>466.46m²</u></td> <td><u>466.46m²</u></td> </tr> <tr> <td><u>Sixth Floor</u></td> <td><u>0</u></td> <td><u>466.46m²</u></td> <td><u>466.46m²</u></td> </tr> <tr> <td><u>Seventh Floor</u></td> <td><u>0</u></td> <td><u>466.46m²</u></td> <td><u>466.46m²</u></td> </tr> <tr> <td><u>Penthouse Level</u></td> <td><u>0</u></td> <td><u>47.30m²</u></td> <td><u>47.30m²</u></td> </tr> <tr> <td style="text-align: right;">Total</td> <td><u>0</u></td> <td><u>5633.33m²</u></td> <td><u>5633.33m²</u></td> </tr> </tbody> </table>	Description:	Existing	New	Total	<u>Basement Level</u>	<u>0</u>	<u>1100.34m²</u>	<u>1100.34m²</u>	<u>Ground Floor</u>	<u>0</u>	<u>834.90m²</u>	<u>834.90m²</u>	<u>Second Floor</u>	<u>0</u>	<u>651.77m²</u>	<u>651.77m²</u>	<u>Third Floor</u>	<u>0</u>	<u>799.82m²</u>	<u>799.82m²</u>	<i>Insert additional lines as needed</i> <u>Fourth Floor</u>	<u>0</u>	<u>799.82m²</u>	<u>799.82m²</u>	<u>Fifth Floor</u>	<u>0</u>	<u>466.46m²</u>	<u>466.46m²</u>	<u>Sixth Floor</u>	<u>0</u>	<u>466.46m²</u>	<u>466.46m²</u>	<u>Seventh Floor</u>	<u>0</u>	<u>466.46m²</u>	<u>466.46m²</u>	<u>Penthouse Level</u>	<u>0</u>	<u>47.30m²</u>	<u>47.30m²</u>	Total	<u>0</u>	<u>5633.33m²</u>	<u>5633.33m²</u>	[A] 1.4.1.2.
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3.06	Mezzanine Area (m ²)	<table border="1"> <thead> <tr> <th>Description:</th> <th>Existing</th> <th>New</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td><u>N/A</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td>_____</td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td>_____</td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td>_____</td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td style="text-align: right;"><i>Insert additional lines as needed</i> Total</td> <td><u>0</u></td> <td><u>0</u></td> <td><u>0</u></td> </tr> </tbody> </table>	Description:	Existing	New	Total	<u>N/A</u>	<u>0</u>	<u>0</u>	<u>0</u>	_____	<u>0</u>	<u>0</u>	<u>0</u>	_____	<u>0</u>	<u>0</u>	<u>0</u>	_____	<u>0</u>	<u>0</u>	<u>0</u>	<i>Insert additional lines as needed</i> Total	<u>0</u>	<u>0</u>	<u>0</u>	3.2.1.1.																				
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<i>Insert additional lines as needed</i> Total	<u>0</u>	<u>0</u>	<u>0</u>																																												
3.07	Building Height	<u>7</u> Storeys above grade <u>20</u> (m) Above grade <u>1</u> Storeys below grade	[A] 1.4.1.2. & 3.2.1.1.																																												
3.08	High Building	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	3.2.6.																																												
3.09	Number of Streets/Firefighter access	<u>1</u> street(s)	3.2.2.10. & 3.2.5.																																												
3.10	Building Classification: (Size and Construction Relative to Occupancy)	<u>3.2.2.42</u> Group/Div. <u>C</u>	3.2.2.20. - 83.																																												
3.11	Sprinkler System	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required Proposed: <table border="0"> <tr> <td><input checked="" type="checkbox"/> entire building</td> <td><input type="checkbox"/> selected compartments</td> </tr> <tr> <td><input type="checkbox"/> selected floor areas</td> <td><input type="checkbox"/> basement</td> </tr> <tr> <td><input type="checkbox"/> in lieu of roof rating</td> <td><input type="checkbox"/> none</td> </tr> </table>	<input checked="" type="checkbox"/> entire building	<input type="checkbox"/> selected compartments	<input type="checkbox"/> selected floor areas	<input type="checkbox"/> basement	<input type="checkbox"/> in lieu of roof rating	<input type="checkbox"/> none	3.2.1.5. & 3.2.2.17.																																						
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<input type="checkbox"/> in lieu of roof rating	<input type="checkbox"/> none																																														
3.12	Standpipe System	<input type="checkbox"/> Not required <input checked="" type="checkbox"/> Required	3.2.9.																																												

BUILDING CODE MATRIX

3.13	Fire Alarm System	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not required Proposed: <input type="checkbox"/> Single stage <input checked="" type="checkbox"/> Two stage <input type="checkbox"/> None	3.2.4.																																																								
3.14	Water Service / Supply is Adequate	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes																																																									
3.15	Construction Type:	Restriction: <input type="checkbox"/> Combustible permitted <input checked="" type="checkbox"/> Non-combustible required Actual: <input type="checkbox"/> Combustible <input checked="" type="checkbox"/> Non-combustible <input type="checkbox"/> Combination Heavy Timber Construction: <input type="checkbox"/> No <input type="checkbox"/> Yes	3.2.2.20. - 83. & 3.2.1.4.																																																								
3.16	Importance Category:	<input type="checkbox"/> Low <input type="checkbox"/> Low human occupancy <input type="checkbox"/> Post-disaster shelter <input checked="" type="checkbox"/> Normal <input type="checkbox"/> High <input type="checkbox"/> Minor storage building <input type="checkbox"/> Explosive or hazardous substances <input type="checkbox"/> Post-disaster	4.1.2.1.(3) & T4.1.2.1.B																																																								
3.17	Seismic Hazard Index:	(I _E Fa Sa (0.2)) = <u>0</u> Seismic design required for Table 4.1.8.18. items 6 to 21: (I _E Fa Sa (0.2)) ≥ 0.35 or Post-disaster) <input type="checkbox"/> No <input type="checkbox"/> Yes	4.1.2.1.(3) 4.1.8.18.(2)																																																								
3.18	Occupant Load	<table border="1"> <thead> <tr> <th>Floor Level/Area</th> <th>Occ. Type</th> <th>Based On</th> <th>Occupant Load (Persons)</th> </tr> </thead> <tbody> <tr> <td></td> <td>Parking</td> <td></td> <td></td> </tr> <tr> <td>Basement Level</td> <td>-</td> <td></td> <td>0</td> </tr> <tr> <td>Ground Floor</td> <td>Resi.</td> <td>5 Units</td> <td>10</td> </tr> <tr> <td>Second Floor</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>Third Floor</td> <td>Resi.</td> <td>10 Units</td> <td>22</td> </tr> <tr> <td>Fourth Floor</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>Fourth Floor</td> <td>Resi.</td> <td>13 Units</td> <td>28</td> </tr> <tr> <td>Fifth Floor</td> <td>Resi.</td> <td>13 Units</td> <td>18</td> </tr> <tr> <td>Fifth Floor</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>Fifth Floor</td> <td>Resi.</td> <td>7 Units</td> <td>18</td> </tr> <tr> <td>Fifth Floor</td> <td>Resi.</td> <td>7 Units</td> <td>18</td> </tr> <tr> <td>TOTAL</td> <td>Resi.</td> <td>7 Units</td> <td>142</td> </tr> <tr> <td></td> <td></td> <td>62 Units</td> <td></td> </tr> </tbody> </table>	Floor Level/Area	Occ. Type	Based On	Occupant Load (Persons)		Parking			Basement Level	-		0	Ground Floor	Resi.	5 Units	10	Second Floor	-	-		Third Floor	Resi.	10 Units	22	Fourth Floor	-	-		Fourth Floor	Resi.	13 Units	28	Fifth Floor	Resi.	13 Units	18	Fifth Floor	-	-		Fifth Floor	Resi.	7 Units	18	Fifth Floor	Resi.	7 Units	18	TOTAL	Resi.	7 Units	142			62 Units		3.1.17.
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3.19	Barrier-free Design:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>Explanation</u>	3.8.																																																								
3.20	Hazardous Substances:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <u>Explanation</u>	3.3.1.2. & 3.3.1.19.																																																								

3.21	Required Fire Resistance Ratings	<table border="1"> <thead> <tr> <th>Horizontal Assembly</th> <th>Rating (Hr.)</th> <th>Supporting Assembly</th> <th>Non-combustible in lieu of rating?</th> </tr> </thead> <tbody> <tr> <td>Floors over basement</td> <td><u>1</u></td> <td><u>1</u></td> <td><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A</td> </tr> <tr> <td>Floors</td> <td><u>1</u></td> <td><u>1</u></td> <td><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A</td> </tr> <tr> <td>Mezzanine</td> <td><u>0</u></td> <td><u>0</u></td> <td><input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A</td> </tr> <tr> <td>Roof</td> <td><u>1</u></td> <td><u>1</u></td> <td><input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A</td> </tr> </tbody> </table>	Horizontal Assembly	Rating (Hr.)	Supporting Assembly	Non-combustible in lieu of rating?	Floors over basement	<u>1</u>	<u>1</u>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	Floors	<u>1</u>	<u>1</u>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	Mezzanine	<u>0</u>	<u>0</u>	<input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A	Roof	<u>1</u>	<u>1</u>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A	3.2.2.20. - 83. & 3.2.1.4.															
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3.22	Spatial Separation	<table border="1"> <thead> <tr> <th>Wall</th> <th>EBF Area (m²)</th> <th>L.D. (m)</th> <th>L/H or H/L</th> <th>Required FRR (H)</th> <th>Construction Type Required</th> <th>Cladding Type Required</th> </tr> </thead> <tbody> <tr> <td></td> <td><u>0</u></td> <td><u>< 9</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><input type="checkbox"/> Noncombustible</td> <td><input type="checkbox"/> Noncombustible</td> </tr> <tr> <td></td> <td><u>0</u></td> <td><u>< 9</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><input type="checkbox"/> Noncombustible</td> <td><input type="checkbox"/> Noncombustible</td> </tr> <tr> <td></td> <td><u>0</u></td> <td><u>< 9</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><input type="checkbox"/> Noncombustible</td> <td><input type="checkbox"/> Noncombustible</td> </tr> <tr> <td></td> <td><u>0</u></td> <td><u>< 9</u></td> <td><u>0</u></td> <td><u>0</u></td> <td><input type="checkbox"/> Noncombustible</td> <td><input type="checkbox"/> Noncombustible</td> </tr> </tbody> </table> <p><i>Insert additional lines as needed</i></p>	Wall	EBF Area (m ²)	L.D. (m)	L/H or H/L	Required FRR (H)	Construction Type Required	Cladding Type Required		<u>0</u>	<u>< 9</u>	<u>0</u>	<u>0</u>	<input type="checkbox"/> Noncombustible	<input type="checkbox"/> Noncombustible		<u>0</u>	<u>< 9</u>	<u>0</u>	<u>0</u>	<input type="checkbox"/> Noncombustible	<input type="checkbox"/> Noncombustible		<u>0</u>	<u>< 9</u>	<u>0</u>	<u>0</u>	<input type="checkbox"/> Noncombustible	<input type="checkbox"/> Noncombustible		<u>0</u>	<u>< 9</u>	<u>0</u>	<u>0</u>	<input type="checkbox"/> Noncombustible	<input type="checkbox"/> Noncombustible	3.2.3.
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3.23	Plumbing Fixture Requirements	<p>Ratio: <u>Male:Female = 50:50 Except as noted otherwise</u></p> <table border="1"> <thead> <tr> <th>Floor Level/Area</th> <th>Occupant Load</th> <th>OBC Reference</th> <th>Fixtures Required</th> <th>Fixtures Provided</th> </tr> </thead> <tbody> <tr> <td>Basement</td> <td><u>n/a</u></td> <td></td> <td><u>0</u></td> <td><u>0</u></td> </tr> <tr> <td>2nd Floor</td> <td><u>56</u></td> <td></td> <td><u>28</u></td> <td><u>28</u></td> </tr> <tr> <td>3rd Floor</td> <td><u>56</u></td> <td></td> <td><u>28</u></td> <td><u>28</u></td> </tr> <tr> <td></td> <td><u>0</u></td> <td></td> <td><u>0</u></td> <td><u>0</u></td> </tr> </tbody> </table> <p><i>Insert additional lines as needed</i></p>	Floor Level/Area	Occupant Load	OBC Reference	Fixtures Required	Fixtures Provided	Basement	<u>n/a</u>		<u>0</u>	<u>0</u>	2 nd Floor	<u>56</u>		<u>28</u>	<u>28</u>	3 rd Floor	<u>56</u>		<u>28</u>	<u>28</u>		<u>0</u>		<u>0</u>	<u>0</u>	3.7.4.										
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3.24	Energy Efficiency:	<p>Compliance Path: _____</p> <p>Climatic Zone: _____</p>																																				
3.25	Notes:	<p>_____</p> <p>_____</p> <p>_____</p> <p><i>Insert additional lines as needed</i></p>																																				

1 All references are to Division B of the OBC unless preceded by [A] for Division A and [C] for Division C.

WIND STUDY

Pedestrian Comfort and Safety Criteria - City of Ottawa

Pedestrian comfort and safety criteria are based on the mechanical effects of wind without consideration of other meteorological conditions (i.e., temperature, relative humidity). The comfort guidelines assume that pedestrians are appropriately dressed for a specified outdoor activity during any given season. Five pedestrian comfort classes are based on 80% non-exceedance mean wind speed ranges, which include:

1. **Sitting:** Mean wind speeds no greater than 10 km/h occurring at least 80% of the time. The gust equivalent mean wind speed is approximately 16 km/h.
2. **Standing:** Mean wind speeds no greater than 14 km/h occurring at least 80% of the time. The gust equivalent mean wind speed is approximately 22 km/h.
3. **Strolling:** Mean wind speeds no greater than 17 km/h occurring at least 80% of the time. The gust equivalent mean wind speed is approximately 27 km/h.
4. **Walking:** Mean wind speeds no greater than 20 km/h occurring at least 80% of the time. The gust equivalent mean wind speed is approximately 32 km/h.
5. **Uncomfortable:** Uncomfortable conditions are characterized by predicted values that fall below the 80% target for walking. Brisk walking and exercise, such as jogging, would be acceptable for moderate excesses of this criterion.

Wind Comfort Conditions - Level 5 Amenity Terrace

The following discussion is focused on the two amenity terraces situated atop the podia roofs at Level 5, as well as the level 5 amenity terraces situated between the two buildings. The noted terraces are predicted to be mostly calm; pedestrian wind comfort is summarized below for each seasonal period.

- **Spring Season:** Conditions are predicted to be mostly suitable for sitting, with isolated regions suitable for standing. This terrace will be suitable for sitting for at least 70% of the time during the spring season.
- **Summer Season:** Conditions are predicted to be universally suitable for sitting. These areas are suitable for sitting for at least 80% of the time during summers.
- **Autumn Season** Conditions are similar to those predicted for the spring season. These areas are suitable for sitting for at least 70% of the time during the autumn season.
- **Winter Season** Conditions are predicted to be mostly suitable for sitting, with isolated regions suitable for standing. The southwest corner of each terrace is somewhat windier, and suitable for standing. These areas will be suitable for sitting for at least 65% of the time.

Wind Speed Chart & Wind Rose Diagram - City of Ottawa

