





Vancouver Fire Hall 9 CD-1 Rezoning Booklet

1805 Victoria Drive
Lots A, B & C, of Lot B, Block 144, District Lot 264A, Group 1, New Westminster District, Plan 9687

Table of Contents

1.0 Introduction	
1.1 Rezoning Intent	06
1.3 Design Rationale	07
2.0 Project Context	
2.1 Context Map	12
2.2 Site Photos	13
2.3 Existing Streetscape	14
2.4 Zoning Context	15
2.5 Policy Context	16
2.6 View Cones	17
2.7 Sustainability Measures	18
3.0 Project Statistics and Data	
3.1 Site Area, Proposed Uses, Floor Area, FSR, Height, Setbacks	20
4.0 Drawings	
4.1 Context Plan	22
4.2 Site Plan	23
4.3 Floor Plans	24
4.4 FSR Overlays	27
4.5 Elevations	29
4.6 Cross-sections	33
4.7 Roof Landscape Plan	35
4.8 Ground Floor Landscape Plan	36
4.9 Shadow Studies	37
5.0 Renderings and Perspectives	
5.1 Looking North from Victoria Drive	39
5.2 Elevation View Along Victoria Drive	40
5.3 Looking Southwest from Victoria Drive and East 2nd Avenue	41

Project Team



Architectural



Engineers



Mechanical & Electrical



Landscape



Civil



Building Envelope & Energy Model



Building Code



Traffic



Acoustic



1.0 Introduction

The City of Vancouver engaged hcma to design a new Vancouver Fire Hall No. 9 which is intended to replace the existing Fire Hall on the same site. The new VFH 9 will be constructed on the site located on Victoria Dr. between East 2nd and 3rd Avenues.

The schematic design work was completed between February and August 2023 with regular meetings which included functional program validation, initial test fits, reviews of planning layouts, design progress workshops, sustainability and Passive House workshops, Life Cycle Analysis workshop, Mechanical and Electrical systems workshops with the consultant team and the City staff. Towards the end of the schematic design phase, a series of design scheme reviews with CoV & VFRS were undertaken to enhance the quality of the design solution. This engagement provided feedback that helped establish the size, form and character of the building as well as its relationship with the surrounding neighbourhood.

The selected site for the new VFH9 faced numerous constraints including a proximity to the neighbouring properties, challenging soil conditions, a large building program that fills most of the site, and limited options for vehicular site access. Following an extensive test-fit exercise, a building massing solution was agreed upon that had the greatest potential to achieve our project vision. This massing option was selected due to the following advantages:

- Location of apparatus bays for ease of fire truck movement in and out of the hall
- Creation of green areas around the hall to provide buffer to adjacent properties and observe the minimum setbacks from zoning and geotechnical perspective
- Stacking the program on top of apparatus bays volume to minimize the height of the building in a largely residential neighbourhood and to minimize shadowing effect on the street and adjacent properties
- Maintaining public presence and civic pride of the Grandview Woodland community fire hall
- Creation of a logical delineation between the part of the building that would be certified Passive House and the rest of the building

A number of key design strategies were used to help the facility be a good neighbor and responsive to its context while creating a welcoming appearance for the community. The key strategy was in breaking apart the massive building footprint into two distinct volumes and articulating the design to express the three main programmatic elements:

- Apparatus Bays
- Fire Hall
- Vancouver Fire and Rescue Service Senior Administration

Rezoning Intent

The existing two-bay Fire Hall 9 includes a 5-storey hose tower and adjacent training square and surface parking. The Fire Hall was built in 1959 but has no designated heritage status, and is currently assessed to be in poor/critical condition. The existing facility was identified as high-risk in a Rapid Visual Seismic Screening through the City of Vancouver Seismic program. Current users VFRS will be relocated to a temporary facility off-site for the course of construction of a replacement facility. The new fire hall would expand capacity to include five apparatus bays (four back-in and one drive-through) to better serve the neighbourhood, and house Vancouver Fire and Rescue Service Senior Administration, Fire Investigations, and Department Operation Centre.

The intent is to redesignate the subject site from RT-5 zoning district to a new Comprehensive Development (CD-1) District to include density and form of development for 1805 Victoria Drive.

The subject site at 1805 Victoria Drive is currently City-owned land containing Fire Hall No. 9. This proposal of the new Fire Hall No. 9 has expanded functionality, including VFRS Senior Administration and Fire Investigations and Department Operation Centre. The proposed uses are complementary to those of the existing Fire Hall and are compatible with approved use of "Public Authority Use, essential in these districts" in current RT-5 zoning.

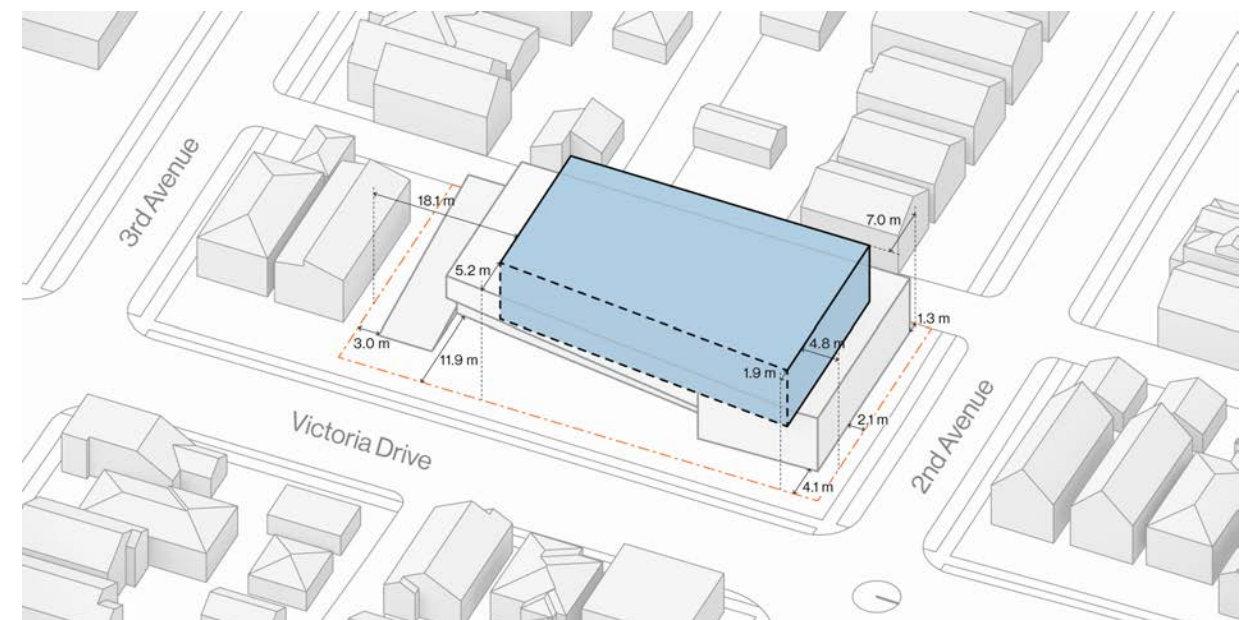
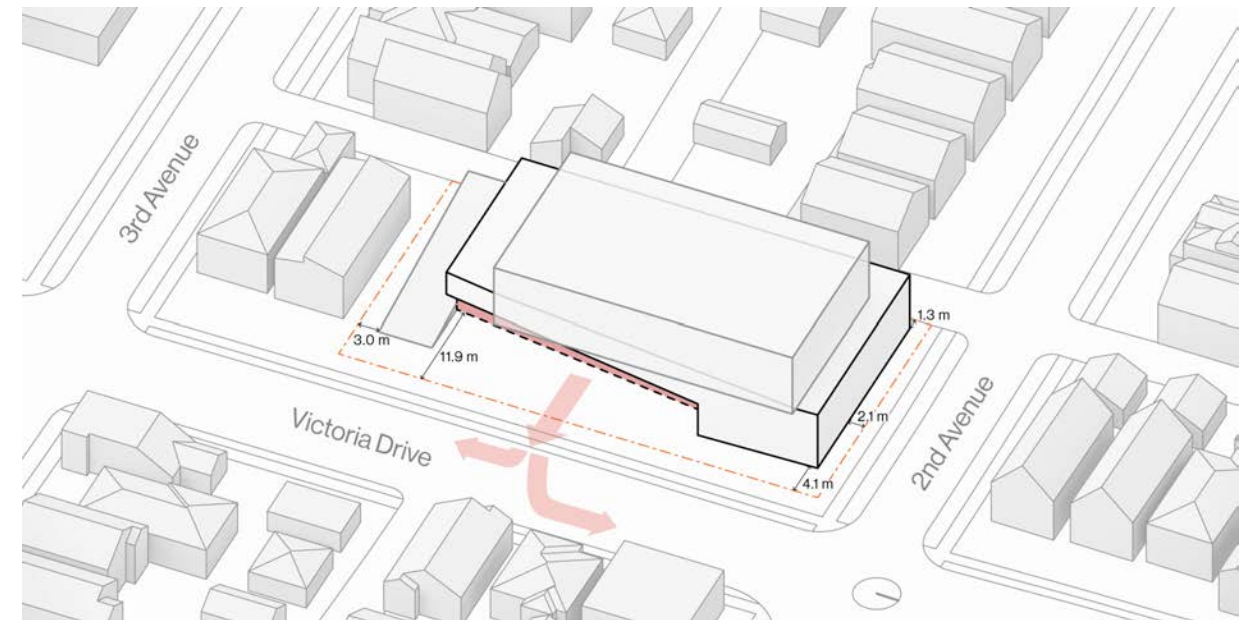
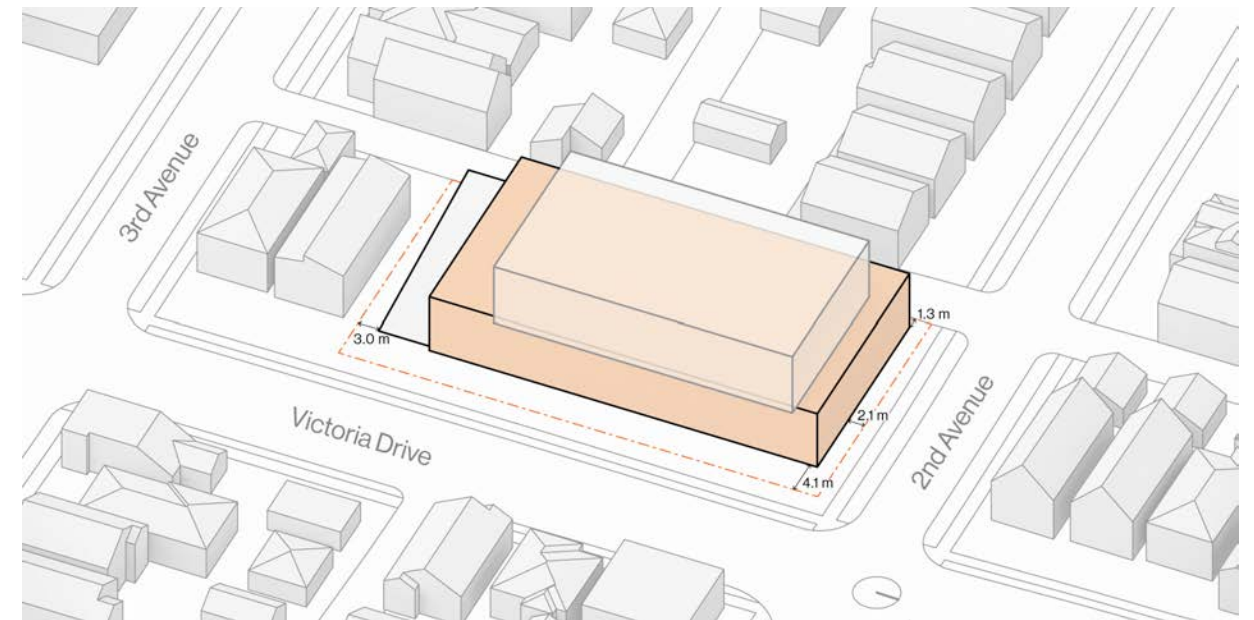
The proposed site density is approximately 2.0 FSR. Maximum building height exceeds the currently allowed by existing RT-5 zoning, but it will be approximately within 1m of the height of existing hose tower and will respect view cone 27.2 – Trout Lake.

Design Rationale

The lower bar is a two-storey volume that contains the apparatus bay and the majority of the fire hall program. It sits 1.3 metres from the west property line (not compliant with RT-5 rear yard setback), 2.1 metres from the north property line (compliant with RT-5 side yard setback, but not with 3.65m required per 10.4.1 of Section 10), and 4.1 metres from the east property line (not compliant with 5.5m setback required per 10.5.1.a of Section 10). On the south side, the ramp to the underground parking sits 3.0 metres from the property line (compliant with RT-5 side yard setback), providing access to the two levels of underground parking from the back lane.

The need for emergency vehicles to enter Victoria Drive mid-block when responding to calls governs the location of the apparatus bay at the southwest of the site. A recess is carved out from the lower volume to create exterior space for a truck apron directly facing Victoria Drive. The recess and staggered profile helps distinguish the apparatus bay while breaking up the length of the lower bar.

The upper bar is a two-storey volume that contains the administrative program. It is large enough in its horizontal dimensions to keep the total project height as low as possible. To break up the overall massing and minimize visual and shadow impacts on adjacent buildings, the upper volume is recessed from the extents of the lower volume on three sides, resulting in setbacks from property lines of 18.1 metres on the south, 7.0 metres on the west, and 4.8 metres on the north. On the east side, the face of the upper volume along Victoria Drive is angled to respond to the massing below and improve visual impact at street level.



FIRE HALL OF A GREEN COMMUNITY



At the urban scale, there is an opportunity in this project to extend the neighbourhood's already-strong relationship with nature, to make this a fire hall not just in a green community but **of** a green community: a landscaped plaza at the corner of Victoria and East 2nd could carry the character of the surrounding foliage onto the site; a planted lane might help beautify the western vantage and serve as a herb garden for firefighters and community cooks alike; a rain garden at the south could help mitigate storm water on site; and low-intensity green roofs would add further to the net planted area of the neighbourhood.

And, just as importantly, the built form must also clearly evince the dignity and history of the fire hall – an emergency services building that holds a special place in this and any community. The massing is articulated to express the identity of the three different components of the fire hall: the apparatus bay, the hall functions, and the office headquarters.

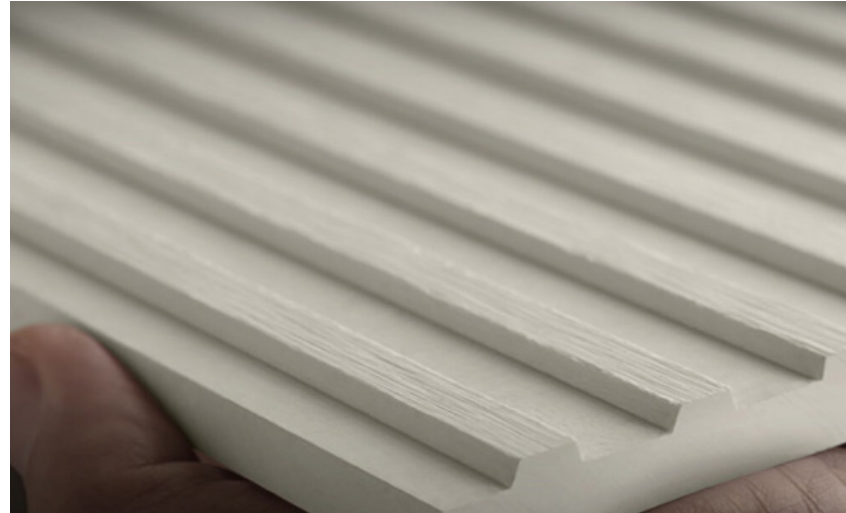
A single, textured charcoal volume serves as a strong, grounding base for the project that gathers up the apparatus bay, dormitory and office functions, as well as the entry lobby – each designed to express their own identity within this bar.

The apparatus bay – recessed, red and with a glazed front – is configured to showcase the trucks and expresses the day-to-day working of the hall and its emergency response services. The same coloured treatment is carried through to the north to punctuate the public entrance. This entrance is also combined with a display window for an antique fire truck, an artifact that evokes the sense of tradition for passers-by, building visitors and daily users. And, finally, a white, textured two-storey office bar atop signifies that it supports those who hold the vision and future thinking for Vancouver Fire Rescue Services.

Materials

01

EQUITONE [linea]
Colour: LT90 Chalk



04

EQUITONE [tectiva]
Colour: TE90 Chalk



02

EQUITONE [linea]
Colour: LT20 Pebble



05

EQUITONE [natura]
Colour: N074 Obsidian



03

EQUITONE [natura]
Colour: N331 Agate Red



06

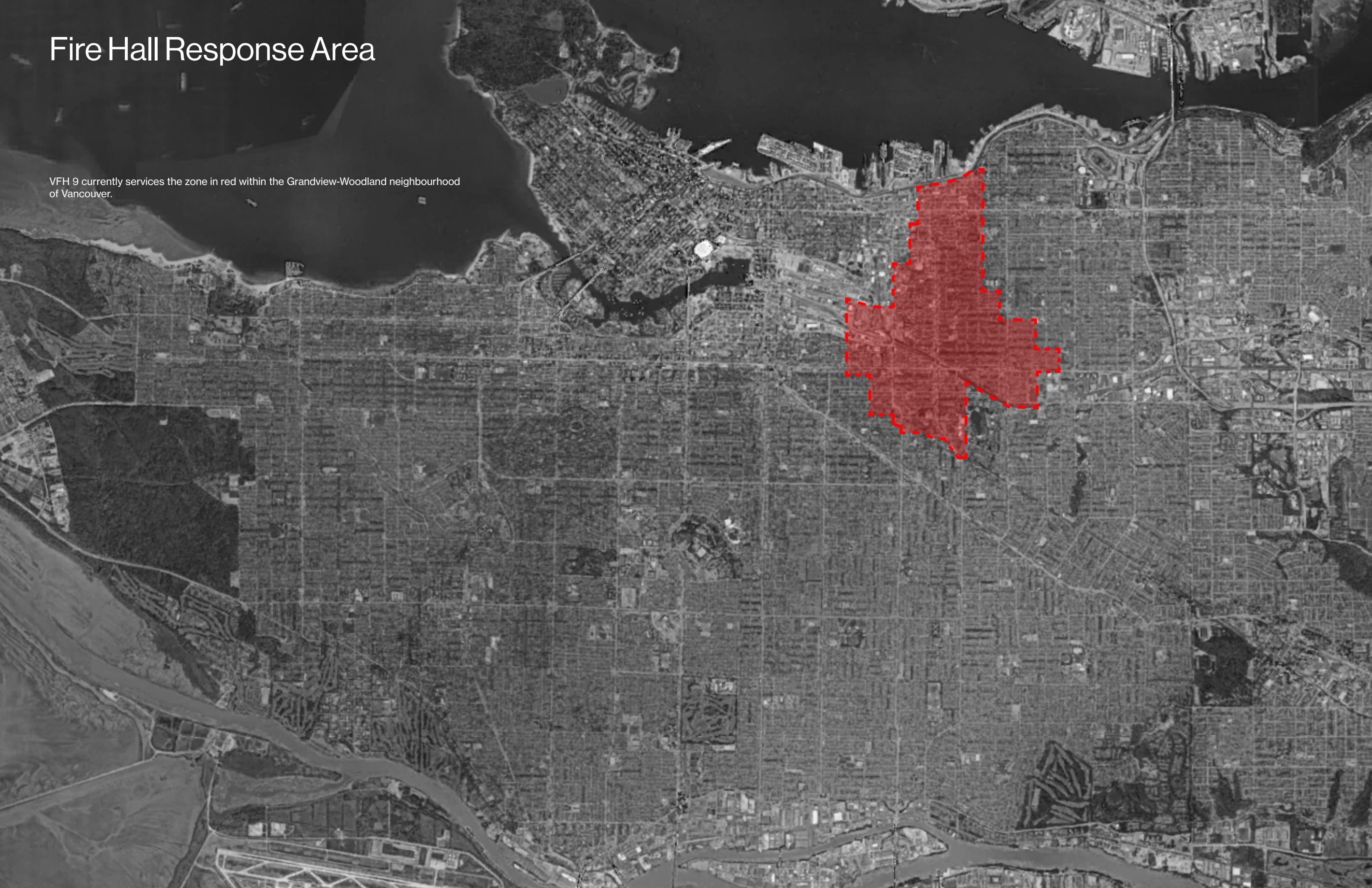
CLT
Spruce-Pin-Fir with clear sealer



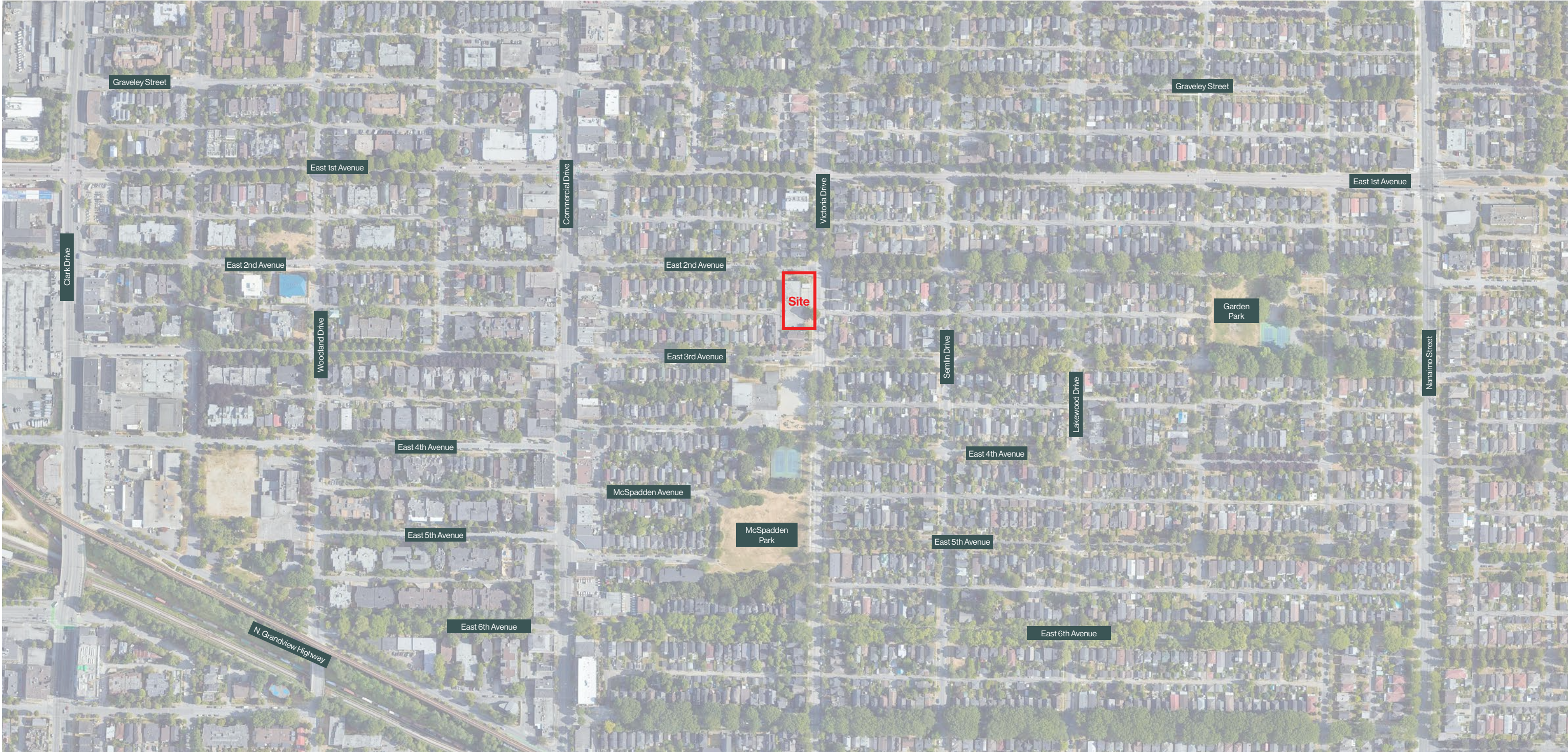
2.0 Project Context

Fire Hall Response Area

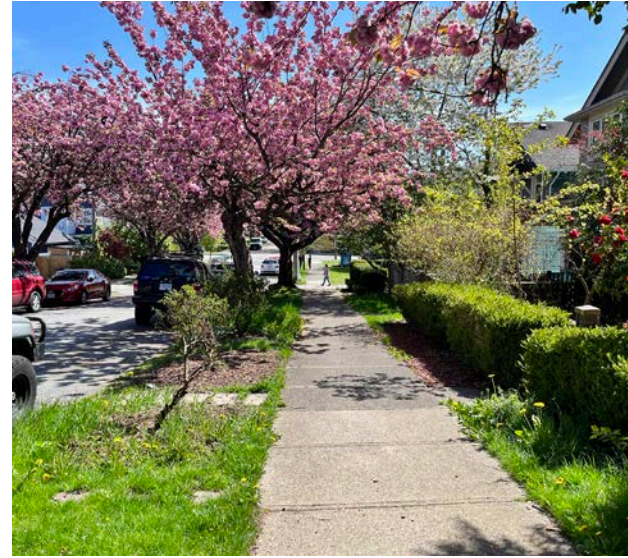
VFH 9 currently services the zone in red within the Grandview-Woodland neighbourhood of Vancouver.



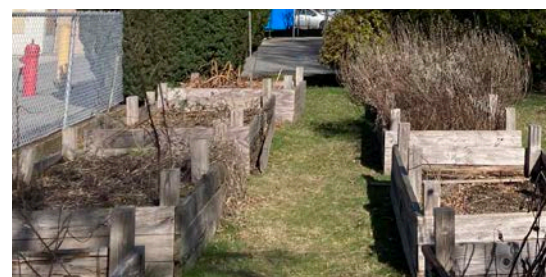
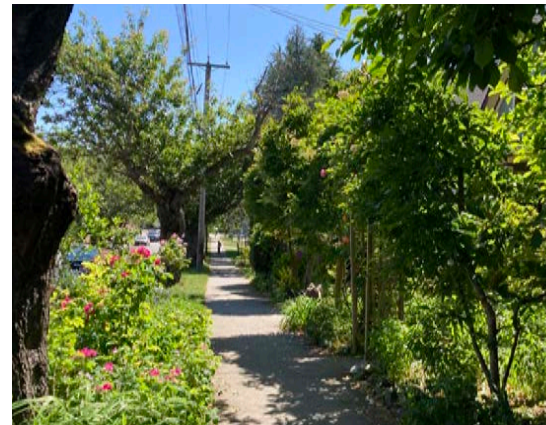
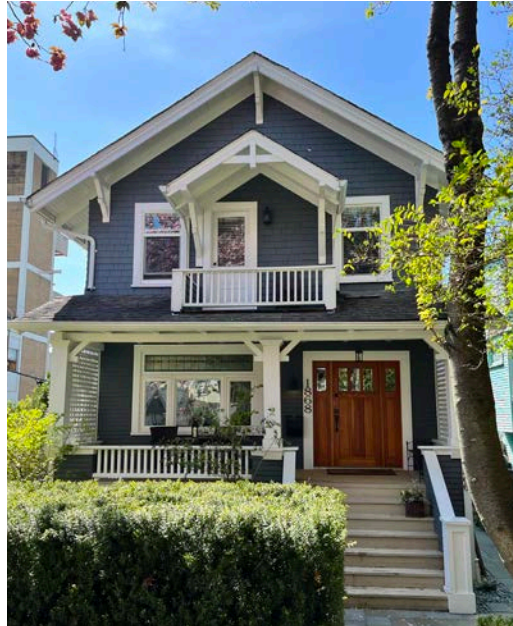
Context Map



Site Photos



Existing Streetscape



The surrounding environs in Grandview-Woodland is comprised of primarily single-family homes – mainly of heritage character with steeply-pitched gable roofs or newer homes built in this style, and Vancouver Specials with their comparatively lower-pitched rooflines. Besides the array of single-family homes, there is a large four-storey residential building at 1st Avenue and Victoria, and Queen Victoria Annex school to the south just across 3rd Avenue.

The neighbourhood is also characterized by its abundant foliage: cherry trees, evergreen and deciduous trees, raised garden beds, and boulevard plantings are evident throughout the area and signify a community invested in its relationship with urban nature.

Designing a replacement fire hall at this location presents the opportunity for a project that improves upon the existing, a hall that currently, in its architectural expression and predominantly concrete ground plane, does little to integrate itself into the neighbourhood, does little to offer anything to the public beyond its basic function of fire safety.

There is one notable exception, however: there is a small grid of raised garden beds just beyond the fence at the southeastern corner that provide a glimpse of how the replacement hall could shape for itself a more public-facing disposition. Taking seriously the character of the surrounding built environment and its natural systems marks our point of departure for generating a project that is more suitably stitched into the urban fabric, enhances the character of the neighbourhood, and provides for the community a kind of outdoor amenity space they can safely use.

Zoning Context

RT-5 District Schedule

The site is currently zoned RT-5. The proposed use for this project is limited to Public Authority Use, essential in this area (Fire Hall), which is a conditional approval use based on the current zoning. The setbacks and building heights of the proposed scheme exceed the outright acceptance limitation. The proposed FSR exceeds the outright acceptance limitation of 0.60 and 0.75 for conditional acceptance.

Grandview-Woodland Community Plan

Renewal of Firehall No. 9 was highlighted as a strategy for the next 25 years in Grandview-Woodland Community plan. The proposal tries to enhance Victoria Dr. with public realm improvements and serve as a gradual transition to higher forms in line with the urban design governing principles outlined in the plan.

Green Buildings Policy for Rezoning

The project is responding to the requirements of the Green Buildings Policy for Rezoning as per the most recent May 2022 update. The project intends to respond to the following policy requirements: integrated rainwater management and green infrastructure, and reporting of green and resilient building measures, and enhanced commissioning. Refer to 3.3. of this document for additional details, the supporting documentation to be submitted as part of the rezoning application.

Policy Context

Renewal of Firehall No. 9 was highlighted as a strategy for the next 25 years in Grandview-Woodland Community plan issued in 2016.

The said plan outlined the following urban design governing principles for the neighborhood:

1. *Maintain the historical character while allowing “gentle” forms of densification.*
2. *Allow for a variety of building heights, scales and uses within residential apartment areas.*
3. *Enhance the arterial streetscapes with public realm improvements and innovative forms of family-oriented housing.*
4. *Preserve small-scale, local-serving commercial spaces within the neighborhood.*
5. *Create a gradual transition to higher forms.*

The intent is to preserve and strengthen Grandview’s character while allowing for gentle growth through new ground-oriented housing and infill options.

As highlighted further in this document, the proposal tries to comply with and incorporate most of these principles that could be considered applicable to the Firehall redevelopment.

Under Vancouver Plan (issued in 2022) the site falls under category of Rapid Transit Areas, the purpose of which is described as to “Reinforce vibrant, mixed-use neighborhoods providing more opportunities for purpose-built rental and social housing, childcare, community infrastructure, and arts and culture uses, together with public spaces that allow people to connect.” (Van Plan 2022) Although there hasn’t been any enabling policy has been issued for this neighborhood based on Vancouver Plan yet, the proposed development also attempts to fit the future ambitions for this area.

01



01 Illustration of urban design principles from Grandview-Woodland Community plan (CoV, 2016 p. 39)

02 Excerpt from Vancouver Plan (CoV, 2022)

02



Example of a Rapid Transit Area (Source: Brisco Manufacturing Ltd.)

Rapid transit areas are generally within a 10-minute walk of existing or future rapid transit stations. Locating jobs and purpose built rental housing near transit moves the city closer to a zero carbon future, is important for accessibility, and offers an economic advantage for people who rely on transit as a lower-cost transportation option. As more people move into these neighbourhoods, high-quality public spaces and access to amenities becomes even more important.

View Cones

Maximum building height will be approximately within 1 m of the height of the existing tall hose tower and at its highest point will reach 57.4 m above sea level. The proposed height will not affect view cone 27.2 (Trout Lake) which starts at 88.5 m above sea level.



01 View cone 27.2 - Trout Lake in plan

02 View cone 27.2 - Trout Lake in photograph

Sustainability Measures - Green Buildings Policy for Rezoning

The project is responding to the requirements of the Green Buildings Policy for Rezoning as per the most recent July 2023 update. The following narrative outlines how the project intends to respond to the policy requirements.

Integrated Rainwater Management and Green Infrastructure

The new facility will comply with the Rainwater Management Bulletin (last updated in August 2022). A preliminary rainwater management plan (RWMP) will be provided in the rezoning package, describing the project approach to meet the requirements for volume reduction, rate control and water quality.

The project intends to capture (through infiltration, evapotranspiration and water reuse) and clean the first 48mm of rainfall in 24-hours from all areas of the site, exceeding the minimum 24mm of rainfall required to be managed by the Rainwater Management Bulletin. With very limited available space on site for landscape areas or other engineered infiltration systems, and a groundwater table at grade, the project team is exploring options to meet this target, including the use of green roofs and runoff detention systems.

Reporting of Green and Resilient Building Measures

a/ Energy & Emissions Performance Limits

The project intends to demonstrate compliance with the VBBL 2019 energy and emissions performance requirements through the passive house certification path. As the mixed-use building contains group D major occupancies, the building would fall under 10.2.1.3 of the code ('Residential Buildings of 4 storeys or more, and Commercial Buildings'). Buildings of this typology are allowed to demonstrate compliance with the energy and emissions performance requirements through the passive house certification (10.2.2.5.4).

The PHPP modelling will be prepared by a Certified Passive House Designer, using version 10 of the spreadsheet. The Passive House Institute in Darmstadt has been retained as the Passive House Certifier for the project and engaged throughout the Schematic design phase to discuss considerations unique to this project and establish the approach to the passive house certification.

In lieu of the Energy & Emissions Design Report and as agreed with the City's planning department, a letter from the Certified Passive House Designer is provided in Appendix A, describing the key design strategies to achieving certification.

b/ Embodied Carbon Limits

A whole-building life cycle assessment (LCA) has been conducted with the Carbon Designer 3D tool from One Click LCA software, based on the Schematic Design documents and in accordance with the City of Vancouver Embodied Carbon Guidelines. The Embodied Carbon Design Report, detailing the assumptions and results of this LCA, is provided in Appendix A, and demonstrates the project is on track to meet the VBBL embodied carbon limits.

Per the VBBL requirements expected to be in force at the time of the project's building permit application, projects will need to demonstrate that their whole-building embodied carbon impacts are minimum 20% below a functionally equivalent baseline. As a City-owned building, the new facility is targeting a 40% reduction in embodied carbon compared to the same baseline, far exceeding the VBBL requirements.

The design team is contemplating the following strategies to reduce the building's embodied carbon:

- Use a mass timber structure
- Explore alternates to concrete topping for mass timber floors
- Optimize the structure to reduce the amount of concrete (e.g. avoiding transfer slabs, aligning columns)
- Specify low carbon concrete mixes with GUL cement and high SCM content
- Specify low carbon insulation and cladding material (i.e. fibercement panels)
- Reduce thermal bridging in the building envelope to minimize the amount of insulation
- Consider wood stud framing for interior and exterior non-loadbearing walls as opposed to conventional steel framing
- Reduce finishes by leaving the structure exposed

c/ Resilient Buildings Planning Worksheet

The Resilient Buildings Planning Worksheet, included in Appendix A, summarizes the level of resilience planning undertaken by the project and identifies proposed strategies.

The following key resilient design strategies are assumed in the design to help the building respond to future climate conditions and risks related to water, heat and wildfire smoke:

Water

- Increased permeability of site surfaces
- Implementation of rainwater capture
- Use of drought tolerant native plants

Heat

- Sizing of the cooling system for future climate conditions
- Evaluation of natural ventilation opportunities
- Provision of exterior shading on the South, East and West facades
- Optimizing window to wall ratio for each façade and balancing the need for natural light and risk of overheating
- Choosing glazing with low solar heat gain coefficient

Wildfire Smoke

- Providing min MERV 15 filtration in supply air system
- Specifying ventilation system that accommodates carbon, HEPA or other enhanced filtration during wildfire events
- Increasing airtightness of building envelope
- Incorporating vestibules at major building entrances

Enhanced Commissioning

The owner is committed to an enhanced commissioning process in accordance with the LEED v4 'Enhanced Commissioning' credit (Option 1, Path 1) and a third-party commissioning authority, with experience with projects of similar size and complexity, will be engaged for the project before the end of the Design Development phase. The commissioning scope will include at a minimum mechanical, electrical, plumbing and renewable energy systems. The commissioning activities will be completed in accordance with ASHRAE Guideline 0-2005 and 1.1-2007.

A letter of commitment from the project owner to complete the enhanced commissioning process in accordance with the LEED v4 'Enhanced commissioning' credit, Option 1 – Path 1, is provided in Appendix A.

Energy System Sub-Metering

The project does not intend to install extensive energy sub-metering, due to the low-value and added maintenance the City has experienced on previous projects. However, the project will pursue the 'Building-level energy metering' LEED prerequisite. The letter of commitment from the project owner included in Appendix A provides further details on the reasons not to include energy submetering.

3.0 Project Statistics and Data

Proposed Uses, Site Area, Setbacks, Height & Exclusions, Parking Summary

Overview

Civic Address:	1805 Victoria Drive
Legal Description:	Lots A, B & C, of Lot B, Block 144, District Lot 264A, Group 1, New Westminster District, Plan 9687
Zoning:	RT-5
Site Dimensions:	60.4 m x 32.0 m
Site Area:	1,932.64 m ²
Current Use:	Fire Hall
Proposed Uses:	Fire Hall (Group F3) , Office (Group D), Dormitory (Group C)
Setbacks:	
Front	4.1 m
North	2.1 m
South	3.0 m
Rear	1.3 m
Building Height:	19m
Exclusions:	GFA calculation exclusions: - Fire pole opening above level 1; - Floors below ground level that are used for off-street parking and loading, bicycle storage.
Height Exclusions:	Cumulative building height exclusions: - Roof mounted photovoltaic panels; - Fire department satellite antennae; - Elevator overrun (if required); - Roof mounted mechanical equipment (if required); - Hose tower as architectural feature; - Doghouse as roof access and infrastructure required to maintain green roofs and urban agriculture.
Proposed FSR:	2.0
Floor Area Included in FSR:	3,869.16 m ²
Proposed Gross Floor Area:	3,869.16 m ²

Floor	Use	Gross Area in m ²	F-F Height in m.	Cumulative bldg. height in m.	Cumulative elevation in m.
Base Elevation					38.4
P2	Fire Hall	44.97	n/a	n/a	n/a
P1	Fire Hall	259.41	n/a	n/a	n/a
1	Fire Hall	1091.57	4.5	4.5	42.9
2	Fire Hall	603.38	4.5	9	47.4
3	Office	834.94	4.6	13.6	52
4	Office	834.31	5.4	19	57.4
P1	Services	137.97	n/a	n/a	n/a
P2	Services	62.6	n/a	n/a	n/a
Total GFA		3,869.16			

Parking Summary

Parking Calculation:

Use	GFA in m ²	Min. Parking Req't	Min Parking No.	Proposed Parking
Fire Hall	1,999.34	N/A	-	56
Office	1,669.25	Up to 300 m ² - one for each 100 m ² Above 300 m ² - one for each 50 m ²	3 28	

Loading Calculation:

Use	GFA in m ²	Class A Loading Req't	Class A No.	Class B Loading Req't	Class B No.
Fire Hall	1,999.34	N/A	-	N/A	-
Office	1,669.25	At least one space for 1,000 to 7,500 square meters of GFA	1	At least one space for 500 to 5,000 square meters of GFA	1

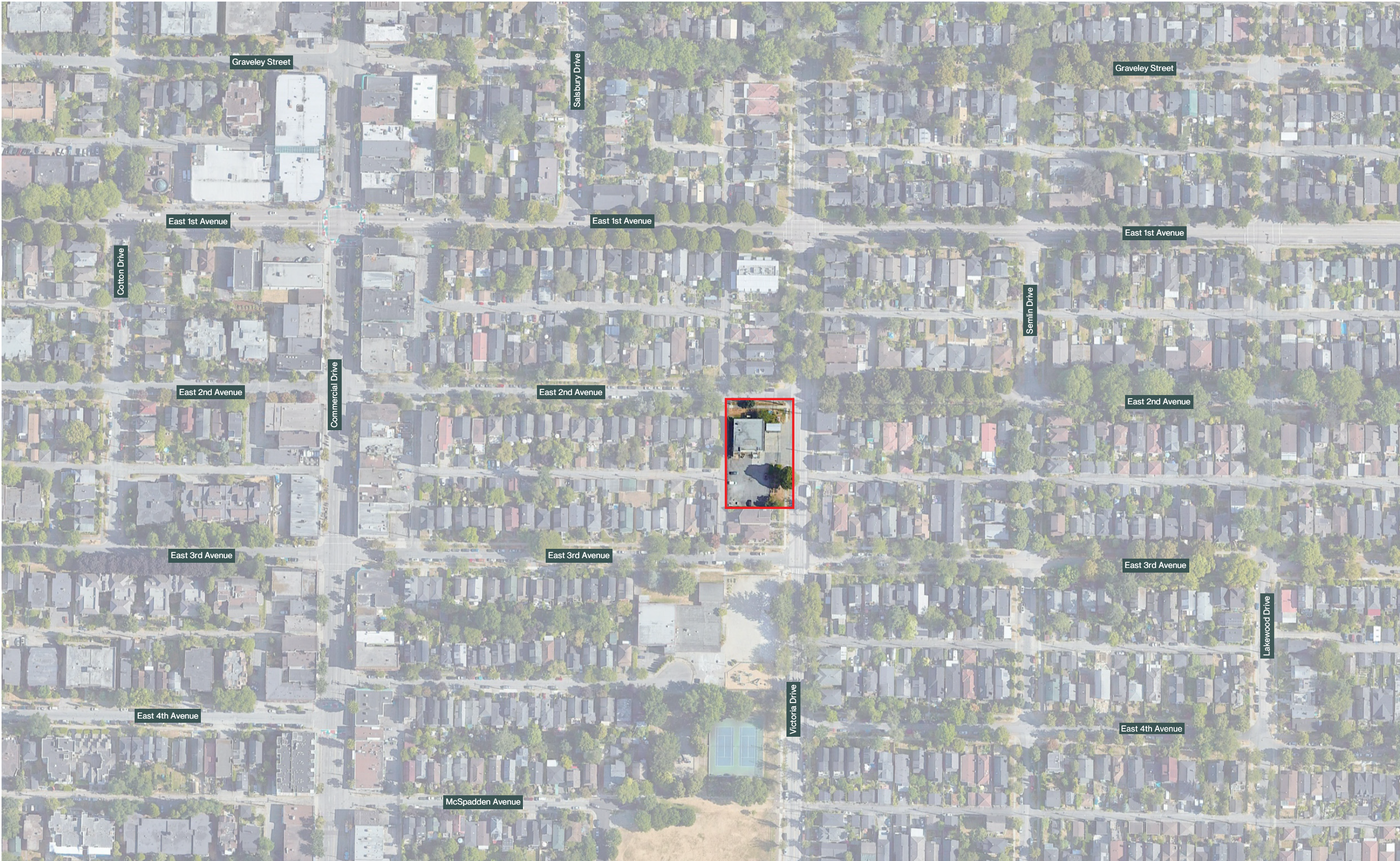
Bicycle Parking Calculation:

Use	GFA in m ²	Class A Req't	Class A No.	Class B Req't	Class B No.
Fire Hall	1,999.34	N/A	-	N/A	-
Office	1,669.25	A minimum of one space for each 170m ² of GFA	10	A minimum of 6 spaces for any development containing a minimum of 2,000m ² of GFA	6

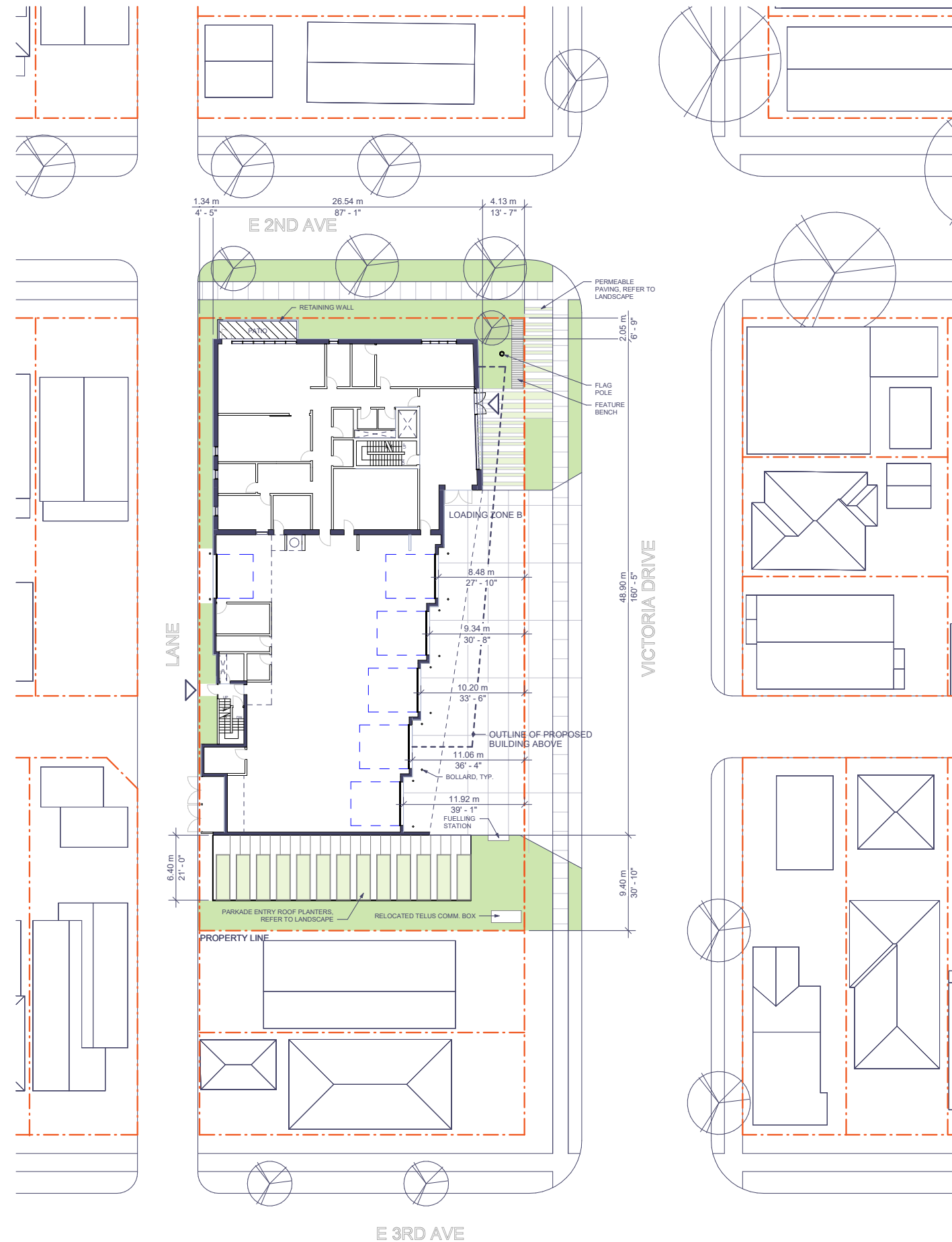
*refer to Section 4.7 TDM Sheets

4.0 Drawings

Context Plan



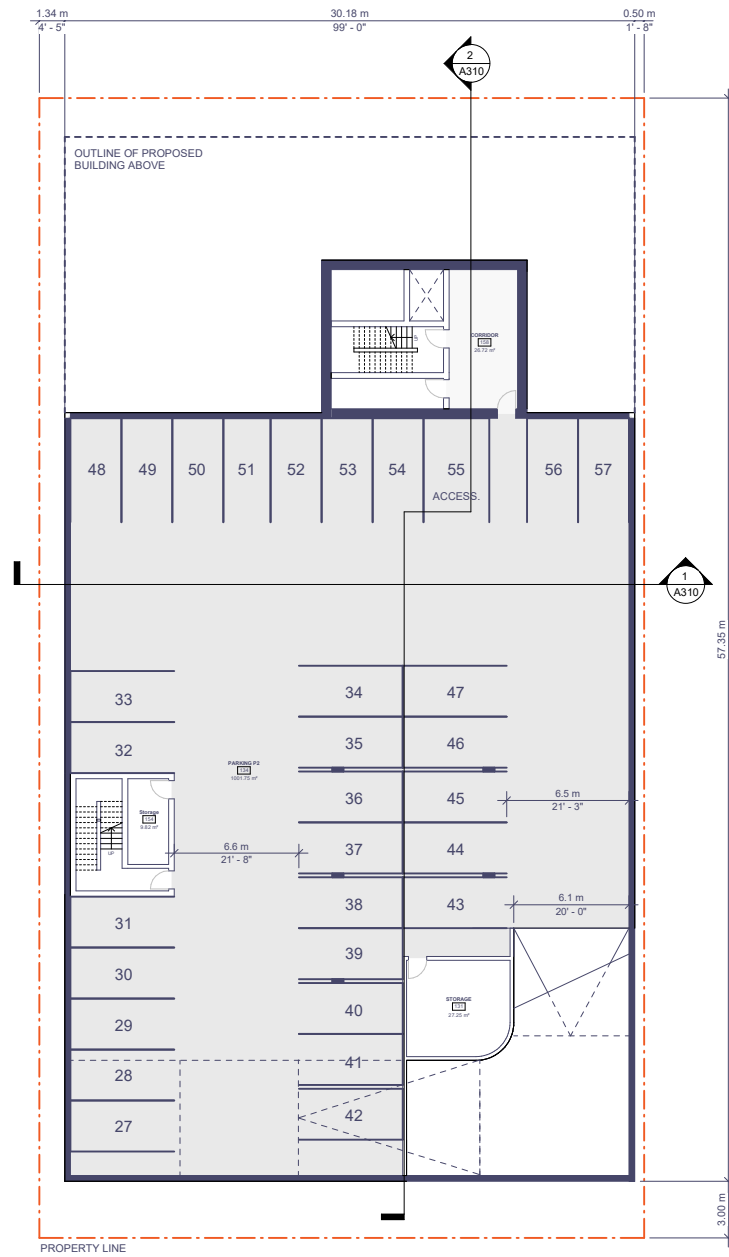
Site Plan



1 SITE PLAN
1:500



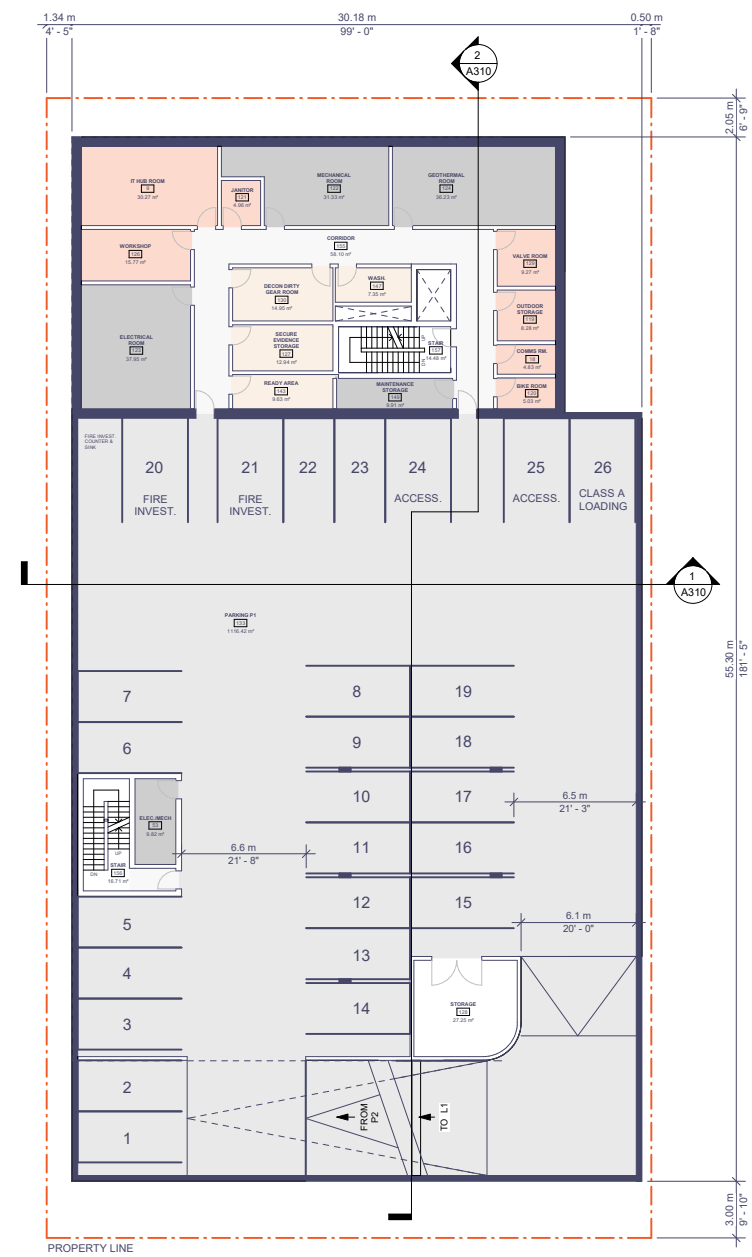
Floor Plans



NET AREA - LEVEL P2

1 LEVEL P2
1 : 400

LEVEL P2 1065.53 m²

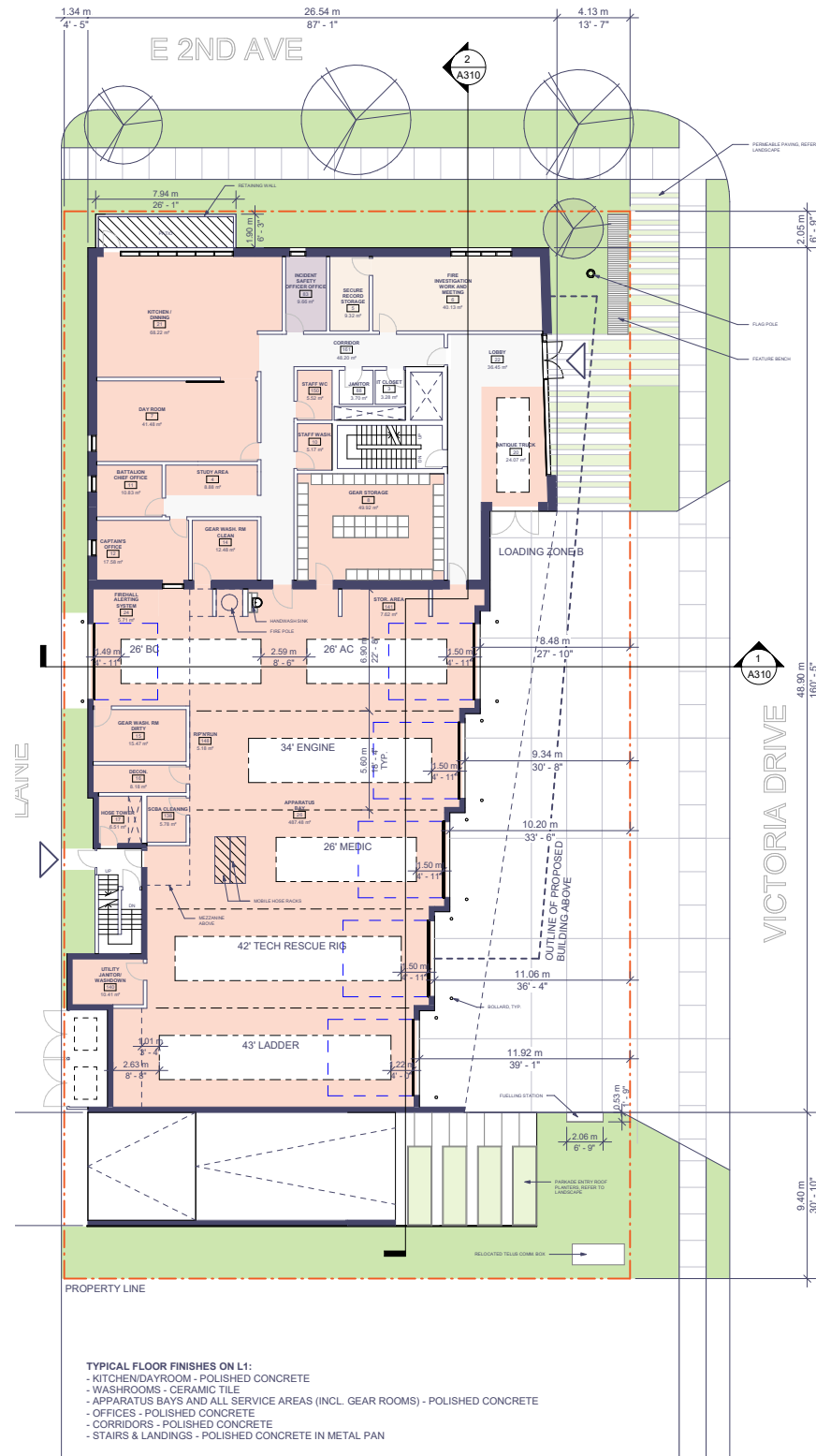


NET AREA - LEVEL P1

2 LEVEL P1
1 : 400

LEVEL P1 1481.48 m²

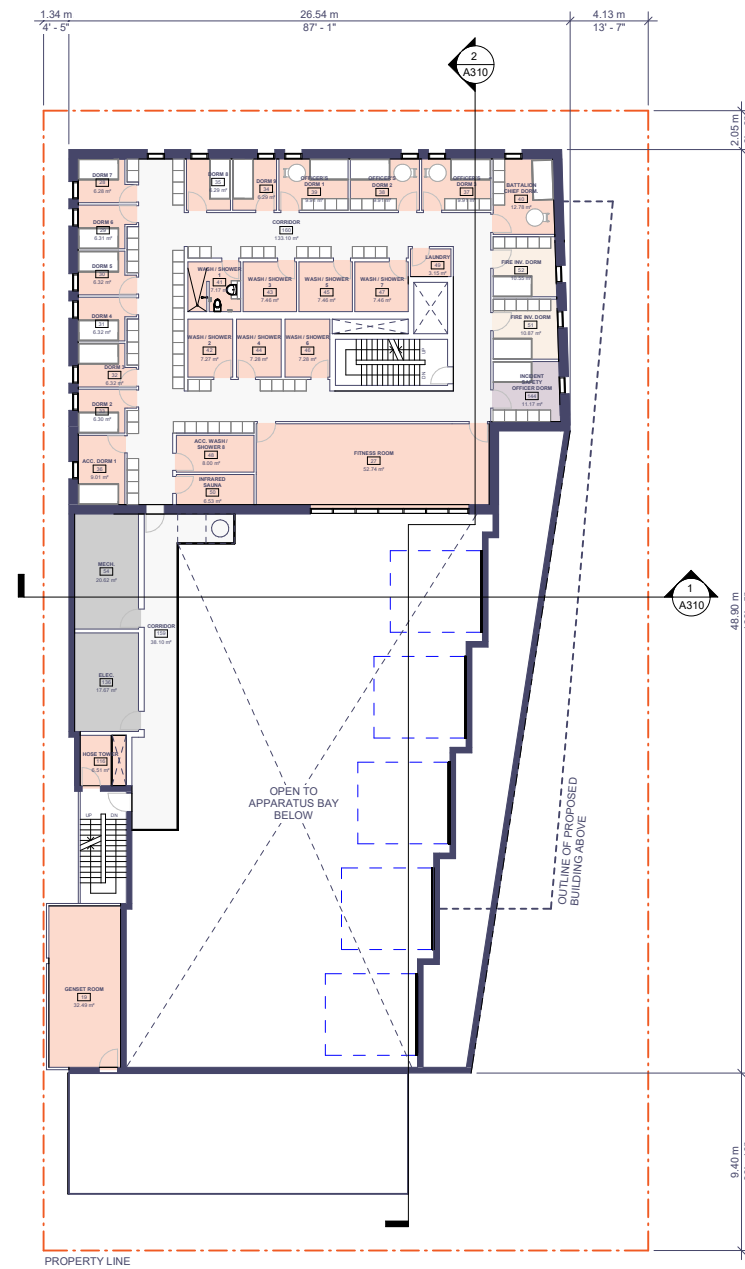




1 LEVEL 1
1 : 400

NET AREA - LEVEL 1

LEVEL 1 947.24 m²

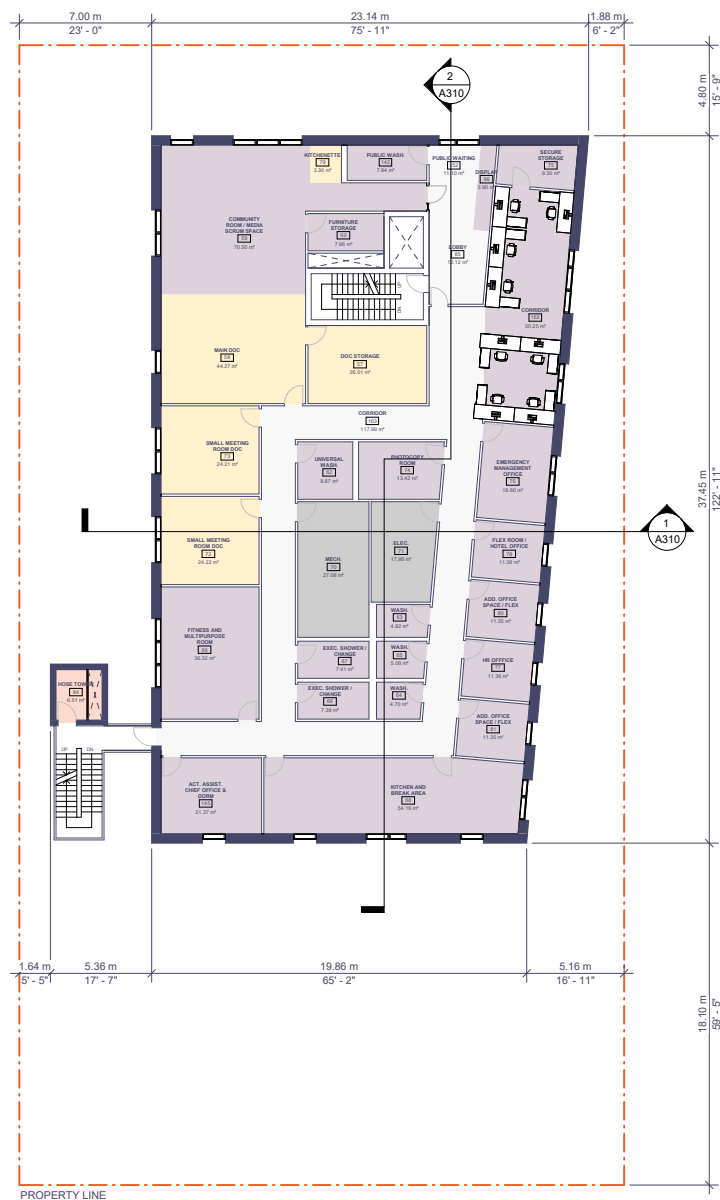


2 LEVEL 2
1 : 400

NET AREA - LEVEL 2

LEVEL 2 504.81 m²

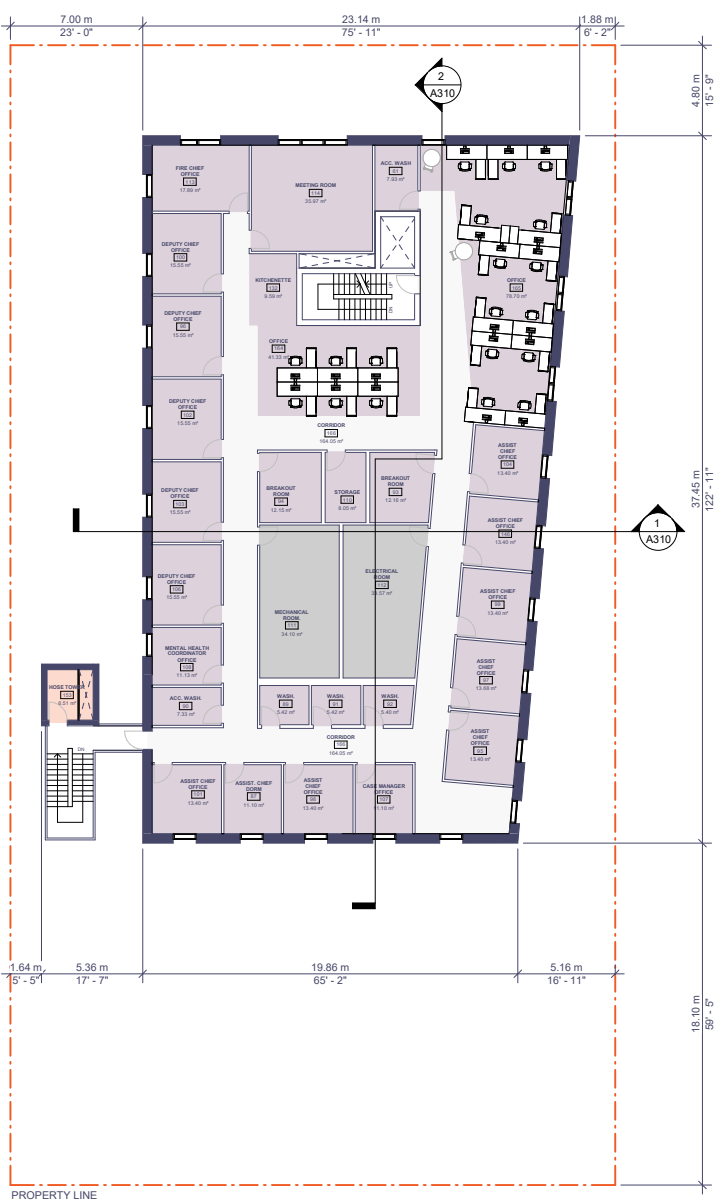




- TYPICAL FLOOR FINISHES ON L3:**
- CORRIDORS - RESILIENT FLOORING
 - OFFICES, MEETING ROOMS - RESILIENT FLOORING
 - WASHROOMS - CERAMIC TILE
 - MECH & ELEC ROOMS - SEALED CONCRETE
 - STAIRS & LANDINGS - POLISHED CONCRETE IN METAL PAN

1 LEVEL 3
1: 400

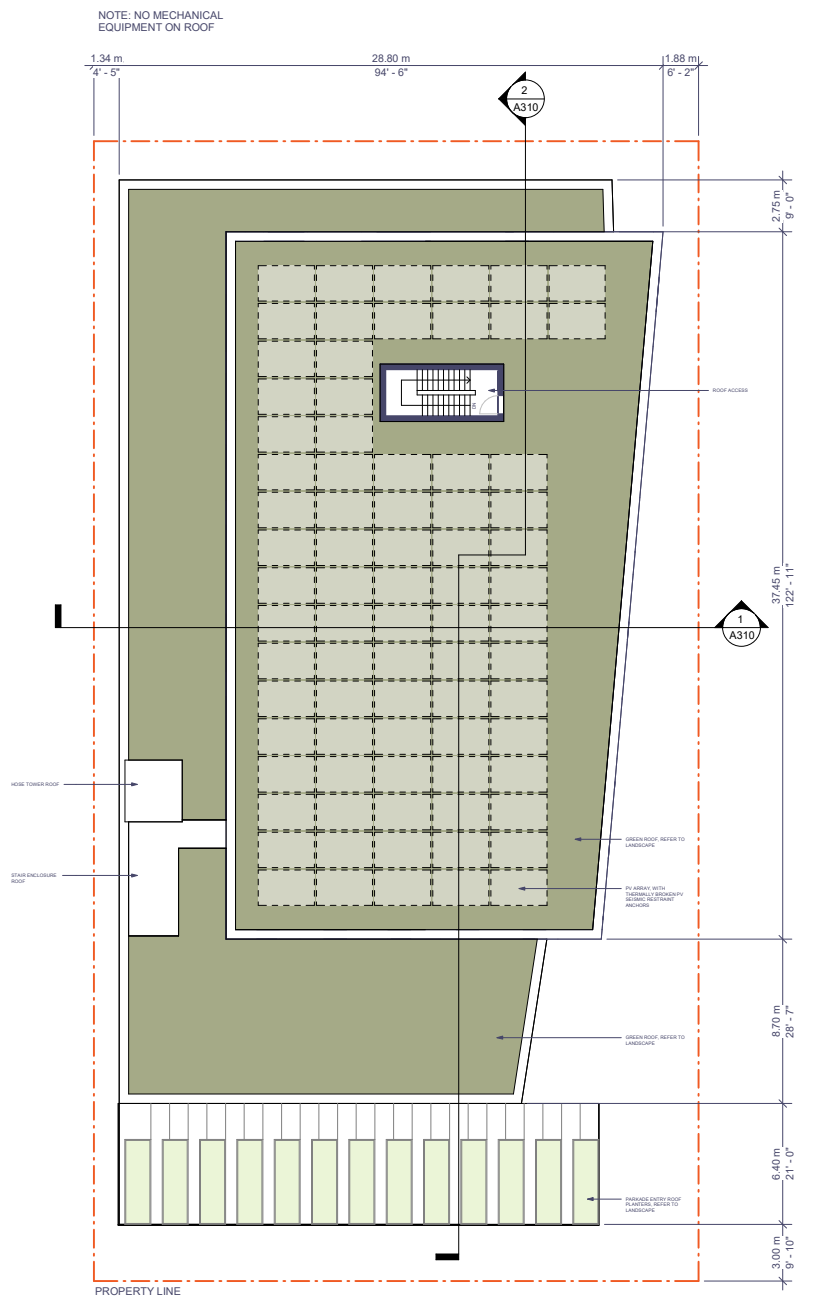
NET AREA - LEVEL 3
LEVEL 3 691.97 m²



- TYPICAL FLOOR FINISHES ON L4:**
- CORRIDORS - RESILIENT FLOORING
 - OFFICES, MEETING ROOMS - RESILIENT FLOORING
 - WASHROOMS - CERAMIC TILE
 - MECH & ELEC ROOMS - SEALED CONCRETE
 - IT HUB ROOM - STATIC DISSIPATIVE RESILIENT FLOORING
 - STAIRS & LANDINGS - POLISHED CONCRETE IN METAL PAN

2 LEVEL 4
1: 400

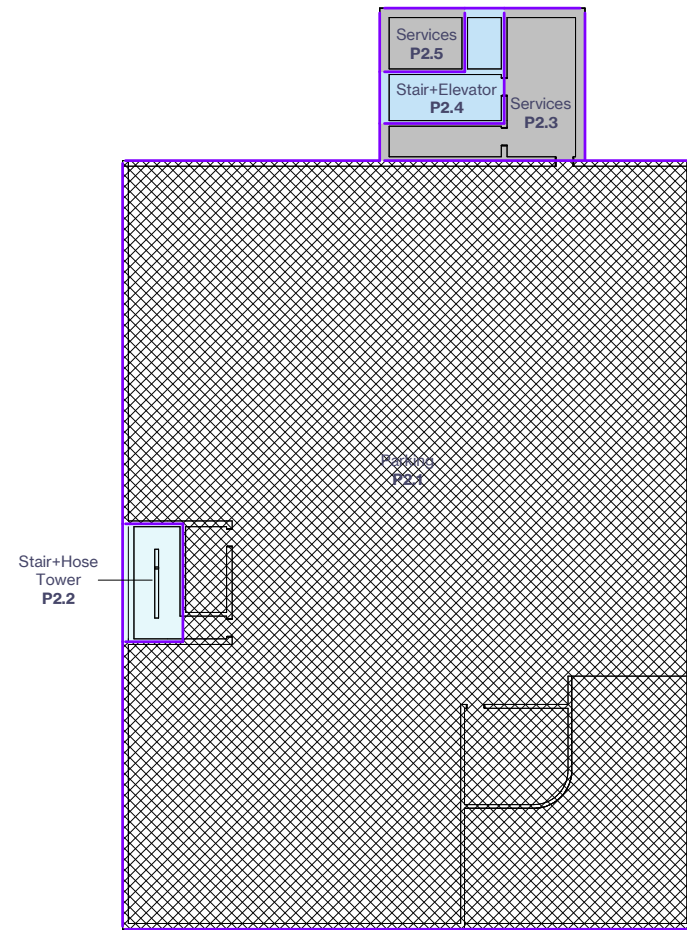
NET AREA - LEVEL 4
LEVEL 4 690.70 m²



3 ROOF
1: 400

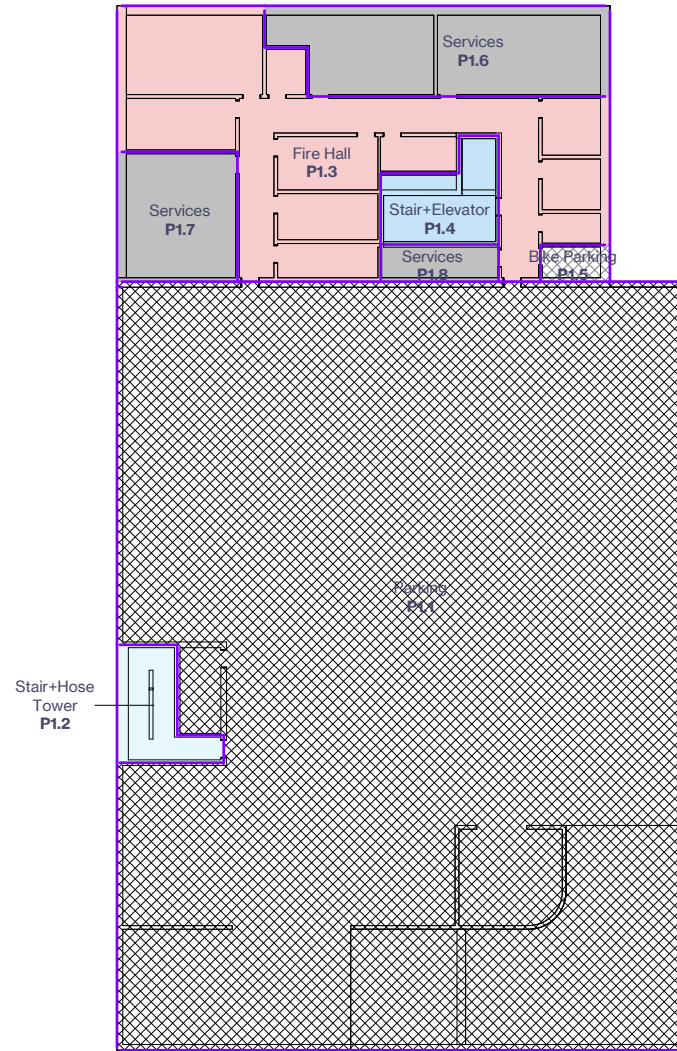


FSR Overlays



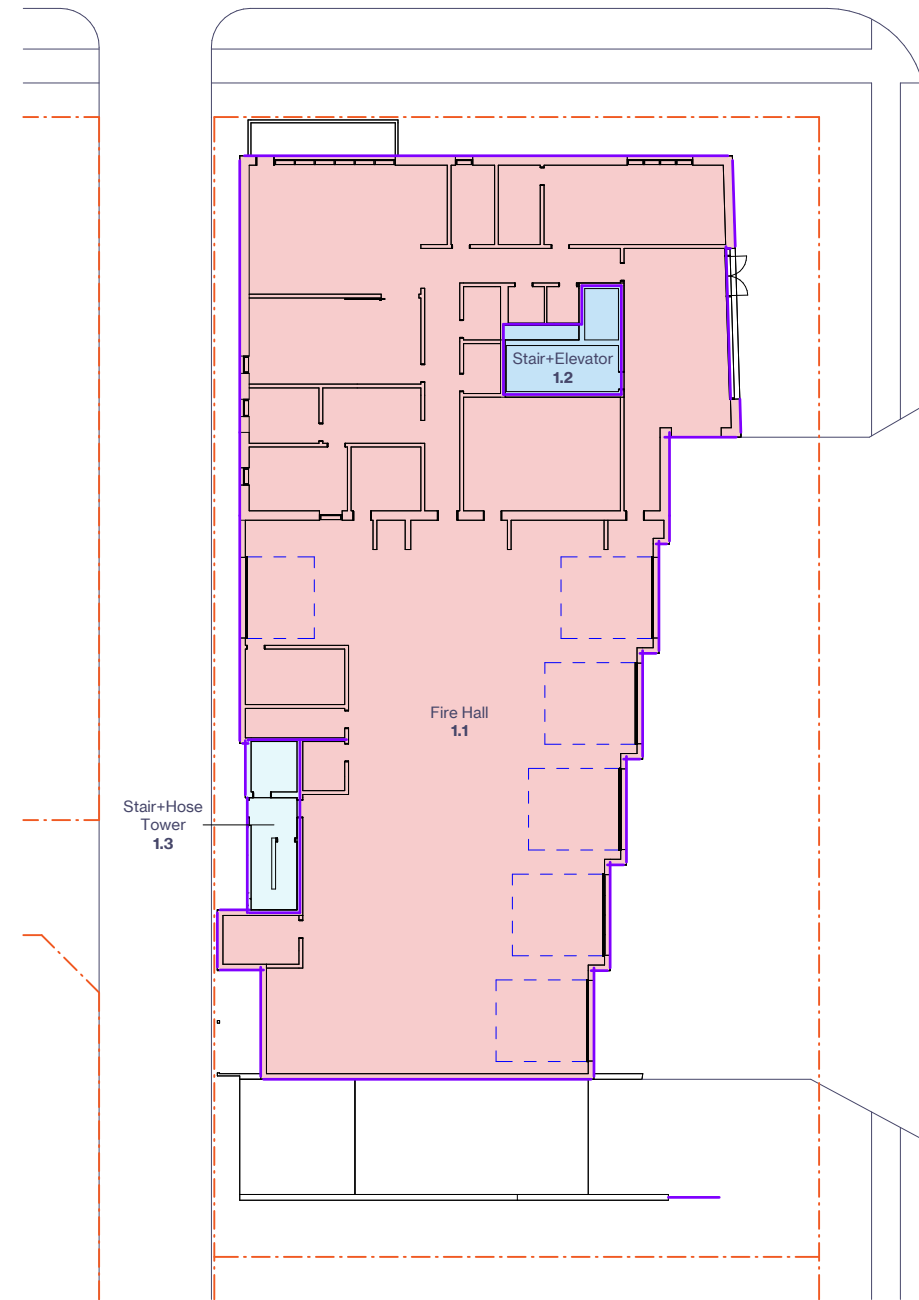
1 LEVEL P2
1:400

GROSS FLOOR AREA - LEVEL P2				
Number	LEVEL	Use Type	AREA	Exclusion
LEVEL P2				
P2.1	LEVEL P2	Parking	1208.40 m ²	Yes
P2.4	LEVEL P2	Fire Hall	25.08 m ²	No
P2.2	LEVEL P2	Fire Hall	19.89 m ²	No
P2.5	LEVEL P2	Services	15.16 m ²	No
P2.3	LEVEL P2	Services	47.45 m ²	No
GFA			1315.98 m ²	



2 LEVEL P1
1:400

GROSS FLOOR AREA - LEVEL P1				
Number	LEVEL	Use Type	AREA	Exclusion
LEVEL P1				
P1.1	LEVEL P1	Parking	1204.83 m ²	Yes
P1.6	LEVEL P1	Services	81.90 m ²	No
P1.4	LEVEL P1	Fire Hall	27.71 m ²	No
P1.2	LEVEL P1	Fire Hall	23.46 m ²	No
P1.3	LEVEL P1	Fire Hall	208.24 m ²	No
P1.7	LEVEL P1	Services	43.81 m ²	No
P1.8	LEVEL P1	Services	12.26 m ²	No
P1.5	LEVEL P1	Bike Parking	7.12 m ²	Yes
GFA			1609.33 m ²	



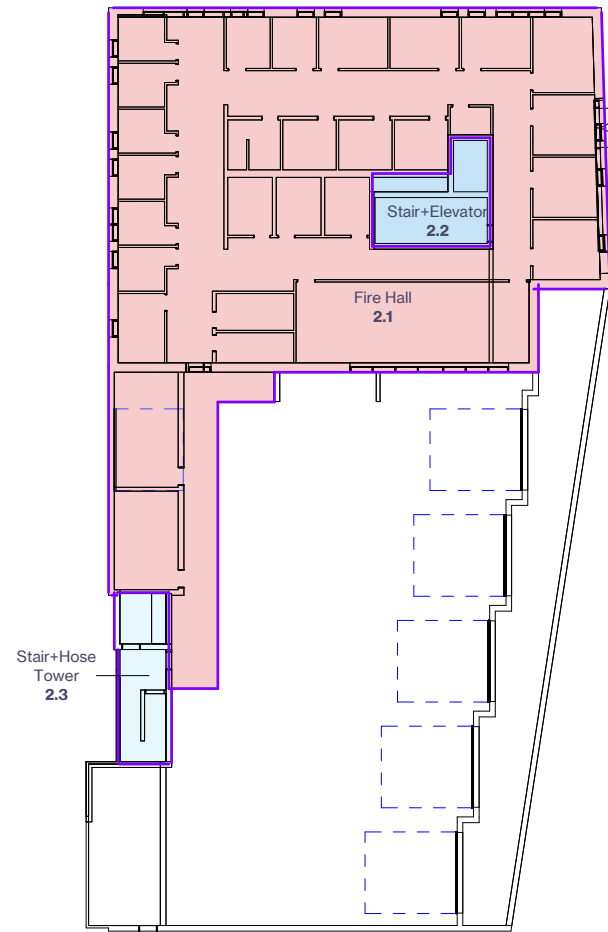
3 LEVEL 1
1:400

GROSS FLOOR AREA - LEVEL 1				
Number	LEVEL	Use Type	AREA	Exclusion
LEVEL 1				
1.1	LEVEL 1	Fire Hall	1038.28 m ²	No
1.2	LEVEL 1	Fire Hall	27.45 m ²	No
1.3	LEVEL 1	Fire Hall	25.83 m ²	No
GFA			1091.57 m ²	

HCMA Colour Scheme

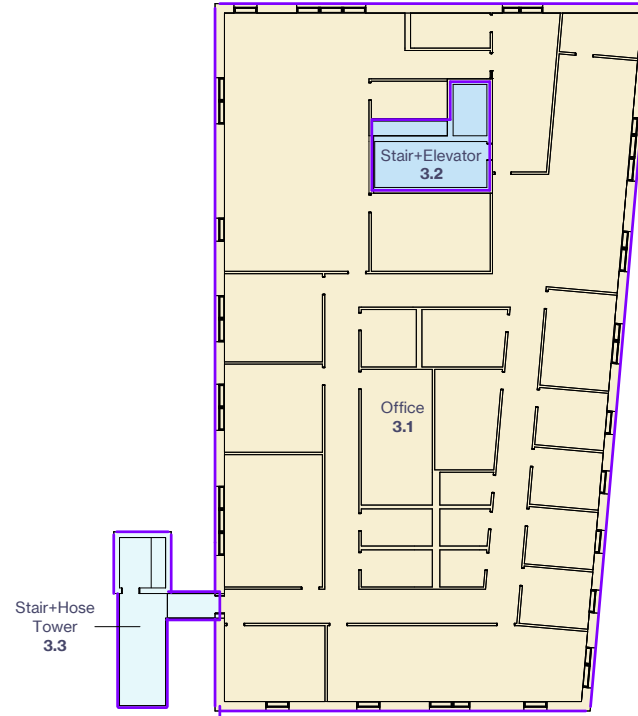
- Bike Parking
- Fire Hall
- Office
- Parking
- Services
- Shaft
- Site Area
- Stair+Elev. Shaft
- Stair+Elevator
- Stair+Hose Tower
- Stair+Hose Tower Shaft





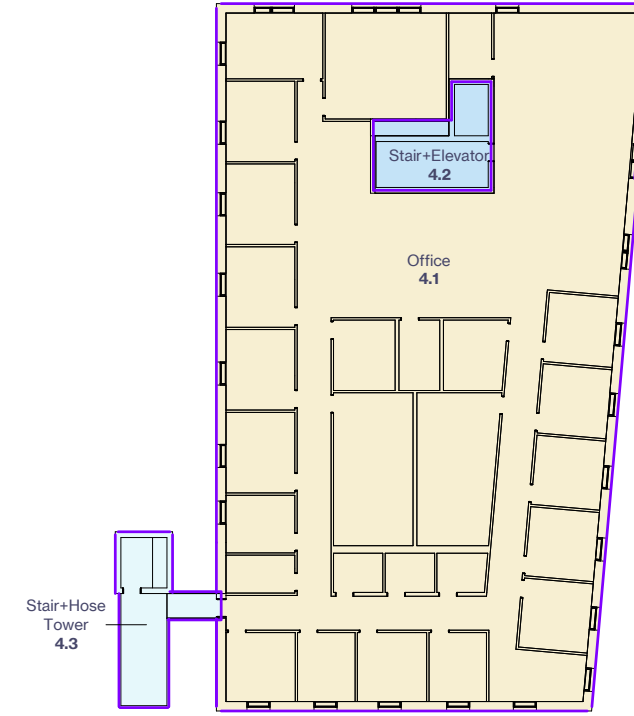
1 LEVEL 2
1 : 400

GROSS FLOOR AREA - LEVEL 2				
Number	LEVEL	Use Type	AREA	Exclusion
LEVEL 2				
2.1	LEVEL 2	Fire Hall	549.74 m ²	No
2.3	LEVEL 2	Fire Hall	25.62 m ²	No
2.2	LEVEL 2	Fire Hall	28.02 m ²	No
GFA			603.38 m ²	



2 LEVEL 3
1 : 400

GROSS FLOOR AREA - LEVEL 3				
Number	LEVEL	Use Type	AREA	Exclusion
LEVEL 3				
3.1	LEVEL 3	Office	777.37 m ²	No
3.2	LEVEL 3	Office	27.56 m ²	No
3.3	LEVEL 3	Office	30.01 m ²	No
GFA			834.94 m ²	



3 LEVEL 4
1 : 400

GROSS FLOOR AREA - LEVEL 4				
Number	LEVEL	Use Type	AREA	Exclusion
LEVEL 4				
4.1	LEVEL 4	Office	776.85 m ²	No
4.2	LEVEL 4	Office	27.45 m ²	No
4.3	LEVEL 4	Office	30.01 m ²	No
GFA			834.31 m ²	

- HCMA Colour Scheme
- Bike Parking
 - Fire Hall
 - Office
 - Parking
 - Services
 - Shaft
 - Site Area
 - Stair+Elev. Shaft
 - Stair+Elevator
 - Stair+Hose Tower
 - Stair+Hose Tower Sha

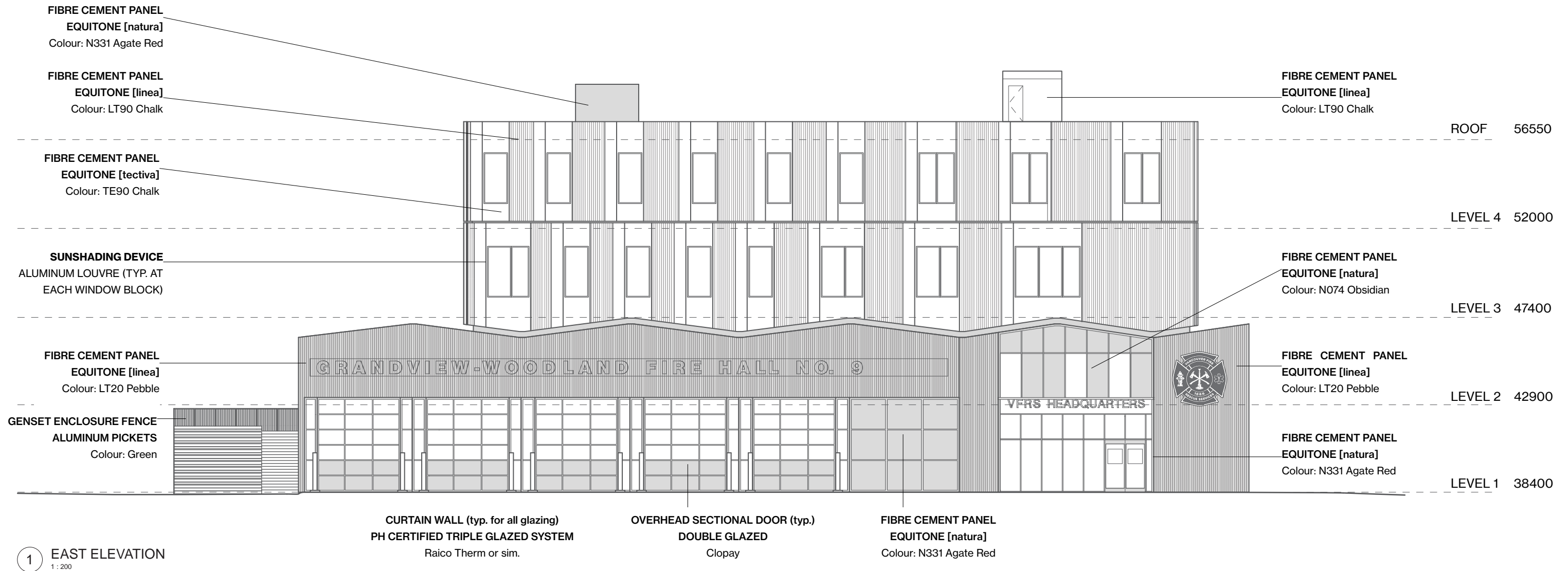


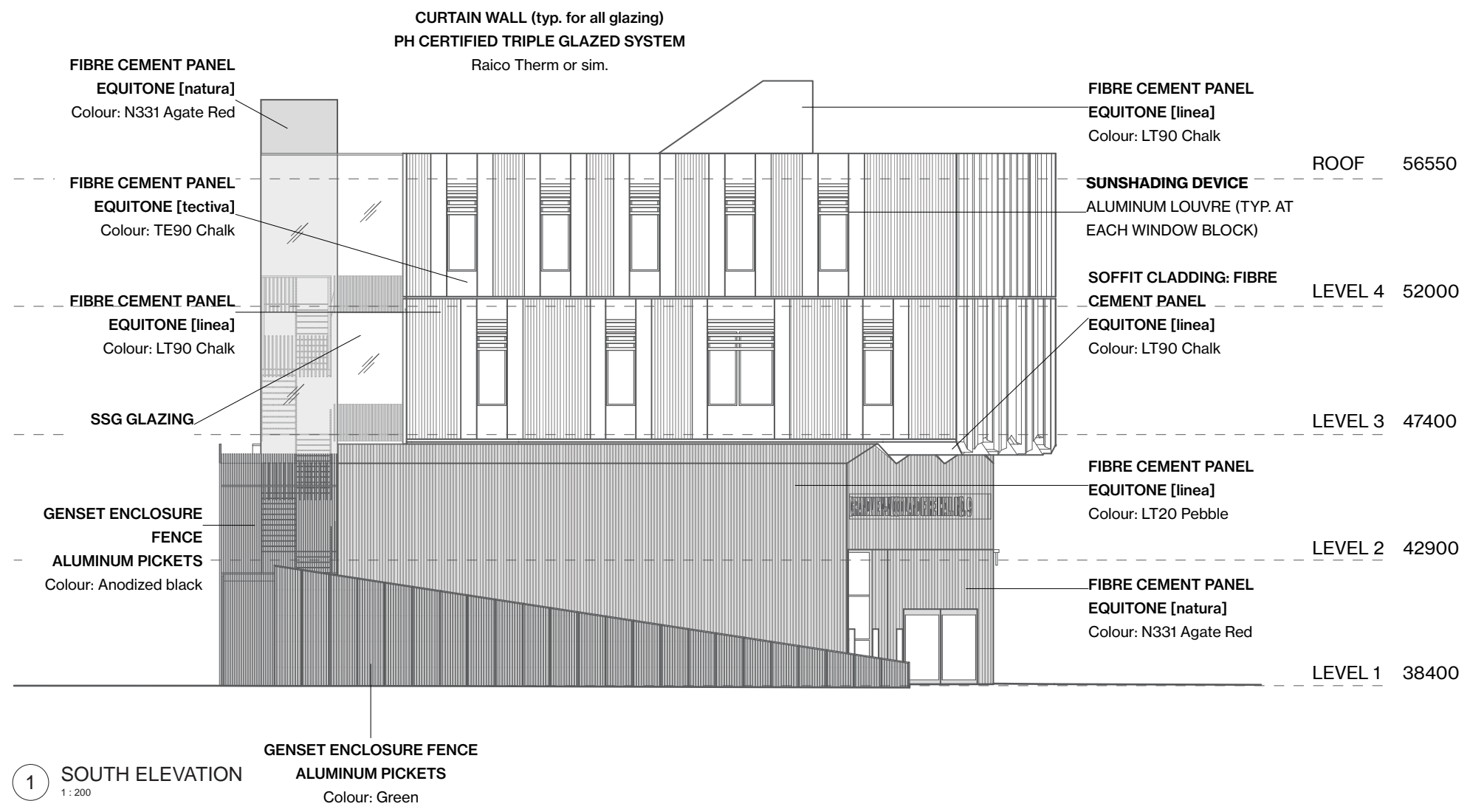
GFA - FSR INCLUSIONS			FSR EXCLUSIONS			SITE AREA	
Use Type	AREA	LEVEL	Use Type	AREA	LEVEL	Site Area	
Fire Hall	25.08 m ²	LEVEL P2	Parking	1208.40 m ²	LEVEL P2	1932.64 m ²	FSR
Fire Hall	19.89 m ²	LEVEL P2	Parking	1204.83 m ²	LEVEL P1		
Services	15.16 m ²	LEVEL P2	Bike Parking	7.12 m ²	LEVEL P1		
Services	47.45 m ²	LEVEL P2	Grand total	2420.36 m ²			
Services	81.90 m ²	LEVEL P1					
Fire Hall	27.71 m ²	LEVEL P1					
Fire Hall	23.46 m ²	LEVEL P1					
Fire Hall	208.24 m ²	LEVEL P1					
Services	43.81 m ²	LEVEL P1					
Services	12.25 m ²	LEVEL P1					
Fire Hall	1038.28 m ²	LEVEL 1					
Fire Hall	27.45 m ²	LEVEL 1					
Fire Hall	25.83 m ²	LEVEL 1					
Fire Hall	549.74 m ²	LEVEL 2					
Fire Hall	25.62 m ²	LEVEL 2					
Fire Hall	28.02 m ²	LEVEL 2					
Office	777.37 m ²	LEVEL 3					
Office	27.56 m ²	LEVEL 3					
Office	30.01 m ²	LEVEL 3					
Office	776.85 m ²	LEVEL 4					
Office	27.45 m ²	LEVEL 4					
Office	30.01 m ²	LEVEL 4					
Grand total	3869.16 m ²						

GFA/Site Area = 3,869.16 m² / 1,932.64 m² = 2.00

Elevations

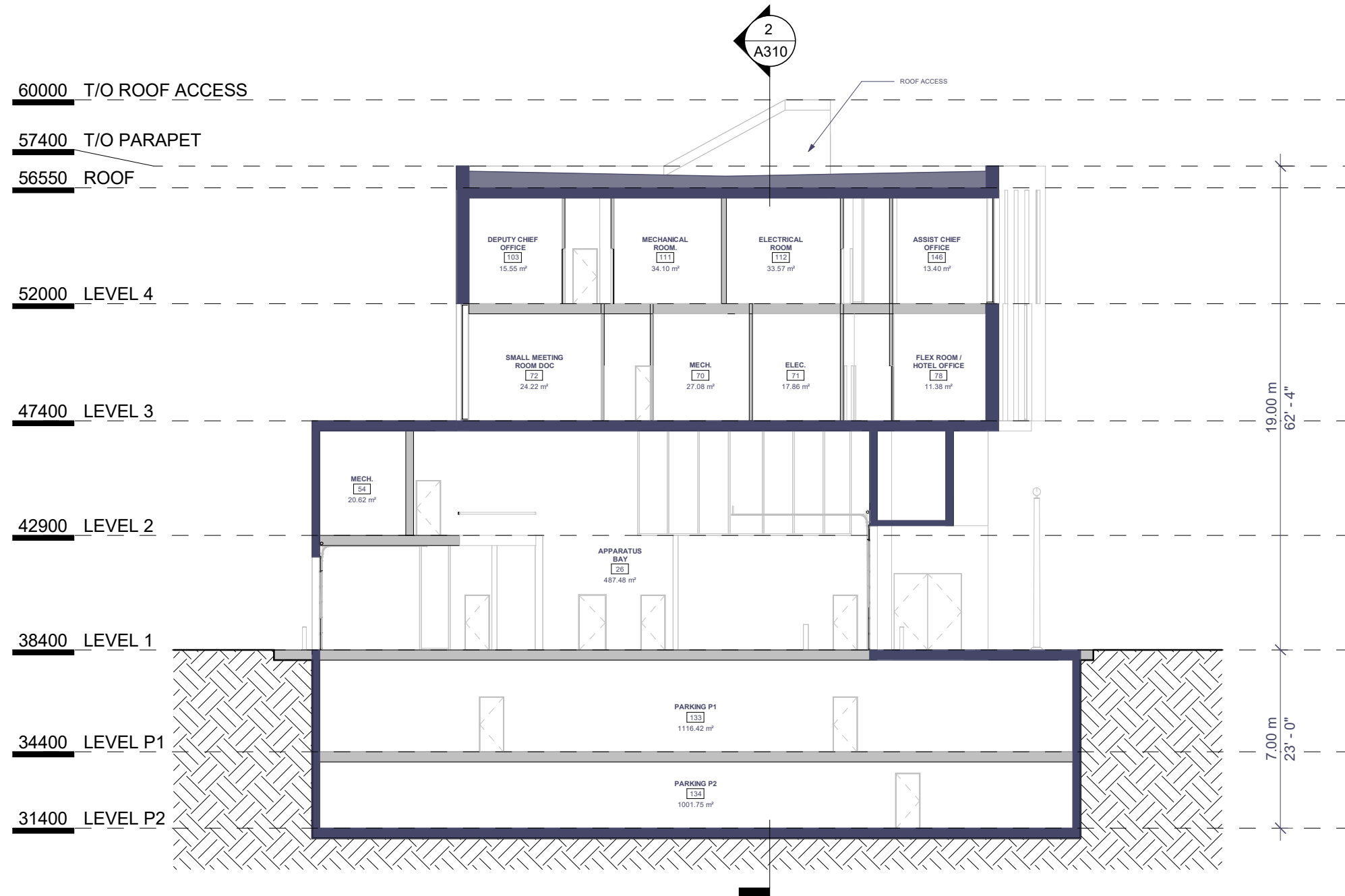




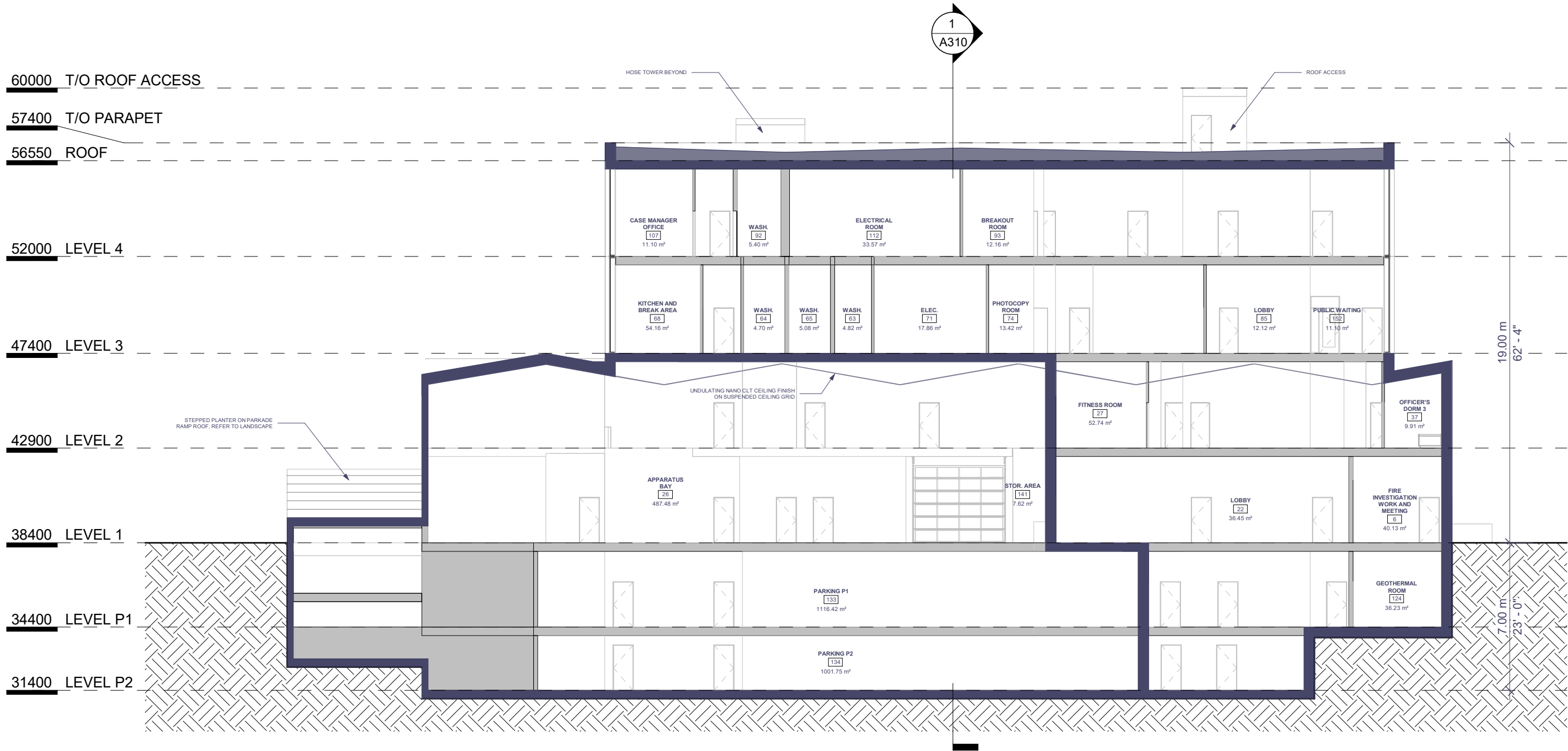




Sections

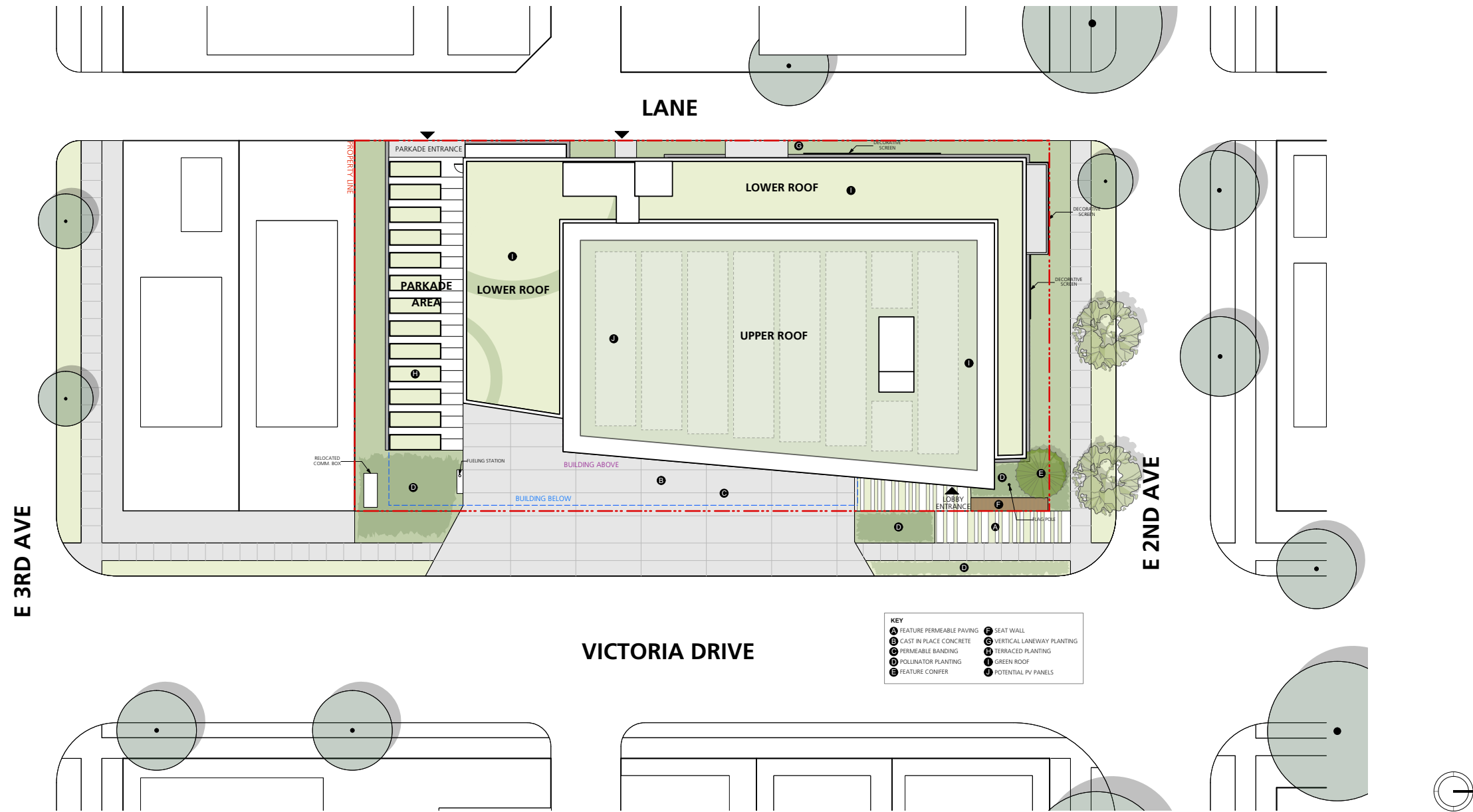


1 EAST - WEST SECTION
1:200



1 NORTH - SOUTH SECTION
1:200

Roof Landscape Plan



Landscape Precedents:



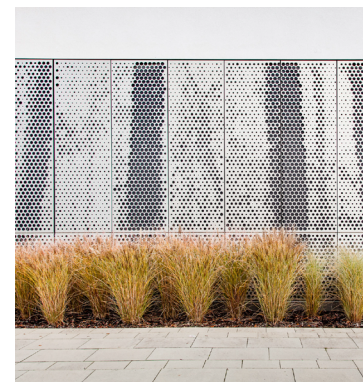
Sloped Green Roof



Low Wall Seating



Upper Green Roof with PV Panels



Patio/Decorative Screen

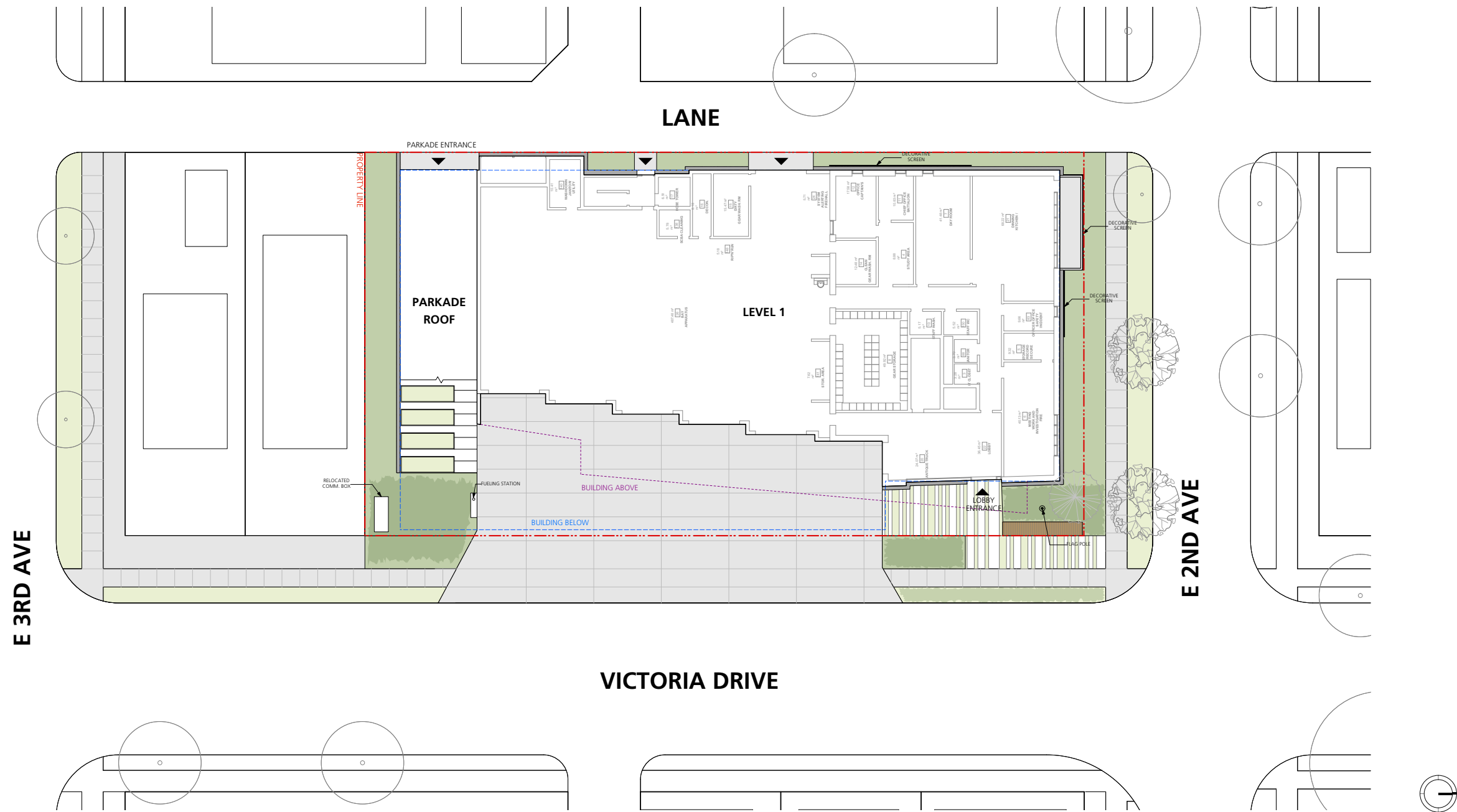


Pollinator Planting



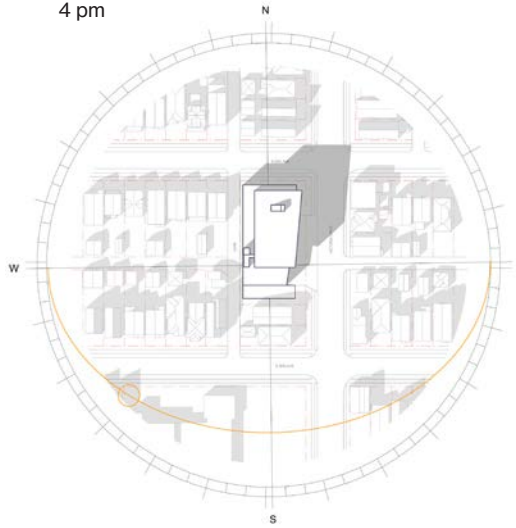
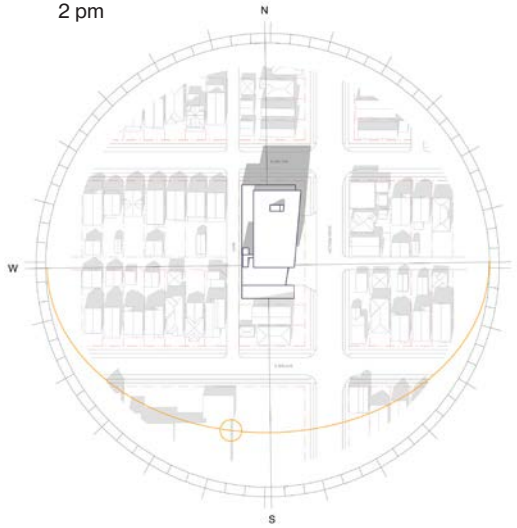
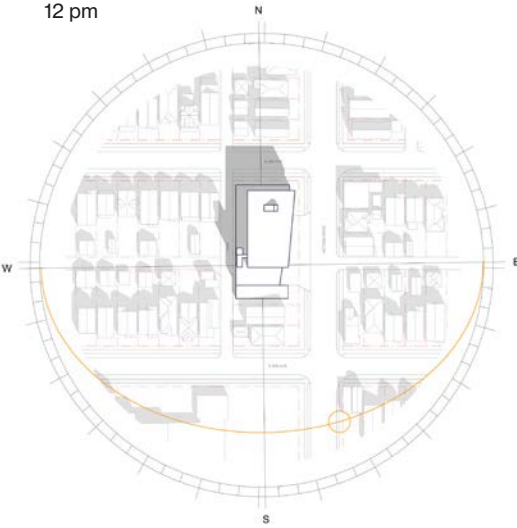
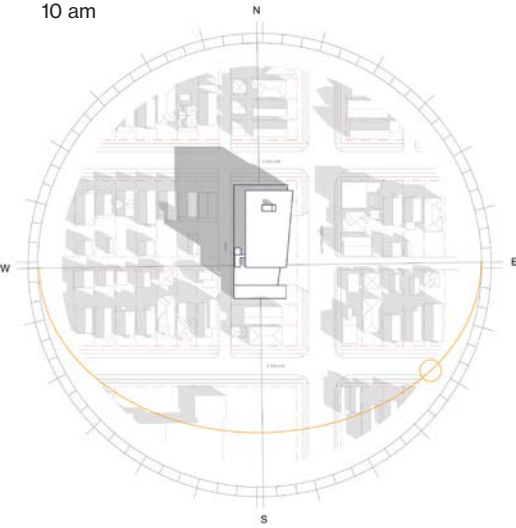
Feature Conifer

Ground Floor Landscape Plan

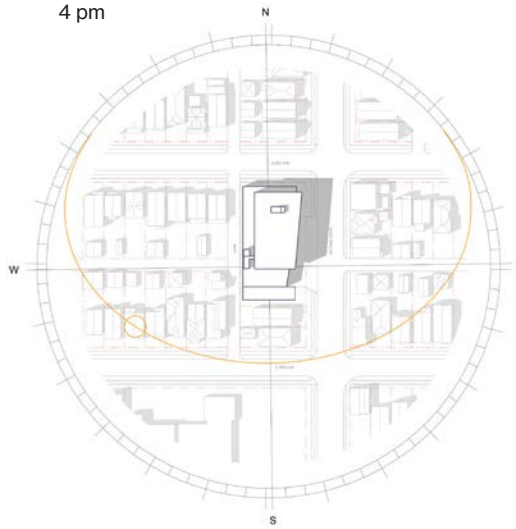
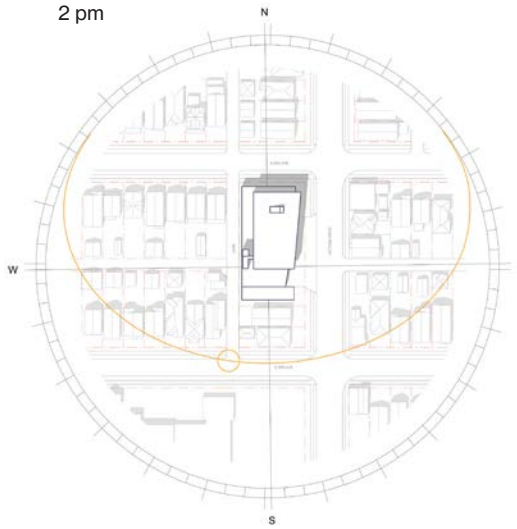
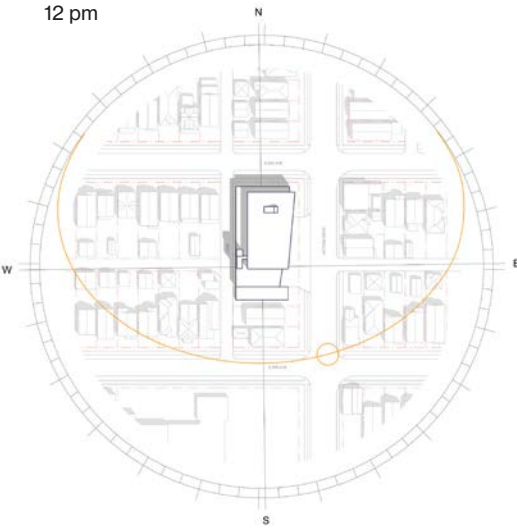
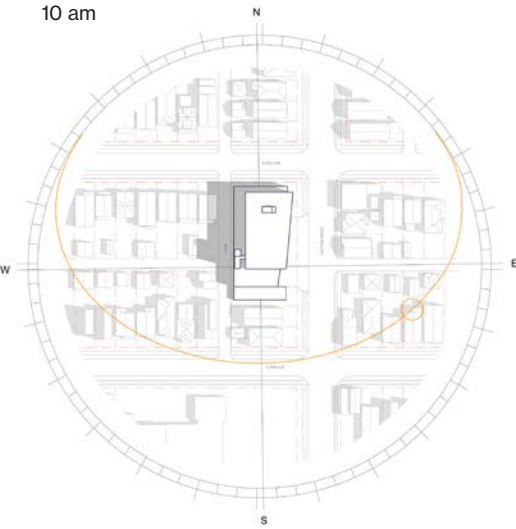


Shadow Studies

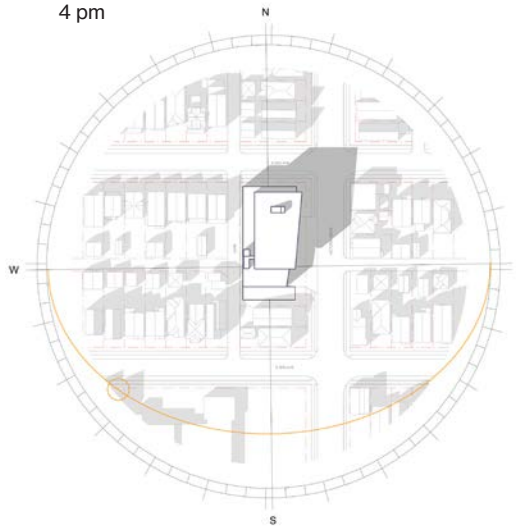
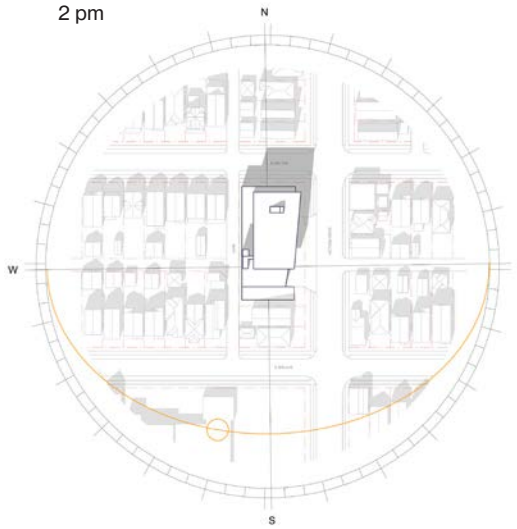
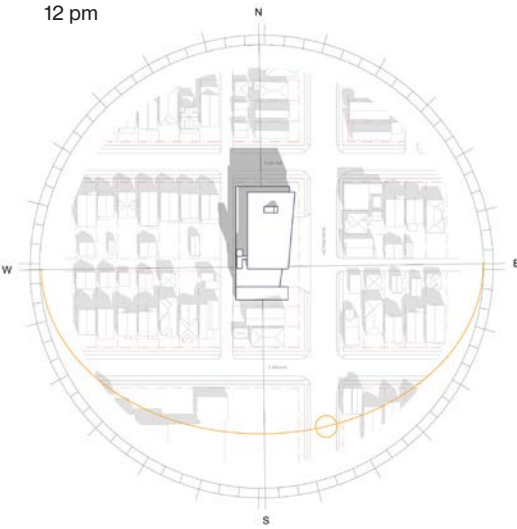
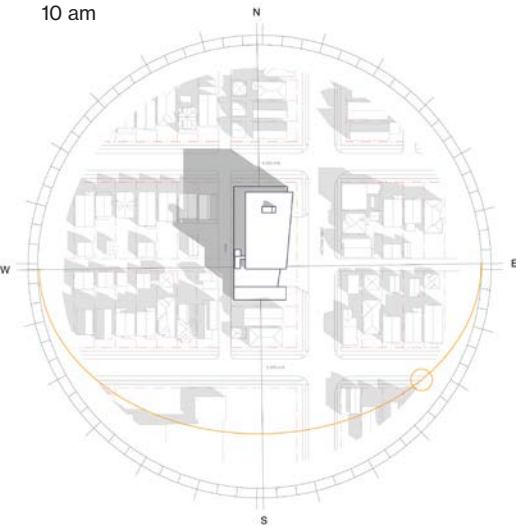
March 21



June 21



September 22



5.0 Renderings and Perspectives



GRANDVIEW-WOODLAND FIRE HALL NO. 9

VFRS HEADQUARTERS







GRANDVIEW-WOODLAND FIRE HALL NO. 9

FIRE HALL NO. 9

As a gesture of respect, peace, and friendship, we acknowledge that the City of Vancouver and Vancouver Fire Hall 9 are located on the unceded Indigenous homelands of the Coast Salish People — specifically the Skwxwú7mesh, səliilwətaʔt, xʷməθkʷəy̓əm, and all their ancestors who have lived on and served as faithful stewards of these lands.



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