

455-485 Great Northern Way and 1850 Thornton Street

Properties Integrated with GNW - Emily Carr Station

Rezoning Booklet

23 February 2024

PCI
DEVELOPMENTS

**LOW
TIDE**

Perkins&Will

PAGE LEFT INTENTIONALLY BLANK

Contents

1.0 Introduction	5	4.0 Renderings	69
1.1 Project Team	6	5.0 Response to Application for Rezoning Advice (Letter Of Enquiry)	77
1.2 Project Proposal	7	5.1 Responses to Pre-Application Enquiry	78
1.3 Program Overview	8	5.2 Responses to Letter of Enquiry	79
2.0 Context	11	6.0 Applicable Policies	91
2.1 Indigenous Engagement	12	6.1 Rezoning Rationale & Applicable Policies	92
2.2 Regional Context	14	6.2 General City of Vancouver Policies	93
2.3 Urban Context	15	6.3 Broadway Plan (2022)	94
2.4 Historic Context	16	7.0 Sustainability	99
2.5 Current Context	17	7.1 Sustainability Strategies Summary	100
2.6 Photos and Existing Streetscape	18	7.2 Overview of City Goals	102
2.7 Site Elevations	20	7.3 Green Building Policy for Rezoning	105
2.8 Pedestrian and Cycling	22	7.4 Rezoning Policy for Sustainable Large Developments	106
2.9 Public Transportation	23	7.5 Third Party Certification Feasibility Studies	107
2.10 Public Amenities/Services	24	7.6 LEED Feasibility Study	108
2.11 Zoning Districts	25	7.7 WELL Feasibility Study	110
2.12 Broadway Plan	26	7.8 Systems Thinking	112
2.13 Precinct Visioning - GNW Charrette	27	7.9 Performance Analysis	113
3.0 Design Proposal	31	8.0 Architecture Drawings	117
3.1 Project Vision	32	8.1 Project Statistics	118
3.2 Design Concept	33	8.2 Context Map	119
3.3 Site Plan Concept	34	8.3 Site Plans	120
3.4 Form of Development	36	8.4 Floor Plans	122
3.5 Organization of Program	38	8.5 Elevations	135
3.6 Lot 7 Transit Station	45	8.6 Sections	139
3.7 Landscape & Public Realm	51	8.7 FSR Overlays	143
		8.8 Shadow Studies	164



Aerial view of project looking North-East

Section 1.0

Introduction

Contents

1.1	Project Team	6
1.2	Project Proposal	7
1.3	Program Overview	8

1.1 Project Team



Co-Owner & Developer

PCI Developments is a privately owned Vancouver, B.C. based real estate developer & investor guided by core values of integrity, discipline, vision and innovation. PCI has invested in and/or developed over 6 million square feet of real estate, including some of Metro Vancouver's most prominent urban landmarks.

PCI is a notably experienced and skilled proponent of mixed-use and transit-oriented development that often works in partnership with institutional, public or private investors. For over three decades, PCI's commitment to their core values has yielded some of Metro Vancouver's most notable developments, often involving innovative solutions for highly complex sites.

Structural Engineer

Mechanical Engineer

Electrical Engineer

Transportation

Code Consultants

Civil Engineer

Geotechnical Engineer

Elevating Device Consultant

Waste management

Sustainability

Public Art

Indigenous Advisory



Co-Owner & Community Manager

Low Tide Properties is a private real estate investment, development, and management company founded in 2011 and headquartered in Vancouver.

Their approach to development is to think long-term and think about community. They are committed to growing, strengthening, and reviving neighborhoods to reach their full potential.

Low Tide acquires industrial, retail, office and multifamily residential properties and is committed to creating visionary spaces.

Glotman-Simpson Consulting Engineers

Introba

Smith + Andersen

Bunt & Associates Engineering

Jensen Hughes

InterCAD Services

GeoPacific Consultants

Gunn Consultants

Target Zero

Perkins&Will

Ballard Fine Art

Aubin Consulting

Perkins&Will

Architect

Since 1935, Perkins&Will have believed that design has the power to make the world a better, more beautiful place. At our Vancouver studio, a culture of collaboration fosters our creativity: we are one team with a common set of goals and values. The ideals of beauty, simplicity, functionality, and sustainability.



Landscape Architect

PFS Studio is a leading Canadian planning, urban design and landscape architecture firm offering consulting services nationally and internationally on a wide range of projects for both the public and private sectors. The firm has been in practice for over thirty years and is committed to innovation, technical advancement and cost effective design solutions to create memorable and engaging public spaces.

1.2 Project Proposal

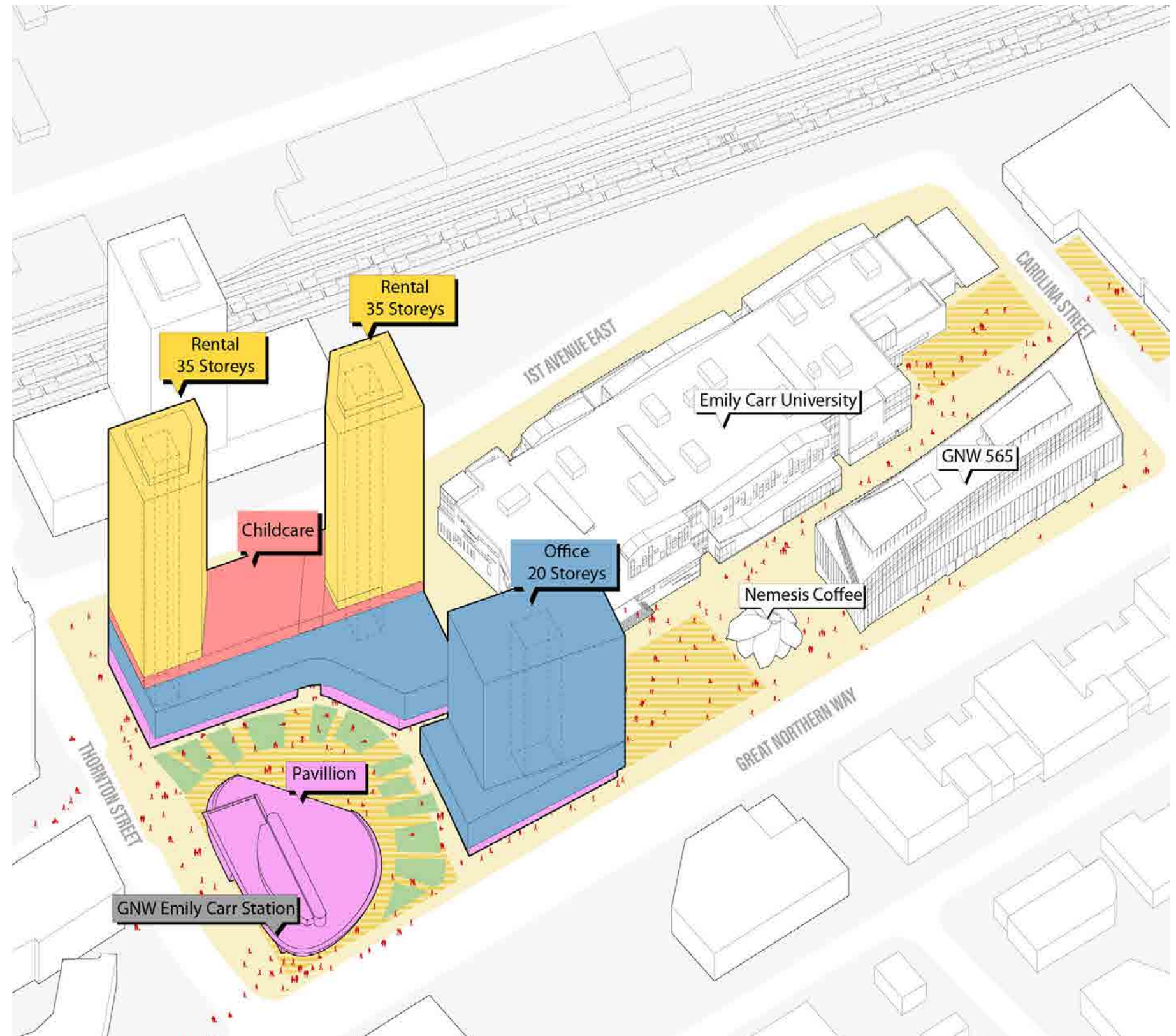
This document puts forward proposals from PCI Developments and Low Tide Properties for Lots 6, 7, and 8 of Lot Q on Great Northern Way. Designed by Perkins&Will with input from Bunt Engineering and PFS Studio, our team's vision builds on our award winning history in this evolving neighborhood. Our proposal encompasses three primary new buildings: providing approximately 877,427 sq.ft (81,515 sq.m) of mixed-use development, including space for commercial offices, ground-activating retail, and childcare.

In addition to commercial space, we are proposing approximately 433,178 sq.ft (40,243 sq.m) of new secured rental housing (including 20% at below market rental) and amenity.

PCI Developments has coordinated closely with the Province due to close integration with the new Great Northern Way - Emily Carr Station which is being constructed on the site as part of the Broadway Line. Organized around the new station, the project proposes an important new primary public open space for the benefit of the surrounding burgeoning community.

Finally, a host of secondary spaces - with new uses, active frontages, and public art, are envisioned to enliven and enrich the economic, cultural, and demographic cross-section of the urban realm within the False Creek Flats.

These new proposals tie several surrounding pieces of the Lot Q district together, forming the centerpiece of the Great Northern Way Campus and Creative District. Multi-use and walkable, our new proposals will contribute to the delivery of an active, productive, and populated city quarter; a place for people to live, to start new business, and to enjoy their city with spectacular views of the downtown core and connections to the rest of Vancouver.



1.3 Program Overview

1. Public Realm

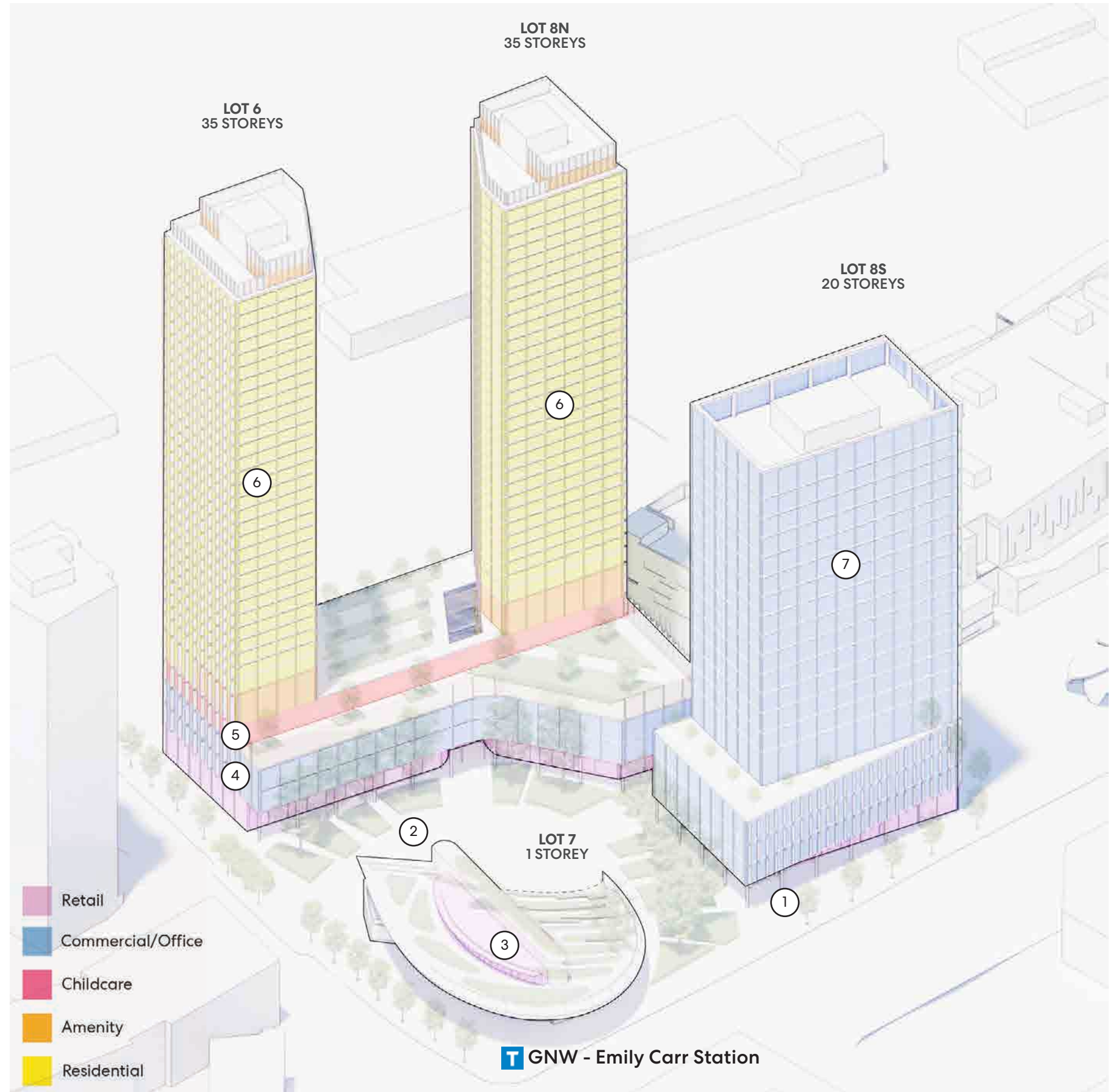
The project proposes the creation of a large at-grade public open space embraced by building forms that wrap around the north and east sides to create a sense of enclosure and place. The area of the public open space maintains the 0.49 hectare Open Space requirement previously located on Lot 6 as per the Lot Q Structure Plan (2002).

2. Active Ground Plane

At-grade, retail and a lobbies activate the base of each building further contributing to a dynamic and lively place. This supports the intent of the Broadway Plan for sites designated as 'Large and Unique Sites' to redevelop as denser, mixed use developments, creating hubs of round-the-clock vitality.

3. The Station Pavilion

Lot 7 offers a high-profile opportunity to integrate with transit at the site's south-west corner. The future Great Northern Way - Emily Carr Station will be a key transportation node within the community and as such draw the attention of large amounts of pedestrians. Integrated with this station, the proposed design of Lot 7 is intended to directly respond to the needs of the community and to create high quality indoor and outdoor spaces that add to the surrounding public realm. The proposal for the Station Pavilion aims to establish a valuable architectural landmark along Great Northern Way.



Program Overview**4. Commercial Base (Lots 6 & 8N)**

This proposal includes a shared commercial base between Lot 6 and Lot 8N that spans across the top of the guideway of the Broadway Subway line below. These larger podium floor plates can allow for a range of activities fostering innovation within and area designated within the Broadway Plan as the Creative District. The applicant is seeking general office classification to encourage flexibility in accommodating rapidly evolving innovation industry and education uses.

With a Podium Height of approximately 22 meters (72'2"), the 3 storeys above grade present the opportunity for commercial space while hosting the childcare indoor and outdoor space on the top. The average floor plate size is approximately 38,000 sq.ft (3,530 sq.m)

5. Childcare

Provision of childcare facilities is recommended for this site under the Broadway Plan (Sections 10.31.5, 16.11). The proposal provides approximately 94 spaces. The childcare is positioned atop the commercial base with contiguous outdoor play area on the roof.

6. Rental

Two residential towers sit above the commercial program on Lots 6 and 8N to deliver much needed housing with the opening of the new GNW-Emily Carr Station. These rental buildings, providing 100% secured rental accommodations with 20% of the units designated as below-market rental. Section 12.2.12 of the Broadway Plan allows for sites designated as 'Large and Unique Sites' to support additional height and density to support new housing choices.

A total of 548 Residential Units are proposed with 20% of units (110 units) as below-market rental units. A tower floor plate size of up to 7200 sq.ft (670 sq.m) with an overall building height of 35 storeys approximately 113 meters (371'1").

7. Office

Lot 8S includes a dedicated to office building to deliver a significant amount of new job space to the emerging Creative District. The proposed building is 20 storeys with a larger 3 level base that provides a massing relationship to adjacent Lot 6 and 8N as well as neighboring buildings 565 Great Northern Way and Emily Carr University.

Between the lower base and tower floors, Level 4 is dedicated to office amenity providing both indoor and outdoor terrace space. Lot 8S has a typical tower floor plate size of 13,200 sq.ft (1225 sq.m) with an overall building height of 93 meters (306'3").

8. Parking and Loading

The proposal is serviced by five levels of underground parkade, which is constrained and dissected by the provision of the Broadway Line Subway, GNW - Emily Carr Station, and sewer SRW. There is potential to connect through to the parkade adjacent on 565 Great Northern Way. These five levels provide bike and vehicular parking, loading bays, residential unit storage, mechanical and electrical services spaces and waste and recycling rooms. There is direct access from P1 to the subterranean cultural space on Lot 7. The project is supported by a comprehensive TDM Plan B aimed at maximizing the utility of sustainable transportation choices.

PAGE LEFT INTENTIONALLY BLANK

Section 2.0

Context

Contents

2.1	Indigenous Engagement	12
2.2	Regional Context	14
2.3	Urban Context	15
2.4	Historic Context	16
2.5	Current Context	17
2.6	Photos and Existing Streetscape	18
2.7	Site Elevations	20
2.8	Pedestrian and Cycling	22
2.9	Public Transportation	23
2.10	Public Amenities/Services	24
2.11	Zoning Districts	25
2.12	Broadway Plan	26
2.13	Precinct Visioning - GNW Charrette	27

2.1 Indigenous Engagement

PCI Developments have established an Indigenous Advisory Committee (IAC) led by Aubin Consulting to provide consultation and facilitation throughout the Indigenous Engagement process. This engagement will have a precinct wide focus, including both this site at GNW-Emily Carr Station and the site at Great Northern Way at VCC-Clark Station. Exploratory workshops and engagement sessions have taken place to introduce the vision for both projects to the Committee and discuss areas of opportunity for Indigenous Engagement. This includes but is not limited to opportunities with the public realm and landscape, the buildings, the development of the cultural ribbon as was conceptualized in the precinct charrette and overlap with the Public Art process. A submission will be made by the IAC to the City of Vancouver outlining the vision for Indigenous Engagement outside of the Rezoning process and the results of which will be folded into the design both in terms of overall philosophy and with specific interventions. This will form part of the subsequent Development Permit Application for each project.



VISION

South Flats celebrates the identities of the xʷməθkʷəy̓əm, Skwxwú7mesh, and səliłwətał Nations, weaving together our shared aspirations that advance Reconciliation.

GUIDING PRINCIPLES



Learning

Listening with intent while fostering space for co-learning and unlearning

Recognition

Making visible the culture, history, and identities of xʷməθkʷəy̓əm, Skwxwú7mes, and səliłwətał Nations

Relationships

Paddling together: Strengthening relationships through thoughtful processes

Chechénstway

Lifting each other up along this journey

Accountability

Using seven generation thinking to guide accountability



Mural by Lauren Brevner and James Harry (Squamish Nation Member)

SĪNULHĶAY

(TWO-HEADED SERPENT)

A two-headed serpent named SĪnulhĶay casts fear over the land. The Chief tasked his young warrior son, Xwechtāal, with slaying the supernatural beast. Guided by ancient teachings, Xwechtāal undergoes a dangerous journey, overcoming the serpent's powers through bathing in cold water and brushing himself with hemlock boughs to strengthen his body and mind.

For four years, Xwechtāal pursued the serpent until it retreated into a lake. In dreams, a mysterious woman instructs him to build a raft and fashion spears from special trees. With determination, Xwechtāal confronts the serpent, successfully defeating it by striking both heads.

In a final dream, the woman reveals the importance of a special bone from the serpent. Upon obtaining it, Xwechtāal gains incredible powers. Returning to his village, he uses the magical bone to heal and transform his people. Xwechtāal's bravery and resilience became a legendary tale, being passed down from generation to generation.

Art by Cory Douglas (Squamish Nation Member)



SKWACHAYS

(DEEP HOLE REPRESENTING A PORTAL INTO THE SPIRIT REALM)

"To the eastern side of False Creek is Skwachays, which literally means deep hole, but this represents a portal into the spirit realm. There's a few areas we know as portals. There's a story of a hunter here from Señákw who paddled down to harpoon a seal but it disappeared into the deep hole. The hunter then found the carcass of the seal up at Deer Lake in Burnaby, which then indicated this aquifer was ground-fed. But we also talked about it as going through and reappearing in different spiritual realms. So, it becomes a very sacred site."

Chief Ian Campbell, Squamish Nation

2.2 Regional Context

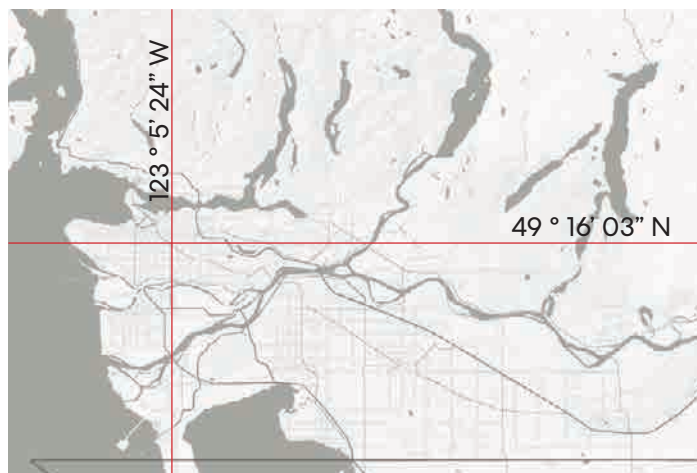
Located on the southern edge of the Flats, the Creative Campus is well-served by transit. Already home to two stations, serving both the Expo and Millennium lines, this area will see another station built as part of an extension of the Millennium Line along Broadway.

The area is centrally located within an emerging cluster of the innovation economy stretching down Main Street from Railtown in the north to Mount Pleasant in the south, with the sub-area anchored by the emerging institutional campus at Great Northern Way.

This campus includes the Emily Carr University of Art + Design (ECUAD, opened 2017) as well as the Centre for Digital Media (CDM, opened 2012), a Master degree program jointly offered by the four institutions at Great Northern Way: ECUAD, the University of British Columbia (UBC), Simon Fraser University (SFU) and the British Columbia Institute of Technology (BCIT).

Drawn to the industrial character and emerging campus, a number of art galleries have recently relocated to the area joining a long-standing cluster of automotive repair and service businesses. Other recent arrivals include a new campus for Columbia College and a large brewery for Red Truck Beer.

- False Creek Flats Plan (2017)

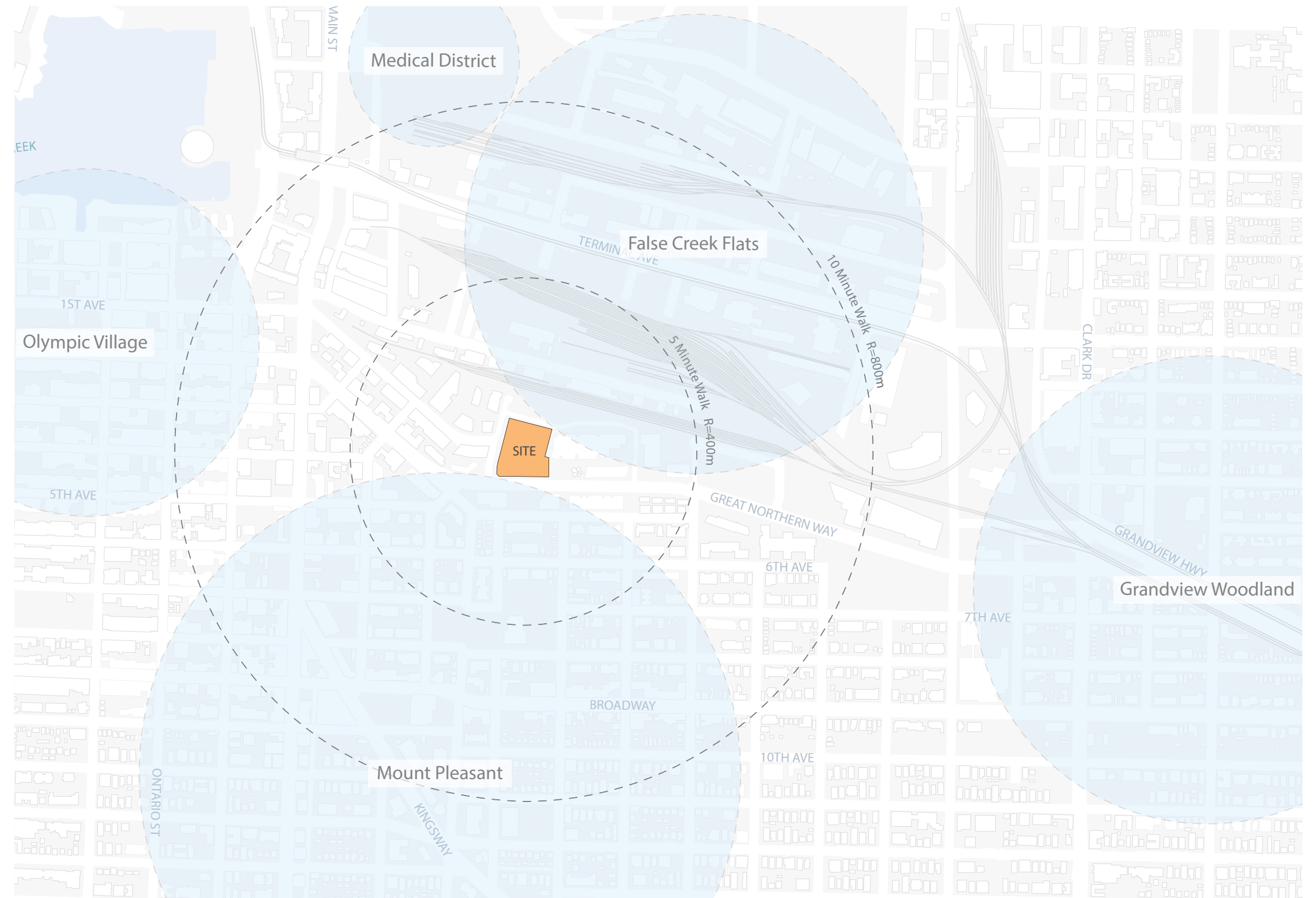


The project is located within the unceded homelands of the x^wməθk^wəyəm (Musqueam), Sk̓wx̓wú7mesh (Squamish), and səliłwətał (Tsleil-Waututh) (MST) Nations.



2.3 Urban Context

The site is located at the interface between the residential Mount Pleasant neighborhood to the south and the industrial False Creek Flats area to the north. With the railyard to the immediate north of the site, permeability to the northern neighborhood is limited and connectivity with the southern residential neighborhood is increased. Northern connections may be improved in the future with the potential redevelopment of railyards.



2.4 Historic Context

Approximately 8000 years ago, groups of First Nations began harvesting salmon in the Fraser Canyon, and for 3000 years they utilized the resources of the future Vancouver area. Three Salishan groups have overlapping claims to the Vancouver area as a traditional territory; the Squamish, the Tsleil-Waututh and the Musqueam. (Vancouver Historic Society.) The first recorded encounter between First Nations and Europeans was from ships by the Spanish and English in 1791 and 1792 respectively. The modern city of was founded on these traditional territories and the City of Vancouver recognizes that these territories were never ceded through treaty, war or surrendered.

The site and project is on the land traditionally known as Skwachays, now occupied by Great Northern Way and the Creative District. Sitting at the base of Mount Pleasant on the edge of the larger False Creek Flats area, the site is a drained tidal flat that has been used as railyards for much of Vancouver's history.

By 1886 Vancouver was incorporated as a City, and in 1887 the transcontinental railway reached Vancouver.

Following the great fire in Vancouver in 1886, settlement increased on the south shore of False Creek.

By the 1920's False Creek had become the industrial hub for Vancouver, home to sawmills, shingle plants, shipyards, and manufacturing.

Decades of logging and development transformed the landscape of the south shore of False Creek. Streams once traveled near the site on St. George St. and Brunswick St.



Vancouver's Old Streams
1978 - Sharon Proctor



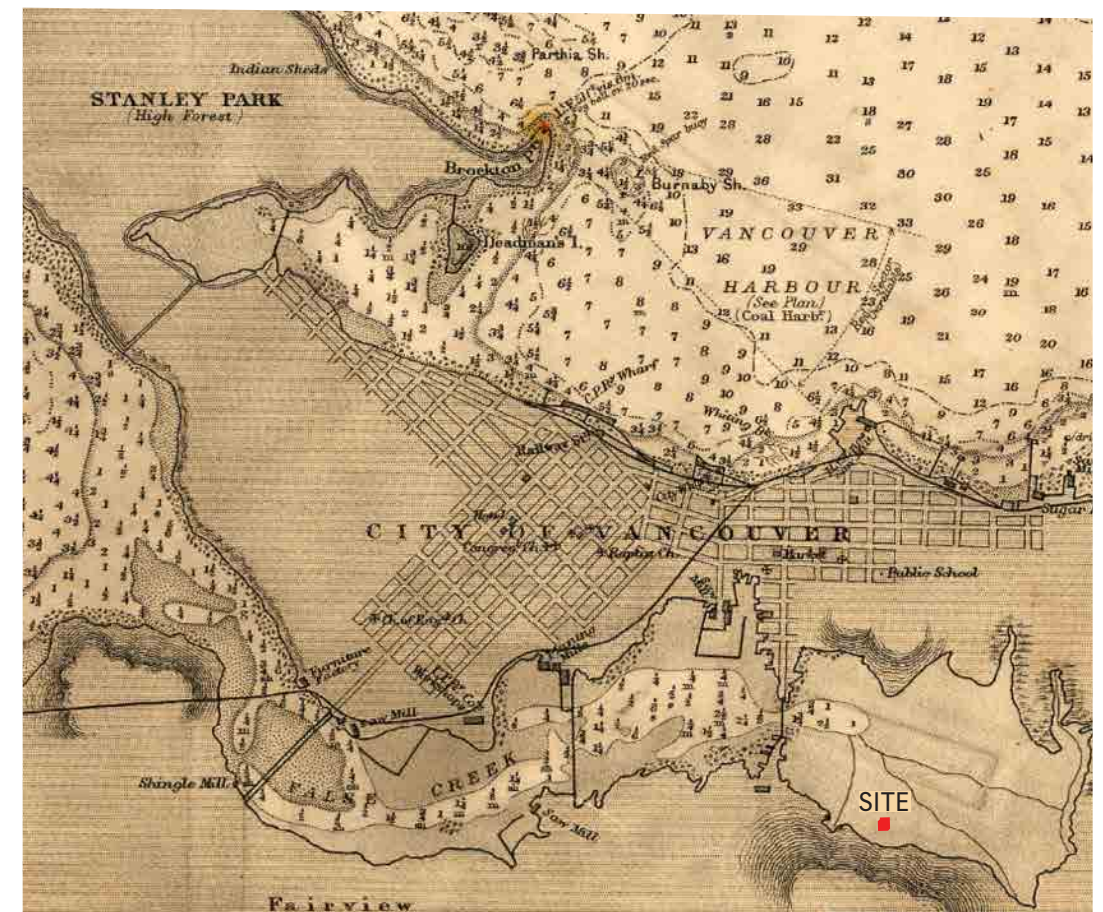
Fairview looking west across False Creek
1890 - Vancouver Archives



Freight Sheds on False Creek Flats
1919 - Matthews, Vancouver Archives



Goad's Plan, 1912



Burrard Inlet Admiralty Chart, 1893

2.5 Current Context

In 2001, the industrial distributor Finning International donated 7.5 hectares (19 acres) of former industrial land in the False Creek flats area of Vancouver to the Great Northern Way Campus Trust (GNWC) formed by the four academic partner institutions (the University of British Columbia, Simon Fraser University, Emily Carr University of Art and Design and the British Columbia Institute of Technology). The goal of this trust is “to cover the costs of future educational programs and buildings at the False Creek flats with revenues generated by private sector development.” The Vancouver Sun (Nov 17, 2001)

GNWC built a new Centre for Digital Media building on the east side of the property. The building includes teaching facilities, office space, meeting and event spaces and 76 student housing units. It opened in September 2012.

In 2017, The Emily Carr University of Art + Design moved into a newly built, state-of-the-art campus at Great Northern Way.

In 2018, 565 Great Northern Way (built by PCI/Low Tide) opened, immediately leased with a diverse offering of technological and office tenants supportive of the Flats economies and the adjacent educational institutions.

In 2021, Nemesis Great Northern Way (built by PCI/Low Tide) was opened, offering a much-needed destination cafe/restaurant in an award-winning pavilion in the central plaza.



Emily Carr University, Diamond Schmitt, c. 2017



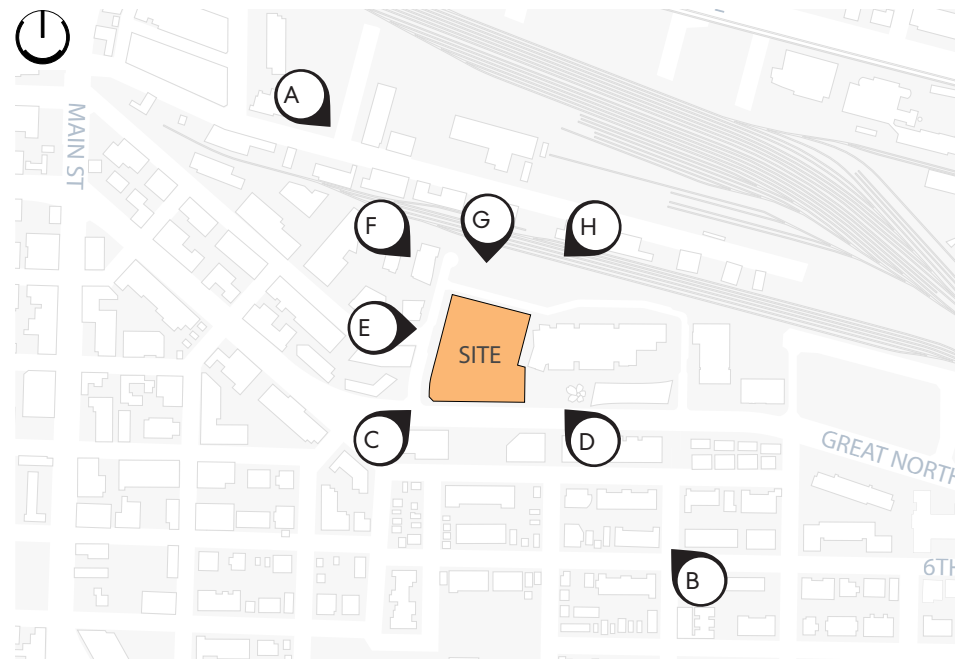
555/565 GNW and Pavilion

2.6 Photos and Existing Streetscape

The site's front lot line along Great Northern Way is elevated relative to the rear and separated from the busy arterial by the Central Valley Greenway bicycle route. The site is surrounded on two sides by new development. To the east, the new Emily Carr University Campus, and to the West, new multi-storey residential.



A. View toward site from the north west



Streetscape Photo Key Plan



B. View from Great Northern Way looking north

Photos and Existing Streetscape



C. View from Great Northern Way looking north-east



E. View from Thornton St looking east



G. View from E 1st Ave looking south



D. View from Great Northern Way looking north-west



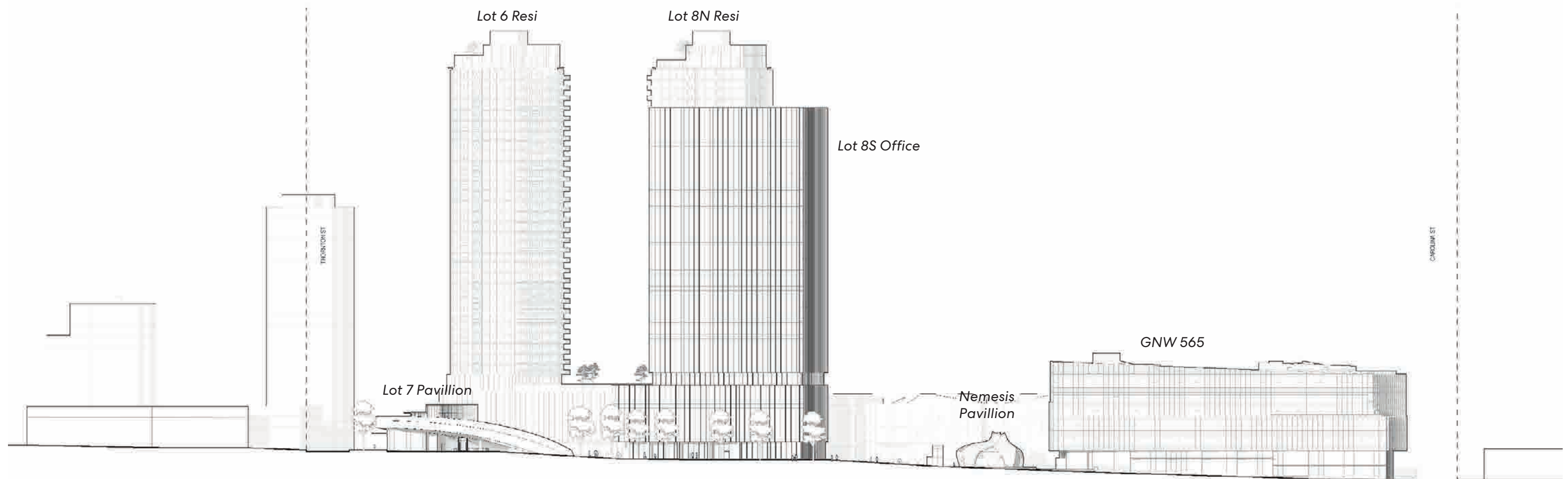
F. View from Thornton St looking east south-east



H. View from E 1st Ave looking south-west

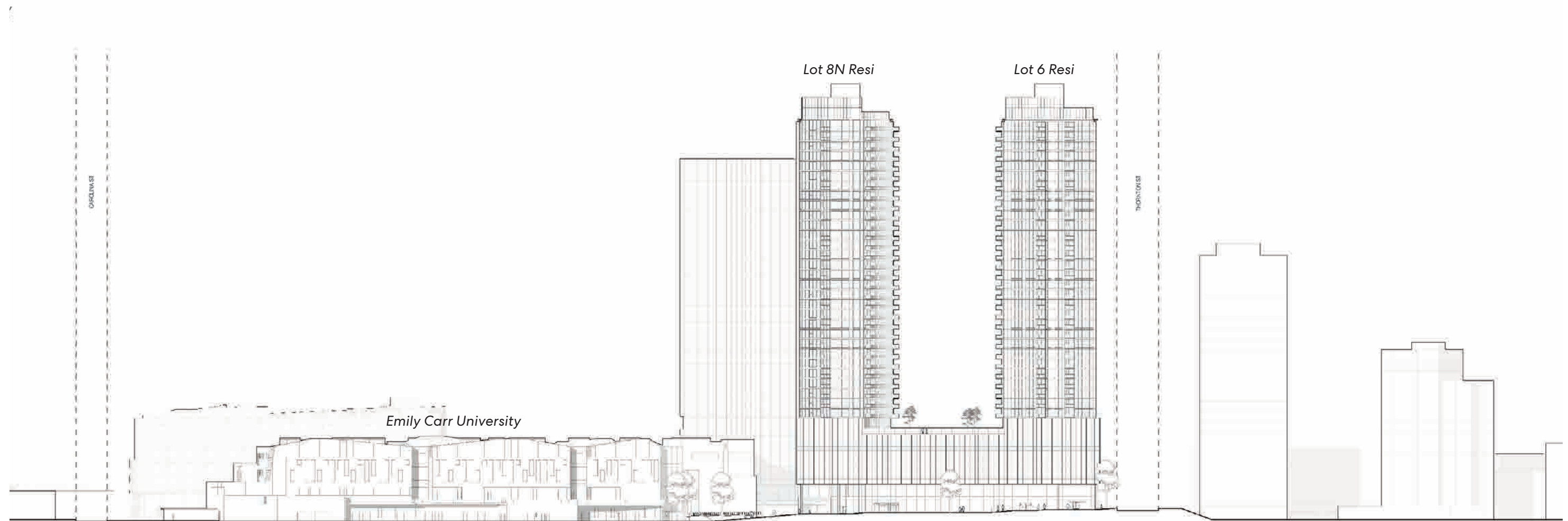
2.7 Site Elevations

The site is bound by Great Northern Way to the south, GNW Campus to the east, E 1st Ave to the North, and Thornton St. to the West. To the south, grades increase significantly. To the north, the flats accommodate current and former industrial uses. Great Northern Way slopes significantly from west to east as illustrated in the development of 565 Great Northern Way.



North Site Elevation: Great Northern Way

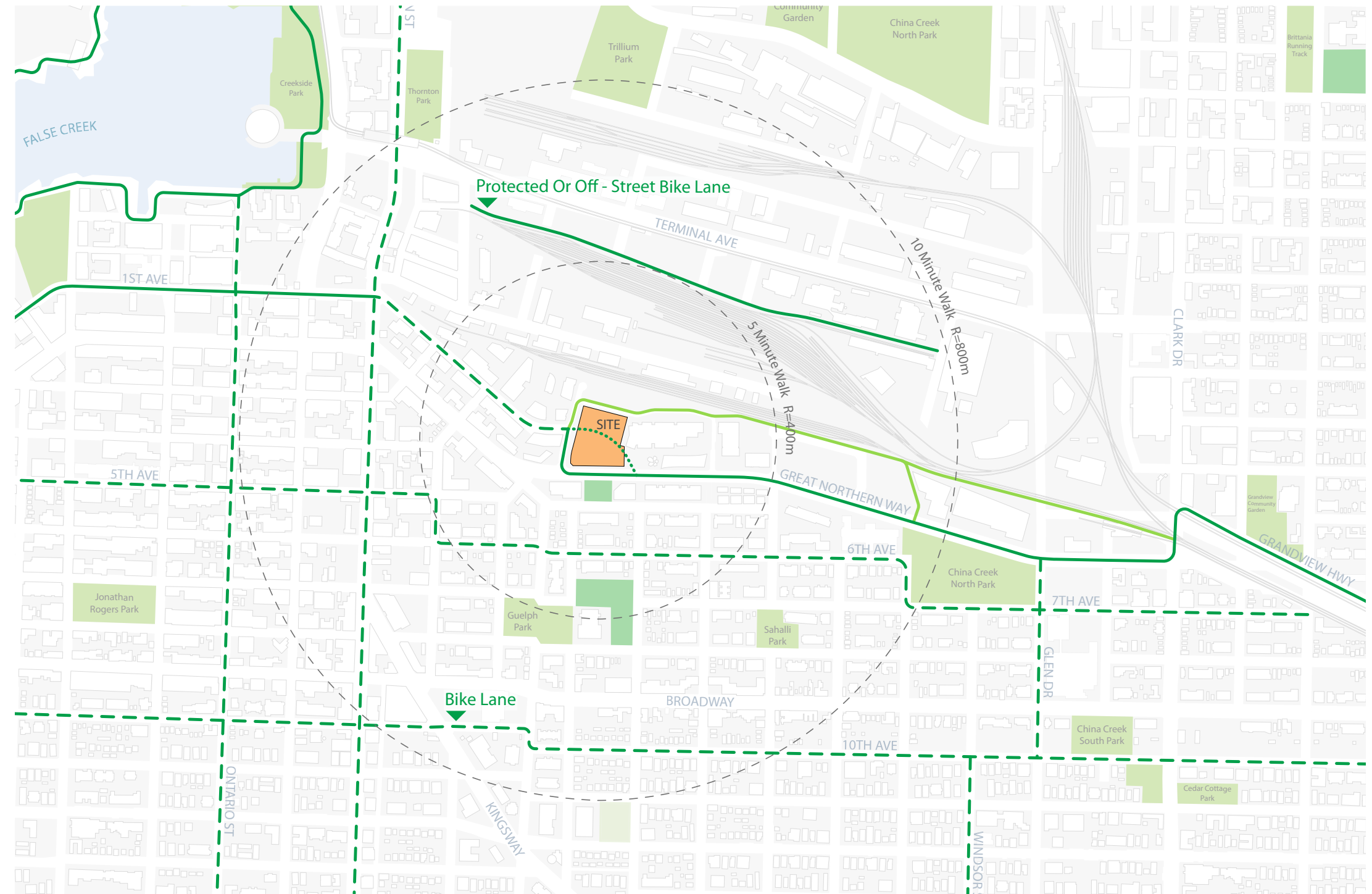
Site Elevations



South Site Elevation: East 1st Ave

2.8 Pedestrian and Cycling

The 24km long Central Valley Greenway runs along Great Northern Way and the internal pedestrian spine. It is a major component of Metro Vancouver's active transportation network and provides connections between downtown Vancouver and eastern neighborhoods all the way to Burnaby and New Westminster. One of the key design elements for developing the site is relocation of Central Valley Greenway from running through middle of the campus and integrate this vital route with public space and transit station within the site boundary.



- Site
- Walking Radius
- Current Bike lane Cross The Site
- Application Proposed Bike lane
- Protected Bike lane
- On-Street Bike lane

2.9 Public Transportation

The site is well connected to major transportation networks in the city.

The development shares a site with the future GNW-EC station of the Broadway Subway. Once completed, this station will dramatically increase the site's prominence and connectivity to the greater region.

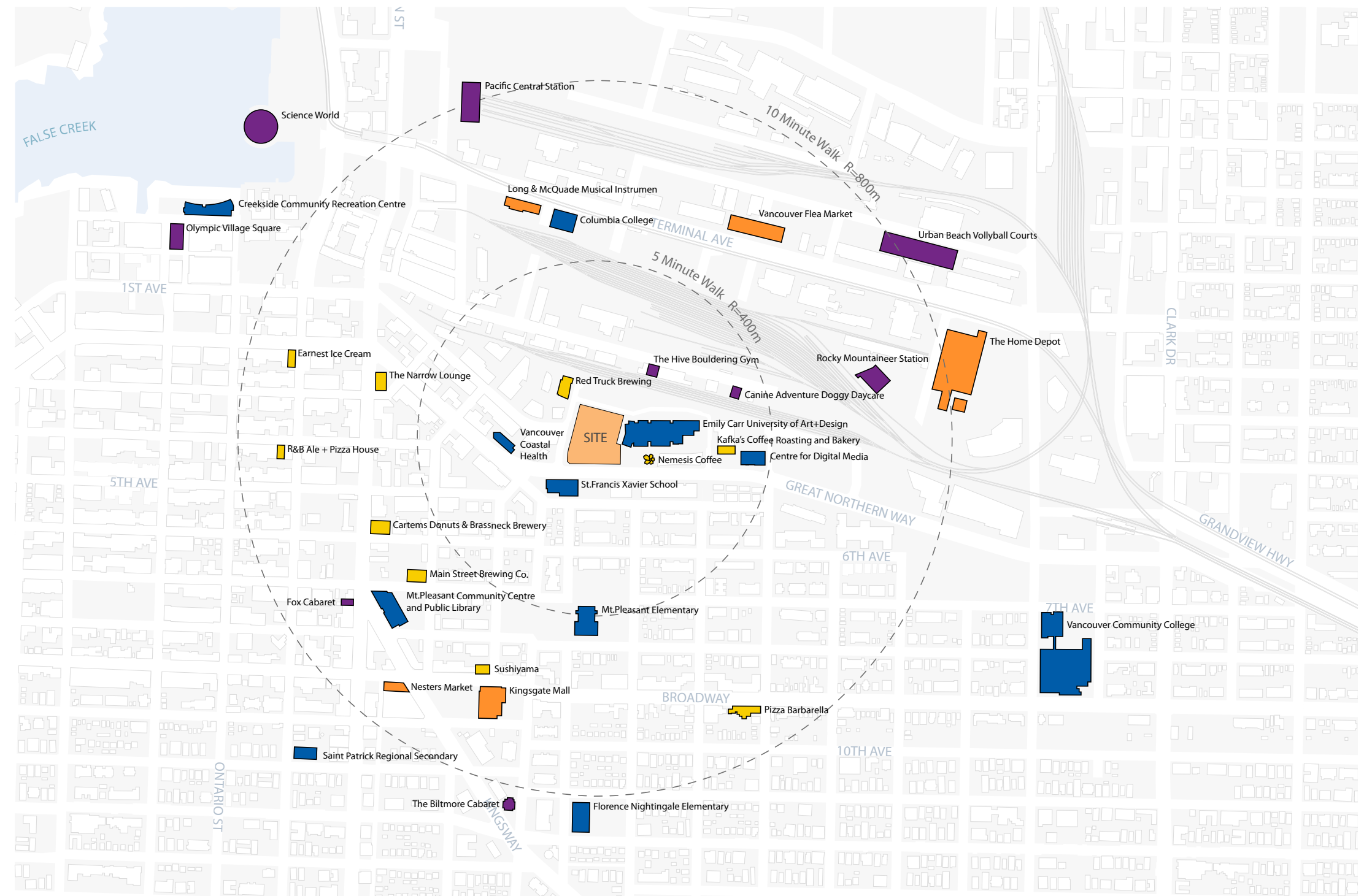
Great Northern Way, along the site's southern edge, is a major east-west arterial road, connecting East Vancouver to downtown.

- Site
- Bus Route
- SkyTrain Route Expo Line
- SkyTrain Route Millennium Line
- Future Broadway Subway
- Future Skytrain Station
- Expo Line Skytrain Station
- Millennium Line Skytrain Station
- 5 Minutes Walk Radius



2.10 Public Amenities/Services

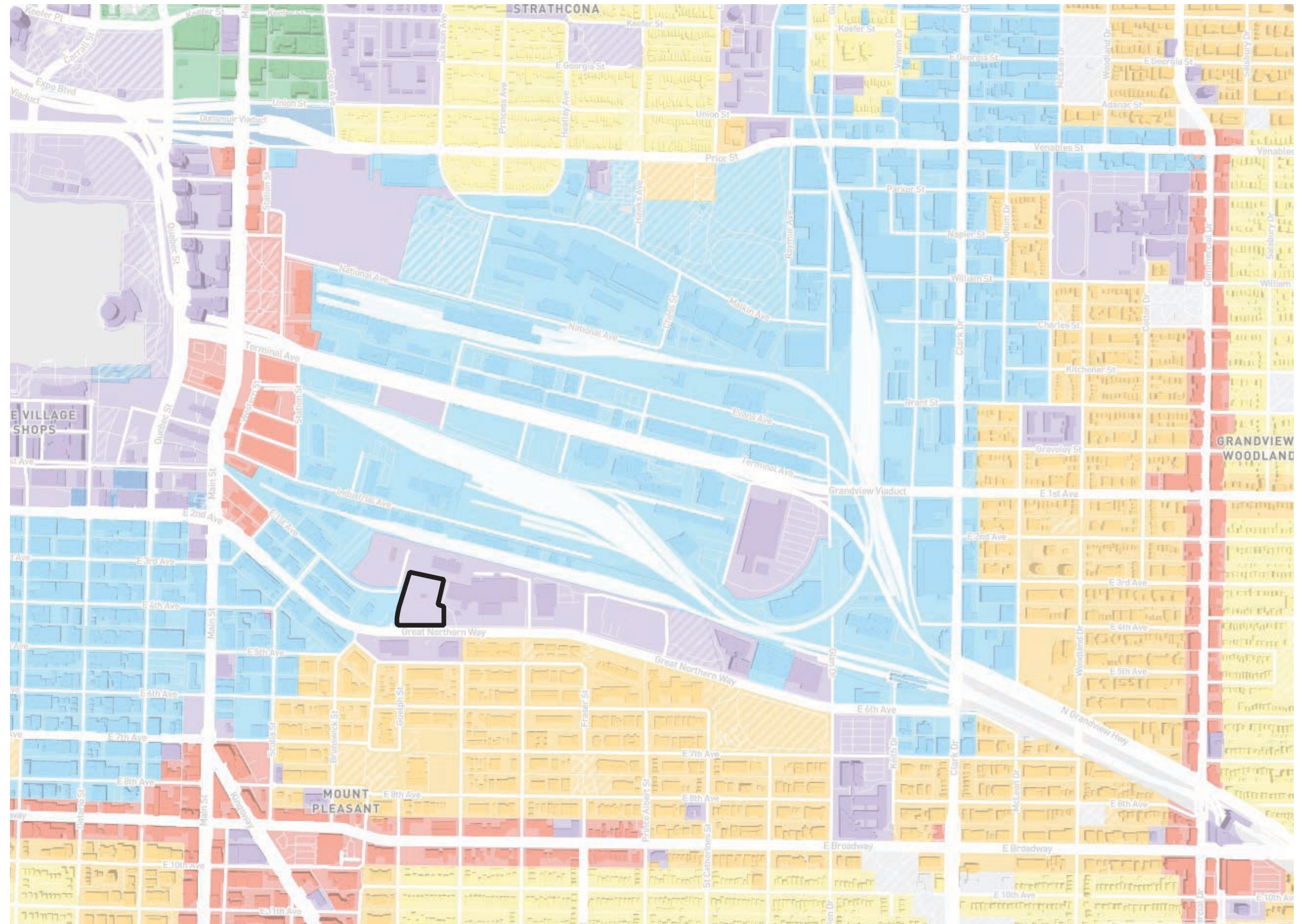
The Site's location on the rapidly developing Great Northern Way campus places it at the heart of a flourishing neighborhood hub with access to all the associated amenities and services that go along with that position. The adjacent Mt. Pleasant community is a cultural leader in Vancouver. Home to many of the cities most celebrated restaurants, breweries, and entertainment venues.



- Site
- Public Amenities
- Food
- Retail
- Service / Venue

2.11 Zoning Districts

The site is in a CD-1 zoning district, acting as a buffer between residential and industrial land uses. This Comprehensive Development has both site-specific zoning regulations and site-specific guidelines.



- Site (CD-1,402)
- Comprehensive Development
- Commercial
- Light Industrial
- Multi-family Dwelling
- Historical Area

2.12 Broadway Plan

The site falls within the boundary of the Broadway Plan and is categorized as one of the 'Centres - Station Areas'. In terms of land use policy, the site is located in Mount Pleasant neighborhood within the Creative District and is also identified as one of the Large and Unique Sites.

Centers: The Station Areas encourage a mix of uses including high density housing, work space, as well as shops, service amenities and public spaces, with building heights generally of 30-40 storeys.

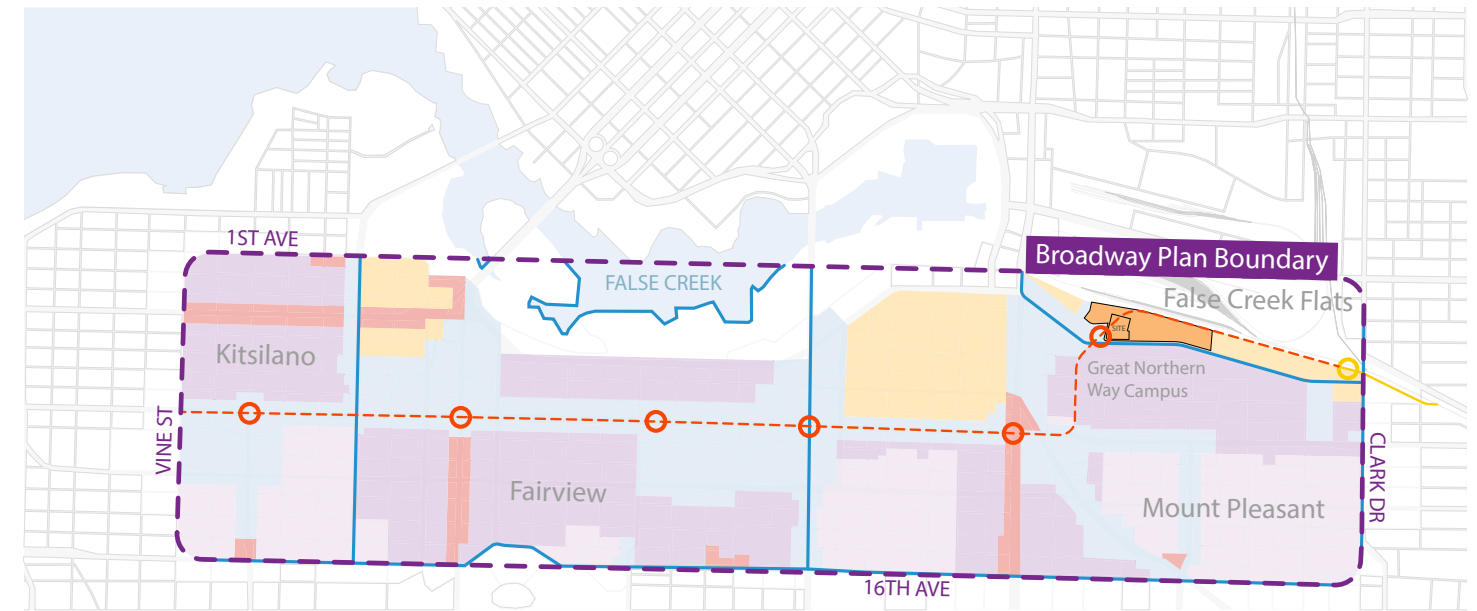
Mount Pleasant Neighborhood is an eclectic and diverse neighborhood that has a mix of industrial lands, cherished local shops and services, a strong arts and culture presence, and some of the city's most affordable rental housing stock. The Broadway Plan policies for Mount Pleasant seek to retain and strengthen these unique places while integrating new housing and job space.

Large and Unique Sites provide significant opportunities to deliver on multiple plan objectives including diverse and affordable housing, job space, community-serving facilities and institutions, public amenities, and new shops and services – contributing towards more complete neighborhoods.

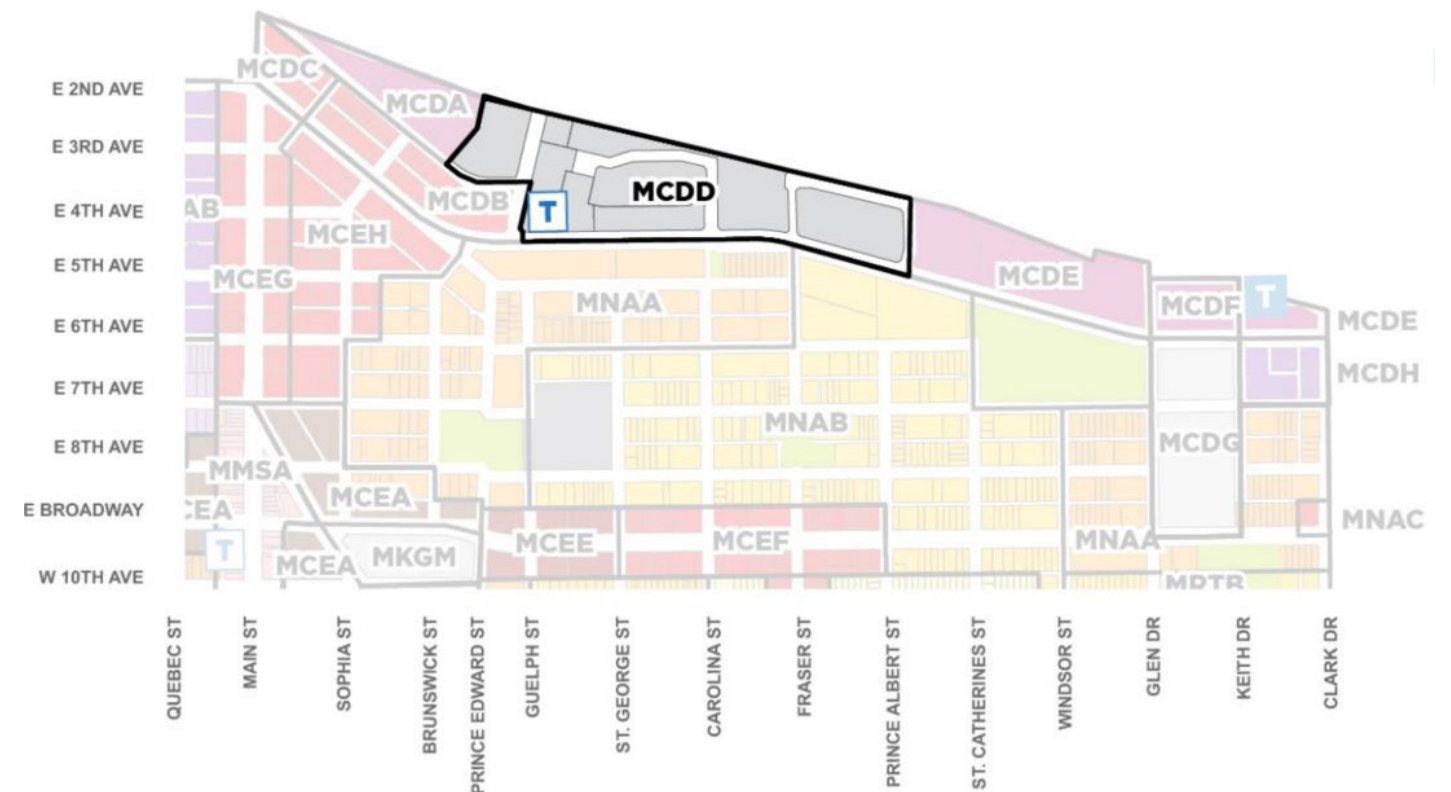
Creative District: The Broadway Plan strengthens the Creative District as a walkable mixed-use area that is vibrant during the day and evening hours, which helps attract and retain employees to the area.

The site is located within the boundary of MCDD which aims to support the long term expansion of the Great Northern Way Campus with a broader range of uses

The proposed development is compliant with the spirit of Broadway Plan and its policy framework for the Creative District.



Extent of Broadway Plan Area and the Site Location within the Plan



Extent of Large and Unique Site boundary within Creative District

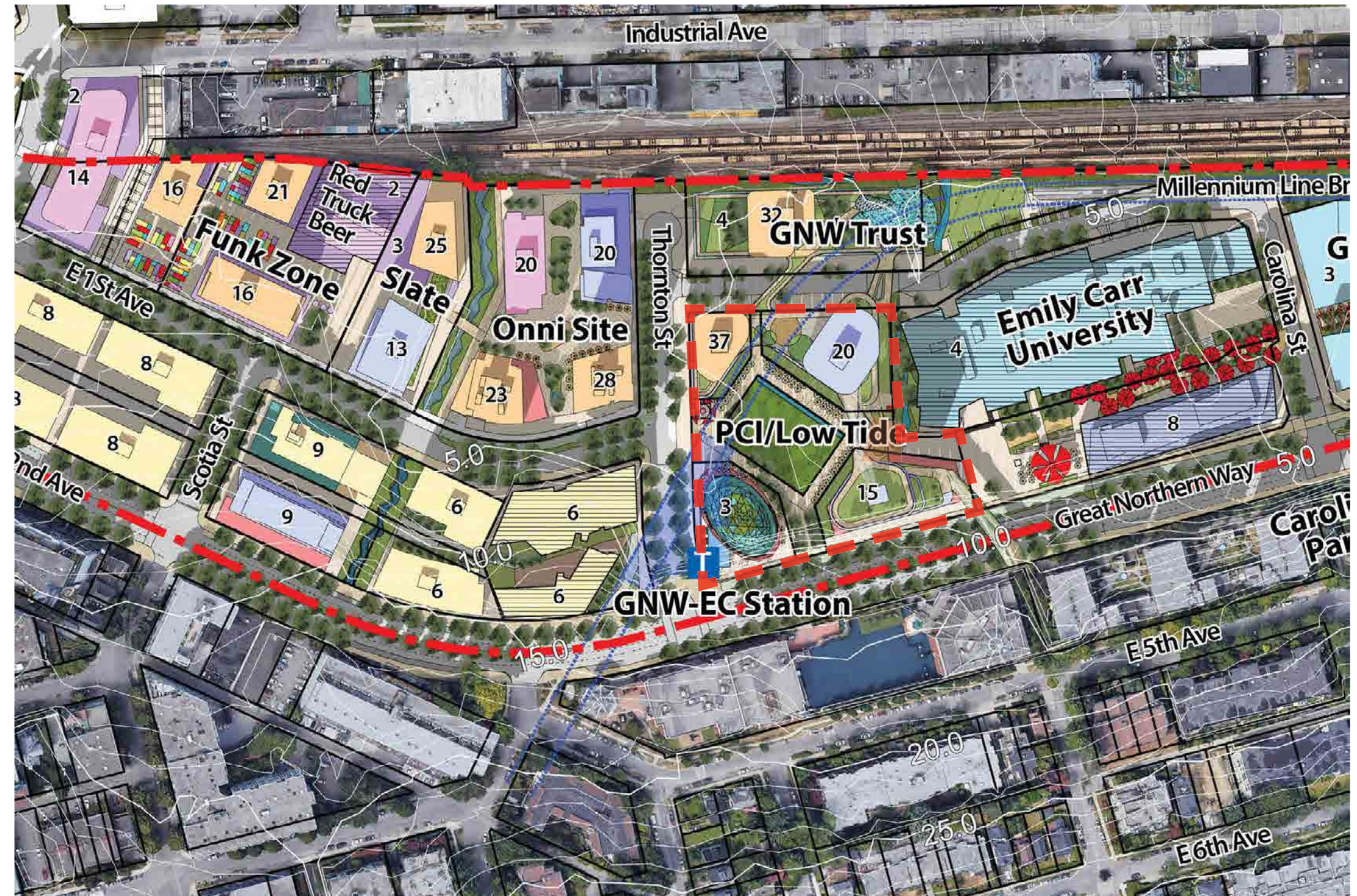


2.13 Precinct Visioning - GNW Charrette

PCI and Low Tide Properties hosted two charrettes to assess and advance the planning efforts in the Creative District of the False Creek Flats on October 27th and 28th and November 29th and 30th of 2021. The first two-day charrette included City of Vancouver staff and stakeholders from the vast majority of properties and regulators in the District. The second two-day charrette focused on PCI/Low Tide Properties owned lands in the District.

The work contained within this document has been informed by these charrettes and largely in compliance within their directions including distribution of height and density, employment, residential areas, ground-plane activation through retail, open space, public art and pedestrian and cycling routes.

Emerging from the charrette is the development of a district-wide “Cultural Ribbon”, as a meandering walkway that connect spaces for public gathering and art with a strong connection to Coast Salish culture.



- LEGEND**
- - - Creative District Boundary
 - Retail
 - Office
 - Light Industrial
 - Institutional
 - Hotel
 - Residential
 - Amenity
 - Loading & Parking
 - Existing Buildings
 - T SkyTrain Station
 - - - Millennium Line Broadway Extension
 - Underground Station Area

The Illustrative Master Plan Highlighting the Vision for the Creative District.

2.13.1 Lot Q Structure Plan (CD-1 402)

The site consists of the three western lots of the main Great Northern Way campus, Lot 6, 7, 8N and 8S. These lots play a crucial role in connecting and integrating the campus into the surrounding neighborhoods and community.

The site is part of the Great Northern Way Campus (also known as Lot Q or Campus Lands) with site specific comprehensive development zoning in place. Existing zoning for the site is CD-1 (402) approved by Council in 1999. This zoning is accompanied by an illustrative Structure Plan (revised 2014) offering guidance on site planning elements and configuration while allowing room for design flexibility. The proposal contained herein builds on the framework of the Structure Plan and is reflective of ongoing discussions with the City of Vancouver, Broadway Subway Project and GNW Trust as to the configuration of the development to facilitate the station construction and integration.

Lot Q Structure Plan (CD-1402)



Proposed Property Lines for Lot 6,7,8N,8S

PAGE LEFT INTENTIONALLY BLANK

PAGE LEFT INTENTIONALLY BLANK

Section 3.0

Design Proposal

Contents

3.1	Project Vision	32
3.2	Design Concept	33
3.3	Site Plan Concept	34
3.4	Form of Development	36
3.5	Organization of Program	38
3.6	Lot 7 Transit Station	45
3.7	Landscape & Public Realm	51

3.1 Project Vision

This new creative node will be a vibrant, mixed-use development that seamlessly integrates active ground-level retail, office workspace, and residential homes at the heart of an emerging creative district. As a dynamic transit-oriented hub, this project will inspire creativity, collaboration, and community.



Community Nexus & Public Realm

Create a welcoming and inclusive community at the heart of the project to foster deep social interaction through a vibrant and memorable public realm that inspires curiosity and creates a district story.

Enliven the public realm with a fine-grained landscape, active and transparent building edges, and connections through and across the site to tie into the wider neighbourhood emblematic of a 24-hour mixed-use district.



Evolve Workspace & Housing

Establish a new benchmark for workspace at the centre of an emerging Creative District that responds to the evolving needs for productivity, innovation, and well-being.

Complemented with new purpose-built rental housing to provide opportunities to live and work within the same community.



Concept Aerial View

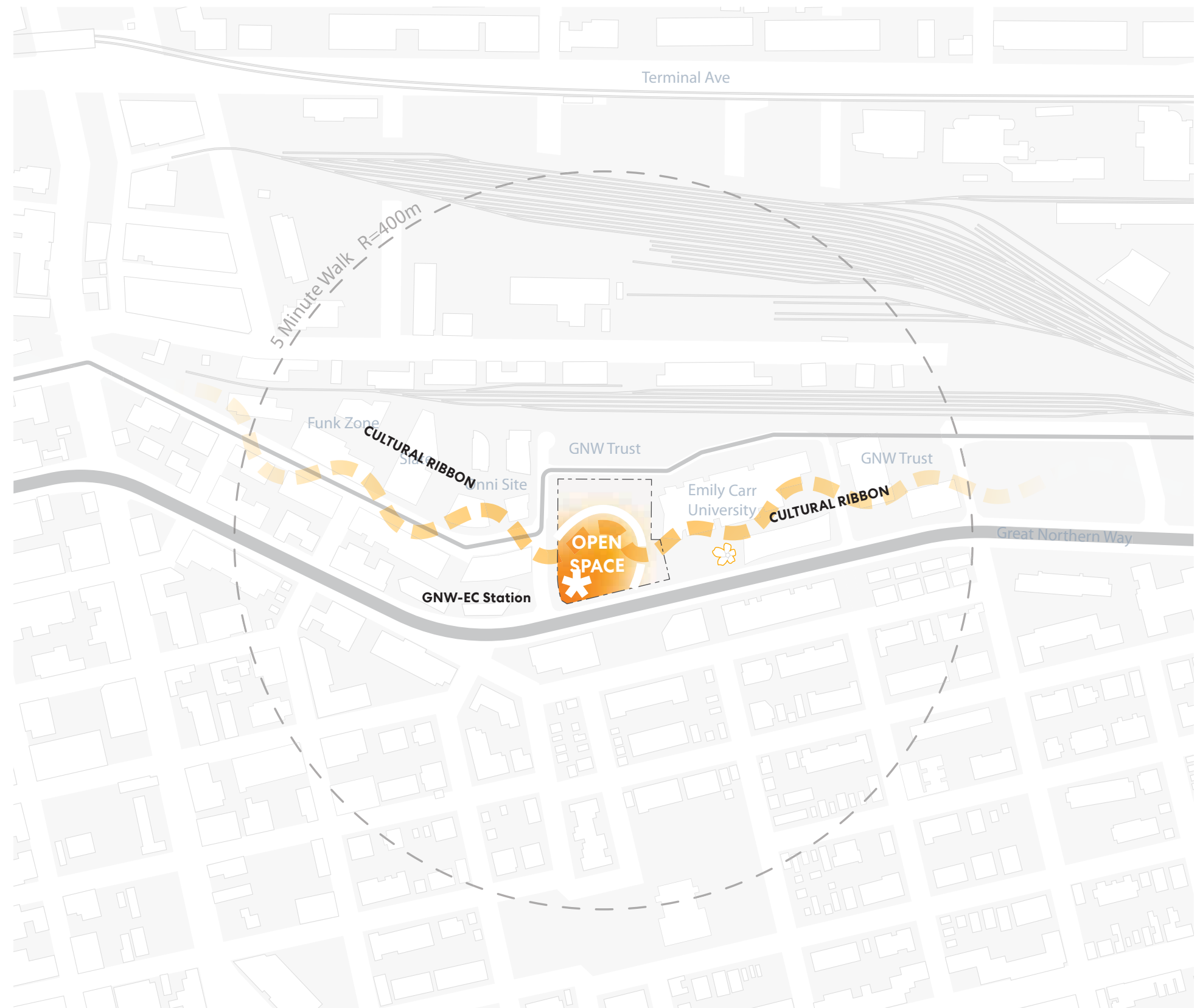
3.2 Design Concept

Heart of the Creative District

The Great Northern Way Campus (Lot Q) is a unique space in the city. It is a large site without any bisecting streets surrounded by industrial uses to the north and residential housing to the south. Its development into a diverse campus combining education institutions, commercial work space, and supportive amenities presents the opportunity to create a new neighborhood focused on the connection of people and integration of arts & culture to create a locally authentic sense of place.

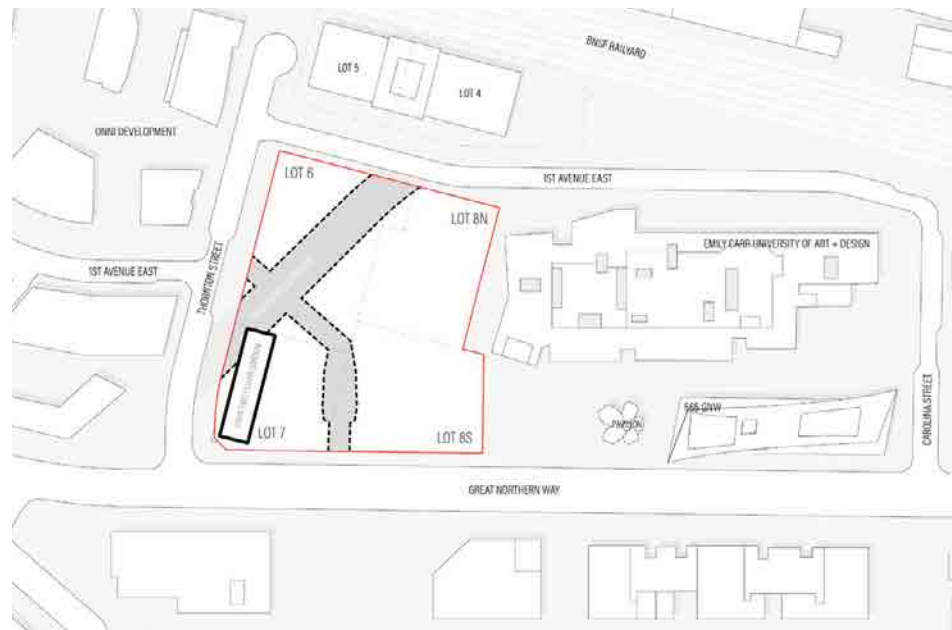
Influenced by the Broadway Plan, GNW Charrette visioning workshops and ongoing coordination with the Province, the site plan has been conceptualized to prioritize a large, contiguous central open space at the heart of Lots 6-8. This configuration creates a framework for a vibrant 24h mixed-use development integrated with the future GNW-EC Station and meaningful public realm that is activated by ground level program and reinforced through responsive building form that, together, create a distinctive identity for this unique site.

The ambition for a District-wide “Cultural Ribbon” is envisioned to be woven through the new public gathering space to provide a highly visible gateway and important node along the length of this emerging pedestrian link.



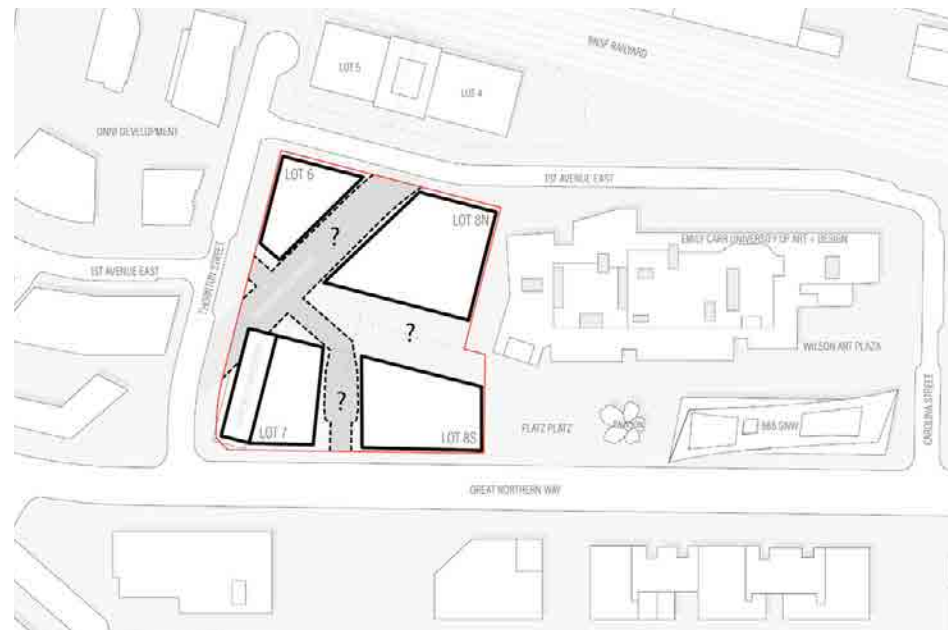
Site Concept Sketch
A new Open Space Node at the Heart of the Creative District

3.3 Site Plan Concept



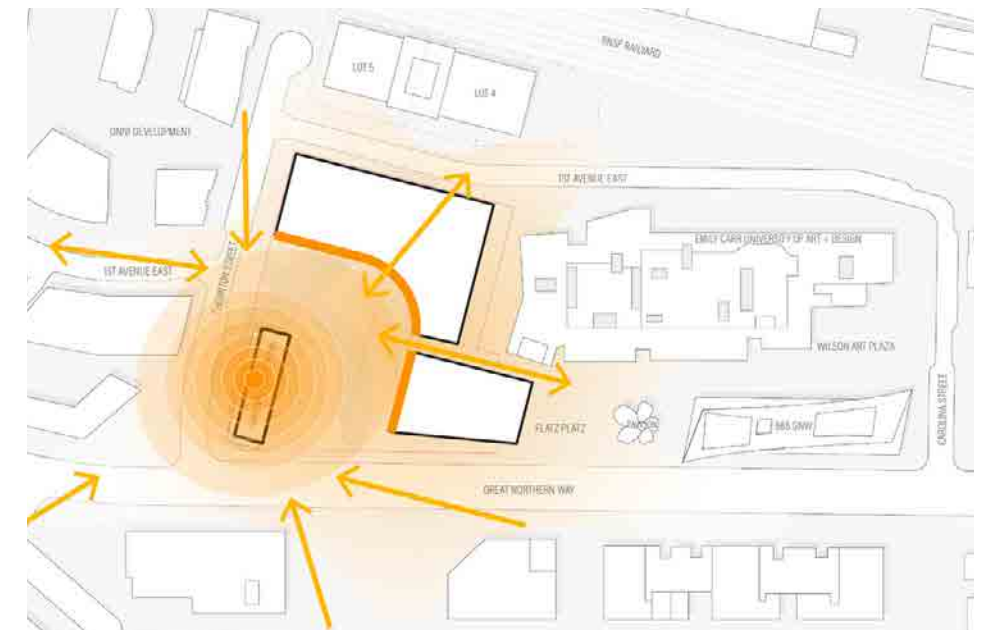
Site Conditions & Constraints

The project consists of four development sites: Lot 6, 7, 8S, 8N. Significant underground SRWs bisect the site for a storm sewer and the Broadway Subway guideway and station. The future GNW-ECU station head house sits at the southwest corner of Lot 7.



Developable Footprint & Open Area

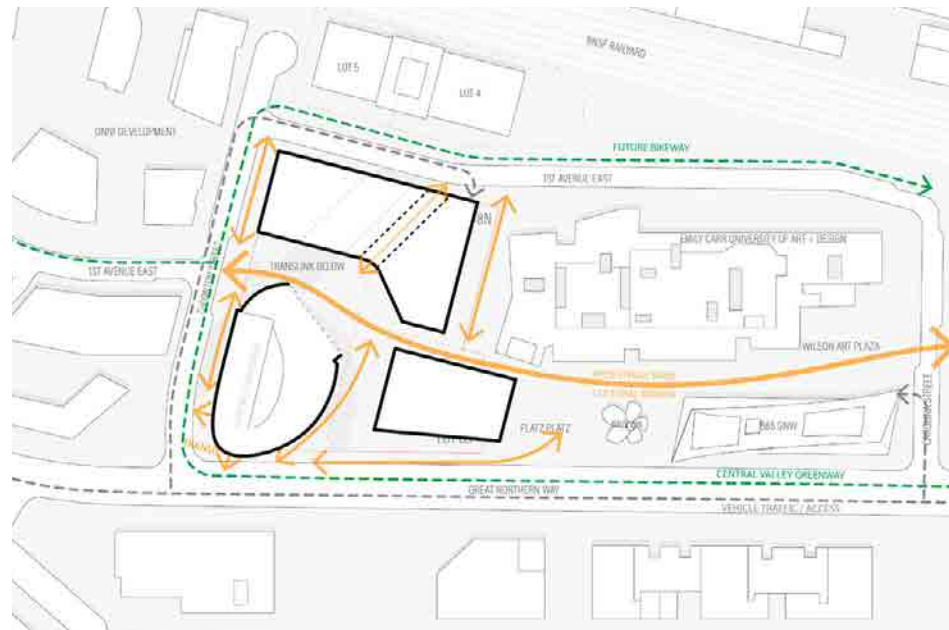
The resulting developable footprints from the site constraints create a fragmented site plan without a clear hierarchy of public space or building form. This would precipitate an undefined public realm and open space.



New Open Space & Focal Point

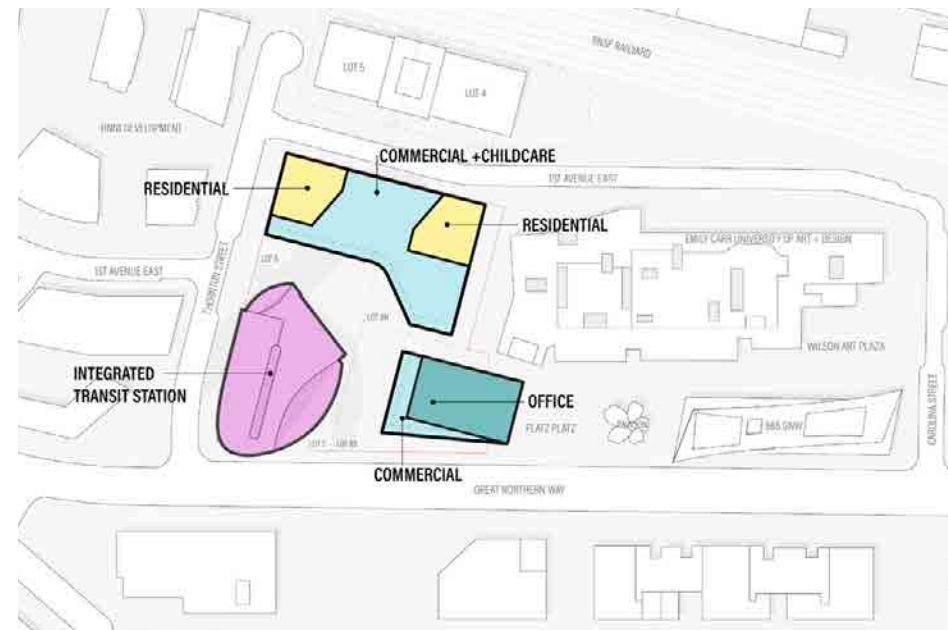
Acknowledging this site as an important node within the Creative District, a large public open space is established at the centre. Serving as both a gateway and place of gathering, this new public open space recognizes the transit and potential overbuild as an important focal point for the site and neighborhood.

Site Plan Concept



Connection & Porosity

Connecting the site into the larger district through an extension of the pedestrian spine running east-west and facilitating future pedestrian flows to and from the Station. Finer-grain porosity is provided north-south from GNW to E 1st Ave. Additional response to bicycle movements on surrounding CVG network and key vehicular access points.



Building Form & Program

The creation of a large at-grade public gathering space is embraced by building forms that wrap around the north and east sides to create a sense of enclosure and place. At-grade retail activates the base of each building, with a high-profile opportunity to integrate with transit at the site's south-west corner.



Public Realm & Landscape

A comprehensive landscape strategy ties the new public space into the surrounding campus and neighborhood, creating a hierarchy of spaces for public gathering and outdoor enjoyment. The largest of these spaces anchors the site and the wider district as a marker of transit and ambitions for broad social activity and engagement.

3.4 Form of Development

3.4.1 Height and Massing

The form of development embraces the circular open space at the heart of the development with a dynamic family of forms that provides containment at the streetscape and a recognizable skyline silhouette.

Lot 7

At the corner of Great Northern Way and Thornton St, the under construction GNW-EC Station is being built as part of the Broadway Subway Project. Working with the Province, the rectangular station headhouse will be integrated as part of a recognizable landmark pavilion that extends the public realm up and above the new station while creating a new flexible spaces for a destination program below. The low height of the pavilion helps maximize solar access to the plaza and provides an accessible roof deck with outlook.

Lots 6 and 8N

The north side of the site includes a four storey commercial base with residential towers above rising to 35 storeys as per the Broadway Plan. Both towers include floorplates up to 7200 sq.ft (670 sq.m) with chamfered inner faces in response to the subway guideway that runs at an angle below the site. At grade the same angle is registered as a seam between the two towers providing an internal atrium with access to elevators for the commercial base and a spacious market hall. A childcare facility is located on Level 4 with the indoor program under the towers and outdoor area on adjacent roof deck.

Lot 8S

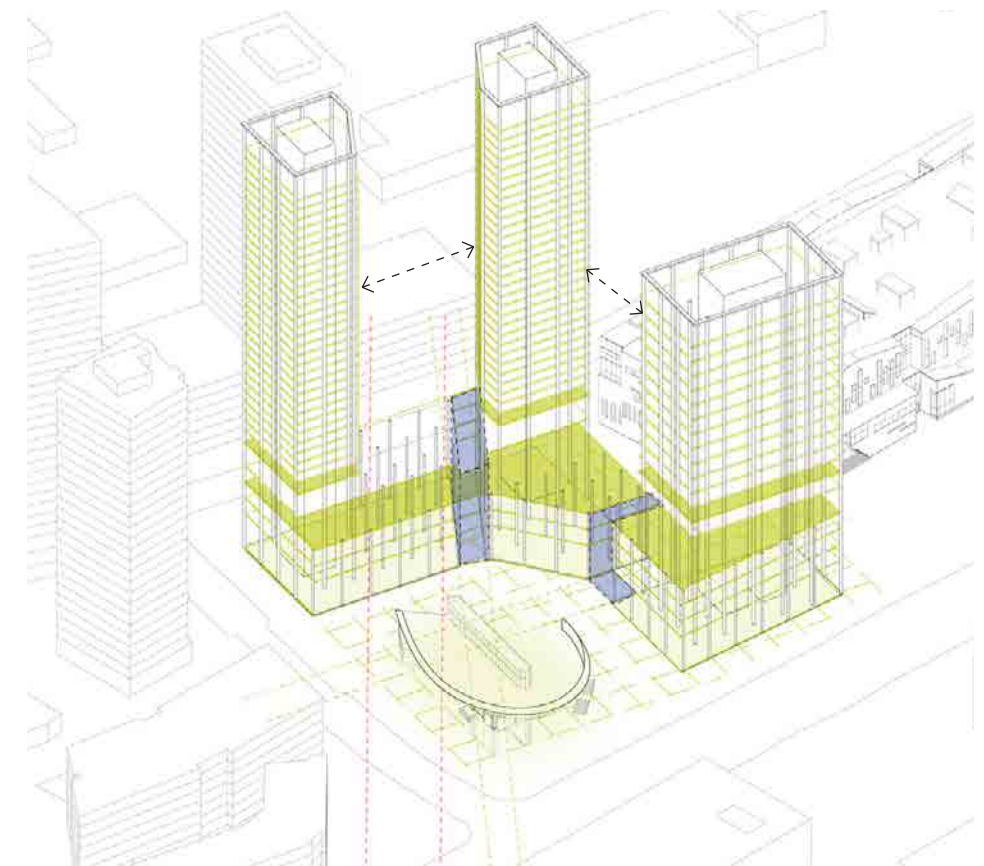
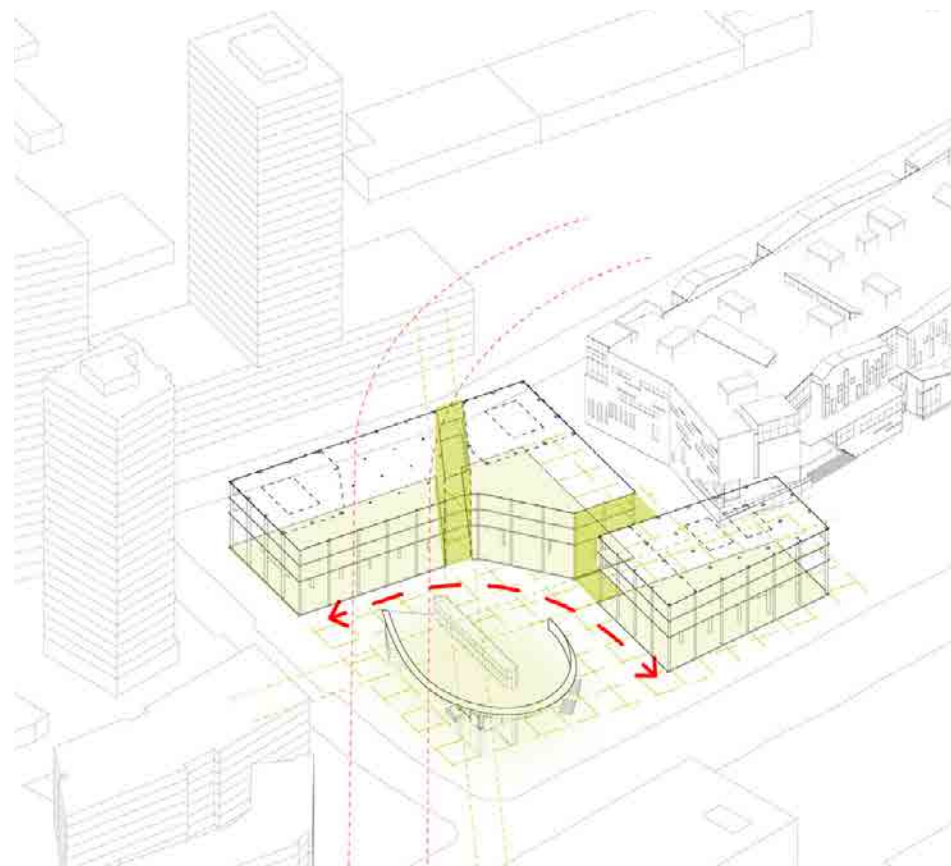
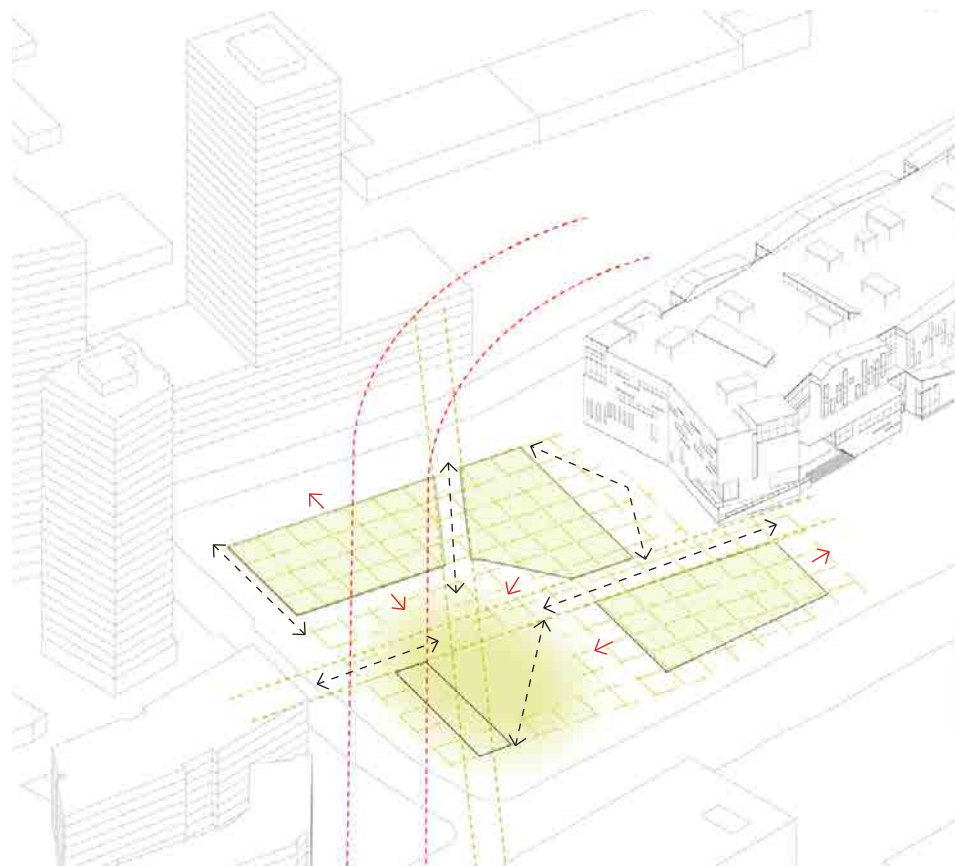
On the south side of the site and fronting GNW is a large-plate office building rising to 20 storeys. The ground floor has been opened up to provide a transparent and active connection between the new plaza and adjacent existing plaza to the east. Level 4 hosts office amenity with a generous outdoor terrace with the floors above pulled back from Great Northern Way to reduce tower massing and open up to the south.



Aerial view looking to project and downtown from southeast

3.4.2 Architectural Expression

--- Transit Line
 --- Pedestrian Connection



Site Constraints and Connections

Building footprints are shaped by a host of site constraints and oriented to create a new public space at the heart of the development. A network of fine-grained pedestrian connections traverse the site to connect out to the wider creative district.

Embrace the Public Realm

With a primary focus on the public realm, three building forms wrap around and embrace a generous and unique public space and centre. The first floor of each building is setback to provide an expanded outdoor area and covered circulation zone protected from the elements. A curvilinear sloped roof plane draws the open space up and over the station serving as a gateway to the district.

Creative Framework

Set back from the public open space above the commercial base, three towers continue the rational grid to provide flexible office and residential floor plates. The towers are positioned to maximize tower separation with further articulation to negotiate the subway guideway and provide views past. Altogether, this ensemble of buildings provides the campus with a legible and recognizable identity.

3.5 Organization of Program

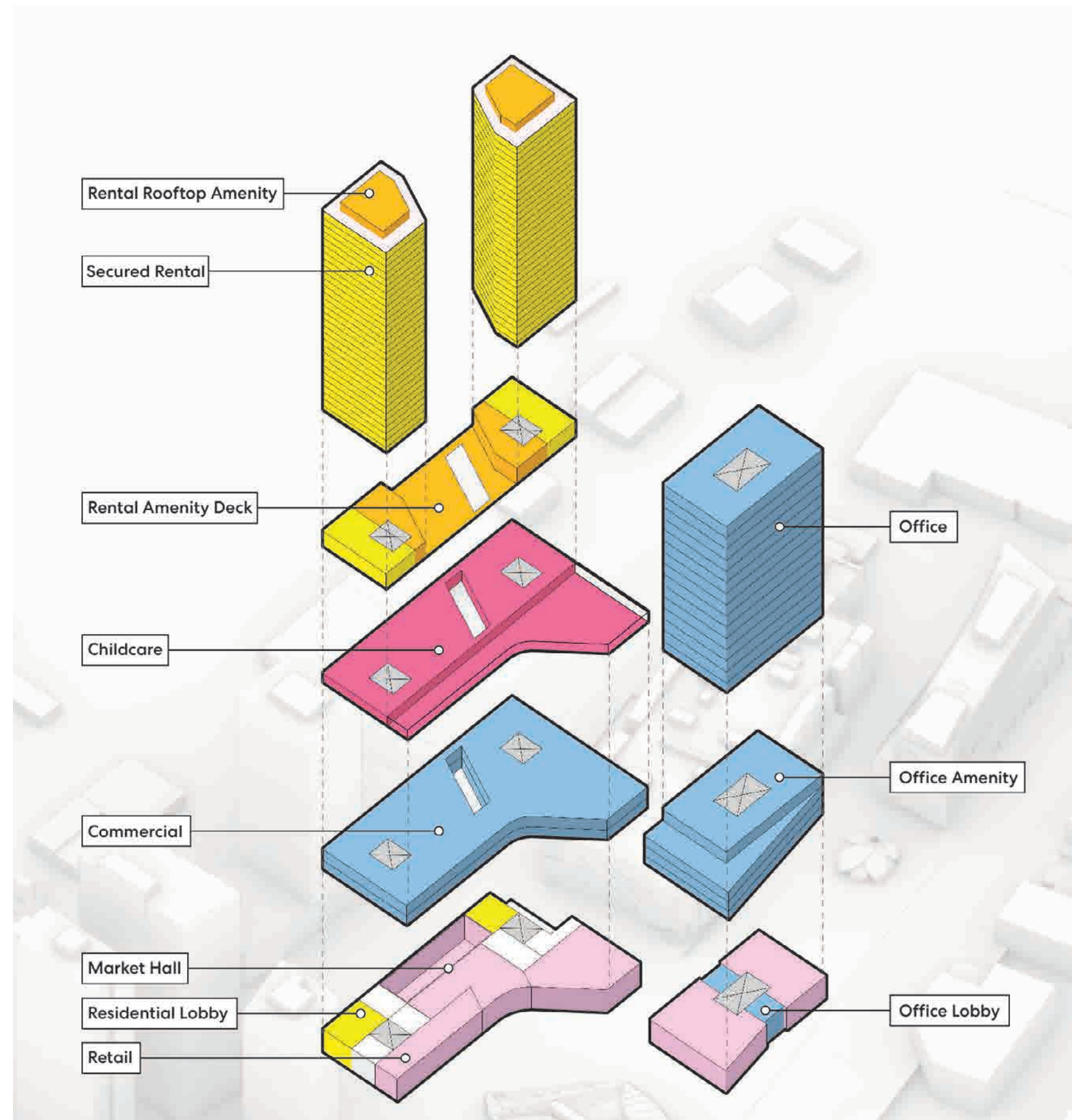
3.5.1 Program Breakout

Lot 6 & 8N

Commercial base with retail and market hall at grade and childcare with adjacent outdoor playspace on Level 4. Located above are two residential towers with associated amenities located on lower and rooftop levels.

Lot 8S

Office tower with retail at grade and office amenity with an outdoor terrace at Level 5.



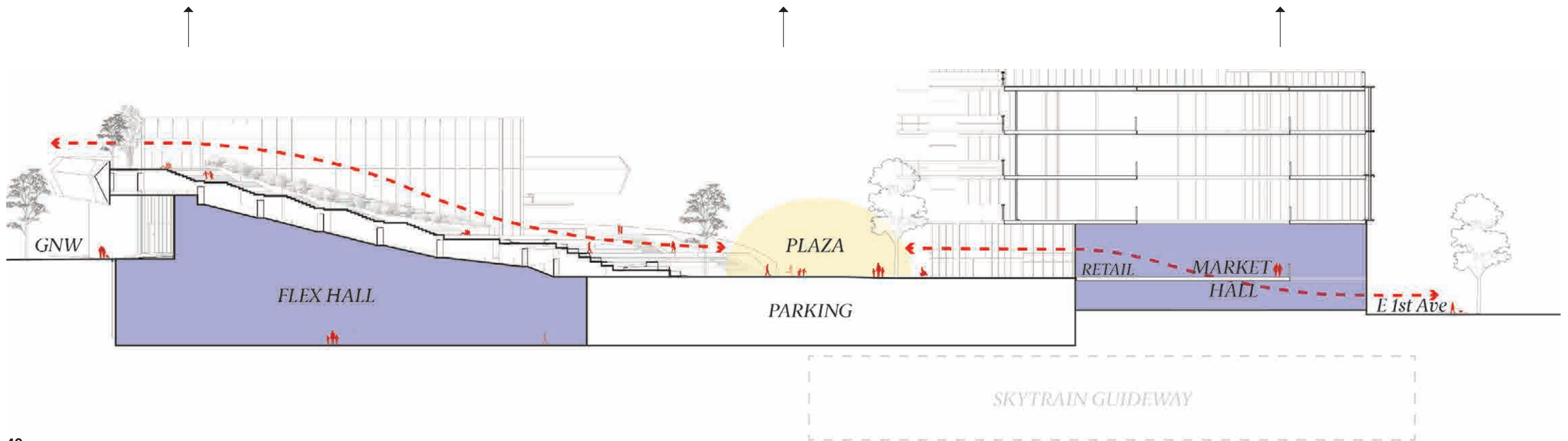
3.5.2 Active Ground Plane

The ground floor of all buildings are envisaged as an extension of the public realm and surrounding sites. In addition to accommodating the lobbies for the residential, childcare and office programs, opportunities for retail are integrated at key moments to activate the surrounding streets and public realm including both the new public open space and existing St. George's Plaza.

At the centre of Lots 6 / 8N, the Market Hall serves as an important connection point between the Plaza and East 1st Ave, negotiating a change in grade to welcome people from both sides. The Market Hall is intended to provide an important indoor space offering a mix of food-related amenities as a social gathering space.

The Lot 7 Transit Station Pavilion is a key component of the overall groundplane and is covered in more detail in Section 3.6





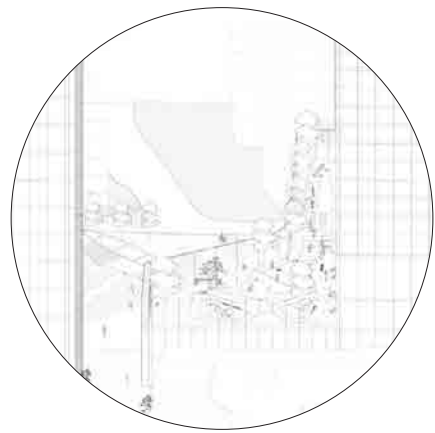
3.5.3 Childcare

A large childcare facility is located on Level 04 of the podium of Lot 6 & 8N with adjacent outdoor children's play area. The outdoor area faces the plaza, receiving significant solar exposure while creating a strong connection to the public realm below.

Area	ft ²	m ²
Indoor Activity Area	8342	775
Indoor Support Area	4779	444
Outdoor Area	12099	1124

Unit	Age	Spaces
A	0 to 3	12
B	0 to 3	12
C	Preschool	20
D	3 to 5	25
E	3 to 5	25
Estimated Total		94

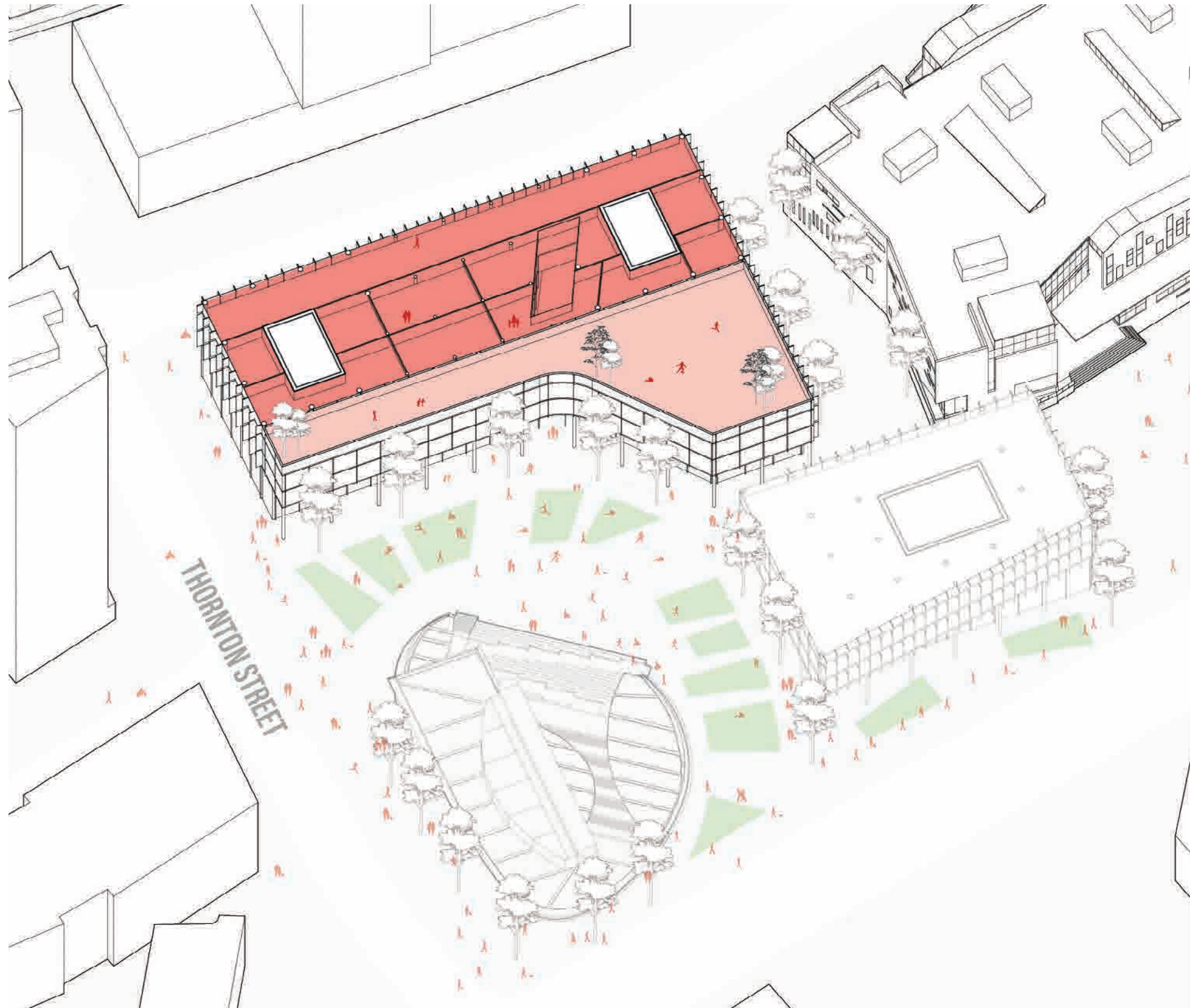
Age	%
0 to 3	26 %
Preschool	21 %
3 to 5	53 %



Perspective view of outdoor childcare overlooking Lot 7 pavilion



Aerial view of outdoor childcare



3.5.4 Amenity

Amenities are provided throughout the project, starting with residential and office amenity at Level 5 of Lot 6, 8N, and 8S with adjacent outdoor space on the top of the podiums. Similarly to the childcare, the outdoor amenity receives significant solar exposure, with prominent views and a connection to the public realm below. The outdoor and indoor amenity will host a series of programs including urban agriculture beds

Additional indoor and outdoor amenity exists on the rooftops of both residential towers boasting 360 views of Vancouver and allows the proposal to exceed city required indoor and outdoor amenity areas.

Approximate Total Indoor Residential Amenity Area per Tower:

5000 sq.ft (465 sq.m) (1.7m²/unit)

Approximate Total Outdoor Residential Amenity Area per Tower:

6190 sq.ft (575 sq.m) (2.1m²/unit)

Aerial view of residential tower rooftop amenity



Lot 6



Lot 8N



Aerial view of residential podium amenity with urban agriculture beds



3.5.5 Residential

Lot 6 and 8N hosts two 35-storey purpose-built rental towers. This pair of towers share a similar typical floor plate up to 7200 sq.ft (670 sq.m) that has been designed in response to site constraints, family housing mix, and unit sizes to deliver over 500 new homes. All family units will have a balcony meeting the minimum dimensions of 1.8m deep by 2.7m wide.

Perspective view of preliminary balcony integrated design



3.5.6 Office

The 20-storey office building on Lot 8S provides office floorspace with large open spans providing flexibility for a variety of office and creative uses. The intent is for Lot 8S to evolve the office and establish a new benchmark for workspace in the heart of an emerging creative district and adjacent to public transit.

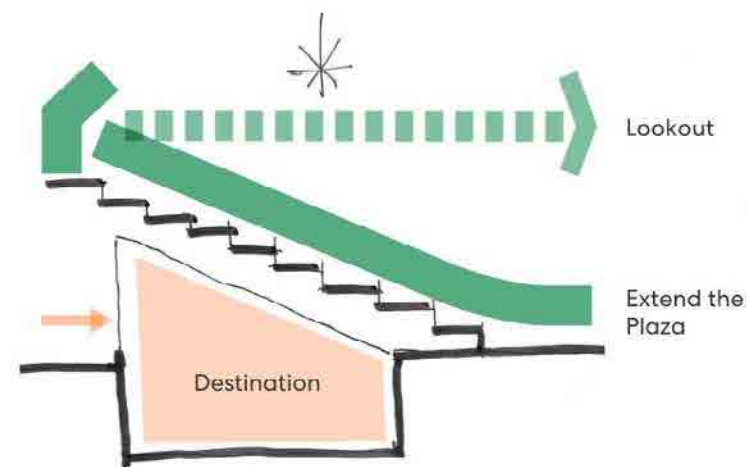
Perspective view of the office building interacting with the public realm at grade.



3.6 Lot 7 Transit Station

3.6.1 Neighbourhood Beacon

Situated at the prominent corner of Great Northern Way and Thornton St, the new GNW-Emily Carr headhouse will be enveloped by a sloped roof that extends the public plaza up and over the station to provide a unique terraced landscape and public view deck. Cantilevering out over the headhouse, this deck creates a remarkable new canopy for the station and marking it as a key transportation gateway for the campus.



GNW-Emily Carr Station Concept Sketch



3.6.2 Component Diagrams

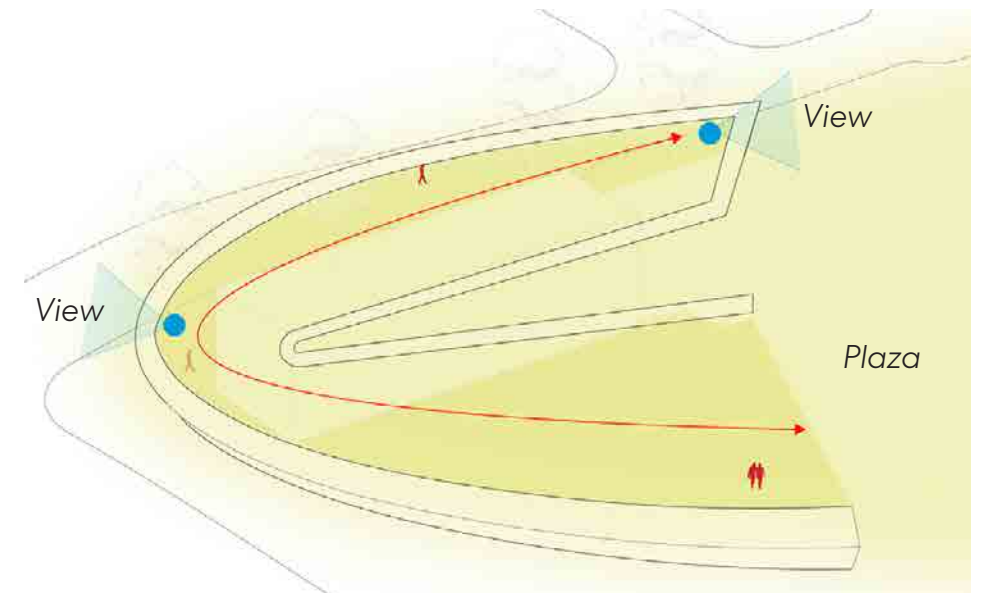
Driven by the anticipated built condition of the new GNW-EC Station headhouse, this proposal seeks to provide seamless integration of transit infrastructure with new program opportunities and expanded public space.

The following diagrams document how the existing built form of the headhouse is integrated with a new roof that is sloped and landscaped to extend the public plaza up and over the station.



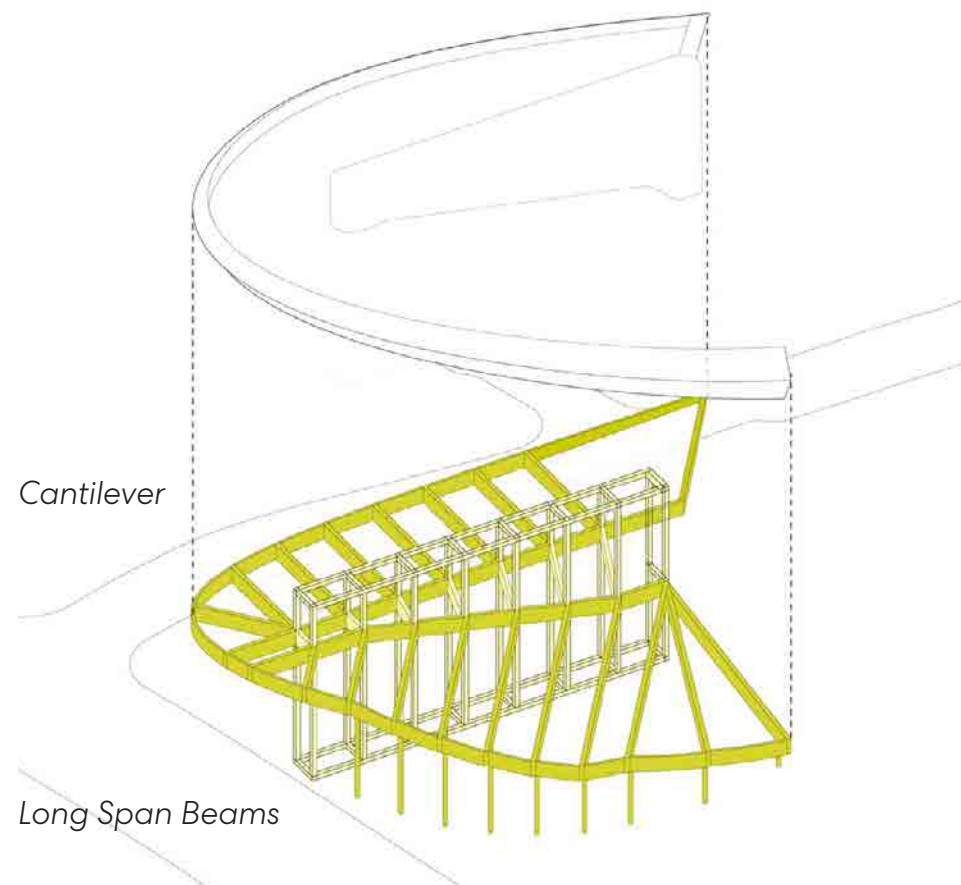
Subway Station Headhouse

As part of the Broadway Subway line, the new GNW-EC station will be built with the headhouse emerging at the corner of GNW and Thornton St.



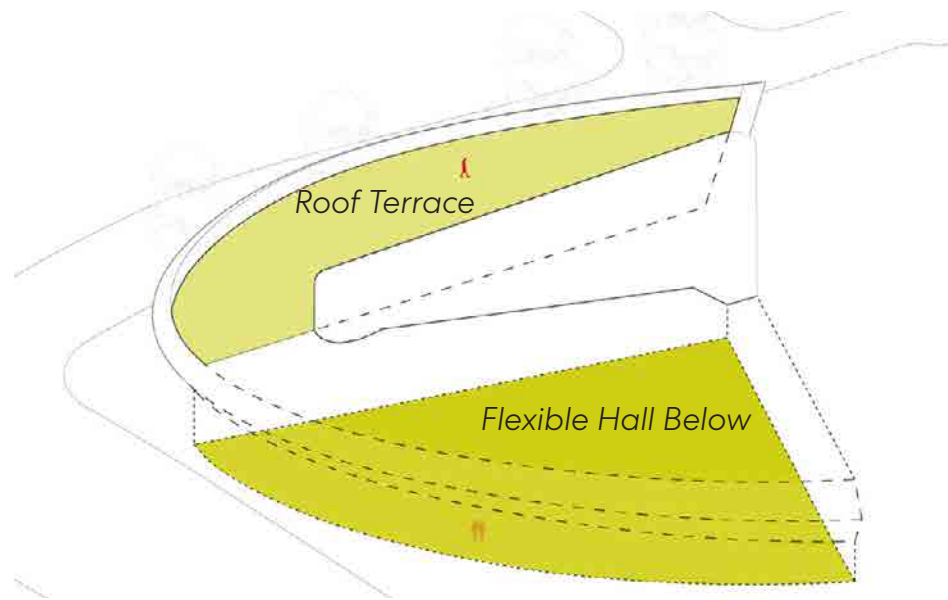
Expand the Public Space

Using the new station and its prominent corner location as an opportunity to expand the public space up and over the head house.



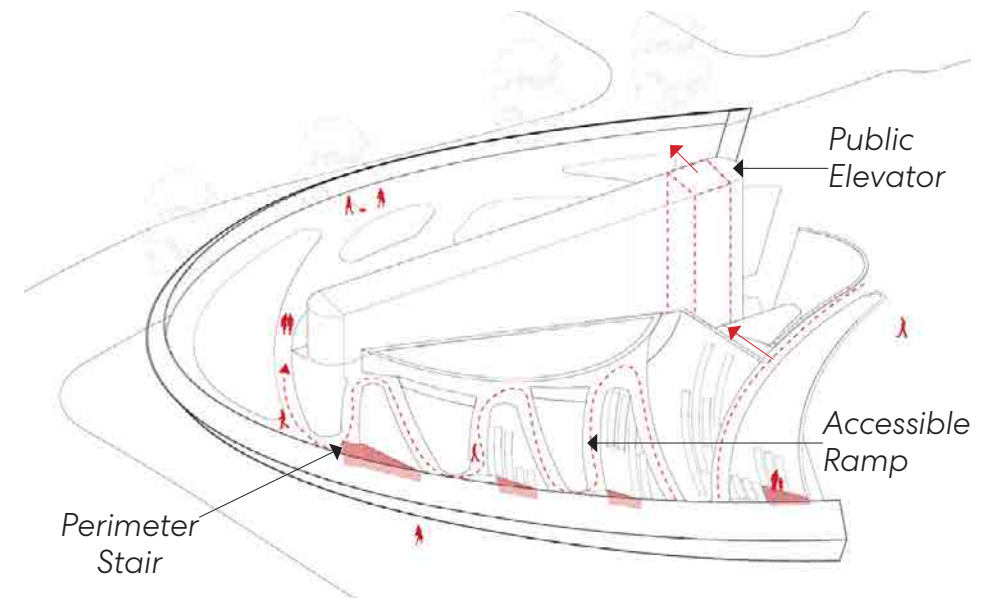
Expressive Structure

A dramatic structural solution enables the extension of the plaza to cantilever out over the existing station with both structures remaining independent.



New Spaces

The gesture to expand the public space creates two unique opportunities: a large flexible hall under the expanded plaza, and an expansive roof terrace on top.



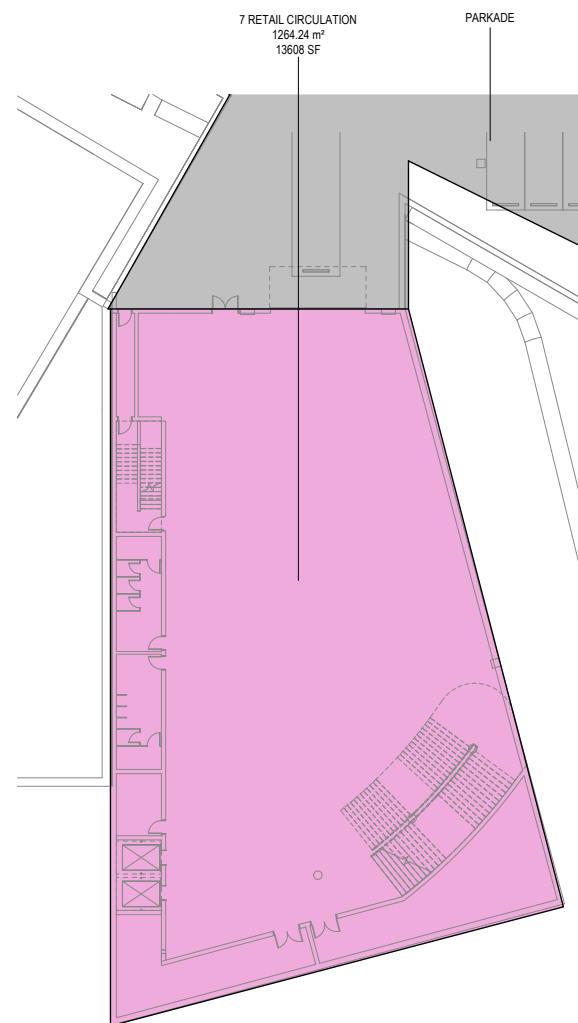
Rooftop Accessibility

Through various circulation routes, the design prioritizes creating a rooftop public space expansion all user groups can experience.

Lot 7

3.6.3 Flexible Hall (Level P1)

Located partially subterranean, this large column-free hall is a flexible and dramatic space that is anticipated to be used in a variety of capacities on a rotating basis to include commercial and cultural opportunities.

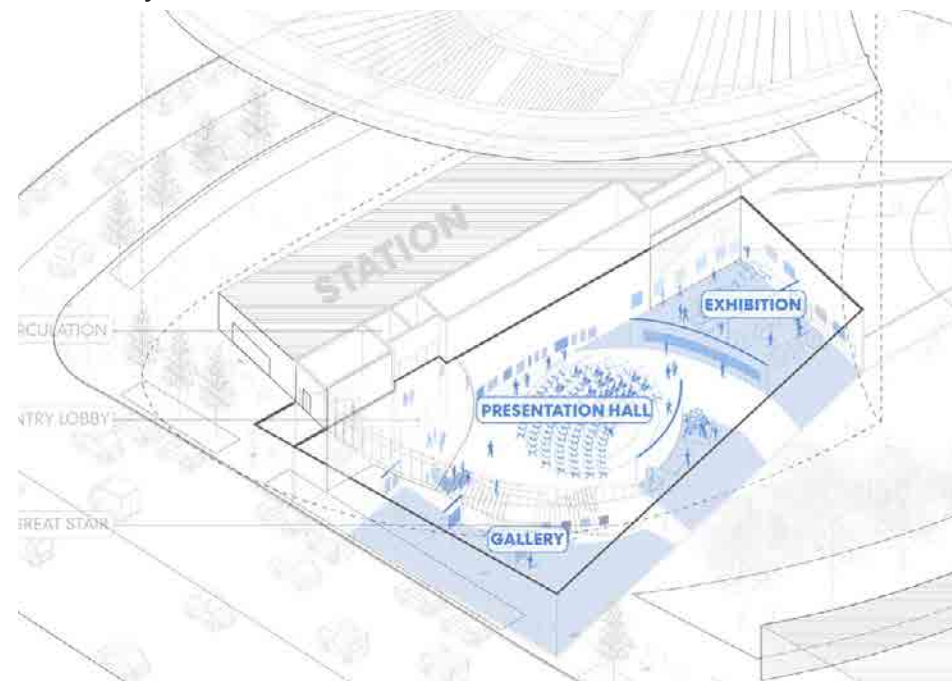


P1 Plan

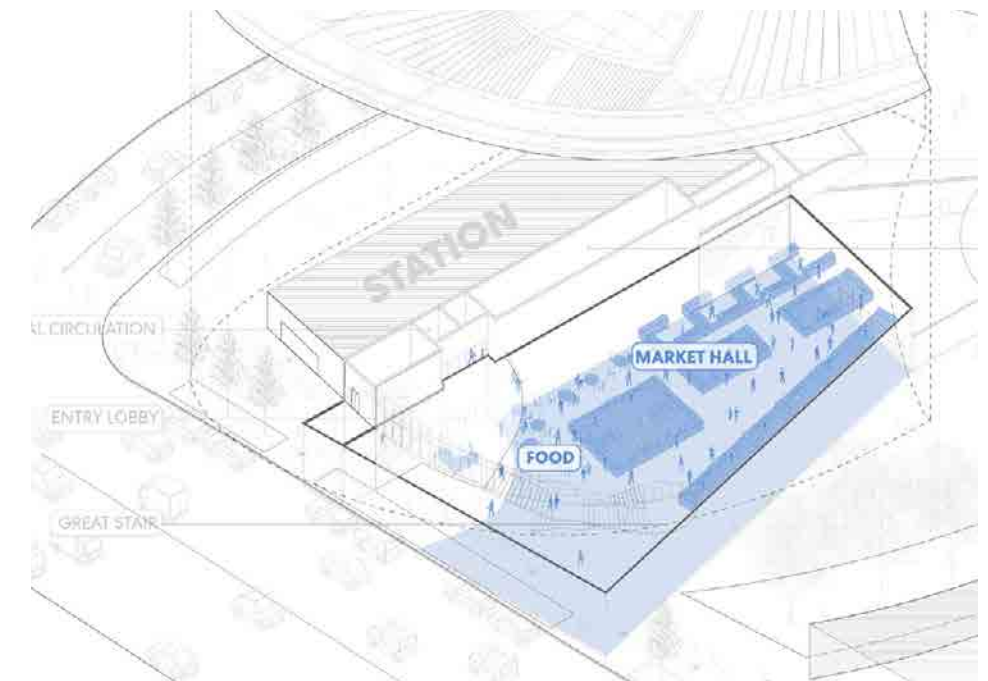


Perspective From the Flexible Hall

Art Gallery



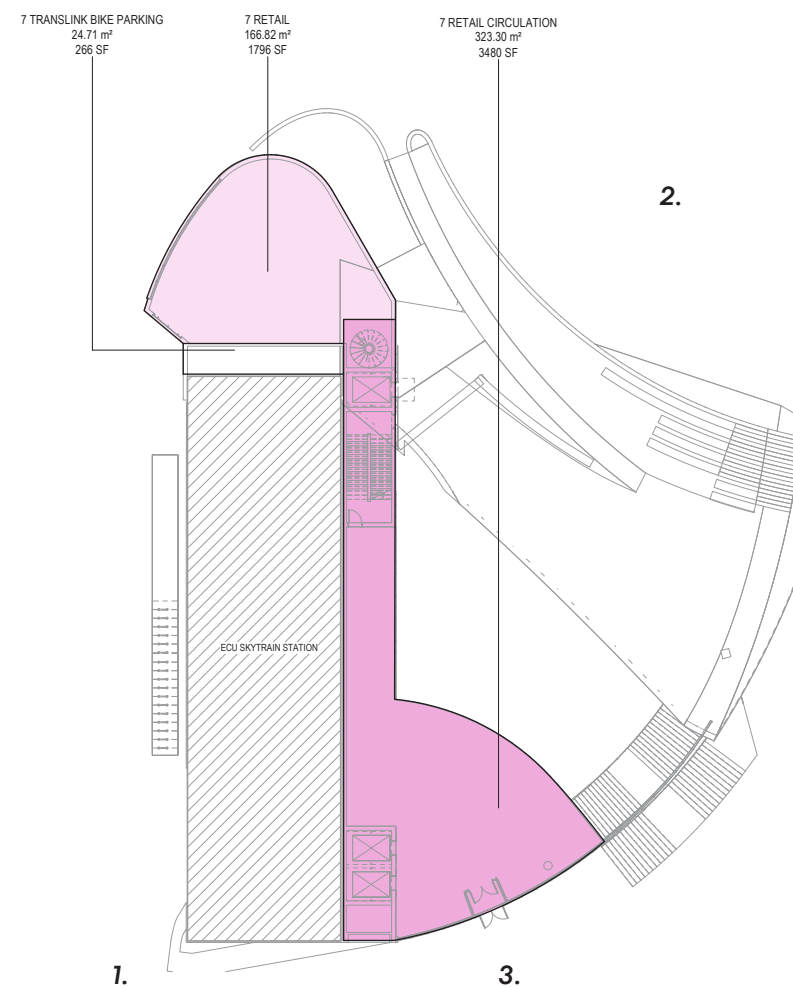
Market



Lot 7

3.6.4 Ground Level

The ground level features the entry to both the skytrain station and flexible hall that exists in P1. Both entries are visible as one approaches the site, meanwhile from the envisioned public space at the heart of the proposal, the ground level cascades up Lot 7 creating a natural extension of the public space.



Ground Plan



1. Skytrain Entry

2. Perspective From Center of Plaza



3. Hall Entry

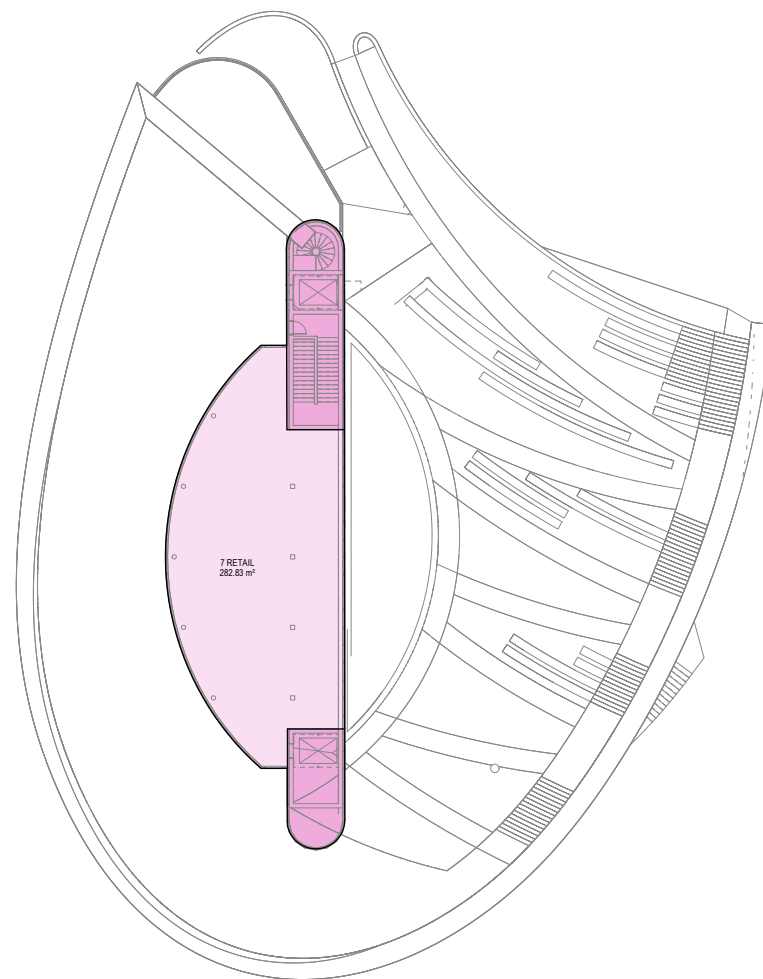


Lot 7

3.6.5 Roof Terrace

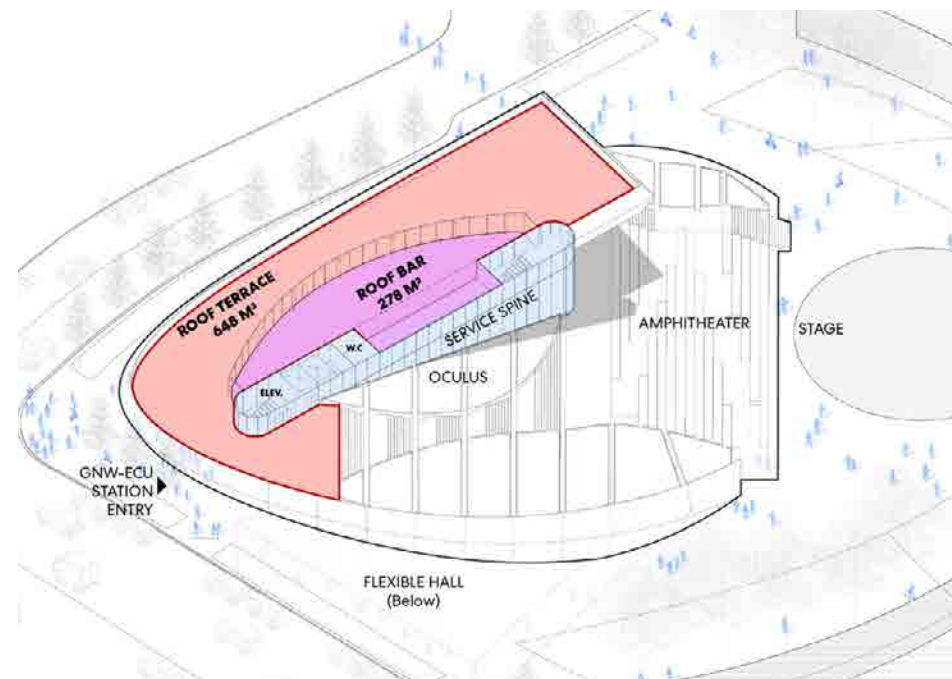
Floating above the station headhouse, a new sky deck provides a public vantage point of views north to the mountains, up Great Northern Way, and down across the public open space. This landscaped deck is connected to grade via a ceremonial perimeter stair, an experiential ramp, and dedicated elevator. This large platform presents opportunities for unique event programming and destination food & beverage retail.

Roof Plan

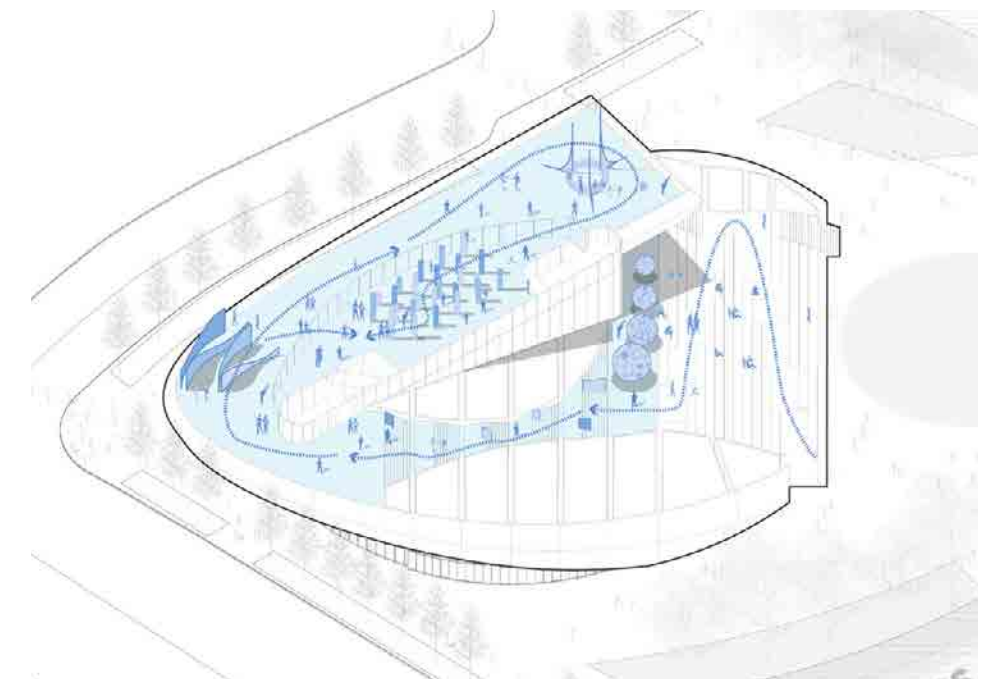


Perspective From the Roof Terrace

Roof Terrace



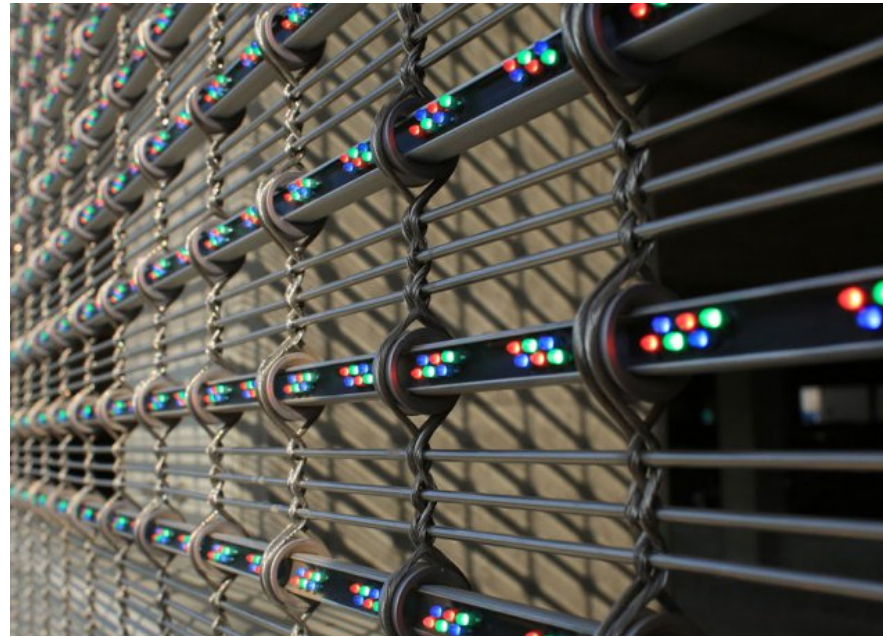
Art Exhibition



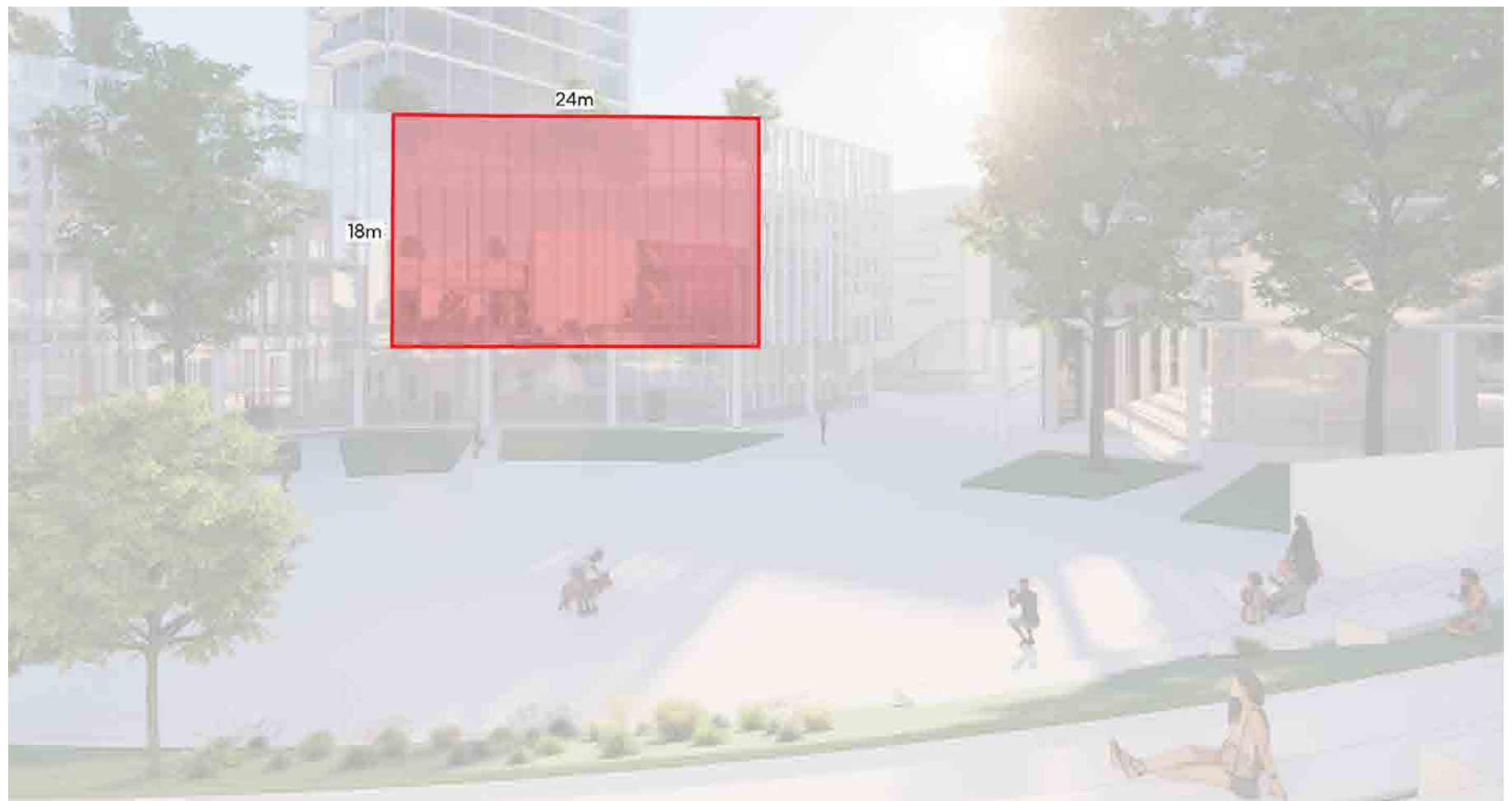
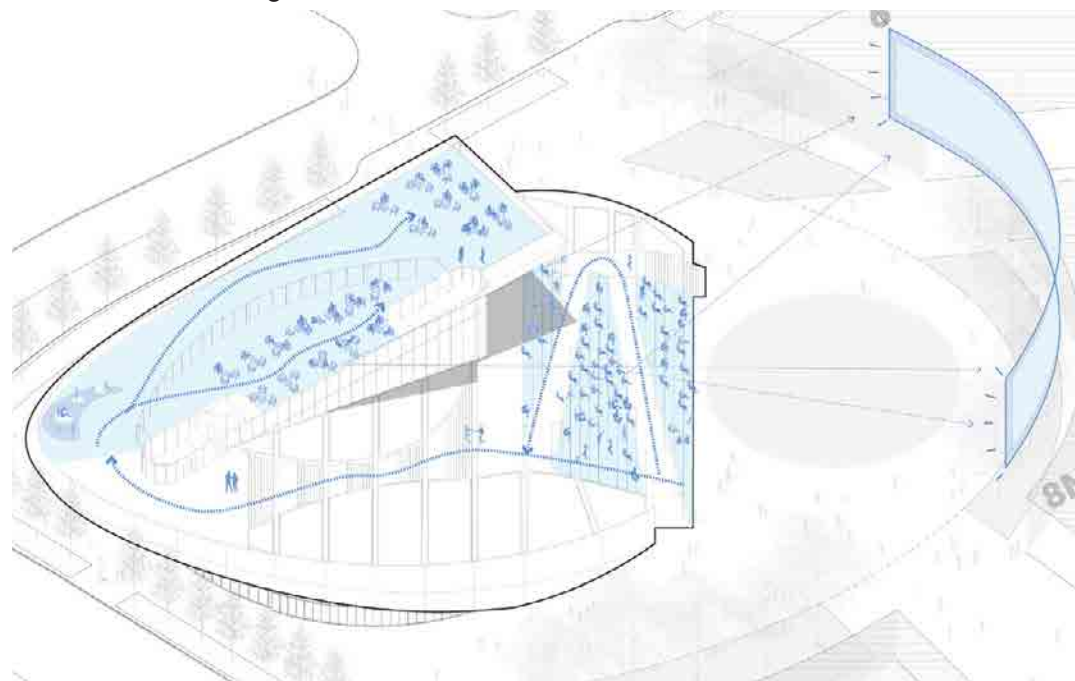
Lot 7

3.6.6 Amphitheater / Projection Screen

Envisioned as a new public space for Vancouver, a dynamic LED mesh screen integrated within the facade of the lower commercial base of Lot 8N provides the opportunity for a wide range of video programming and art opportunities at an urban-scale screen.



Event/Film Screening



3.7 Landscape & Public Realm

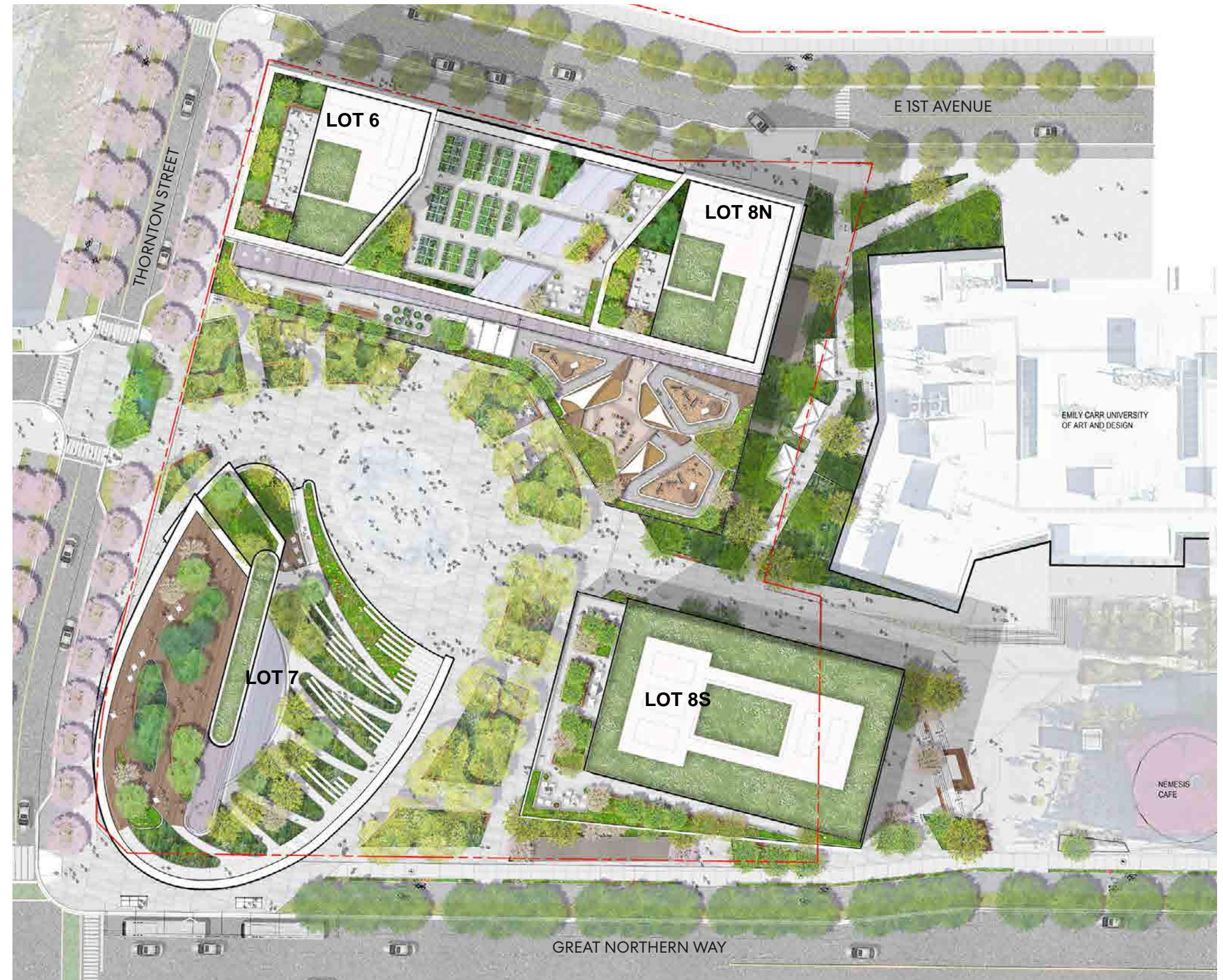
Concept Site Plan

The public realm is centered around an oval plaza, a communal space strategically positioned at the core of Lots 6, 7, and 8. This design creates a central courtyard at an urban scale, accessible from all sides. It serves as a shared space where residents, office users, campus students, and travelers alike can converge.

The oval shape of the plaza encourages flexible use of the space, accommodating gatherings and outdoor activities. Tree groves lining the north to east edges define the plaza's borders, providing shade from the afternoon sun. Pocket areas among and beneath the tree groves offer a refuge, housing outdoor patios for cafes and restaurants. Behind the arcade planters lies a sheltered passage granting access to the commercial units and office/residential lobbies.

The GNW-Emily Carr station is currently being constructed on Lot 7. The intent for this development is to overbuild the station. Program considered for Lot 7 are commercial or community focussed. The applicant team is investigating the continuation of the plaza into Lot 7 and integration with any proposed development over the station.

The station will be a key transportation node within the community and as such draw the attention of large amounts of pedestrians. The design of Lot 7 is intended to directly respond to the needs of the community and to create high quality indoor and outdoor spaces that add to the surrounding public realm. As such the project aims to establish a valuable architectural landmark along Great Northern Way.



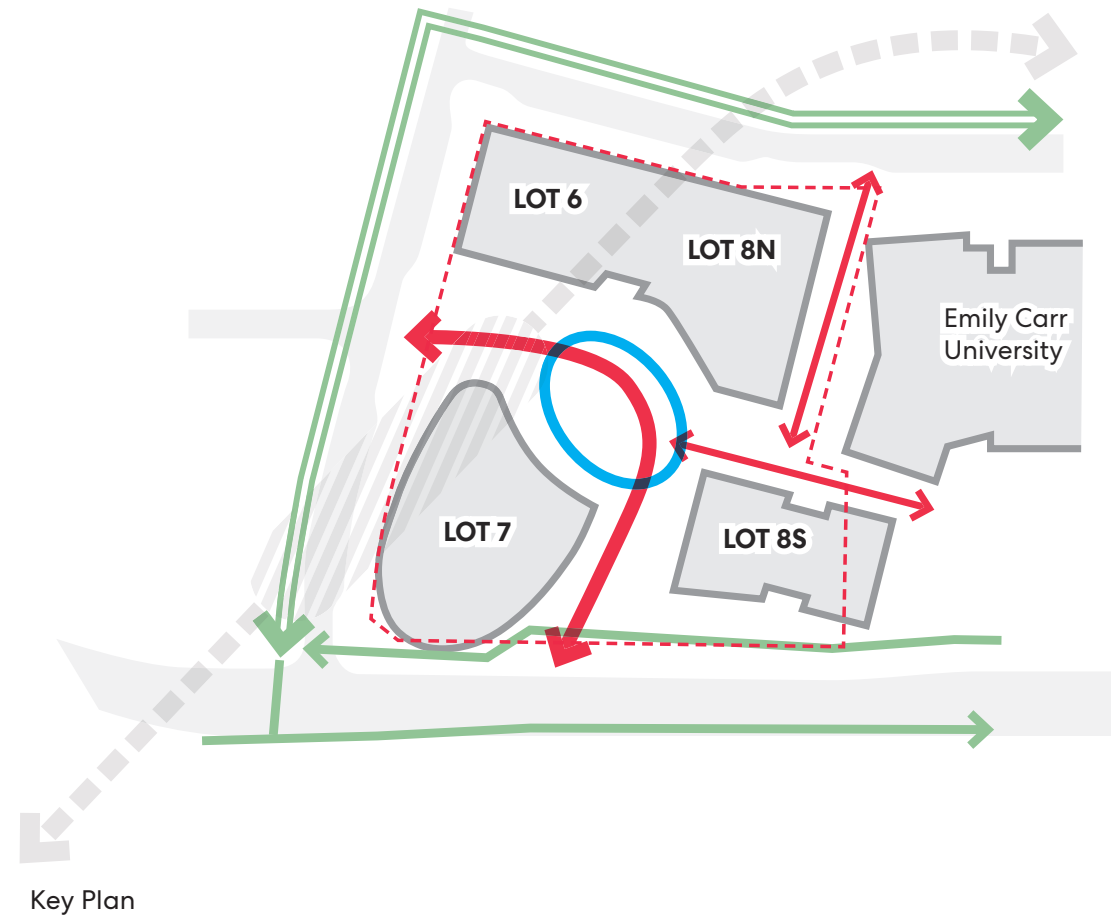
3.7.1 Landscape Concept

Overview

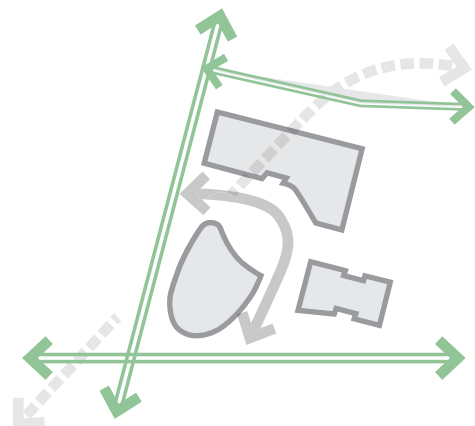
There is a unique opportunity in the creation of a large contiguous open space at the heart of the project. This provides an opportunity to celebrate the public realm through the landscape design and active building edges that frame streets and open spaces. Future development on lot 7 is viewed as an incredible opportunity for a landmark pavilion that can provide unique visibility and identity to development integrated with the GNW-Emily Carr station.

Urban Design and Landscape Principles

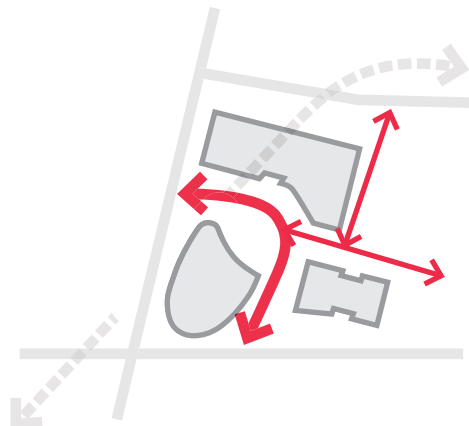
Diagrammatic plans on the following pages provide explanation of the key considerations for the site's design and organization. The principles described ensuring a unified design and providing a framework for future development in the Great Northern Way lots 6, 7 and 8.



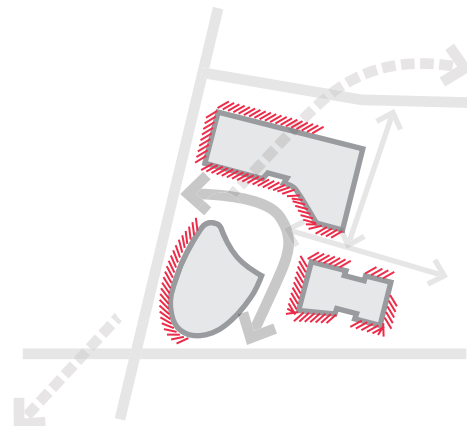
01 Transportation



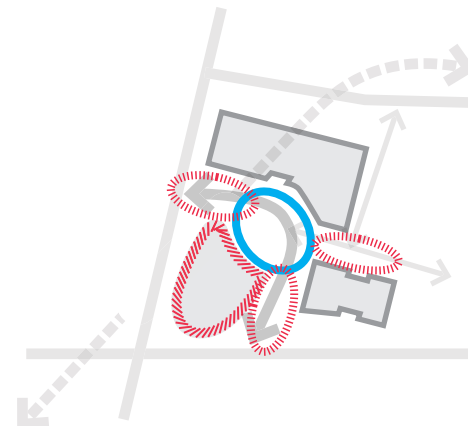
02 Movement + Connections



03 Active Frontages



04 Public Open Space



05 Green Infrastructure



06 Urban Forestry



3.7.2 Urban Design and Landscape Principles

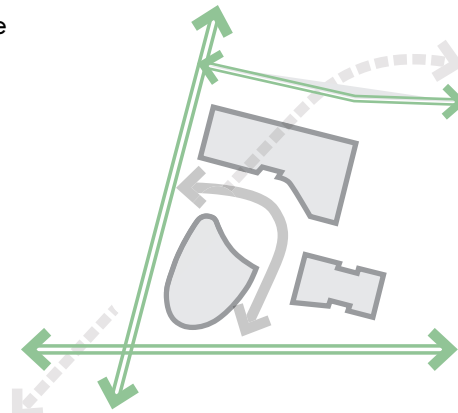
Movement and Connections

The public realm strategy is designed to cater to diverse users while seamlessly integrating with established and upcoming public assets, including the new station, Emily Carr, VCC campuses, Creative District offices, and China Creek North Park. This cohesive approach prioritizes the flow of pedestrian traffic between crucial connection points within the site and extends to broader connections on a larger scale.

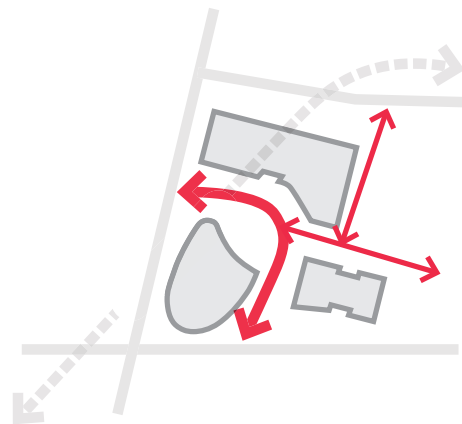
An integral element of this design is the 'Oval,' which reinforces a crucial linkage from the site to the existing Emily Carr plaza in the east.

Pedestrian movement is enhanced by providing strategic direction through the use of planting island 'Bumpers' and thoughtfully placed site furnishings, directing individuals towards building entrances and facilitating safe crossings.

Transportation



Movement + Connections



Legend

Building entry / egress

2-way dedicated bike lane

Dedicated bike lane

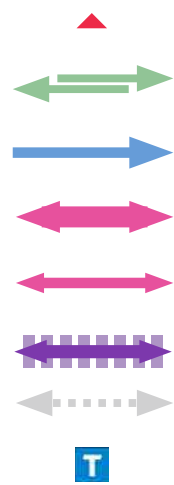
Primary connection

Secondary pedestrian hydrology

Sidewalk / crosswalk

Skytrain line

Great Northern Way Station



Public Open Space / Active Frontage

The success of the emerging development project hinges on the careful consideration of the public realm. The design prioritizes a thoughtful layout of spaces to facilitate smooth movement and establish distinct areas of various sizes. This approach contributes to an enriched overall pattern, promoting activity stemming from both building uses and transportation connections.

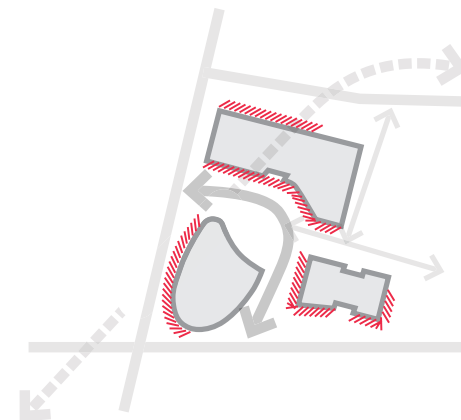
A clear radiating axis is framed in the public realm, starting from the 'oval' plaza at the heart. Along the building interface with the plaza, smaller, intimate cross-routes are carved out, forming a network of occupiable zones and connections to key points of interest and transport. Pedestrian movement is guided by arcade planter islands, creating separation between foot traffic and green/refuge spaces under the tree canopies, fostering smaller informal seating areas. The focus on a pedestrian-priority public realm and streetscape is strengthened by the unified materiality approach.

Future development includes a terraced park over the pavilion leading to a viewing platform over the station rooftop to support seamless and accessible pedestrian movement through the public realm.

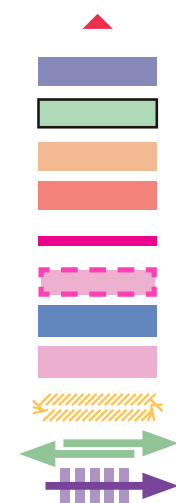
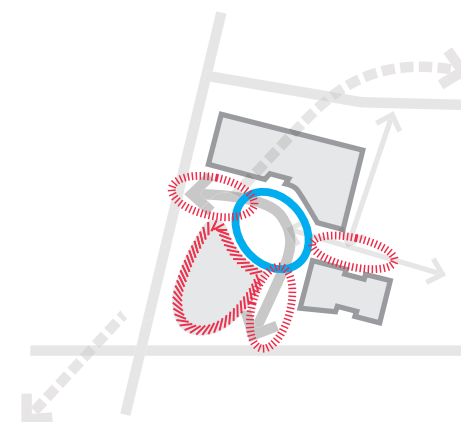
Legend

- Building entry / egress
- The ground level plaza
- The Station Rooftop Park / View Deck
- Secondary Open/Flexible Spaces
- Outdoor patio + seating spaces
- Edge plaza seating
- Building lobby arrival / merchant zone
- Office frontage / sidewalk
- Merchant zone
- Line-up + waiting zones
- Bike lane
- Pedestrian Sidewalk / Crossing

Active Frontages



Public Open Space



Urban Design and Landscape Principles

Green Infrastructure / Urban Forestry

City of Vancouver supports a rich biodiversity, with the urban environment's green infrastructure network supporting and interwoven with a variety of important natural habitats including forests, meadows and wetlands. The green approach to the Great Northern Way Lots 6-8 seeks to enhance and support this character at one the heavily industrialized areas of the city, and as a vanguard for continuity in future development.

Sufficient space and soil volume for the mature growth of trees and other vegetation is provided in coordination with underground parking zones. The project strives to achieve an overall 26.8% tree canopy coverage and 36.8% vegetation cover, surpassing the City of Vancouver's Sustainable Large Sites requirements of 20% and 30%, respectively. Currently, there are no trees on the site that are subject to retention.

Green Infrastructure



Urban Forestry

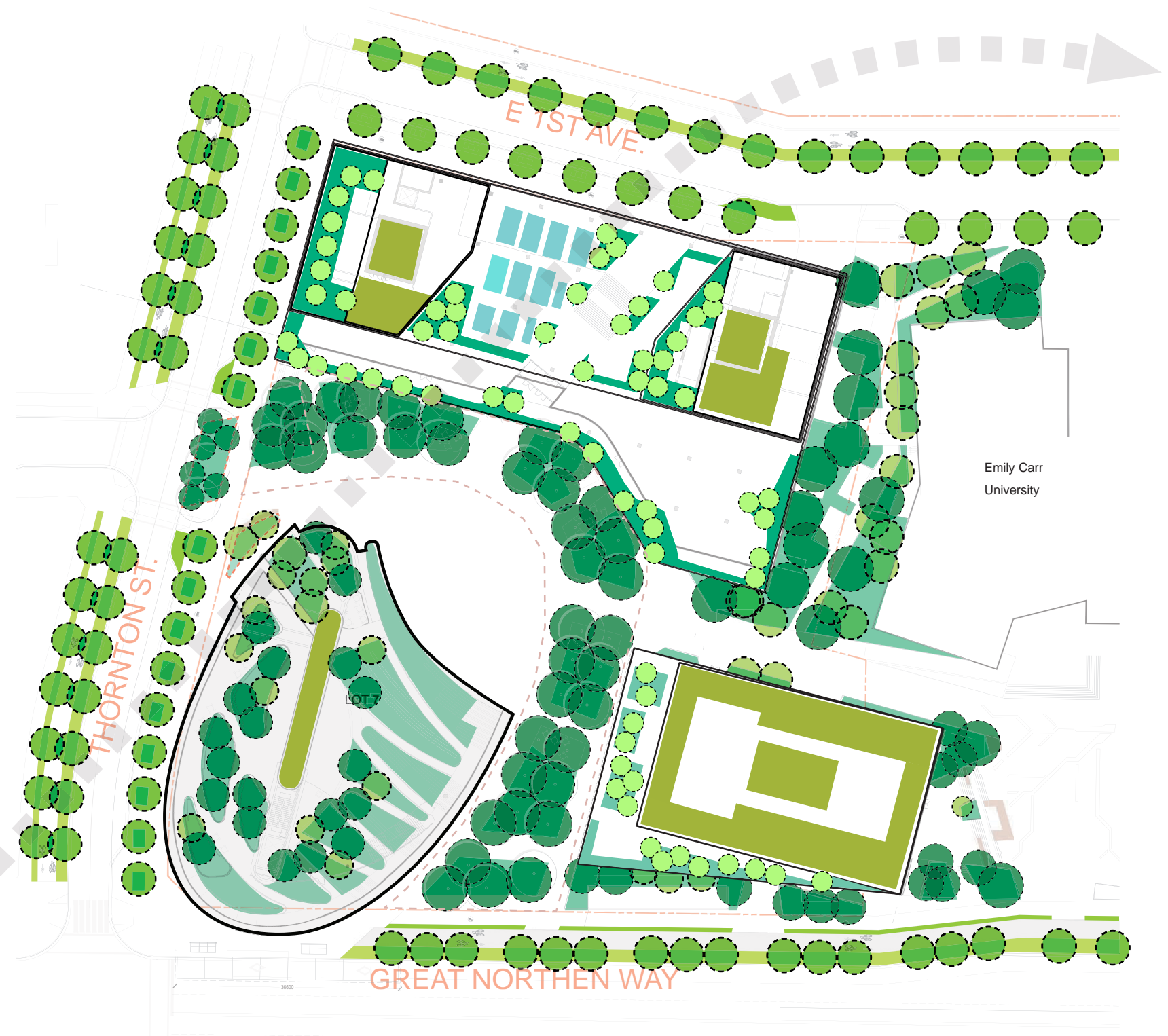
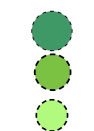


Legend

- Planting islands
- Stormwater infiltration/rain garden (ground level)
- Green roof/balcony shrub planting
- Extensive green roof (roof level)
- Urban Agricultural Plots
- Boulevard (Lawn)
- Boulevard (Shrub Planting)
- On-Site Tree Root Cell



- Proposed Large trees
- Proposed street trees
- Proposed small trees



3.7.3 Plaza Size Comparison

Public Space

The central open space plays a substantial role in configuration of the site and impacts the life of future occupants by creating a unique opportunity for world class park and various outdoor spaces as well as programmable areas. With a required area of 0.49 ha (53,000 sf) the open space is at the heart of the project. While there are grade changes across the street edges the plaza is envisaged as a gently sloping accessible plane that connects the diverse uses across the site and the surrounding context. The surrounding configuration maximize the solar potential of the plaza, creating an outdoor living room within the city, while measures to provide shade and shelter will be incorporated.

The site plan is generally as agreed with City and Broadway Subway Project in past discussions to facilitate GNW-Emily Carr Station construction & integration.

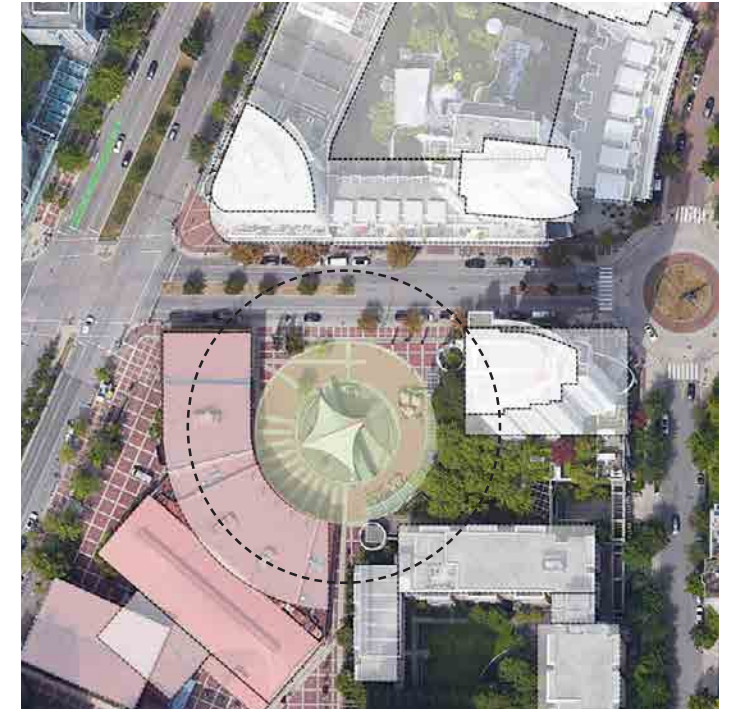
Transit Integration

Our proposal seeks to enhance the functionality of the transit system by providing clear and legible access to the station and using the public realm to encourage access and use of the transit system. This exciting opportunity includes:

1. Presentation of the station visually to Great Northern Way and Thornton Streets.
2. Provision of a bicycle storage facility at the pedestrian spine associated with the station.
3. Provision of significant cycling storage and support facilities within the parkade to encourage active transportation within a transit oriented development.
4. Sculpting of the ground plane on Lots 7 and 8 to encourage pedestrian flow to and from the station.



GNW Lots 6-8 Proposal
0.49 Ha (53,000 sf)



Roundhouse
0.24 Ha (25,800 sf)



Olympic Village
0.32 Ha (35,000 sf)



Robson Square
0.49 Ha (53,000 sf)

3.7.4 Programming Study

The central plaza spans approximately 825 square meters of unobstructed open space, making it a versatile venue suitable for various purposes. It serves as a prominent location for organizing both year-round and one-off events that may involve mobilizing large crowds and hosting significant gatherings. Detailed programming studies have explored different types of outdoor activities, organizational spaces, and how the plaza can adeptly respond to diverse program requirements.

It's noteworthy that the Lot 7 terraced park and the viewing deck over the station building offer a secondary space accessible and well-connected to the ground-level plaza. This additional space can function in tandem with the ground-level plaza organization offering additional space and a new dimension to the space.

In addition to the two main open spaces, there are two smaller-scale yet complementary areas that enhance the functionality of both the plaza and station rooftop. The first is a spacious seven-meter-wide pedestrian promenade seamlessly connecting the Emily Carr campus plaza to the site, offering ample room for temporary stalls or food trucks. The second comprises a set of three covered urban pods situated in the Mews, providing versatile spaces for smaller events, temporary outdoor exhibits, or to support activities linked to the Emily Carr programs centered around art and craft.

1. Site Area (11900 M2)



2. Pop Up Market



3. Movie Night



4. Outdoor Concert



3.7.5 Plan Drawings

Ground Floor

Crafting an expansive, interconnected open space at the core of the project presents an exceptional opportunity. This chance allows for the elevation of the public realm through dynamic landscape design and vibrant building edges that delineate streets and open areas. Lot 7, earmarked for future development, stands out as an auspicious prospect for a landmark pavilion. Such a structure holds the potential to impart distinct visibility and identity, seamlessly blending with the GNW-Emily Carr station.

The plaza's oval configuration promotes versatile utilization, accommodating gatherings and outdoor activities at its center. Clusters of large deciduous trees, thoughtfully arranged in urban-scale planters, create inviting pockets for flexible lounging. These green enclaves serve as access points from the plaza's heart to the adjacent commercial units and office/residential lobbies. The tree groves not only define the plaza's boundaries but also provide refreshing shade from the afternoon sun. Deliberately designed pocket areas nestled among and beneath the tree groves offer refuge, hosting outdoor patios for cafes and restaurants.

Plaza Level

- 1 3.0M WIDE BUILDING CANOPY
- 2 ARCADE PLANTERS
- 3 PLAZA OVAL / WATER JETS
- 4 CLASS B BIKE PARKING
- 5 BOULEVARD TREES
- 6 RAIN GARDEN
- 7 BIKE LANE
- 8 ACCESS TO PARKADE
- 9 FLEXIBLE PLATFORMS / ART+PERFORMANCE SPACE
- 10 STREET TREES ON GRATE

Pavilion Rooftop (Lot 7)

- 11 VIEW DECK
- 12 LANDSCAPE TERRACES LOT 7
- 13 TIERED SEATING
- 14 PERIMETER STAIR
- 15 PEDESTRIAN RAMP ACCESS
- 16 SKYLIGHT
- 17 STATION RETAIN GREEN ROOF
- 18 EXTENSIVE GREEN ROOF
- 19 RAISED PLANTERS WITH EDGE SEATING
- 20 GLASS CANOPY



Plaza Level and Lot 7 Rooftop Plan

Plan Drawings

Childcare + Podium Roof

LEVEL 4 CHILDCARE PATIO

The Level 4 childcare outdoor play space is a secure and interactive environment seamlessly connected to indoor facilities, accommodating 94 children across infant to preschool age groups. Positioned on the southern side of the podium, it comprises three distinct play zones: one for infants/toddlers, another for preschoolers, and an area suitable for 3-5-year-olds. Each program boasts its dedicated outdoor patio, ensuring a tailored play element features with the children age group and abilities.

The patio interfaces with the indoor childcare area through a continuous composite deck platform adorned with an overhead canopy, facilitating outdoor circle time and social interactions. Each program's patio features a tricycle track in a loop, elevated play islands with wood fiber surfacing, and various play obstacles, promoting both active and imaginative play. The sand and water play areas come equipped with sail shades, enhancing the environmental comfort within the play zone.

Designed to capture sunlight, the patio supports the growth of native trees and plants, offering edible food sources, attracting birds and insects, and providing shade for the play area.

Programmed along the patio edges are outdoor storage units, communal tables, and planting pods, providing convenient access for all programs.

LEVEL 5, PODIUM AMENITY SPACE

At Level 5, the rooftop amenity area offers a dynamic selection of outdoor program spaces that have been carefully curated to accommodate the needs of both residents.

A convivial outdoor gathering space emerges, showcasing a diverse array of seating options, including a lounge area and fixed planter-edge seats with movable tables, a harvest table and gardening shed. Additionally, spanning over 160 square meters, this level hosts urban agricultural plots accessible to residents of both towers.

The office tower also boasts a communal outdoor amenity space on the podium level, featuring elevated planters adorned with ornamental trees and shrub beds. This area offers opportunities for seating along the edges, complemented by moveable patio furniture for added flexibility.



Level 4 Childcare Patio

- 1 ORNAMENTAL TREE
- 2 ACTIVE PLAY AREA
- 3 SAND PLAY AREA
- 4 WOODEN DECK
- 5 OUTDOOR CLASS-ROOM
- 6 MOVEABLE TABLE AND CHAIRS
- 7 OUTDOOR STORAGE
- 8 COMMUNAL TABLE / PICNIC TABLE
- 9 PIP RUBBER SURFACE
- 10 SAIL SHADE
- 11 GLASS CANOPY
- 12 RAISED PLANTER
- 13 SEATING PLATFORM

Level 5 Podium Amenity Space

- 14 RAISED PLANTER WITH SEATING
- 15 HARVEST TABLE
- 16 SKYLIGHT
- 17 MOVEABLE FURNITURE
- 18 HYDRAPRESSED PORCELAIN PAVERS ON PEDESTALS
- 19 URBAN AGRICULTURAL PLOTS
- 20 GARDEN STORAGE
- 21 LOUNGE SEATING



Levels 4 and 5 Plan

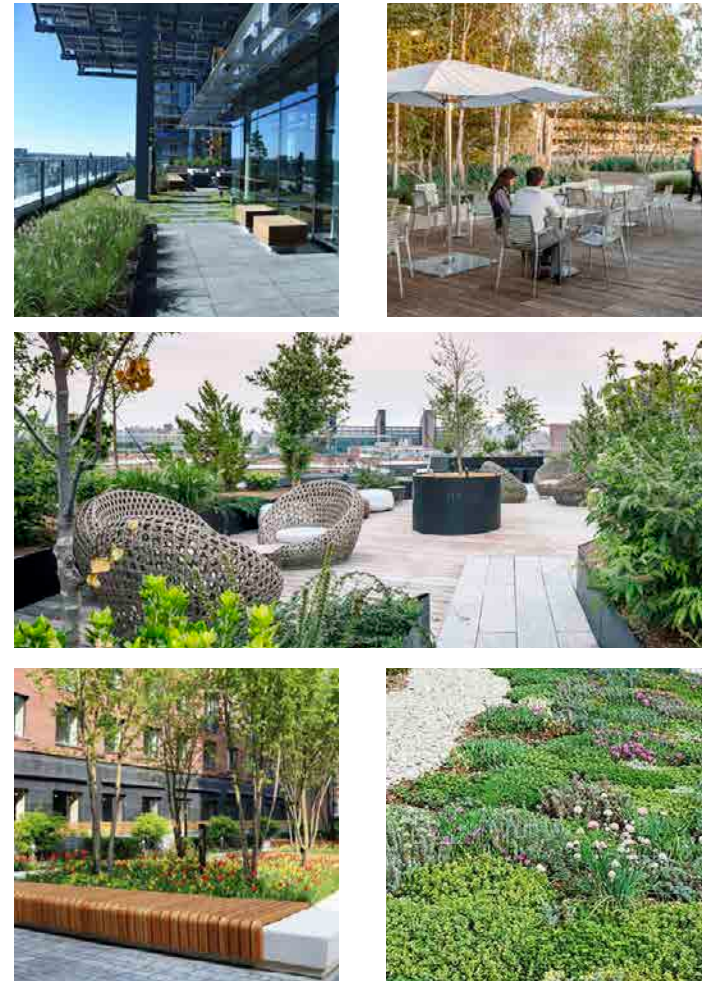
Plan Drawings

Tower Rooftops

RESIDENTIAL LEVEL 36 ROOFTOP AMENITY SPACE

Taking advantage of the impressive height of the towers, the rooftops of both towers offer a captivating 360-degree view deck. This elevated space provides residents with a panoramic vista and seating options, encouraging them to immerse themselves in the breathtaking surroundings.

In line with the objective to maximize green space, the design incorporates an extensive green space surrounding the patio deck. Furthermore, green elements are integrated over the tower core for increasing greenery and maximizing infiltration and rainwater storage.



Rooftop Amenity Space

- 1 RAISED PLANTER
- 2 EDGE SEATING
- 3 EXTENSIVE GREEN ROOF
- 4 MOVEABLE FURNITURE
- 5 HYDRAPRESSED PORCELAIN PAVERS ON PEDESTALS
- 6 ORNAMENTAL TREE
- 7 LOUNGE SEATING
- 8 MECHANICAL SPACE



Levels 18 and 35 Rower Rooftop Plan

3.7.6 Planting and Material

Planting Design

The public realm's strategy maximizes green space, utilizing perimeter planters around the oval plaza with a mix of large tree canopies, providing shade, intercepting rainfall, and supporting native shrubs. Low ground cover and larger shrubs strategically create open sightlines and habitats for birds, insects, and humans.

Soil cells connect tree roots under paved zones, increasing uncompacted soil for healthy plaza tree growth. Rainwater management, including rain gardens and permeable pavers, infiltrates and directs water to green space, reducing irrigation needs, ensuring tree longevity, and maximizing canopy.

A significant portion of the plant list focuses on native and climate-adaptive species with cultural value for First Nations, promoting biodiversity. Carefully chosen plant combinations support wildlife micro-ecosystems, honoring indigenous traditions and deepening the connection to the land.

Above the roof, diverse plant selections, including edibles and ornamental trees, support outdoor activities, enhancing aesthetics and human comfort. Indigenous and climate-adaptive plants support local biodiversity, offering food and habitat. Green roofs are incorporated for wildlife and building cooling.

Bird-Friendly Guidelines are adhered to, with downward-directed outdoor lighting and native plants selected for landscaping provide food and shelter for birds, and a cluster of trees in the plaza, arranged in groves with interlocking canopies, supports bird habitat and nesting.

The Re-Wilding Strategy enhances blue-green networks with rain gardens, permeable paving, and interconnected planters. Trees and shrubs are strategically planted to increase the urban forest, providing wildlife habitat, reducing urban heat, and sequestering carbon.

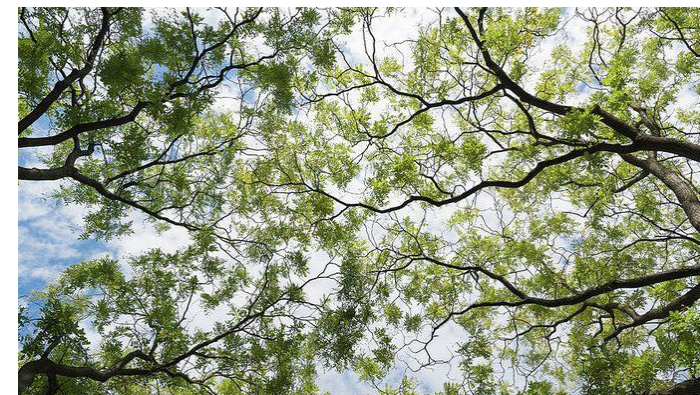
Considerations are given to integrate edible planting, ethnobotanical planting, and plant species with cultural value for Indigenous people. The Lot 7 rooftop park serves as an educational garden, engaging the community through community planting days and educational events about local biodiversity. This not only enhances the project's success but also fosters a sense of ownership and pride within the community.



Improving Biodiversity



Stormwater Integration



Connected Canopy



Accessible Green Space



Landscape Indigeniety and Education



Wildlife Habitat Support

Planting & Materials**Planting Palette**

BOTANICAL NAME / COMMON NAME	SIZE			
STREET TREES				
Ginkgo biloba/ Maidenhair Tree	7.0 cm Cal.			
Liquidambar styraciflua / Sweet gum	7.0 cm Cal.			
Nyssa sylvatica / Black tupelo	7.0 cm Cal.			
Quercus alba / White Oak	7.0 cm Cal.			
GROVE TREES				
Acer freemanii / Freeman maple	7.0 cm Cal.			
Crataegus douglasii / Black hawthorn	7.0 cm Cal.			
Picea sitchensis / Sitka Spruce	2.0m Ht.			
Pinus ponderosa / ponderosa pine	2.5m Ht.			
Robinia pseudoacacia/ Black locust	7.0 cm Cal.			
Zelkova serrata / Japanese zelkova	7.0 cm Cal.			
ORNAMENTAL TREES				
Acer circinatum / Vine maple	5.0 - 6.0cm Cal.			
Acer griseum / Paperbark maple	5.0 - 6.0cm Cal.			
Cornus nuttallii / Pacific dogwood	5.0 - 6.0cm Cal.			
Acer circinatum / Pacific fire vine maple	5.0 - 6.0cm Cal.			
Cupressus x leylandii / Leyland Cypress	2.0m Ht.			
SHRUBS				
Aquilegia formosa / Western columbine				
Amelanchier alnifolia / Western Serviceberry				
Arbutus unedo 'Compacta'				
Arctostaphylos uva-ursi / Kinnikinnick				
Bergenia cordifolia / Winterglow bergenia				
Cornus sericea Arctic Fire Red				
Cornus canadensis / Bunchberry dogwood				
Cephalotaxus harringtonia 'Prostrata'				
Cornus sericea / Red twig dogwood				
Hydrangea paniculata / Panicked hydrangea				
Mahonia aquifolium / Oregon grape				
Polystichum munitum / Western sword fern				
Prunus laurocerasus / Mount Vernon English laurel				
Physocarpus capitatus / Pacific ninebark				
Rubus parviflorus / Thimbleberry				
Ribes sanguineum / Red flowering currant				
Saskatoon berry / Amelanchier alnifolia				
Sambucus cerulea / Blue elderberry				
Spiraea splendens / Mountain spiraea				
Taxus X Media Hicksii / Hick's yew				
Vaccinium ovatum / Evergreen Huckleberry				
Vaccinium parvifolium / Red huckleberry				
GROUND COVERS				
Arctostaphylos uva-ursi / Kinnikinnick				
Cornus canadensis / Bunchberry				
Gaultheria shallon / Salal				
Oxalis oregana / Redwood sorrel				
Prunus laurocerasus / Mount Vernon english laurel				
PERENNIALS				
Achillea millefolium / Terracotta yarrow				
Allium sphaerocephalon / Drumstick allium				
Echinacea purpurea White / White swan echinacea				
Geranium 'Gerwat' / Rozanne cranesbill				
Geranium procurrents / Ann folkard geranium				
Iris missouriensis / Western blue flag iris				
Salvia nemorosa / Cardonna sage				
Symphotrichum subspicatum / Douglas aster				
GRASSES				
Carex testacea / Orange sedge				
Carex flacca / Blue Sedge				
Molinia caerulea 'Moorhexe' / Molinia Moorhexe				
Nassella tenuissima / Mexican feather grass				
RAIN GARDEN PLANTS				
Cornus sericea / Redtwig dogwood				
Polystichum munitum / Western sword fern				
Ribes sanguineum / Red flowering currant				
Mahonia aquifolium / Oregon grape				
Symphotrichum / Douglas aster				
Physocarpus capitatus / Pacific ninebark				
Arctostaphylos uva-ursi / Kinnikinnick				
Iris missouriensis / Western blue flag iris				
Aquilegia formosa / Western columbine				
EXTENSIVE GREEN ROOF - SEDUM				
Sedum species on extensive green roof				
Sedum acre 'aureum' / Goldmoss stonecrop				
Sedum album / White stonecrop				
Sedum oreganum / Oregon setonecrop				
Sedum spathulata 'cape blanco' / Cape blanco sedum				
Sedum spurium 'dragon's blood' / Dragon's blood stonecrop				
Sedum 'sun sparkler' / Sun sparkler stonecrop				

Planting & Materials

Materiality

Paving Selection:

Permeable precast concrete unit pavers are chosen for the plaza, providing durability and allowing water infiltration. Within café and restaurant outdoor pockets inside the plaza planters, sealed decomposed granite is utilized for a distinct aesthetic.

A CIP concrete pathway on the pavilion roof meanders through planters, leading to a view deck crafted from Thermally modified Ash wood.

Specialized paving in the plaza core integrates art features, textures, and patterns using natural materials like granite stone.

Durable hydrapressed porcelain pavers on pedestals dominate the upper patio amenity spaces.

The childcare patio features resilient materials such as PIP rubber, wood fiber, and sealed crushed aggregate in active play zones, along with a Thermally modified Ash wood deck in covered areas and at the patio interface with indoor programs.

Furniture Selection:

CIP concrete linear benches with large slab cuts of natural stone and polished edges are strategically placed inside perimeter planters on the ground level.

Tiers of CIP concrete seats with wood tops adorn the pavilion's terraced rooftop.

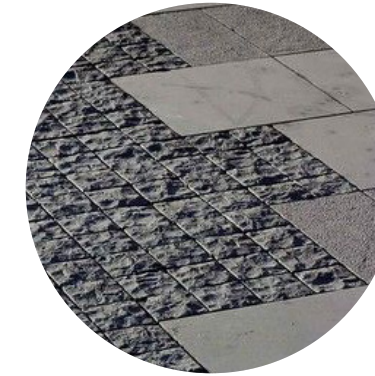
Other site furniture includes bike racks, landscape lighting, communal tables, picnic tables on the outdoor rooftops, and a variety of movable furniture, including tables, chairs, and lounge seating in the patio areas.



Thermally Modified Ash Wood



Precast Concrete Pavers



Special Stone Paving



Hydrapressed Porcelain Paver



Decomposed Granite Aggregate Paving



Indigenous Art and Craft



Integrated Planters with Seating



Bike Racks



Stone Slabs



Tiered Seat Walls on Pavilion



Floor Lights



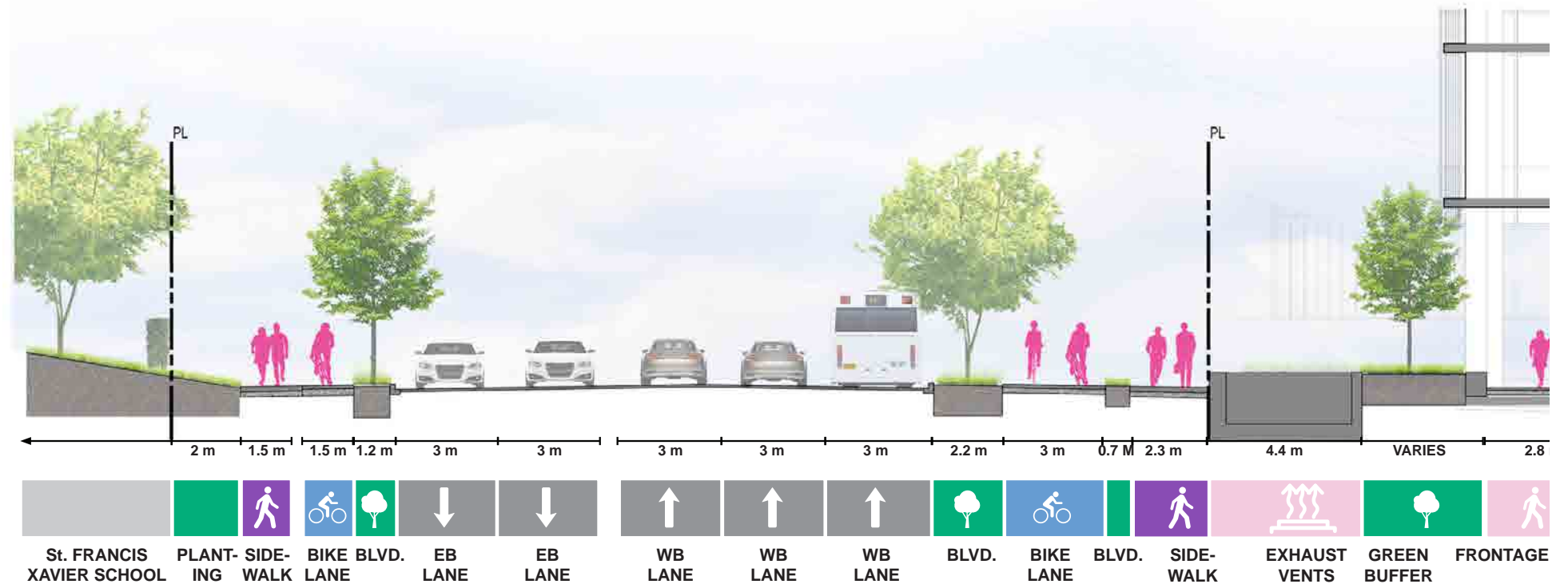
Amenity Planters and Moveable Furniture

3.7.7 GNW Frontage

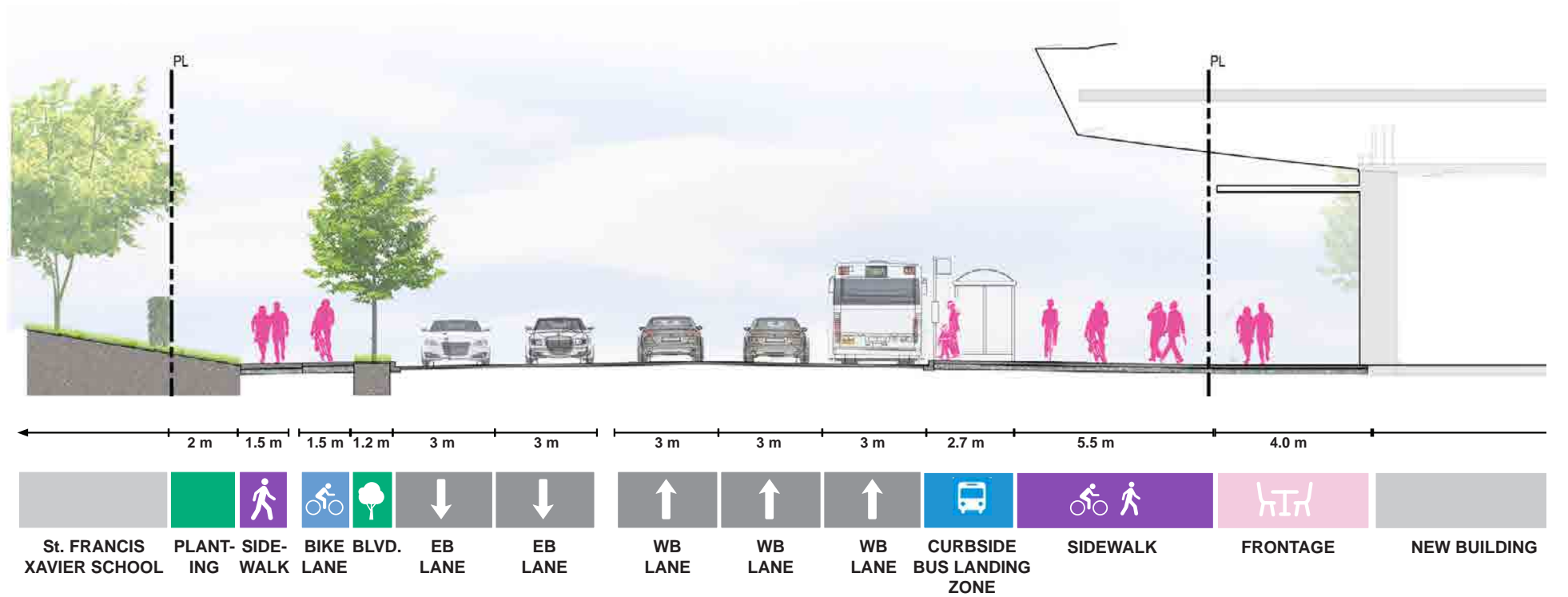
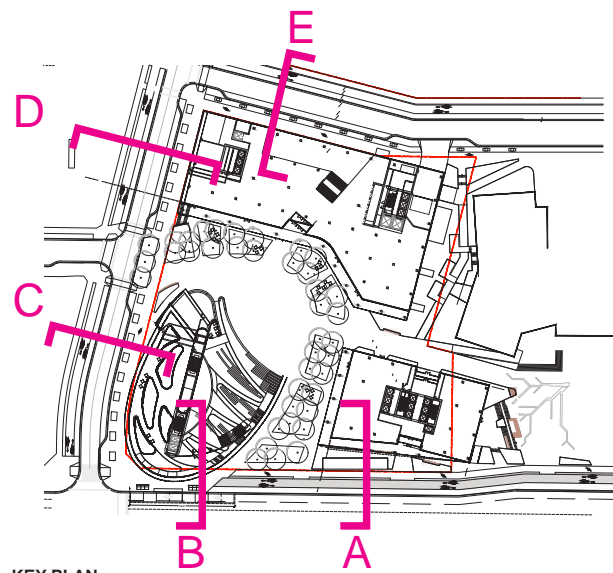
Sections at GNW

The design features a dedicated bi-directional bike lane situated to the north of Great Northern Way, transitioning into a single bike lane to the south of the right-of-way (ROW). Bike lane crossings seamlessly connect the two at the intersection of Great Northern Way and Thornton Street. A spacious treed boulevard along the curb provides separation between the bike lane and the road, complemented by a secondary shrub bed strip that demarcates the bike lane from the sidewalk.

As one approaches the station, the continuity of the sidewalk lane is briefly interrupted by plaza spatial paving material. This distinctive paving serves as a clear indication to all users that they are approaching the station. This designated area is anticipated to be a point where traffic slows down, and bus queues begin to form at the two bus stops.



A- GNW at Lot 8S- looking west



B- GNW at Lot 7- looking west

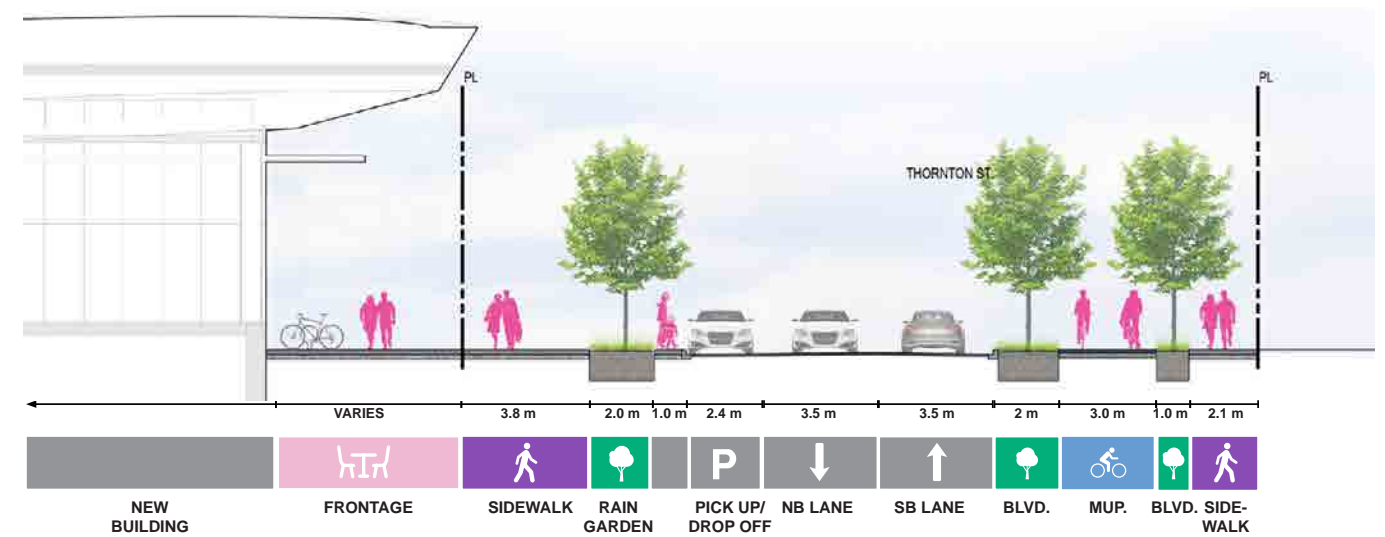
GNW Frontage

Sections at Thornton Street

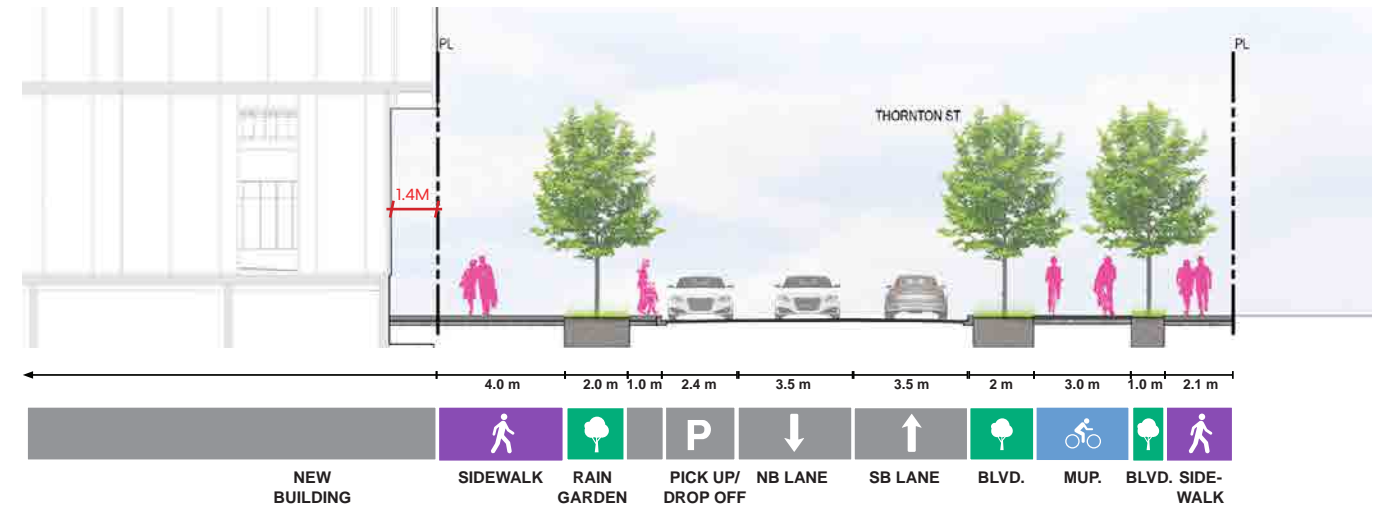
The Thornton streetscape is structured around two through lanes, accompanied by a pickup/drop-off lane adjacent to the station building and residential tower Lot 6. The public realm features a combination of a spacious sidewalk and a two-meter-wide treed boulevard, delineating the pedestrian interface with the development. The station building is set back by six meters, creating a substantial canopied area. This space is partially utilized for Mobi electric bike facilities and provides ample room for momentary stops for SkyTrain passengers. A two-way bike lane, flanked by double rows of treed boulevards, separates the lane from the sidewalk and driveway.

Sections at East 1st Avenue

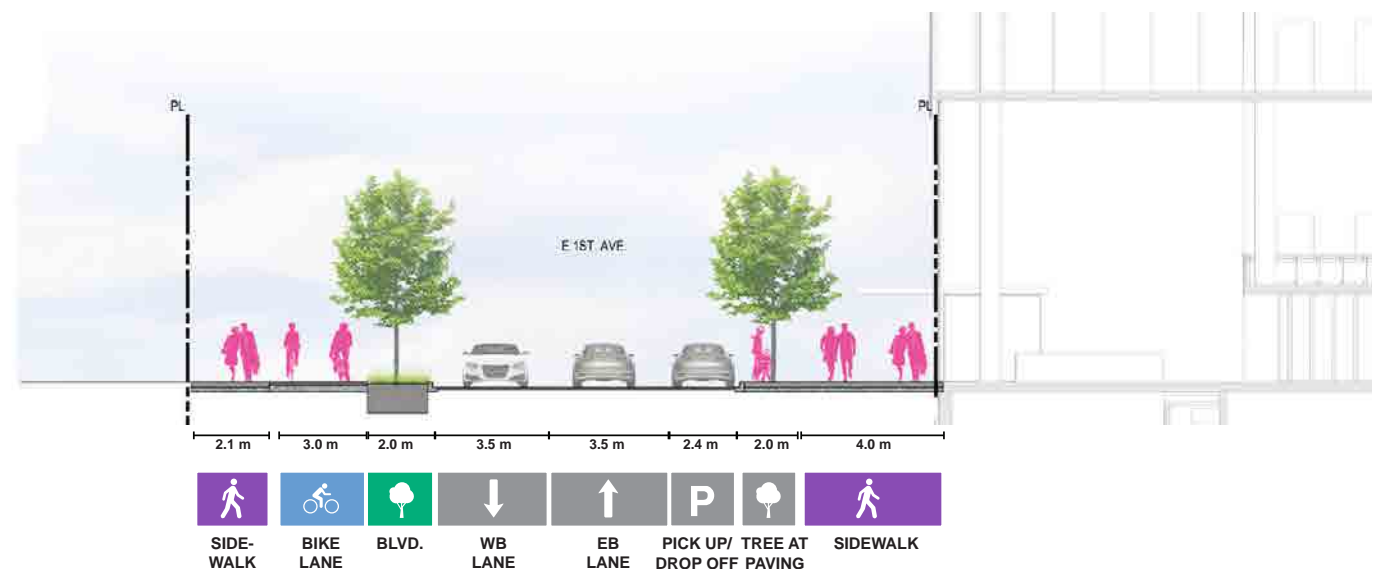
Significant changes are anticipated for East 1st Avenue, currently ending at a cul-de-sac, with the goal of extending it to Thornton Street. Expanding on the continuity of the Central Valley Greenway, the street cross-section includes a dedicated two-lane bike lane and a pedestrian walkway on the north side. On the south side, a proposed tree row on grates aims to maximize the walkable surface and streamline pick-up/drop-off activities near residential areas and the market hall entrance from East 1st Avenue.



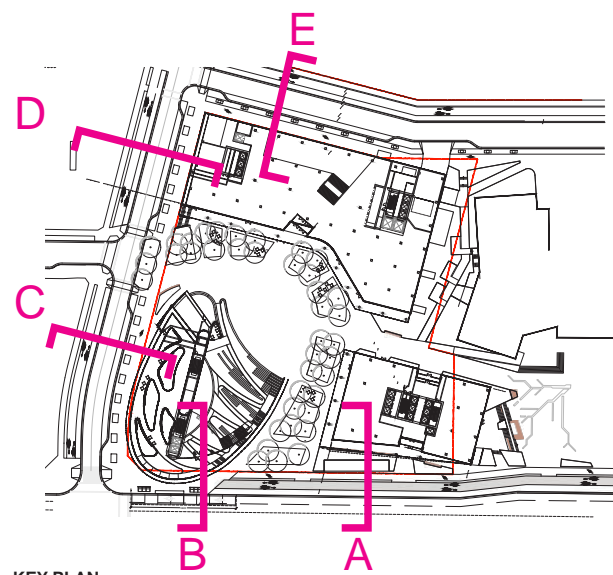
C- Thornton street at Lot 7 - looking south



D- Thornton street at Lot 6 - looking south



E- Thornton street at Lot 7 - looking south



KEY PLAN

3.7.8 Pedestrian Connections

Art Alley

Lot 6N is setback from the proposed property line 8 meters to create additional open space between the proposed building and Emily Carr University, creating a pedestrian connection from 1st Avenue East. Contributing to the campus network, the potential art alley not only connects the public realm, but allows for an intimate space for students from Emily Carr University to display work and engage with the community.

1.



PAGE LEFT INTENTIONALLY BLANK

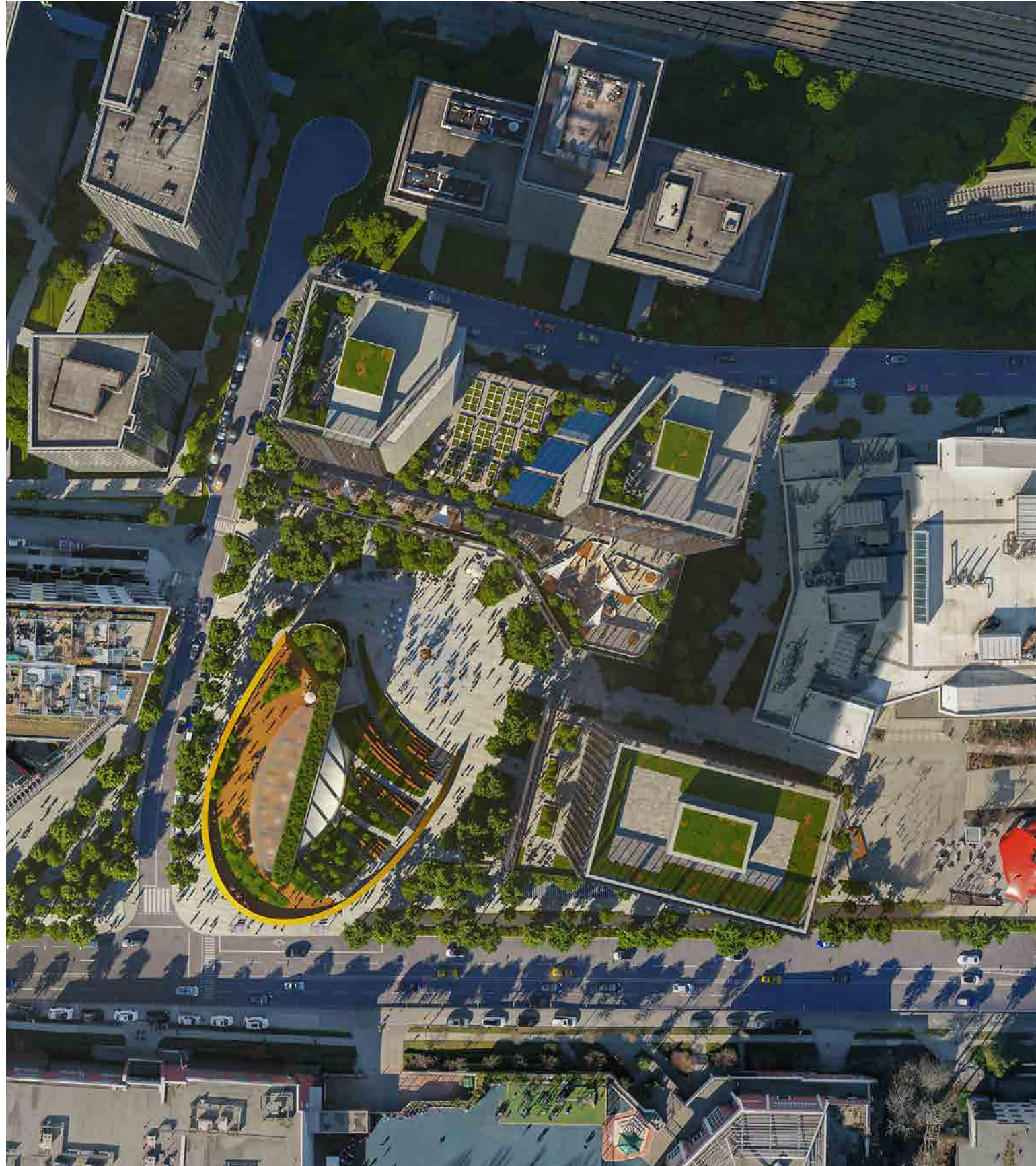
PAGE LEFT INTENTIONALLY BLANK

Section 4.0

Renderings



Aerial view of project looking North-East



Aerial view of project



View from Great Northern Way looking North into new public space and West into adjacent plaza



View from Thornton Street looking West into heart of the project



View from Lot 6 + 8N podium looking South at the Pavilion

PAGE LEFT INTENTIONALLY BLANK

PAGE LEFT INTENTIONALLY BLANK

Section 5.0

Response to Application for Rezoning Advice (Letter Of Enquiry)

Contents

5.1	Responses to Pre-Application Enquiry	78
5.2	Responses to Letter of Enquiry	79

5.1 Responses to Pre-Application Enquiry

The Pre-Application Enquiry submission included a series of Points of Enquiry to facilitate discussion with City staff on aspects of the proposed development, of which were unclear at the time of Enquiry submission. Most of these have been answered within the City Letter of Response and subsequent engagement with City staff. The below table summarizes the status of these points of enquiry within the current Rezoning Application Submission. Please refer to previous Pre-Application Enquiry submission for more explanation and graphics illustrating these points at the time of that submission.

Point of Enquiry	Status at Rezoning Submission
4.1 Campus Wide Approach	The Pre-Application submission highlighted some macro scale initiatives that would benefit from a district wide approach within the GNW Campus. While the majority of policy requirements are contained within the bounds of the application site (e.g. childcare provision, parking under new City and Provincial policies for TOD developments, connection to District Energy, urban agriculture) there are some areas where a campus wide approach still makes sense. This includes location of the lot line (and application boundary) east of Lot 8S, and the connection and integration to the public realm to the east and the underground parkade on this adjoining Lot, as well as the boundary of the lot line (and application boundary) north of 8N with the re-alignment and extension of East 1st Avenue.
4.2 (Rerouting of) Central Valley Greenway via East 1st	The proposal is proceeding as per the approach proposed in Pre-Application submission, following discussion with the City. The applicant will continue engagement with relevant departments.
4.3 E 1st Ave Alignment	The proposal is proceeding as per the approach proposed in Pre-Application submission, following discussion with the City and Broadway Subway Project team. The applicant will continue engagement with relevant departments.
4.4 Building Setbacks	The proposal is proceeding as per the approach proposed in Pre-Application Enquiry submission and in alignment with setbacks outlined in Engineering comments in City letter of response. The applicant will continue engagement with relevant City departments. Refer to architectural drawings.
4.5 Curb Space / Set Down	It remains the case that curb spaces surrounding the GNW-Emily Carr Station will be amongst the busiest within the district, with high demand and overlapping uses. General intent is in line with approach proposed in Pre-Application Enquiry submission and applicant will continue engagement with relevant City departments. Refer to architectural and landscape site plan drawings.
4.6 Parking and Loading Provision	The underground site conditions remain as constrained as was outlined in Pre-Application Enquiry submission. The proposal continues to propose a common underground parking (vehicles and bikes) and loading facility beneath the new buildings within the developable footprint of the parkade, and is supported by an accompanying Traffic Demand Management (TDM) Plan in line with latest City of Vancouver policy.
4.7 Plaza Open Space	The proposal is proceeding as per the approach proposed in Pre-Application submission, following discussion with the City. The applicant will continue engagement with relevant City departments. Refer to architectural drawings.
4.8 Building Height & Floor Plate Sizing & 4.10 Housing	<p>As noted elsewhere in this booklet, the housing component has been updated to include two residential towers of 35 storeys; with the same percentage of multifamily units (35%) and below market units (20%) as within the Pre-Application submission. This aligns with policy direction within Broadway plan, and City comments letter of response to the Pre-Application Submission.</p> <p>The residential tower floor plates are proposed up to 7200 sq.ft/670 sq.m (versus 604 sq.m in the Broadway Plan). This aligns with discussions to date with City Staff in in response to site constraints, family housing mix, and unit sizes to deliver over 500 new homes. Unit sizes are per recommendations outlined in City letter of response to the Pre-Application submission. The applicant will continue engagement with relevant City departments.</p> <p>The office tower is proposed at 20 storeys and with a tower floor plate of 13,185 sq.ft/1,225 sq.m, noted to be in excess of the 929 sq.m. within the Broadway Plan. As noted in the response matrix below, and elsewhere in this booklet this development is within the area characterized as the 'Creative District' within the Broadway plan. The is intended as a mixed hub of primarily institutional, light industrial and office developments, anchored by post-secondary institutions such as Emily Carr University of Art and Design (ECUAD), and aims to foster employment uses that support innovation and creative economy uses.</p> <p>A relaxation on the maximum tower floor plate size of recommended 10,000 SF is being sought. The Broadway plan section 11.9 Industrial/Employment touches on floor plates (11.9.6), with a maximum floor plate recommended at 10,000 SF / 929sq.m, primarily along the Broadway corridor. PCI has been in discussions with active employment groups and the brokerage community since LOE submission. In order to respond to some tenant requirements, this project will need to maximize height and provide expanded floorplates to meet market demand. In downtown Vancouver, PCI has completed an office building with 10,000 SF floor plates that has been experiencing difficulty in lease up due to smaller floor plate size. The current design has a tower floor plate ranging from 950sq.m to 1550sq.m on 8S and a shared podium floor plate of approximately 3200sq.m. that would attract some of the employment uses that support innovation and creative economy uses.</p>
4.9 Childcare Provision	In response comments in City Letter of Response to Pre-Application submission and subsequent discussions with City Staff, the application has expanded the Pre-application proposal (37 spaces) and is exceeding the City staff recommended minimum (56-spaces, with 738 sq.m of functional indoor area, and a minimum size of 703 sq.m of functional programmable outdoor area). The applicant proposes a facility catering for approximately 94 childcare spaces. with ~23,000 sq.ft/2000 sq.m indoor area, and ~1000 sq.m of outdoor area. Refer to Architectural Drawings.

5.2 Responses to Letter of Enquiry

Section Title / City Department	City Comment Category	City Comment	Response
General		Staff have reviewed your proposal and are supportive in principle of a mixed-use multi-tower development with varying building heights at this location; however, the proposed maximum building height of 40 storeys exceeds the policy direction of the Broadway Plan.	Tower heights have been revised with Rezoning Submission, as compare to Pre-Application Submission. Two residential towers of 35 storeys and one 20 storey office tower are proposed; aligned with policy direction within Broadway plan, and the letter of response to the Pre-Application Submission.
Proposal		It proposes a total floor area of approximately 89,837 sq. m (967,000 sq. ft.) and a floor space ratio of approximately 7.4. The development site is 12,189.6 sq. m (131,209 sq. ft.) in size The residential component includes approximately 300 units of rental accommodation of which 35% are to be family-sized units. The proposal includes 20% of the rental units as below market units at rates 20% below CMHC's average rent for the neighbourhood. The development also includes 61,707 sq. m (664,210 sq. ft.) of office space and 2,278 sq. m (24,520 sq. ft.) of commercial retail space generally located at grade. A 37-space childcare facility to be dedicated to the City is also proposed. 382 vehicle parking spaces and 1900 Class A bicycle spaces are proposed within four levels of underground parking, accessed from East 1st Avenue.	Rezoning application proposed total floor area up to 7200 sq.ft (670sq.m) and a floor space ratio of approximately 6.41. With the conversion of the tower at 8N to residential the proposal includes approximetly 548 units of rental accomodation, with the same percentage of multifamily units (35%) and below market units (20%) as within the Pre-Application submission. An enlarged childcare program from the envisaged within the Pre-Application submission approximately 94 spaces is proposed.
Staff Advice		The project triggers the Rezoning Policy for Sustainable Large Developments ("RPSLD"), which includes objectives for sustainable site design, tree planting, food assets and mobility. Note that the affordable housing objectives of the RPSLD do not apply, as they are superseded by the housing objectives of the Plan. Please consult the RPSLD for more information about rezoning application submission requirements.	Noted

	<p>Demonstrate due diligence of building placement with provision of adequate setbacks for life safety design for all railway adjacent buildings. Note: Other municipalities in Canada with similar contexts have identified a minimum setback of 30 m (99 ft.) from any railway site for all commercial and residential buildings in proximity to any railway orientated operations; however, policy work is ongoing in collaboration with therelevant stakeholders to identify the proper design response in Vancouver which may reflect or differ from this standard.</p>	<p>The new extension of East 1st Avenue extension will be about 54m away from the nearest CPR rail line, meaning the development will be in excess of 70m away. In our discussions with the City on December 5, 2023 it was noted that this matter would not be an issue for this project.</p>
	<p>Provide a letter demonstrating liaison with Canada Pacific Railway and referred relevant bodies satisfying the mitigation of pertinent issues or concerns in accordance with the intent of the "Guidelines for New Development in Proximity to Railway Orientated Operations".</p>	
	<p>Demonstrate mitigation of risk for nuisance issues whether acoustic, vibration, or other for all commercial and residential buildings in proximity to any railway orientated operations.</p>	<p>As per above, the applicant will review acoustic and vibration mitigation measures due to proximity to rail operations as the project proceeds through to Development Permit.</p>
<p>Form of Development</p>	<p>Height, Density and Massing</p> <p>The proposal complies with the maximum allowable density.</p>	<p>Noted.</p>
	<p>This property has been identified as having the potential to integrate with a rapid transit station below grade. Staff support the proposed design strategy to integrate the station to the public plaza.</p>	<p>Noted. Coordination is ongoing with the Province and their design and construction teams delivering the Emily Carr-GNW Skytrain station, including coordination of structural integration of overbuild, elevation treatment of station headhouse and station bike parking provision.</p>
	<p>This proposal significantly exceeds the maximum allowable tower floor plate for office buildings identified in the Plan, Design development to reduce the tower floor plate in compliance with the plan is required.</p>	<p>The proposal will proceed as per the approach proposed in Pre-Application submission and requests a variance as notes in Point of Enquiry 4.8 to attract employment uses that foster innovation and the creative economy, in the area defined as the 'Creative District' in the Broadway Plan.</p>
	<p>The proposal exceeds the maximum allowable height of up to 35 storeys identified in the Plan. Design development to reduce the rental residential tower height in compliance with Plan is required.</p>	<p>Rezoning Submission includes (two) residential towers of 35 stories.</p>
	<p>Site Design</p> <p>It is recommended that the plaza meet the requirements indicated by Parks in regards to removing underground parking structures. Note: Urban Design staff are available to meet with your team to review and discuss design explorations as your proposal moves through the permitting process</p>	<p>Below grade constraints and necessity behind underground structures were reviewed with Parks and Planning as part of on-going engagement with the City. The comment contradicts commentary elsewhere within this letter (e.g provision of NEU infrastructure). The applicant will continue to engage with Parks on the provision of the public realm and the required open space but given the nature of the mixed use development program above grade, below grade construction for support and servicing infrastructure is necessary and continues to be proposed.</p>
	<p>Tower Separation</p> <p>Additional design analysis is needed to demonstrate clearly that the proposal complies with the required minimum separation between towers within the development site and does not unduly prevent redevelopment of adjacent properties.</p>	<p>Noted - The tower separation between the two residential towers (Lot 6 and Lot 8N) is 31m. The tower separation between residential and office (Lot 8N and Lot 8S) is 39m.</p>
	<p>Reconciliation</p> <p>Design development to meaningfully contribute toward the "Cultural Ribbon" concept, described in the "Big Moves" for the Creative District. Note: The Cultural Ribbon forms a walkway that acts as a draw to the area, highlighting Coast Salish knowledge and culture through elements such as art, signage, public realm/landscape design and architecture. Refer to Broadway Plan Section 10.31.7.</p>	<p>Noted-PCI Developments have established an Indigenous Advisory Committee (IAC) led by Aubin Consulting to provide consultation and facilitation throughout the Indigenous Engagement process. This engagement will have a precinct wide focus, including both this site at Lots 6-8 Great Northern Way and the site at Great Northern Way at VCC-Clark Station. Exploratory workshops and engagement sessions have taken place to introduce the vision for both projects to the Committee and discuss areas of opportunity for Indigenous Engagement. This includes but is not limited to opportunities with the public realm and landscape, the buildings, the development of the cultural ribbon as was conceptualized in the precinct charette and overlap with the Public Art process. A submission will be made by the IAC to the City of Vancouver outlining the vision for Indigenous Engagement outside of the Rezoning process and the results of which will be folded into the design both in terms of overall philosophy and with specific interventions. This will form part of the subsequent Development Permit Application for each project.</p>
	<p>Residential Dwelling Units</p> <p>Dwelling units are recommended to be no less than 46.5 sq. m (500 sq. ft.) for one-bedroom, 70 sq. m (753 sq. ft.) for two-bedroom, and 90 sq. m (970 sq. ft.) for three-bedroom units exclusive of in-suite storage to meet minimum standards of livability. Studio dwelling units must be no less than 37.0 sq. m (398 sq. ft.).</p>	<p>Noted.</p>
	<p>Dwelling units should be designed first and foremost in the interest of the occupants, and should foster a sense of stability and encourage long-term tenancy</p>	<p>Noted and is part of the design strategy for the residential provision.</p>

	More attention should be given to implement the design strategies to minimize the noise and pollution impacts on the units facing the rail.	Noted, the applicant will review acoustic and vibration mitigation measures due to proximity to rail operations as the project proceeds through to Development Permit. Refer to sustainability section for preliminary acoustic analysis.
Residential Outdoor Amenities	The proposal should comply with 2.0 sq. m / dwelling unit ratio for common outdoor amenities.	Noted. Approximately 6190 sq ft / 575 sq m (2.1 m2/unit) of common outdoor amenity is provided per tower.
	Common outdoor amenities should be located throughout the development site, particularly at locations with good solar access and prominent views.	Noted. Outdoor amenity is located on both podium rooftop and tower rooftop providing good solar access and prominent views.
	Accommodations should be made for robust plantings that provide shade, acoustic buffering and visual appeal at all outdoor amenity areas	Noted and is part of the design strategy for the public realm and outdoor amenity areas.
	<p>Providing for a variety of outdoor activities to suit a range of age groups is encouraged. Outdoor amenities may include:</p> <p>Sports equipment like basketball hoops, hockey nets and ping-pong tables; Outdoor kitchens and dining areas; Hobby gardening and urban agriculture beds; Children's play structures; and/or, Sunbathing and picnic areas</p>	Noted. Current outdoor amenity includes a range of activities including urban agriculture beds, outdoor kitchen and dining areas, sunbathing and picnic areas.
Residential Indoor Amenities	The proposal should comply with minimum 1.2 sq. m / dwelling unit ratio for common indoor amenities.	Noted. Approximately 5000 sq ft /465 m2 (1.72 m2/unit) of common indoor amenity is provided.
	<p>Indoor amenities should be designed to give residents of all ages access to a variety of activities that may be difficult to do in apartment homes, and creativity is encouraged. Indoor amenities may include:</p> <p>Acoustically controlled music rooms for residents to play instruments without disturbing their neighbours; Multipurpose rooms for hosting larger functions and parties; Flexible workspaces with small meeting rooms to support working at home; Dog washing rooms with hose bibs and floor drains; and/or Workshops with a tool library.</p>	Noted and will be included as the project evolves and proceeds through Development Permit Process.
Civic Agencies	This proposal will be subject to review by the Urban Design Panel.	Noted
Sustainable Design	All non-occupiable roof surfaces should be designed as green roofs to provide for passive rainwater management and to mitigate the urban heat island effect.	Noted, all non-occupiable roof surfaces e.g elevator overruns, will be designed as a green roof.
General Form of Development Comments	Building architecture and materiality should be of its time while considering the architectural character of the neighbourhood.	Noted, material boards will form part of the development permit process.
	Podium expression should be emphasized more as a prominent massing to compare with residential towers as a secondary expression. This could be achieved through clear expression of a finer grain urban fabric, articulating smaller increments and modules, recognizing and appropriately scaling the building entrances to the street and the neighbourhood context.	Noted and will be part of Development Permit process.
Pedestrian Realm Interface and Placemaking	Public Realm should be enlivened to provide opportunities for social connection with human-scaled design that activates the public realm and creates interest.	Noted. The proposed design of the site and architecture of lot 6, 7, 8N and 8S centers around creating a community hub in the middle of the development, connected to adjacent public spaces and buildings fostering social connection.

	Exploration of various design strategies is highly recommended to reduce the area of above grade structure in the plaza and enhance the usable and qualitative open space for all residents.	The site design takes an enhanced approach to Lot 7 and uses the overbuild from the new transit station to enhance the quality of the open space. The pavilion integrated into Lot 7 creates an extension of plaza over the station head house.
	Attractive and pedestrian friendly facades can be achieved by employing finer grained urban fabric and building modules, high-quality materials and detailing, visually permeable facades, distinct signage, canopies, programming for active outdoor uses, well developed landscape elements, and/or other architectural features.	Noted and will be part of Development Permit Process
Landscape	The site is located on a greenway, in an area that is identified as tree canopy deficient. Incorporation of considerable tree canopy supported by Blue-Green Systems (BGS) as defined in the City's Rain City Strategy is strongly encouraged.	The project strives to achieve an overall 26.8% tree canopy coverage and 36.8% vegetation cover, surpassing the City of Vancouver's Sustainable Large Sites requirement of 20% and 30%.
	The site is identified as an equity initiative zone and the design should respond to this.	The public realm strategy is designed to cater to diverse users while seamlessly integrating with established and upcoming public assets. Recognizing the "creative district" as a "historically underserved area," throughout the Development Permit process the project team will continue to design with the main objective of providing resources, programs, and housing for the community.
	Consider improving the interface with adjacent structures and existing conditions to the east, especially Lot 85 interface with St. George Plaza.	The interface of the office on Lot 8S and St George Plaza has been improved through refined building massing that opens up to the plaza with a transparent, glazed facade at-grade with anticipated retail use to complement the activation of the Red Pavilion Cafe. The landscape has been refined to provide clear orientation to the front entry of Emily Carr and buffered patio spaces that hold grade in front of retail uses.
	Consider providing a central open space with a well-balanced ratio between retail use and public use.	Noted. The building footprints have been designed to prioritize the central open space with social connection and numerous retail parcels on the ground floor of all three buildings including a market hall further drawing in the public to the site.
	Consider providing universally accessible routes from all entry points to the central open space.	Noted. All routes will be universally accessible.
Parks	The park parcel may not be encumbered by non-park related surface or subsurface structures (utilities, parkades, station building, etc.) or other encumbrances such as easements or statutory rights-of-way (SRWs), as indicated in the Park Works Agreement (PWA), specifically: Section 8.3(k) – indicating that the no improvements from adjacent parcels may encroach into the Park Parcel; and Section 8.3(p) – stating that no structures or improvements may be constructed/placed on the Park Parcel other than the Park Works.	Below grade constraints and necessity behind underground structures were reviewed with Parks and Planning in ongoing engagement with the City subsequent to the Pre- Application submission. Given the nature of mixed use development program above grade (as allowed for and desired in the Broadway Plan), below grade construction for servicing and support infrastructure is necessary and continues to be proposed. In addition, comments elsewhere in this letter require it (e.g. provision of NEU facilities). The lot 7 pavilion supports the overbuild and integration of the station as the design integrates a useable roof that activates the public space. The applicant will continue to engage with Parks on the provision of the public realm and the required open space to ensure a cohesive and celebrated public realm is provided.
	The only SRW expected under the park parcel is the Broadway subway tunnel shown in the PWA.	
	The configuration and location of the park parcel as shown in the enquiry is acceptable given it is bordered by two public streets, there are active uses on the ground floor facing the park, and it has good solar access. Subsequent submissions must continue to show a clear delineation of public and private property and keep the park as one contiguous parcel of 0.49 ha (53,000 sq. ft.) in size (minimum).	
	Public use of the roof of the station is also supported as an exciting way to elevate views and create overlook of the park. From an ownership perspective, we recommend that this be considered a POPS, not counted toward the overall 0.49 ha (53,000 sq. ft.) park area.	
	The subsequent submission should acknowledge the terms of the PWA.	
Housing	The project must include a minimum of 35% family units, including a minimum of 10% three bedroom units, and a minimum of 25% two-bedroom units, met separately in both the strata, market and below-market rental units.	Noted and included in Rezoning Submission.
	All new below-market rental housing is required to meet the affordability criteria and other requirements outlined in Broadway Plan policies 12.2.15 – 12.2.18, including that starting rents by unit type not exceed a rate that is 20% less than the City-wide average rents as published annually by CMHC.	Noted and allowed for as part of the application.

	<p>The project must incorporate the High-Density Housing for Families with Children Guidelines (https://guidelines.vancouver.ca/guidelines-high-density-housing-for-families-with-children.pdf), including but not limited to:</p> <ul style="list-style-type: none"> A minimum of 2.3 sq. m (24.7 sq. ft.) of bulk storage for all units; A private open space for each unit which is a minimum of 1.8 m (5.9 ft.) deep by 2.7 m (8.9 ft.) wide; Outdoor amenity area suitable in size to the scale of the project, to include areas suitable for a range of children's play activities and urban agriculture, and situated to maximize sunlight access; and Indoor amenity suitable in size to the scale of the project, including a kitchenette and accessible washroom, with direct access to the outdoor amenity area where possible. 	<p>Noted and included in the submission.</p>
	<p>If taking the DCL waiver, the project must ensure the average unit size per unit type is less than the maximum set in the Rental Incentive Programs Bulletin. A copy of the DCL Waiver Request Form should be submitted at Rezoning Application stage.</p>	<p>Noted and included in the submission.</p>
	<p>The rental and below-market rental tenure must be secured for a term of 60 years or life of the building, whichever is greater, through legal agreements (e.g. Housing Agreement pursuant to section 565.2 of the Vancouver Charter, including no stratification and no separate sales covenants).</p>	<p>Noted</p>
	<p>In zoning districts where the Rental Housing Stock Official Development Plan (RHS ODP) applies, projects will require one-for-one replacement of existing rental housing units with new secured rental housing units (Broadway Plan policy 12.2.13).</p>	<p>Noted- no existing rental units on the development site.</p>
<p>Engineering</p>	<p>As per the Public Bike Share (PBS) SRW Agreement (CA4605271-CA4605278) for 555 Great Northern Way registered on August 13, 2015:</p> <p>A 43 m x 4 m (linear) or 23 m x 8 m (back-to-back) sized PBS station shall be accommodated on this site. The station must be fully located on private property while still clearly visible to the public with 24/7 public access. The preferred location is near the intersection of Great Northern Way and Thornton St to allow easy access to the street.</p>	<p>Noted and included in Rezoning Submission.</p>
	<p>The applicant will be asked to provide the following off-site improvements:</p> <ul style="list-style-type: none"> A 18.97 m (62.24 ft.) wide dedication is required along the north of the site for the East 1st Avenue extension to Thornton Street. The new property line will be aligned with the SRW Plan EPP56251 line as shown in the rezoning enquiry package. Building setbacks/SRWs to achieve 1.4 m (4.6 ft.) from the property line for widened sidewalks along Thornton Street. The SRW shall be free of any encumbrances at-grade. Additional off-site improvement requests apply. See 3. Notes for Future Development Stages below. 	<p>Noted and included in Rezoning Submission.</p>
<p>Neighbourhood Energy Utility</p>	<p>Design the building(s) heating and domestic hot water system to be compatible with the NEU system to supply all heating and domestic hot water requirements.</p>	<p>Noted and is part of the district energy strategy for the development.</p>
	<p>Explore waste heat recovery opportunities including but not limited to heat recovery from building cooling, data centres, sewage, and commercial refrigeration.</p>	<p>Noted and is part of the servicing strategy for the development.</p>
	<p>Provide for an adequate and appropriate dedicated Energy Transfer Station (ETS) room (free of other equipment) located on the highest below-grade level.</p> <p>The ETS room must be located with an exterior wall adjacent to existing/planned NEU distribution piping and easily serviceable by the NEU.</p> <p>The dedicated ETS room and its access route shall facilitate installation of prefabricated Energy Transfer Station (ETS) skid(s). Sufficient space along access route is required to allow installation/maneuverability of ETS skids.</p>	<p>Noted and is part of the district energy strategy for the development.</p>

	<p>Provide for an adequate and appropriate dedicated NEU Room located on the highest belowgrade level, developed in consultation with the City, to house NEU infrastructure required to serve growth in this section of the network. The NEU Room shall be made available at the earliest phase of the development to accommodate NEU infrastructure. Preliminary design features of the NEU Room includes: Estimated 130 sq. m floor area (aspect ratio not narrower than 3:1); 4.5 m clear height at minimum; At least one outside wall adjacent to existing/future NEU distribution piping; Drive-in access and appropriate structural capacity along drive-in route; and Adequate provisioning of electrical, natural gas, ventilation, plumbing, venting/boiler flues, telecommunications, lighting, and life safety systems.</p>	<p>Noted and allowed for as part of the application.</p>
<p>Economic Development</p>	<p>Floor areas set out for employment spaces in CD-1(402) Table 1 are considered a collective minimum for all employment uses for this rezoning.</p>	<p>Noted and allowed for as part of the application.</p>
	<p>Retail can be prioritized over office for this site due to adjacency to transit station and large amount of residential to the west. Conversion lower level office (e.g. at least Level 2) to additional retail to increase amenity on the site is encouraged (see Section 2.1(c) in CD-1 Guidelines). Consider providing larger grocery store to provide daily needs on 2nd level for larger floor plate.</p>	<p>A market hall is being proposed as part of the application within the podium of Lot 6 and 8N. The opportunity for grocery will be explored.</p>
	<p>Ensure/maintain connection to ECUAD campus and St George Plaza and the Red Petal Pavilion building.</p>	<p>Noted. The proposal maintains and enhances the connections to adjacent buildings and public spaces as noted under the landscape comments above.</p>
	<p>Strong economic development support for providing childcare on this site.</p>	<p>Noted.</p>
<p>Rezoning Policy for Sustainable Large Developments</p>	<p>As the application contains 45,000 sq. m (484,375 sq. ft.) or more of new development floor area, the Rezoning Policy for Sustainable Large Developments (“RPSLD”) applies (see also the Sustainable Large Developments Bulletin). The rezoning application must meet seven of the eight policy areas: 1) sustainable site design; 2) sustainable food systems; 3) green mobility; 4) potable water management; 5) rainwater and groundwater management; 6) zero waste planning; 7) affordable housing (omitted from requirements as below-market rental is proposed); and 8) resilience. Note: As part of your application submission, please include a summary document of how the proposal intends to meet the policy areas in the RPSLD.</p>	<p>Noted - included in Rezoning Submission package</p>
	<p>The project must fulfill the Sustainable Food Systems requirements of RPSLD by providing three food assets. When developing the rezoning application, staff recommend reviewing the Broadway Plan and Vancouver Plan food systems policies and proposing assets and land uses that align.</p>	<p>Noted - included in Rezoning Submission package</p>

When developing a food assets proposal to accompany the rezoning, staff recommend reviewing the Broadway Plan and Vancouver Plan food policies and proposing assets that align. The following Broadway Plan directions are particularly relevant: Section 16 - Key Food Systems Direction: Retain and expand community food assets such as food growing, harvest space and community kitchens, by seeking opportunities in City-owned, -secured or -supported sites and projects. Where possible, encourage and enable private food infrastructure to reduce the service demand on publicly accessible and community-programmed food infrastructure. Expand opportunities for food supply chain businesses to improve food access and resilience.

16.4.1 Improve decentralized access to food infrastructure of different types and scales (e.g. food retail, markets, street food vending, food and medicine growing space, free or low-cost food options, food processing).

16.4.2 Enable a broad array of food retail, vending, manufacturing, and free or low-cost food options to address geographic gaps.

16.4.3 Build and outfit new food production and harvest spaces (including community gardens, Indigenous food lands, urban farms, greenhouses, and other models) on City-owned and private land and buildings. Through development in strategic locations such as large and unique sites, seek opportunities to deliver or sustain urban farms (indoor or outdoor models) and publicly accessible food production and harvest spaces.

16.4.4 Find opportunities to secure sites for small (under 500 square meter), medium (500-1,500 square meter) and large (over 1,500 square meter) outdoor and indoor food production typologies, including on:

- a) City-owned land,
- b) Vacant sites awaiting redevelopment, and
- c) Large sites where the Rezoning Policy for Sustainable Large Developments applies.

Noted - included in Rezoning Submission package

16.4.5 Explore ways to better enable and encourage developments to provide food and medicine growing spaces such as rooftop or courtyard gardens, indoor urban farms, and other food assets, in alignment with City bylaws and design guidelines.

16.4.6 Explore how food production and harvest spaces may be leveraged to support the implementation of the Integrated Rainwater Management Plan and Rain City Strategy.

16.4.7 Pursue development of neighbourhood food infrastructure, potentially co-located with other community facilities, to provide community organizations with space for food storage, preparation, distribution and celebration in day-to-day programming and during emergency response.

15.1.1 Provide a complete, connected network of public spaces by delivering a full spectrum of space types and uses across all neighbourhoods in Broadway, to support: gathering and social connection; cultural expression and celebration; civic action and democratic expression; respite and connection to nature; physical activity, health and well-being; food security and local economic vibrancy.

15.4.5 Support targets for food production and harvest spaces (including community gardens, Indigenous foodlands, urban farms, and other models), and meet targets through opportunities in the public realm and publicly accessible spaces, including in parks, greenways, blue green systems, and open spaces.

15.4.6 Enable the sharing of food by integrating infrastructure such as covered picnic tables, outdoor cooking facilities, sinks, potable water, and washrooms into outdoor public space.

Noted and will be part of Development Permit process.

In alignment with the Broadway Plan, food assets that are particularly encouraged in this location include publicly accessible urban agriculture amenities such as publicly accessible community gardens or an urban farm (which could include rooftop or indoor models).

Noted - included in Rezoning Submission package.

In addition to the requirements of the RPSLD, enabling food-related manufacturing uses is encouraged within the industrial or retail units in alignment with the Broadway Plan (e.g. policy 16.4.1, 16.4.2).

Noted and opportunities will be explored.

Staff recommend a pre-application meeting to discuss these considerations and potential food asset options in advance of rezoning application submission. Please contact foodpolicy@vancouver.ca.

Noted. Meeting will be arranged subsequent to application. The applicant will continue to engage with relevant City departments.

<p>Childcare</p>	<p>The City maintains a strong preference to operate larger childcares where sites can accommodate them, for maximum efficiency of childcare operations and ongoing facility maintenance.</p>	<p>The applicant proposes a facility catering for approximately 94 childcare spaces, with ~2000 sq.m indoor area, and ~1000 sq.m of outdoor area. Refer to Architectural Drawings.</p>
	<p>Staff recommend a minimum 56-space facility to be delivered, to wholly fulfil the obligations of the original childcare commitment on this site (with a minimum size of 738 sq. m of functional, programmable indoor area, and a minimum size of 703 sq. m of functional, programmable outdoor area, as per the Childcare Design Guidelines).</p>	
	<p>Proposed location, on the 6th floor of the 40-storey residential tower (Lot 6), is not ideal for a functional, programmable 37-space childcare, and would not be sufficient in size to accommodate a 56-space facility (CoV preference). For a 37 space facility composed of two programs (12 space toddler, 25 space 3-5), functionality of the indoor area is compromised by a large, divided core, resulting in narrow programmable spaces, low visibility and challenging supervisability; Outdoor space will be challenged to meet solar access guidelines, which call for a minimum of three hours of sunlight per day, including two hours of sunlight during typical playtimes of 9:30 am - 11:30 am or 1:30 pm - 4:00 pm (staff will accept shadow studies on Feb 1st instead of winter solstice); The irregular shape of the proposed outdoor space, with a narrow strip on south end, is not functional for the outdoor play area layout; Concern with the outdoor play area placed in a potential wind tunnel between the two towers; Current tower design will ensure that many residential balconies will be located above the childcare play area, which should be minimized as per the Childcare Technical Guidelines; Entrance to the childcare on north side (East 1st) is not preferred, as it lacks visibility /accessibility, particularly for transit users.</p>	<p>The expanded childcare facility remains on Level 03 of the podium, stretching across lot 6 and 8N in turn providing indoor and outdoor area to accommodate approximately 94- space facility. Please refer to sustainability section for initial performance analysis, including solar access studies. Further studies including wind acoustics and outdoor programming will be a part of the development permit process. The outdoor childcare location allows for significant sunlight access as per the study included in the rezoning package.</p>
<p>Public Art</p>	<p>The Public Art Policy and Procedures for Rezoned Developments requires rezonings having a floor area of 9,290.0 sq. m (100,000 sq. ft.) or greater to contribute public art (Option A) or provide 80% cash in lieu (Option B) as a condition of rezoning. Public art budgets are based on a formula (2016) of \$21.3125 per sq. m (\$1.98 per sq. ft.) for all areas contributing to the total FSR calculation. Please note that the Public Art rate is finalized at the development permit stage and is subject to periodic adjustments to address inflation.</p>	<p>Application will submit Public Art Check list and Preliminary Public Art Plan as part of the Rezoning Application with the detailed Public Art Plan to follow (as a condition of DP issuance).</p>
	<p>This project sits in the area of the Broadway Plan, which includes a key direction to “Focus public art investment in public spaces, including plazas, parks, and as a component of complete streets, to centre art in daily life.” The City will seek to identify opportunities to deploy shared resources to advance this goal, including through Option B payments. Please review chapter 17 of the Broadway Plan, “Arts and Culture,” particularly the policies outlined in section 17.6.</p>	<p>Noted and will be part of Development Permit and Public Art process.</p>
	<p>This project also lies within the Creative District area identified in the Broadway Plan. One of the “Big Moves” for the Creative District is the concept of a Cultural Ribbon forming a link from East Vancouver towards False Creek. The Cultural Ribbon will be a walkway that acts as a draw to the area, highlighting Coast Salish knowledge and culture through elements such as art, signage, public realm/landscape design and architecture.</p>	<p>Noted Indigenous Engagement is ongoing and the Cultural Ribbon Concept will continue to be a part of Development Permit process.</p>
	<p>New developments in the Creative District should meaningfully integrate, reflect, and advance the Cultural Ribbon in consultation with the Host Nations and led by Musqueam, Squamish and Tsleil-Waututh peoples.</p>	
	<p>Please contact public art staff at publicart@vancouver.ca to discuss opportunities for public art and potential partnerships prior to submitting a rezoning application.</p>	<p>Noted and will be part of Development Permit and Public Art process.</p>
<p>Community Amenity Contributions</p>	<p>A real estate pro forma analysis is required with a rezoning application submission in accordance with the City’s CAC policy.</p>	<p>Noted and will follow subsequent Rezoning Application intake.</p>
<p>Engineering</p>	<p>Vehicle parking, loading, bicycle parking, and passenger loading are to be provided as per by-law requirements and Childcare Design Guidelines. The proposal will additionally be required to consider TransLink’s operational loading/parking needs, e.g. maintenance or police vehicle parking spots in the underground parking with direct connections to the stations.</p>	<p>Noted - included in Rezoning Submission package</p>
	<p>Enter into a shared access agreement for underground parking access to/from adjacent site.</p>	<p>Noted and will follow subsequent Rezoning Application intake.</p>

	<p>Drawings should indicate parking and loading layout as per by-law and design guidelines. Refer to the following links for additional design requirements:</p> <ul style="list-style-type: none"> o Parking By-law: https://vancouver.ca/your-government/parking-by-law.aspx o Parking and Loading Design Supplement: https://bylaws.vancouver.ca/Bulletin/parkingloading-design-supplement-bulletin.pdf o Shared Vehicles: https://bylaws.vancouver.ca/bulletin/S008.pdf o Childcare Design Guidelines: https://guidelines.vancouver.ca/guidelines-childcaredesign.pdf 	Noted - included in Rezoning Submission package
	<p>A Transportation Assessment and Management Study (TAMS) is required with the application.</p> <ul style="list-style-type: none"> o The applicant's transportation consultant is required to submit the TAMS Terms of Reference to Engineering for review and approval prior to undertaking their study. 	Noted - included in Rezoning Submission package
	<p>Transportation Demand Management (TDM) plans are mandatory for Sustainable Large Site developments and will be required with each subsequent development permit application. Note that TDM reductions are not applicable to accessible spaces, visitor parking, loading, bike spaces, passenger loading, or childcare spaces. TDM Schedule A worksheets and sufficient background information to assess the proposed TDM plan is required.</p> <ul style="list-style-type: none"> o Per 10.31.8 of the Broadway Plan, as part of the TDM plan, the applicant is strongly encouraged to explore options and provide for a publicly accessible bike mobility hub accessible, including significantly enhanced end-of-trip facilities, to complement station bike storage rooms. <p>Note also that requirements for delivery of the Public Bike Share station are eligible for credit towards the site's TDM plan(s).</p>	Noted - included in Rezoning Submission package
Transit Urban Design	<p>Full overbuild of the airspace over the station footprint is strongly encouraged per the Broadway Plan and is a key priority for this site. Design of overbuild should take measures to minimize shadowing of the proposed plaza space north of the station site.</p>	Contradicts previous direction in terms of siting of towers and public open space. Lot 7 station overbuild aims to enhance public realm with majority of the development density on Lots 7, 8N and 8S
	<p>Proposals for overbuild of the station site should demonstrate how the priorities outlined in section 11.10 Transit Integration and Urban Interface of the Broadway Plan have been considered to further enhance the transit experience.</p>	Noted - included in Rezoning Submission package
	<p>Coordination of overbuild material, articulation and massing to provide a sympathetic response to station design is required.</p>	Noted - included in Rezoning Submission package
	<p>The proposal shall integrate station emergency access.</p>	Noted - included in Rezoning Submission package
	<p>Solar studies of any potential overbuild of the station entrance to understand potential shadowing of the park, are required the application submission.</p>	As per above, siting of towers and public open space is configured to maximize solar access on the public realm. Lot 7 station overbuild aims to enhance public realm with majority of development density on Lots 7, 8N and 8S. Solar analysis and shadow studies form part of the rezoning application.
	<p>The applicant should coordinate with TransLink regarding any issues related to clearances for the overbuild development above station:</p>	Coordination with the province and Translink subway project team is ongoing.
Flood Protection	<p>It appears this address was included in the floodplain due to an old excavation or depression that may no longer exist. The Flood Construction Level is 4.6m elevation which should be easily achievable as the lot appears to be at or above 5.0m elevation. The northern end of Thornton Avenue is within the floodplain. The floodplain only identifies areas at risk of coastal flooding from False Creek. Areas at risk of overland flooding due to internal drainage network capacity can include areas outside the coastal floodplain. If underground parking is proposed for this development, the location and design of the parkade entrance may wish to consider mitigation measures to prevent overland flow from entering a down-sloped parkade ramp.</p>	Noted and will be part of Development Permit process.
Sustainability	<p>The Green Buildings Policy for Rezonings requires that rezoning applications satisfy the green and resilient building measures detailed in the policy. More information can be found in the hyperlinked policy here and submission requirements can be found in the bulletin for Green Buildings Policy for Rezoning - Process and Requirements.</p>	The office building on lot 8S will be built to LEED Gold standards, and the development will conform with the City's Green Building Policy for Rezonings.
Rezoning Policy for Sustainable Large Developments	<p>As part of your application submission, please include a summary document of how the proposal intends to meet the policy areas in the Rezoning Policy for Sustainable Large Developments.</p>	Noted - included in Rezoning Submission package
Utility Servicing	<p>*Please note that advice regarding utility servicing, including sewer, domestic water and fireflow, groundwater, rainwater management and other related requirements will be provided in a forthcoming addendum to this Letter of Response.</p>	Noted

<p>Housing</p>	<p>The rental tenure must be secured for a term of 60 years or life of the building, whichever is greater, through legal agreements (e.g. Housing Agreement pursuant to section 565.2 of the Vancouver Charter, including no stratification and no separate sales covenants).</p>	<p>Noted</p>
<p>Engineering</p>	<p>The applicant will be asked to provide the following off-site improvements:</p> <ul style="list-style-type: none"> o Public realm improvements along the site frontages such as, but not necessarily limited to: curb and gutter, curb bulges, protected bike lanes, sidewalks, lighting, curb ramps, lane crossings, and street trees. o Construction of the E 1st Avenue extension from property line to property line along the north edge of the site. o Street improvements on E 1st Avenue between the existing cul-de-sac and Carolina Street, as required to provide a AAA (all ages and abilities) protected cycling facility to replace the Central Valley Greenway (CVG) connection through the site which will be removed. o Street improvements on Thornton Street adjacent to the site to rebuild the existing bike lane and sidewalk to current standards. o Site design and cycling connections should provide easy, convenient and legible access to the station bike storage room. o Provision of funding towards and/or delivery of off-site improvements (such as, but not necessarily limited to: neighbourhood traffic calming, signal upgrades, etc.) may be required and will be determined following review of the full application. o Existing bus stop conditions are to be maintained. Ensure no new trees are proposed in the bus zone. 	<p>Noted - included in Rezoning Submission package and will continue to form part of the Development Permit process.</p>
<p>Construction Requirements and</p>	<p>This proposed site is within close proximity to the Broadway Subway Project and street use will need to be coordinated with the Broadway Subway Project. Street use in the vicinity may be limited to ensure neighborhood circulation is maintained during Broadway Subway work (e.g. 1st Ave, 2nd Ave / Great Northern Way, Scotia St). We ask that this is considered in early stages of the project.</p>	<p>Noted. Coordination with the province subway project team is ongoing.</p>
	<p>For the future East 1st Avenue alignment:</p> <ul style="list-style-type: none"> o The applicant should continue to work with the City and Province to develop a strategy for implementation of the ultimate road configuration. The Province's contractor is responsible for restoring like for like which aligns with the previous structure plan. It will be the applicants responsibility to ensure that new City street assets are delivered at the end of the process in like new condition with full service life. o There is a scope split on the E 1st Avenue connector, i.e. Project Co will realign the road but PCI will be responsible for completing the sidewalks / bike lane, streetlight lighting, etc. 	<p>Noted. Coordination with the province subway project team is ongoing.</p>
	<p>The Province, Project Co. and PCI have met on several occasions to discuss future development adjacent to BSP – there are requirements that PCI will need to meet some of which are captured in BSP Structural Dwgs (ref. "Future GNW Development Basis of Design Dwg No. BSP-70340-S1MM-42DD-1010").</p>	<p>Noted. Coordination with the province subway project team is ongoing.</p>
	<p>Arrangements are to be made to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services for the Consolidation of:</p> <ul style="list-style-type: none"> o Lot 6, District Lots 264A and 2037, Plan EPP58103 o Lot 7, District Lots 264A, Plan EPP58103 o Lot 8, District Lots 264A and 2037, Plan EPP58102 <p>to create a single parcel.</p>	<p>Noted</p>
	<p>A title search and charge summary of all non-financial charges on titles will be required to determine any implications for the proposed development.</p>	<p>Noted and provided as part of the Rezoning Application Submission.</p>
<p>Development Cost Levies</p>	<p>The City-wide Utility DCL applies to new developments on a square foot basis and is in addition to the City-wide DCL, to be paid prior to building permit issuance. See the DCL Bulletin for current rates: https://vancouver.ca/files/cov/development-cost-levies-bulletin.pdf</p>	<p>Noted</p>

Community Benefits Agreements

As per the City of Vancouver's Community Benefits Agreement Policy ("CBA Policy"), applicant must enter into a Community Benefits Agreement, which will commit the Applicant and its development partners to:

- o Participate in a First Source Hiring program, in consultation and partnership with community stakeholder groups and the City, making new entry level jobs available to equity seeking community members in Vancouver first and striving for an overall target of 10% of labour (including that for contractors, subcontractors and other possible vendors) sourced from low-income communities and equity seeking groups across the city; including women in trades, Indigenous people, racialized communities, and others facing barriers to opportunity due to discrimination, exclusion and stigmatization;
- o Demonstrate Best Efforts to procure a minimum of 10% of material goods and services from third party certified social impact and/or equity seeking businesses and social enterprises, across the entire lifecycle of the development site, prioritizing Vancouverbased ventures but extending through supply chains regionally and outside the Province and the Country where and when required. This includes, where applicable, post-occupancy and ongoing service needs;
- o Demonstrate Best Efforts to attain 10% procurement of materials, goods and services from Vancouver companies or companies located in Metro Vancouver or British Columbia. These may or may not also be equity seeking 3rd party certified businesses as defined in the policy;
- o Retain the services of an independent third party to the satisfaction of the City in order to assist in monitoring and reporting on the progress towards reaching these goals on an agreed upon timeline with the City of Vancouver during and upon completion of the project and its various development phases. This may include, where applicable and where possible, post-occupancy and ongoing service needs; and
- o Participate in a Project Specific Implementation and Monitoring Working Group with City staff, industry and training and skill development bodies, employment services organizations, and community representatives with knowledge of social procurement, social hiring, and community economic development.

Noted

PAGE LEFT INTENTIONALLY BLANK

Section 6.0

Applicable Policies

Contents

6.1	Rezoning Rationale & Applicable Policies	92
6.2	General City of Vancouver Policies	93
6.3	Broadway Plan (2022)	94

6.1 Rezoning Rationale & Applicable Policies

6.1.1 List of Applicable Policies & Guidelines

The following policies and guidelines are applicable to the site and the proposed development

- *Broadway Plan (2022)*
- *Rezoning Policy for Sustainable Large Developments (2018, last amended 2023)*
- *CD-1 (402) : Great Northern Way Campus By-law No.8131 (1999, last amended 2022)*
- *High-Density Housing for Families with Children Guidelines (1992, last amended 2022)*
- *Housing Vancouver Strategy (2017)*
- *Childcare Design Guidelines (1993, last amended 2021)*
- *Community Amenity Contributions Policy for Rezoning (1999, last amended 2023)*
- *Green Buildings Policy for Rezoning (2010, last amended 2023)*
- *Making Space for Arts and Culture: Cultural Infrastructure Plan (2018)*
- *Public Art Policy and Procedures for Rezoned Developments (2014)*
- *Community Benefit Agreements Policy (2018)*
- *Development Cost Levy Bylaw No.9755 (2008, last amended 2022)*
- *Vancouver Utilities Development Cost Levy By-law No.12183 (2018, last amended 2022)*
- *Development Cost Levies Bulletin (2000, last amended 2023)*
- *Urban Forest Strategy (2018)*



6.2 General City of Vancouver Policies

Family Room: Housing Mix Policy for Rezoning Projects



Family Room:

POLICY 1: Rezoning applications that include any residential strata housing are required to include a minimum of 35 percent family units (units having two or more bedrooms), including a minimum of 10 percent three-bedroom units and a minimum of 25 percent two-bedroom units.

OR

POLICY 2: Rezoning applications for secured market rental projects are required to include a minimum of 35 percent family units with two or more bedrooms.

→ RESPONSE

35% of the rental units are family units.

The proposal envisions two 35-Storey towers on Lot 6 and 8N that will provide approximately 548 units of rental accommodation of which 35% are family units and will comply with the “High Density Housing for Families with Children Guidelines”

The proposal includes securing 20% of units as affordable housing at rates 20% below CMHC’s average rent for the neighborhood, aligning with 12.2.1.b of the Broadway plan.

This is in line with the Broadway Plan, as well as the City’s Rental Incentives Program Bulletin.

High-Density Housing for Families with Children Guidelines (1992)



High-Density

The High-Density Housing For Families With Children Guidelines are intended to be used in conjunction with the Zoning and Development By-Law or an official development plan for new conditional approval residential developments, both market and non-market, of 75 and more units per hectare in density, which are designed specifically for families with children.

The intent of the guidelines is to address the key issues of site, building and unit design which relate to residential livability for families with children.

→ RESPONSE

The project will comply with the “High Density Housing for Families with Children Guidelines” and provide a variety of amenity spaces along with 6’ deep balconies for family units. In suite storage has been provided, where possible.

Community Amenity Contributions through Rezonings



Community Amenity Contributions - Through Rezoning

Community Amenity Contributions (CACs) are in-kind or cash contributions provided by property developers to help address growth costs, area deficiencies, and/or other community needs and impacts. CACs are generally for capital facilities.

There are two types of CAC policy areas in Vancouver:

The citywide CAC area applies to most of the city. For all rezonings in the Citywide CAC area, the CAC is determined through a negotiated approach.

Specific CAC policy areas apply to locations with their own CAC and/or public benefit policies. For all rezonings in the area-specific CAC policies, the CAC is determined through a CAC target and/or negotiated approach.

→ RESPONSE

Response is contained in separate CAC proposal, which will be in line with City Policies.

Public Art Policies and Procedures for Rezoned Developments



Public Art Policy

The Public Art Policy applies to:

All floor areas contributing to the FSR calculation of any residential, commercial, institutional or industrial rezoning resulting in increased floor space or in a change from agricultural or industrial to commercial or residential use.

Rezoning developments of 100,000 square feet (9,290 square meters) or greater.

The Policy may also apply, at the discretion of the City, to projects where a substantial public benefit is sought.

The public art budget is calculated by multiplying all areas contributing to the FSR calculation (as established for the Development Permit) by the public art rate of \$1.98 per square foot or \$21.3125 per square meter.

Prior to rezoning enactment, the elected option, Onsite Artwork (Option A) or Cash-in-Lieu (Option B), must be confirmed.

→ RESPONSE

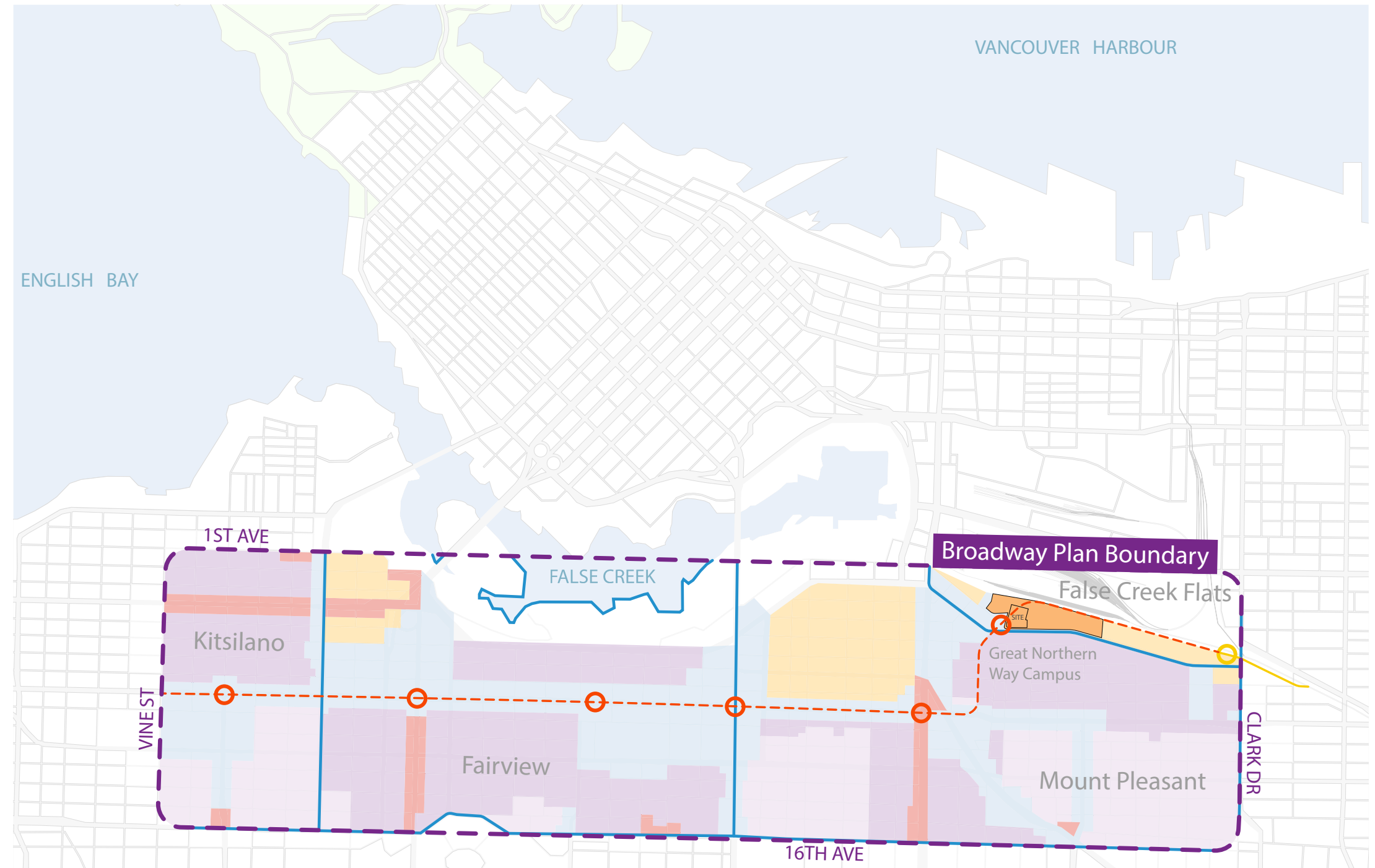
The unique nature of this project offers a great opportunity to complete meaningful public space and architecture with art. A public art liaison is part of the project team, with overlap with the Indigenous Engagement process. It is intended to curate a successful on-site public art program that takes advantage of the mixed-use nature of this project.

6.3 Broadway Plan (2022)

6.3.1 Overview

The site is located within the Broadway Plan area that provides a clear and flexible policy framework to guide growth, positive change, and the delivery of public benefits in the Broadway neighborhoods over 30 years.

The Broadway Plan is organized around four general character areas. This Development is part of centers which are generally the newer mixed-use and commercial areas where the majority of housing and job space has been built in the past 40 years. Highly accessible and with a varied character, these higher-density places will integrate with the Broadway Subway and provide additional opportunities for housing, job space, shops and services, and amenities to meet both local community and city-wide needs.



- Site
- Centres
- Industrial / Employment Area
- Residential RT /RS Zone
- Residential RM / FM Zone
- Villages

Broadway Plan (2022)

6.3.2 Rezoning Policy for the Character Areas - Centres

6.1

The station areas will typically have a mix of high-density housing (outside of Uptown) and major employment spaces as well as shops, services and amenities, with building heights of up to 30 to 40 storeys. Streetscape improvements, active ground floor commercial uses and gathering places will foster a lively public realm and integrate with the new Subway stations, creating hubs of round-the-clock vitality.

6.3.3 Rezoning Policy for the Character Areas - Large and Unique Site

10.31

Support the long term expansion of the Great Northern Way Campus with a broader range of uses.

10.31.4

Consider building heights generally up to 35 storeys nearest to Emily Carr–Great Northern Way Station, with lower building heights throughout the remainder of the area to provide variation in building heights.

→ RESPONSE

The proposal aims to be a pioneering transit-integrated comprehensive development within Great Northern Way campus by providing diverse use and surrounding density which effectively stimulates the transit efficiency.

In addition to significant upfront investment and construction jobs, there will also be long term employment provided by the retails and childcare, and dedicated operations associated with each tower.

The proposal is providing retail and commercial space at grade to contribute to the delivery of an active, productive, and populated city quarter. Large podium floor plates allow for a range of activities fostering innovation within the creative district. The applicant is seeking general office classification to encourage flexibility in accommodating rapidly evolving innovation industry and education uses.

Our proposal places the tallest buildings of 35 stories on Lot 6 and 8N delivering much needed rental housing with the opening of the GNW Emily Carr Station, with the adjacent office building on 8S stepping down in height at 20 stories respectively. The building positioning and heights aim to minimize shadow and view impacts upon public open spaces and neighboring development.

10.31.2

Residential uses (e.g. market rental, below-market rental, or student housing) focused in the areas in closest proximity to the new Emily Carr–Great Northern Way Station. Residential uses will only be considered in areas designated as “General Urban” by Metro Vancouver, in accordance with Metro Vancouver land use designations.

→ RESPONSE

The site is entirely designated “General Urban” within Metro Vancouver Regional Growth Strategy.

Two towers of residential use (80% market rental, 20% below-market rental) are proposed on Lot 6 and 8N, immediately adjacent to the new GNW Emily Carr Station.

10.31.5

Require amenities to be provided on site, such as new public open/green space near Emily Carr–Great Northern Way Station, childcare, and public art.

→ RESPONSE

The proposal retains the 0.49ha open space as was allowed for within the original Lot Q Structure Plan and pulls this into the heart of the plan configuration and creates a large urban plaza, a public open space amenity to be shared across the precinct. There is a comprehensive landscape strategy that offers connection to nature as well as opportunities to mitigate the heat island affect, particularly prevalent in this area. There will be opportunities for Public Art explored within the proposal

As outlined in Section 3.6, the open space continues up on to the roof on top of Lot 7 over the GNW Emily Carr station, providing an extensive accessible and programmable rooftop area with flexible indoor space below.

Childcare facilities are located on the podium roof of Lot 6 and 8N, serving the wider community in close proximity to transit station and employment opportunities. Lots 6, 8N & 8S have amenity program associated with their residential and office use respectively.

Opportunities for public art will explored within the proposal to integrate a significant and captivating art installation to act as both an attractor and activator with the plaza.

5.3.3 Rezoning Policy for the Character Areas - Large and Unique Site

10.31.6

Support and facilitate the location of future NEU energy generation infrastructure, including the preservation of adequate space in a location that has appropriate proximity to NEU infrastructure.

→ RESPONSE

In 2014 the False Creek NEU expanded into Great North Way campus lands. Provision has been made within the proposal for connection to this district energy system, with space allocated within the parkade for utility rooms and rooftop units on Lot 8S providing plant equipment to provide the shared site approach to heating and cooling.

10.31.7

Development should meaningfully contribute toward the “Cultural Ribbon” concept, described in the “Big Moves” for the Creative District.

→ RESPONSE

As per section 2.13 Indigenous Engagement PCI Developments have established an Indigenous Advisory Committee(IAC) led by Aubin Consulting to provide consultation and facilitation throughout the Indigenous Engagement process. This will include the development of the cultural ribbon as was conceptualized in the precinct visioning charrette hosted by the applicant in November 2021.

10.31.7

Full overbuild of the airspace above the Emily Carr-GNW Station entrance is strongly encouraged for rezoning of properties including and connected to the Emily Carr-GNW Station site. Other transit supportive urban design and mobility enhancements, including a bike mobility hub (safe, secure bike parking with end-of-trip facilities), should also be provided.

→ RESPONSE

The overall parcel configuration for Lots 6-8 within this proposal builds on the 2002 Structure Plan open space requirement of 0.49 Ha (previously located on Lot 6) with a reconsidered site plan following discussions with the City of Vancouver in response to the emerging Broadway Plan and new Transit Station.

The proposal places the open space at the centre of the site with reduced height on Lot 7 over the transit station and the residential towers are moved to Lot 6 and 8N along the quieter streets of Thornton and East 1st. This allows increased solar exposure, visibility to GNW, and greater opportunities for active edges. The building on Lot 7 allows integration with the transit station and plaza. The station head house will be integrated as part of a recognizable landmark building that extends the public realm and creates spaces for a destination-type program. The podium and towers on Lots 6, 8N and 8S wrap the plaza to create a sense of enclosure, place and identity for an important node in the precinct.

The proposal seeks to enhance the functionality of the transit system by providing clear and legible access to the station and using the public realm to encourage access and use of the transit system. The application is supported by TDM Plan B that promotes sustainable mobility choices, including the provision of significant bike storage serving both the building occupants themselves and aims to create a wider district cycling hub. End-of-trip facilities and bike repair facilities are also provided.

6.3.4 Housing - Affordability and Supply

12.2.1

Enable higher-density housing options in station areas and shoulder areas through additional height and density for new Developments that do one of the following:

- a. Provide 20 per cent of the residential floor area as social housing to be owned by the City and delivered as completed units on terms that are satisfactory to the City.
- b. Provide 20 per cent of the residential floor area as below-market rental housing with the remainder of the residential floor area as secured market rental housing.
- c. Provide 100 per cent of the residential floor area as secured rental housing.
- d. Provide 100 per cent of the residential floor area as strata ownership housing with a community amenity contribution (cash contribution or in-kind contribution).

→ RESPONSE

The proposal envisions two residential towers on Lot 6 and 8N that will provide approximately 548 units of rental accommodation of which 35% are family units and will comply with the “High Density Housing for Families with Children Guidelines”

The proposal includes securing 20% of units as affordable housing at rates 20% below CMHC’s average rent for the neighborhood, aligning with 12.2.1.b of the Broadway Plan.

Broadway Plan (2022)**5.3.4 Housing -
Affordability and Supply****12.2.12**

Where appropriate, support large and unique sites to redevelop as denser, mixed-use developments with additional height and density to support new housing choices, including social, below market and market rental housing.

→ RESPONSE

The proposal is providing retail and commercial space at grade to contribute to the delivery of an active, productive, and populated city quarter. Large podium floor plates can allow for a range of activities fostering innovation within the creative district. Moreover, the floor plate size for towers with a maximum building height aims to minimize shadow and view impacts upon public open spaces and neighboring development.

The applicant is seeking general office classification to encourage flexibility in accommodating rapidly evolving innovation industry and education uses.

**6.3.5 Community Well Being -
Childcare****16.1.1**

Increase the number of accessible childcare spaces for children aged 0–4 by supporting or requiring facilities through new development. Focus areas include: d) Large and unique development sites

→ RESPONSE

The proposal aims to provide approximately 94 spaces (24 0-3y/o, 20 preschool and 50 3-5y/o), as per recommended space allocations in Table 6, Childcare Design Guidelines. The childcare will be located on Lot 6 and 8N, at the base of the residential tower program, with the outdoor play area on the contiguous podium roof

**6.3.6 Community Well Being – Food
Systems****16.4.3**

Build and outfit new food production and harvest spaces (including community gardens, Indigenous food lands, urban farms, greenhouses, and other models) on City-owned and private land and buildings. Through development in strategic locations such as large and unique sites, seek opportunities to deliver or sustain urban farms (indoor or outdoor models) and publicly accessible food production and harvest spaces.

→ RESPONSE

The proposal will contribute to increasing city and neighborhood food assets and supporting local and sustainable food systems as outlined in the Greenest City 2020 Action Plan and the Vancouver Food Strategy. Refer to the sustainability chapter for a narrative detailing the team's proposed strategies for Sustainable Food Systems under this Policy.

PAGE LEFT INTENTIONALLY BLANK

Section 7.0

Sustainability

Contents

7.1	Sustainability Strategies Summary	100
7.2	Overview of City Goals	102
7.3	Green Building Policy for Rezoning	105
7.4	Rezoning Policy for Sustainable Large Developments	106
7.5	Third Party Certification Feasibility Studies	107
7.6	LEED Feasibility Study	108
7.7	WELL Feasibility Study	110
7.8	Systems Thinking	112
7.9	Performance Analysis	113

7.1 Sustainability Strategies Summary

Water



Materials and Embodied Carbon



Vegetation and Biodiversity



Food Assets



Community and Culture



Transportation



Health and Wellbeing



Energy and Resilience





Vegetation and Biodiversity

- 35% vegetation cover will be made up of native and adaptive plant species.
- 26% Tree canopy cover will create a bird-friendly environment, offer shading of the public realm and connection to the greenway.
- Generous depths of growing medium for all plants supports the project's rainwater management plan improving the storm water retention and infiltration capabilities of the site.



Materials and Embodied Carbon

- Materials and construction practices are chosen based on low Global Warming Potential (GWP) profiles.
- Mechanical systems are selected for low refrigerants profiles, durability and leakage prevention.
- Low-emitting healthy building materials are selected for interior finishes.



Energy and Resilience

- Future climate scenarios have been considered and multi-disciplinary strategies were identified during a resilience planning workshop.
- Preliminary energy modelling provides evidence that Green Building Policy energy targets for TEUI, TEDI and GHGI will be met.
- Mechanical systems are sized to support resilient design capable of withstanding 2050 temperature extremes and fluctuations due to Climate Change.



Water

- A 56% reduction in outdoor water use is realized through selection of indigenous and adaptive plant species capable of thriving in Vancouver's warming climate as well as integration of drip irrigation.
- A 28% reduction in indoor water use is realized through selection of efficient low-flow fixtures.



Transportation

- With access to exceptional active and public transport, the development has a walk score of 95, transit score of 86, and bike score of 94.
- Transit-oriented development located at SkyTrain's future Great Northern Way - Emily Carr Station.
- A first-class bike facility including showers, changing facilities, lockers and bike maintenance toolkits will be integrated, promoting active modes of transportation.
- 100% of residential parking and approximately 45% of non-residential parking are EV ready with Level 02 charging.



Health and Wellbeing

- A preliminary WELL feasibility study for commercial and office space on site recommends a road map for targeting WELL v2 Gold Core certification.
- Occupants will have connections to nature through glazed facade ensuring visual connection to mountain views, accessible vegetated roof and podium terrace, and a centrally located open parks.



Food Assets

- Community gardens and shared learning gardens capable servicing the residential buildings will allow residents to garden year round.
- Edible planting, including berry bushes, herbs and fruit trees will be integrated into the landscape design.
- Education signage will be woven into the landscape and public realm design
- A publicly accessible year-round Community Food Market will be planned and will contribute to a vibrant public realm while offering a focal point for occupants to gather.



Community and Culture

- Lot 7 is designed as a cultural building hub. Exploration of a food and beverage facility and Indigenous gallery space are being explored to support a diverse range of cultural and education program goals for the site.
- Lot 7 roof will include a landscaped sweeping extension of the centrally located plaza where people can sit and enjoy a sense of community. The oval shape of the plaza encourages flexible use of space for gathering and outdoor activities.
- Integration of significant office and residential space revitalizes the neighborhood and local economy.
- A 94-space childcare facility on site will service occupants of the development and wider community.

7.2 Overview of City Goals

The City of Vancouver is widely recognized as one of the most livable cities in the world. As such, the City is committed to approving projects and developments that are sustainable and cost-effective. A number of policies, strategies and guidelines have been developed in order to align this commitment with Vancouver's objectives.

This project will adhere to the applicable general policies, as described on the following pages.



Greenest City - 2020 Action Plan

On November 17, 2020, Vancouver City Council approved the Climate Emergency Action Plan.

Vancouver City Council have targeted cutting carbon pollution in half by 2030, and to be carbon neutral before 2050. This plan builds on previous climate plans and focuses on cutting carbon pollution from the biggest local sources - burning fossil fuels in vehicles (37%) and in our buildings (57%).

By 2030, the City of Vancouver aims to achieve the following goals:

1. How we Move

- 90% of people living within an easy walk or roll of their daily needs
- Two-thirds of trips in Vancouver to be by active transit

2. How we Build and Renovate

- Cutting carbon pollution from buildings in half, compared to 2007
- 40% less embodied emissions from new buildings and construction projects compared to 2018

3. How we capture Carbon

In 2021, the City will establish a target for how much carbon Vancouver will capture. The following paths are being investigated:

- Land-based carbon capture: reforestation, improved forest management or forest protection, improved farming practices, composting, and soil enhancement techniques.

- Ocean/aquatic carbon capture: coastal and freshwater wetland restoration, management or protection

→ RESPONSE

1. How we Move

The Central Valley Greenway runs through the development, and the site includes the future SkyTrain's Great Northern Way- Emily Carr Station as part of the Broadway Line extension. The site has been designed to accommodate and promote active and public modes of transit and will include a first-class bike and maintenance facility.

2. How we Build and Renovate

The project underwent early sensitivity studies using energy model simulation focused on reducing operational energy and greenhouse gas intensity.

A whole building Life Cycle Assessment has been performed for every building on site. This will serve as a baseline and be used to reduce embodied carbon during subsequent design phases.

3. How we capture Carbon

The site will be transformed into a biodiverse green environment. In alignment with the Rezoning Policy for Sustainable Large Developments, 35% vegetation cover and 26% tree canopy cover will contribute to the biodiversity on site.



Neighbourhood Energy Strategy

In order to achieve the goals of the City of Vancouver's Greenest City 2020 Action Plan a neighbourhood energy strategy is encouraged.

Neighbourhood renewable energy systems supply centralized heating and hot water for multiple buildings. These systems use low-carbon renewable energy sources reducing the use of fossil fuels. They eliminate the need for boilers in individual buildings, and provide environmentally friendly, affordable heat and hot water.

→ RESPONSE

The project is located within the Broadway Plan Neighbourhood Energy Utility Service Boundary. The team will work with the City of Vancouver to determine if the project can utilise this facility to provide the majority of on site energy needs



Rain City Strategy (2019)

This initiative focuses on rainwater infrastructure and management and aims to improve and protect Vancouver's water quality, increase Vancouver's resilience through sustainable water management, and enhance Vancouver's livability by improving natural and urban ecosystems.

→ RESPONSE

Rainwater management prioritizes low impact development vegetation cover capable of retaining water on sites through evapotranspiration and infiltration.



Renewable City Strategy (2015)

The Renewable City Strategy establishes two targets for all of Vancouver:

- Derive 100% energy used in Vancouver from renewable sources before 2050
- Reduce Greenhouse Gas emissions by at least 80% below 2007 levels before 2050

The strategies to achieve these goals by 2050 include reducing demand, increasing the use of renewable energy and expanding the supply of renewable energy sources. The goals of the Renewable City Strategy guide the goals set in the Green Buildings Policy for Re-zonings. The Renewable City Strategy also calls for the expansion of existing neighbourhood Renewable Energy Systems and the development of new renewable energy systems.

→ RESPONSE

A high-performance building envelope and efficient systems will mitigate excessive greenhouse gas emissions associated with building operations.



Healthy City Strategy (2015)

This document aims to address the needs of Vancouver's inhabitants. Organized into three themes: Healthy People, Healthy Communities and Healthy Environments with targets that ensure people have access to housing, services, transit, food, culture and green space.

→ RESPONSE

The project provides approximately 433,178 sq.ft (40,243 sq.m) of secured rental housing totaling 548 units.

An on-site childcare facility for 94 children and extensive outdoor space dedicated to a playground will be provided on site.

Lot 7 is designed as a cultural hub and includes a landscaped sweeping extension of the centrally located public plaza. The public realm has been designed to ensure a commitment to healthy communities.



Transportation 2040 (2012)

Transportation 2040 is aligned with the Greenest City 2020 Action Plan. The three primary goals of the document are connected to Economy, People, and Environment. With a goal of hitting two thirds of all trips on foot, bike, or transit by 2040.

100% of residential parking and approximately 45% of non-residential parking will be EV ready with Level O2 charging. Two-way car membership will be offered to residents of each Strata unit free of charge and will be in force for 20 years. The parking strategy combined with a first-class bike parking and maintenance facility prioritizes walking and cycling to and from the site.

→ RESPONSE

100% of residential parking and approximately 45% of non-residential parking will be EV ready with Level O2 charging. The parking strategy combined with a first-class bike parking and maintenance facility prioritizes walking and cycling to and from the site.



Urban Forest Strategy (2018)

The Urban Forest Strategy provides direction to protect, plant, and manage trees to create a diverse, resilient, and beautiful urban forest on public and private lands across the city.

→ RESPONSE

The project will provide approximately 26% tree canopy cover made up of native and adaptive plant species. Generous depth of growing medium and contiguous planting will serve to enhance the urban forest and improve stormwater retention.



Biodiversity Strategy (2016)

The biodiversity strategy contains objectives and targets to increase biodiversity across Vancouver and access to nature for the City's inhabitants. Objectives include the restoration of habitats and species, to protect and enhance biodiversity during development, increase community engagement, and monitor biodiversity to track change and measure success.

→ RESPONSE

Currently, the site does not have any high value ecosystems present. The project will provide a biodiverse planting environment. Native and adaptive plant species will be selected to support local ecology and a healthy habitat.



Vancouver Economic Action Strategy (2011)

The Vancouver Economic Strategy presents a city-wide vision for Economic development in Vancouver. Tactics include working with local planners and organizations to generate strategies in order to secure the required space for a growing work force that also align with local neighbourhoods. Complete neighbourhoods where people can live and work and which reduce automobile dependency are to be encouraged.

→RESPONSE

Significant residential and office space will bring people into neighborhood, revitalizing spending, and the economy. Retail, the cultural hub and public realm add culture and entertainment to the local neighborhood.



Vancouver Bird Strategy (2015)

The City of Vancouver Bird Strategy does demand action, but it is a guideline with recommendations for building and landscape design. Bird friendly landscape design that incorporates native species of varying sizes and layers, minimizing human disturbance and reduce light pollution and increase visibility of glass.

→ RESPONSE

Providing 35% extensive vegetation cover made up of tree canopy, native and adaptive plant species will enhance the urban forest creating a bird-friendly urban environment and greenway connection.

7.3 Green Building Policy for Rezoning



In order to decrease the energy demands and carbon footprint of Vancouver's building stock and design resilient adaptive infrastructure the city has implemented and updated the Green Building Policy for Rezoning.

A summary of the requirements of the Green Building Policy for Rezoning last amended June 2023 is summarized below.

1. Reporting of Green and Resilient Building Measures

Energy and Emissions Performance Limits

All buildings shall meet or exceed the performance limits according to their building type and whether or not they are connected to a City-recognized Low Carbon Energy System:

Total Energy Utilization Intensity (TEUI) (kWh/ m²/ year);

Thermal Energy Demand Intensity (TEDI) (kWh/ m²/ year); and

Greenhouse Gas Intensity (GHGI) (kg CO₂/ m²/ year)

Embodied Carbon Limits

All buildings shall meet or exceed embodied carbon reduction targets according to building type, height and materiality as compared to a concrete baseline building.

This will be demonstrated through completion of a Life Cycle Assessment and Embodied Carbon reported out for each building in kg CO₂/ m² for a 60-year design life.

Resilient Buildings Planning Worksheet

To better position the city to deal with significant shocks and stresses, particularly: earthquakes, extreme weather, extreme temperatures, sea level rise; and to assist in improving disaster preparedness and social connection. To meet the objectives of the Climate Change Adaptation Strategy, including the objective to increase resilience of the built environment to future climate conditions.

AND

3. Enhanced Commissioning

Complete an enhanced commissioning process for all building energy systems in accordance with CSA or ASHRAE guidelines or an alternate acceptable commissioning standard.

AND

4. Energy System Sub-Metering

Provide separate master metering for each energy utility as well as sub-metering of all major end-uses and major spaces uses within each building. Create an Energy Star Portfolio Manager account for each building.

→RESPONSE: The proposal encompassing three buildings, providing 877,427 sq.ft (81,515 sq.m) of mixed use development including office space, ground activating retail, 548 secured rental housing units and a 94-space childcare facility.

Refer to Green Policy for Rezonings Report and supporting documentation for a detailed summary of the inter disciplinary strategies employed by the project to meet the requirements of the Policy.

7.4 Rezoning Policy for Sustainable Large Developments

In order to continue to ensure large development projects provide leading practices and advance the Vancouver's sustainability goals, the city has implemented and updated a policy for developments with a land parcel or parcels having a total site size of 8,000 m² (1.98 acres) or more, or containing 45,000 m² (484,375 ft²) or more of new development floor area.

A summary of the requirements of the Sustainable Large Development Policy last amended October 2023 is summarized below.

A. Sustainable Site Design

The proposal must contribute to meeting the City's Greenest City 2020 Action Plan targets of improving access to nature and planting trees. The proposal must also contribute to meeting the Urban Forest Strategy, Biodiversity Strategy and Rain City Strategy objectives.

B. Sustainable Food Systems

The proposal will contribute to increasing city and neighborhood food assets and supporting local and sustainable food systems as outlined in the Greenest City 2020 Action Plan and the Vancouver Food Strategy.

C. Green Mobility

The proposal will contribute to meeting the following citywide goals:

- Transportation 2040 and Greenest City targets of having walking, cycling, and public transit trips make up at least 66% of all trips by 2040 and to reduce motor vehicle kilometer traveled per resident by 20% from 2007 levels.
- Greenest City target to reduce community-based greenhouse gas emissions by 33% by 2020 levels and the Renewable City target to reduce greenhouse gas emissions 80% below 2007 levels before 2050.
- Greenest City Clean Air target to always meet or beat the most stringent air quality guidelines.

D. Potable Water Management

The proposal will contribute to the Greenest City goals of reducing potable water use by 33% from 2006 levels and meeting stringent water quality standards.

E. Groundwater Management

The proposal should contribute to preserving sewer capacity, reduce the risk of combined sewer overflows and maintain wastewater treatment effectiveness through the prohibition of groundwater flows entering the sewer system in alignment with the Metro Vancouver 2010 Integrated Liquid Waste and Resource Management Plan.

F. Zero Waste Planning

The proposal will contribute to the City's Greenest City target on Zero Waste and the objectives set out in the City's Zero Waste 2040 strategic plan with respect to waste avoidance, reduction, increased opportunities for material re-use and recycling, and reduced greenhouse gas emissions, and the overall goal of eliminating Vancouver waste disposed to landfill and incinerator by 2040.

G. Resilience

To better position the city to deal with significant shocks and stresses, particularly: earthquakes, extreme weather, extreme temperatures, sea level rise; and to assist in improving disaster preparedness and social connection. To meet the objectives of the Climate Change Adaptation Strategy, including the objective to increase resilience of the built environment to future climate conditions.

→RESPONSE: The proposal includes approximately 86,500 m² (930,000 ft²) of new floor area and falls under site type A: master planned projects subject to one rezoning application containing at least one substantial, contiguous park.

Refer to Rezoning Policy for Sustainable Large Developments Report and supporting documentation for a detailed summary of the inter disciplinary strategies employed by the project to meet the requirements of the Policy.

7.5 Third Party Certification Feasibility Studies

7.5.1 Rating System Overview

The Great Northern Way Lot 6-8 development was assessed against the following two third party green building rating systems: :

- LEED v4 BD+C Core and Shell
- WELL v2 Core

The following pages summarize the findings from each of the feasibility studies. Further study will be conducted as the project evolves and is further developed beyond the Rezoning phase.



LEED



WELL

7.6 LEED Feasibility Study

LEED v4 BD+C Core and Shell certification was explored for Great Northern Way Lot 6-8. Based on the project's program areas, the team performed two preliminary feasibility studies for LEED v4 BD+C: Core and Shell (CS) certification to determine opportunities for the office and commercial spaces in the Lots 6-8N podium (phase 1) and the Lot 8S office and commercial space (phase 2). The preliminary assessments indicate LEED-CS Gold is achievable for each phase. The project team will develop specific credit strategies as the design progresses and the project will be registered with US Green Building Council.

Phase 1 and Phase 2 are currently targeting 66 points and the project scorecards, will be updated as the design progresses in subsequent design phases.

Key strategies that support the LEED Gold objective include:

1. Location and Transport

The project has reduced parking footprint and 45% of parking stalls for non-dwelling uses will be EV ready. The development is located on a previously developed land in the Strathcona neighborhood which has a walk score of 95, transit score of 86, and bike score of 94. These scores combined with a first-class bike hub and new sky train station on site enable the development to target 17 points in the location and transport category.

2. Sustainable Sites

LEED Open Space and Light Pollution Reduction requirements will be met. 35% of the site is covered by vegetation and tree canopies and green roofs will be incorporated in the design. Adaptive and native plant species capable of growing year-round have been selected to reduce the heat island effect, which is a significant consideration in an urban environment. Additionally, 100% of the parking spaces are below grade and the landscaping strategy will explore the use of high albedo or open grid pavement. The 85th

percentile of rainwater will be captured. Tenant Design and Construction Guideline will be provided to all occupants to educate and encourage sustainable interior fit-out.

3. Water Efficiency

In alignment with the Sustainable Large Development Policy, the design achieves a 56% reduction in outdoor water use through the means of a drip irrigation system. The design will aim to achieve a 30% reduction in indoor water use through careful selection of fixtures and fittings. Cooling tower water use will be optimized. Finally, the Water Metering Credit is targeted to ensure the designed water use reductions are met during building operation.

4. Energy and Atmosphere

The Advanced Energy Metering and Enhanced Commissioning Credits are targeted to ensure the designed energy optimizations are met during building operation. The project aims to achieve 12 of the 18 Optimize Energy Performance points which means 26% improvements in energy performance. Besides, enhanced refrigerant management credit is also targeted by incorporating central cooling system.

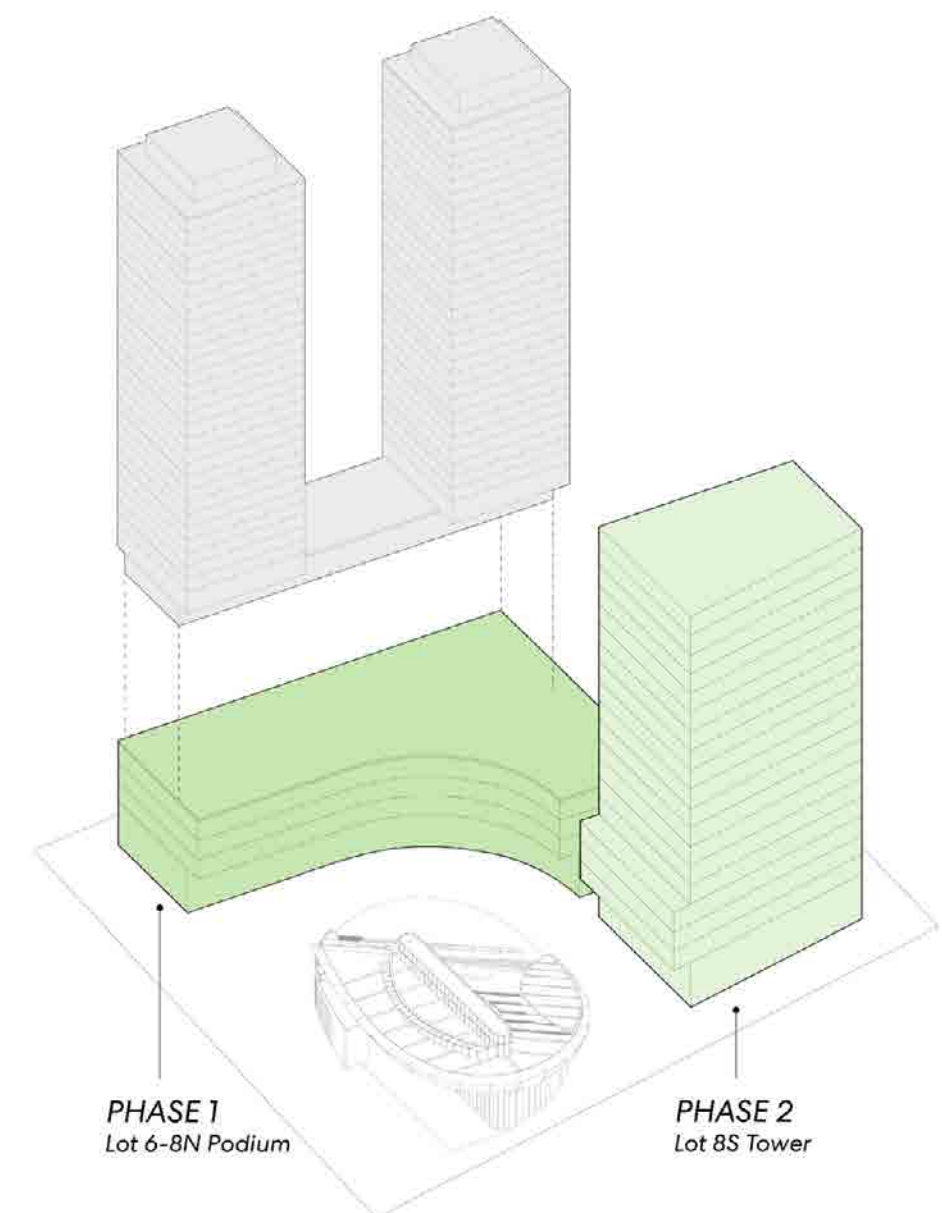
5. Materials and Resources

Every credit within the Materials and Resources category is being targeted providing a holistic and well-rounded approach to material specification and design. The design focuses on tracking and sourcing materials that prioritize disclosure and optimization. The design targets LEED credit Construction and Demolition Waste Management, reducing waste to landfill and going beyond the prerequisite targets.

6. Indoor Environmental Quality

Enhanced Indoor Air Quality Strategies are targeted with MERV 13 filtration required at the base building level. Construction Indoor Air Quality Management

Plan is targeted, ensuring safe and optimized indoor air quality at all phases of building construction and occupancy. Finally, the design focuses on tracking and sourcing materials that prioritize human health through selection of transparent and verified products for low emitting material requirements.





LEED v4 for BD+C: Core and Shell
Project Checklist

Project Name: **Great Northern Way Lot 6-8**
Date: 31.01.2024

Y ? N

1		Credit	Integrative Process	1
---	--	--------	---------------------	---

17	2	21	Location and Transportation	20
		20	Credit: LEED for Neighborhood Development Location	20
2			Credit: Sensitive Land Protection	2
	2	1	Credit: High Priority Site- v4.1 Substitution	3
6			Credit: Surrounding Density and Diverse Uses- v4.1 Substitution	6
6			Credit: Access to Quality Transit- v4.1 Substitution	6
1			Credit: Bicycle Facilities- v4.1 Substitution	1
1			Credit: Reduced Parking Footprint- v4.1 Substitution	1
1			Credit: Green Vehicles- v4.1 Substitution	1

9	1	1	Sustainable Sites	11
Y			Prereq: Construction Activity Pollution Prevention	Required
1			Credit: Site Assessment	1
2			Credit: Site Development - Protect or Restore Habitat- v4.1 Substitution	2
1			Credit: Open Space- v4.1 Substitution	1
2		1	Credit: Rainwater Management- v4.1 Substitution	3
1	1		Credit: Heat Island Reduction	2
1			Credit: Light Pollution Reduction	1
1			Credit: Tenant Design and Construction Guidelines	1

5	4	2	Water Efficiency	11
Y			Prereq: Outdoor Water Use Reduction	Required
Y			Prereq: Indoor Water Use Reduction	Required
Y			Prereq: Building-Level Water Metering	Required
1	1		Credit: Outdoor Water Use Reduction	2
2	2	2	Credit: Indoor Water Use Reduction	6
1	1		Credit: Optimize Process Water Use- v4.1 Substitution	2
1			Credit: Water Metering	1

17	12	4	Energy and Atmosphere	33
Y			Prereq: Fundamental Commissioning and Verification	Required
Y			Prereq: Minimum Energy Performance	Required
Y			Prereq: Building-Level Energy Metering	Required
Y			Prereq: Fundamental Refrigerant Management	Required
3	3		Credit: Enhanced Commissioning	6
12	6		Credit: Optimize Energy Performance	18
1			Credit: Advanced Energy Metering	1
		2	Credit: Demand Response	2
	1	2	Credit: Renewable Energy Production	3
1			Credit: Enhanced Refrigerant Management	1
	2		Credit: Green Power and Carbon Offsets	2

5	6	3	Materials and Resources	14
Y			Prereq: Storage and Collection of Recyclables	Required
Y			Prereq: Construction and Demolition Waste Management Planning	Required
1	2	3	Credit: Building Life-Cycle Impact Reduction- v4.1 Substitution	6
1	1		Credit: Environmental ProductDeclarations- v4.1 Substitution	2
1	1		Credit: Sourcing of Raw Materials- v4.1 Substitution	2
1	1		Credit: Material Ingredients- v4.1 Substitution	2
1	1		Credit: Construction and Demolition Waste Management	2

4	5	1	Indoor Environmental Quality	10
Y			Prereq: Minimum Indoor Air Quality Performance	Required
Y			Prereq: Environmental Tobacco Smoke Control	Required
1	1		Credit: Enhanced Indoor Air Quality Strategies	2
2	1		Credit: Low-Emitting Materials- v4.1 Substitution	3
1			Credit: Construction Indoor Air Quality Management Plan	1
	2	1	Credit: Daylight	3
	1		Credit: Quality Views	1

5	1	Innovation	6
4	1	Credit: Innovation	5
1		Credit: LEED Accredited Professional	1

3	1	Regional Priority	4
1		Credit: Regional Priority: Optimize Energy Performance Credit (Threshold 10)	1
1		Credit: Regional Priority: Indoor Water Use Reduction Credit (Threshold 4)	1
	1	Credit: Regional Priority: Enhanced Commissioning Credit (Threshold 5)	1
1		Credit: Regional Priority: Rainwater Management Credit (Threshold 2)	1

66	32	32	TOTALS	Possible Points:	110
-----------	-----------	-----------	---------------	------------------	------------

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

7.7 WELL Feasibility Study

WELL v2 Core certification was explored for Great Northern Way Lot 6-8. The team has performed two preliminary feasibility studies for WELL v2 Core certification to determine opportunities for the office and commercial spaces in the Lots 6-8N podium (phase 1) and the Lot 8S office and commercial space (phase 2). The preliminary assessments indicate a Gold level of certification is achievable for each phase.

The project is currently targeting 66.5 points and will develop specific optimization strategies as the design progresses. The project will register with the International WELL Building Institute during the next phase of design.

Key strategies that support the WELL Gold objective include:

1. Air

High levels of indoor air quality will be achieved across the buildings lifetime through the design of ventilation systems to provide increased air supply and MERV-13 filtration. Building entryways will be designed to reduce transmission of pollutants from outdoor to indoor locations. The development will eliminate combustion through mechanical system's electrification.

2. Water

Readily available and maintained dispensers for drinking water will be provided to improve drinking water access and human health.

Damage to building materials will be prevented through an envelope designed for moisture protection and a mold and moisture management plan.

3. Nourishment

Proximity to supermarkets with fresh fruit and vegetables and farmers markets serves to improve the nutritional health of building occupants.

4. Light

Daylight simulations will be performed to improve access to daylight. Management of glare and flicker as well as designing lighting for enhanced color rendering quality will promote mental, biological and physical health.

5. Movement

Physical activity is promoted through the provision of a first-class bike facility which includes short and long term bike parking for all the buildings on site as well as showers and a bike maintenance facility. The Central Valley Greenway and future GNW-EC station run through the site providing access to mass and active transit.

6. Thermal Comfort

Comfort of building users is achieved by monitoring the thermal environment for temperature and relative humidity in order to promote human productivity. Outdoor heat and relative humidity will be managed to maintain optimum levels conducive of human health and wellbeing.

7. Sound

Acoustic comfort parameters will be considered to ensure the project limits background noise and designs for sound isolation. This will improve occupant experience within the space.

8. Materials

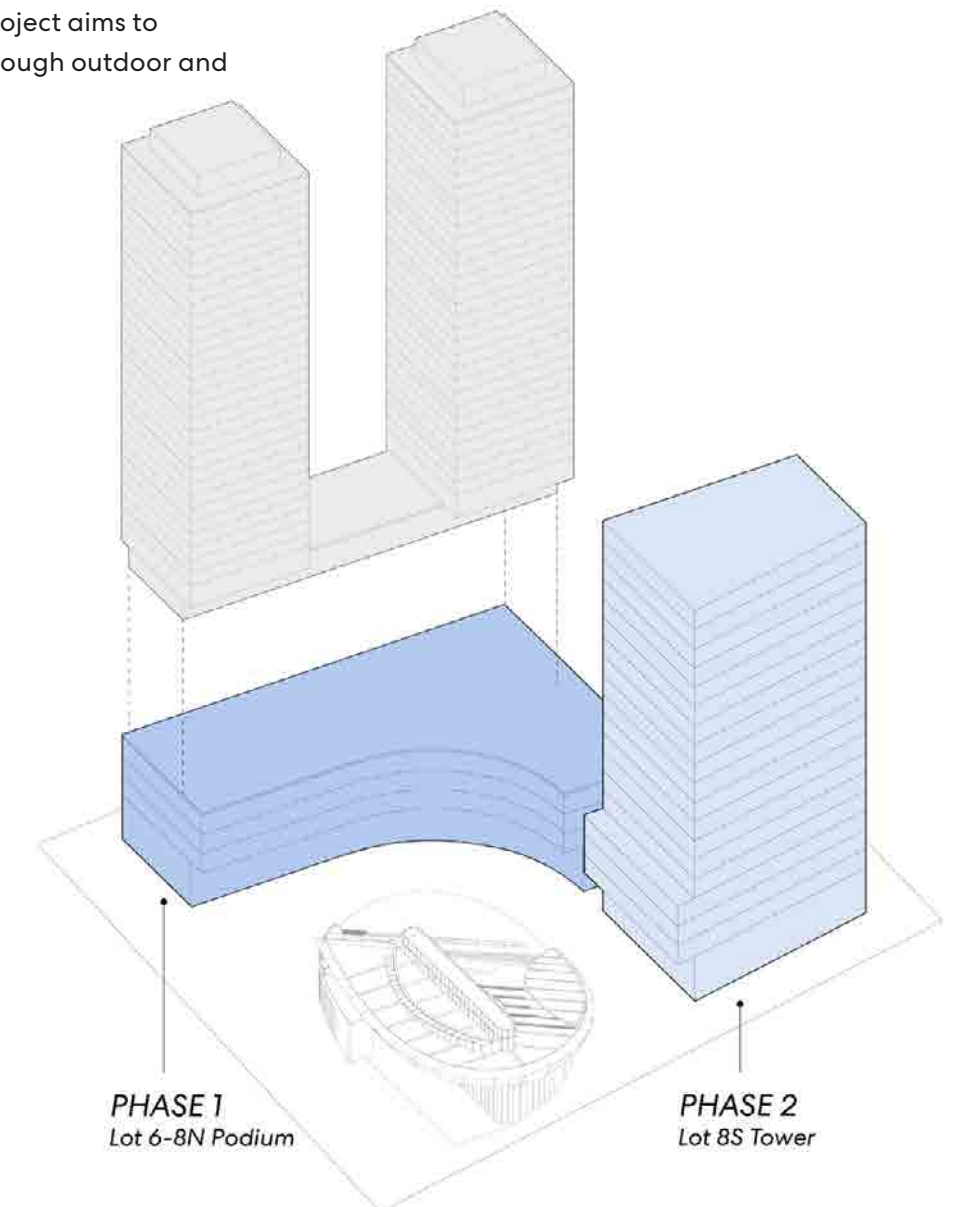
In alignment with LEED low-emitting material criteria, Volatile Organic Compounds in all wet applied products will be restricted to regulatory levels, minimizing human exposure to harmful chemicals. Interior products with transparency documentation will be prioritized to further limit human exposure to harmful substances.

9. Mind

Occupants will have connections to nature through accessible vegetated roof and podium terrace, atria supporting interconnectivity and centrally located open parks and plazas. These strategies aim to positively impact cognitive function and emotional well-being

10. Community

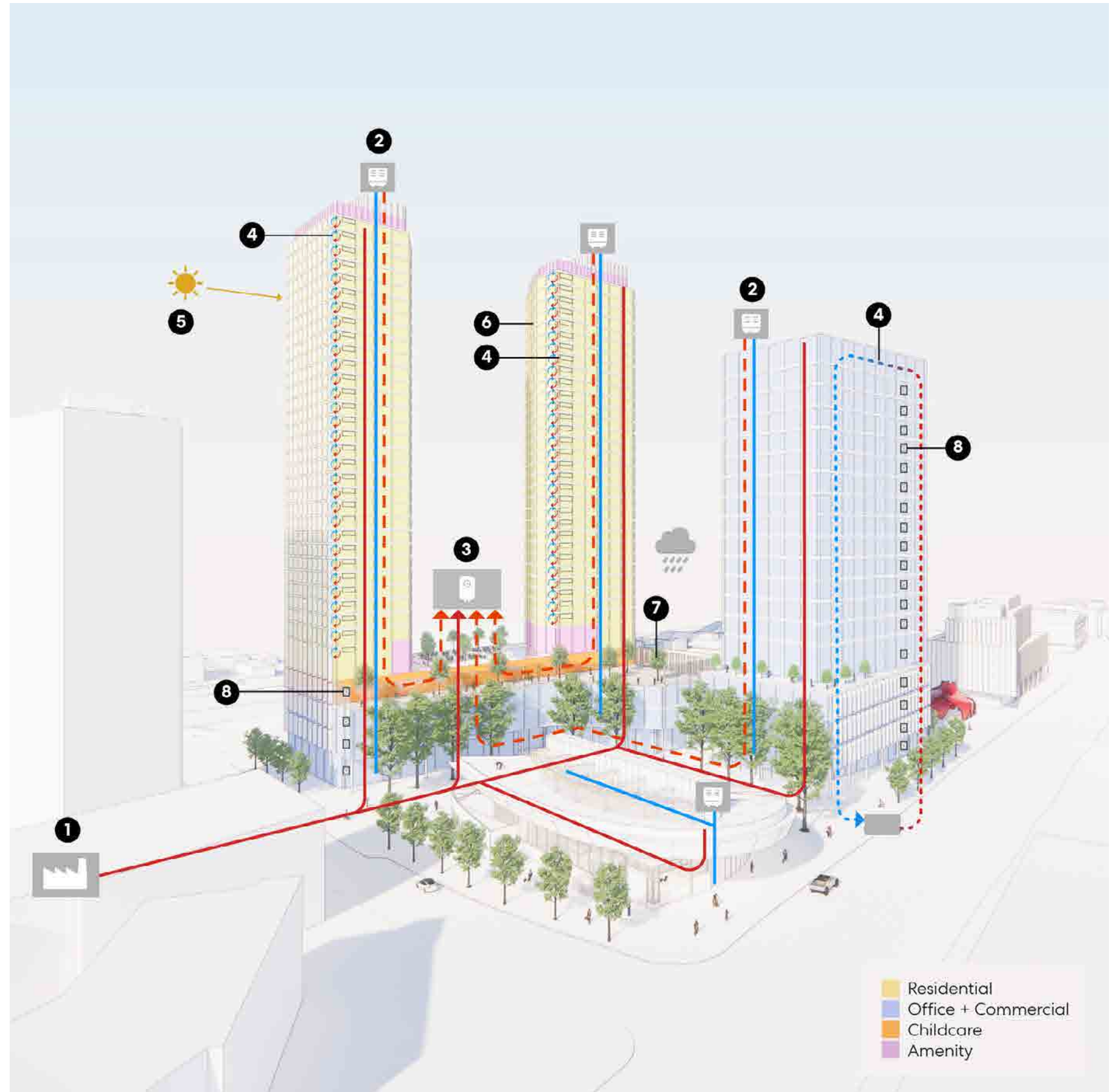
An emergency preparedness plan and a health-oriented mission will be established to promote occupants's health and safety. The project aims to promote community engagement through outdoor and indoor community spaces.



7.8 Systems Thinking

The project uses both active and passive strategies to meet holistic sustainability and energy use targets as outlined below:

1. Neighborhood Energy Utility (NEU) provide heating.
2. Efficient heat recovery air cooled chillers provide cooling.
3. Preheated by heat recovery chiller and boosted by NEU hot water loop provide Domestic Hot Water (DHW).
4. In-suite and central Heat Recovery Ventilators (HRVs).
5. Strategically placed shades and balconies optimize solar heat gain.
6. Optimized window-to-wall ratio balance access to daylight and reduced energy use.
7. Intensive green roof coverage provided stormwater management.
8. Advanced energy metering for office and commercial space.



7.9 Performance Analysis

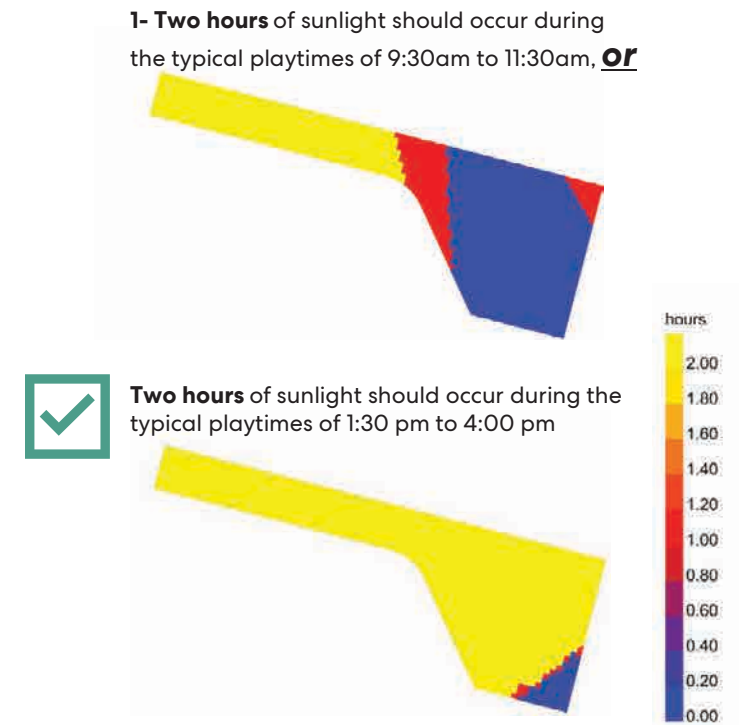
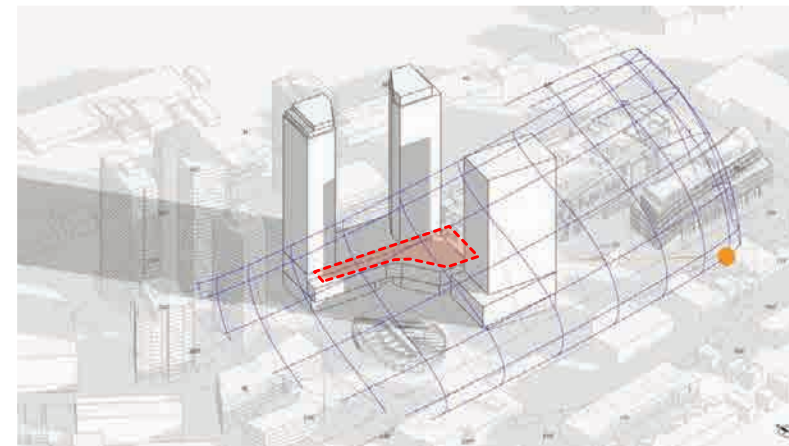
7.9.1 Childcare Sunshine Hours

Sunshine analysis was conducted to assess sunlight exposure on the childcare roof.

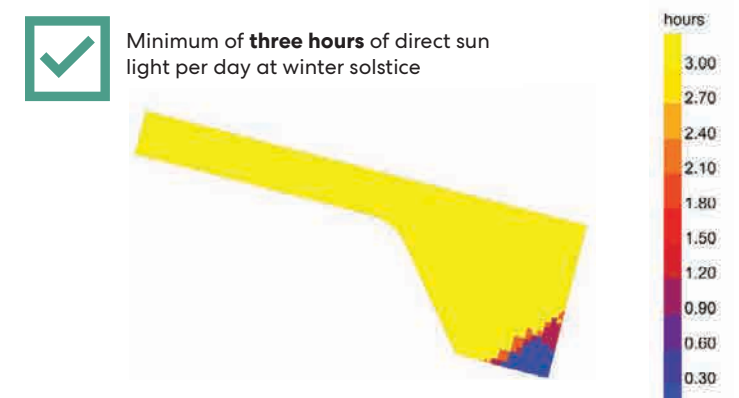
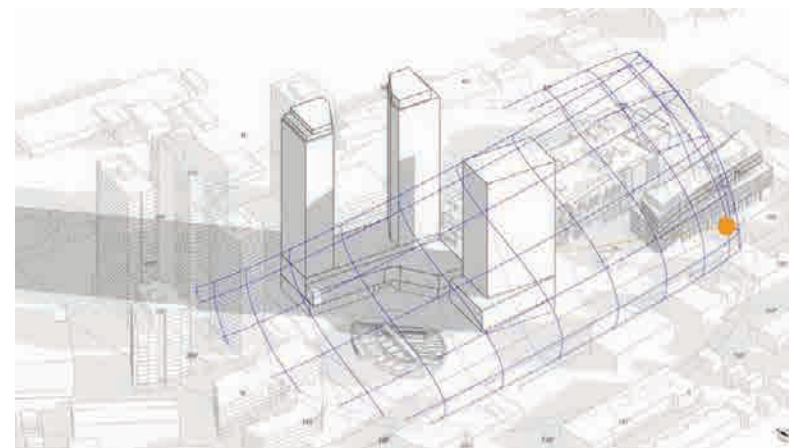
The Childcare Design Guidelines require outdoor play areas to receive a minimum of three hours of direct sunlight per day at the winter solstice. In addition, a minimum of two hours of sunlight are required between 9:30 am - 11:30 am, or 1:30 pm to 4:00 pm to meet the requirements of the guidelines.

The study concludes that the Childcare Design Guidelines are met and the outdoor childcare space will receive adequate sunshine hours.

Winter solstice Lowest Altitude



Feb 1st Slightly Higher Altitude



	Whole day (>3hr)	9:30-11:30am (>2hr)	1:30 to 4:00pm (>2hr)
Winter solstice	Yes	Partially	Yes
1st February	Yes	Partially	Yes

7.9.2 Acoustic Analysis

Two rail lines are located within 300m north of the site. A preliminary acoustic analysis was performed to determine the possible effects of noise on the childcare and residential towers.

The City recommends a maximum sound pressure level of 55dB(A) 24 hour equivalent sound level. Through analysis the project team was able to determine that the recommended equivalent sound level was achieved throughout the project apart from the north facing ground floor podium.

The north facing podium is programmed as back of house space. For this reason the project team do not believe the increased equivalent sound level will negatively impact occupants. For the childcare spaces planned planting and landscaping not accounted for in the study will further reduce noise levels creating a comfortable acoustic environment.

RECOMMENDED NOISE CRITERIA - RESIDENTIAL OR OTHER SENSITIVE LAND USES IN PROXIMITY TO FREIGHT RAIL SHUNTING YARDS

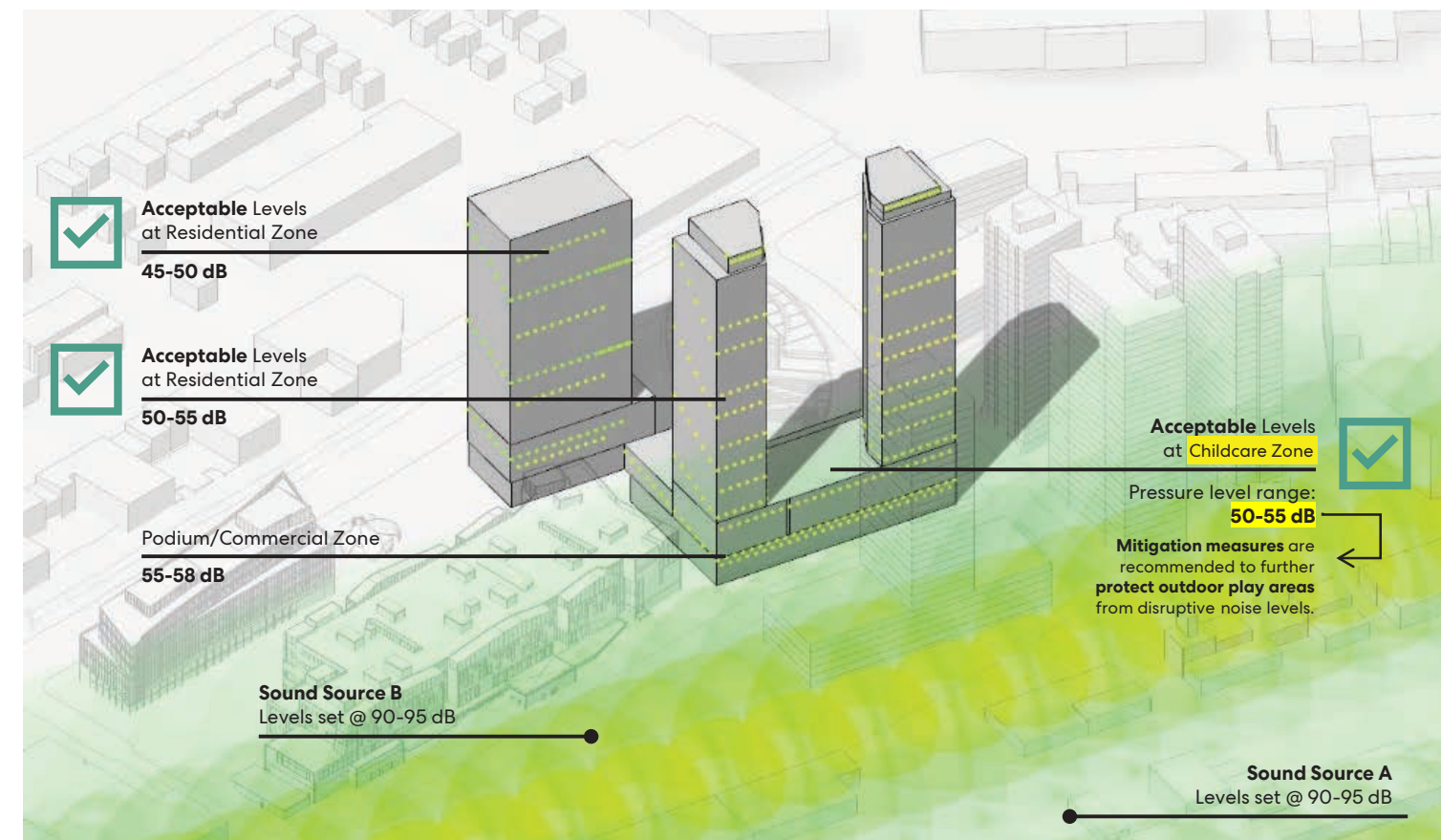
TYPE OF SPACE	TIME PERIOD	SOUND LEVEL LIMIT Leq* (dBA) Rail**	OUTDOOR SOUND LEVEL LIMIT Leq* (dBA)
Bedrooms	2300 to 0700 hrs	35	50
Living/dining rooms	0700 to 2300 hrs	40	55
Outdoor Living Area	0700 to 2300 hrs	55	N/A

TIME OF DAY	ONE HOUR Leq (dBA)
Class 1 Area	
0700 - 1900	50
1900 - 2300	47



Sound Source A
Levels set @ 90-95 dB

Sound Source B
Levels set @ 90-95 dB



* Simulation follows the sound decay inverse law and does not account for sound reflections.
** All simulated measurements are taken at the outdoor façade.



PAGE LEFT INTENTIONALLY BLANK

PAGE LEFT INTENTIONALLY BLANK

Section 8.0

Architecture Drawings

Contents

8.1	Project Statistics	118
8.2	Context Map	119
8.3	Site Plans	120
8.4	Floor Plans	122
8.5	Elevations	135
8.6	Sections	139
8.7	FSR Overlays	143
8.8	Shadow Studies	164

8.1 Project Statistics

FSR SUMMARY (IMPERIAL)

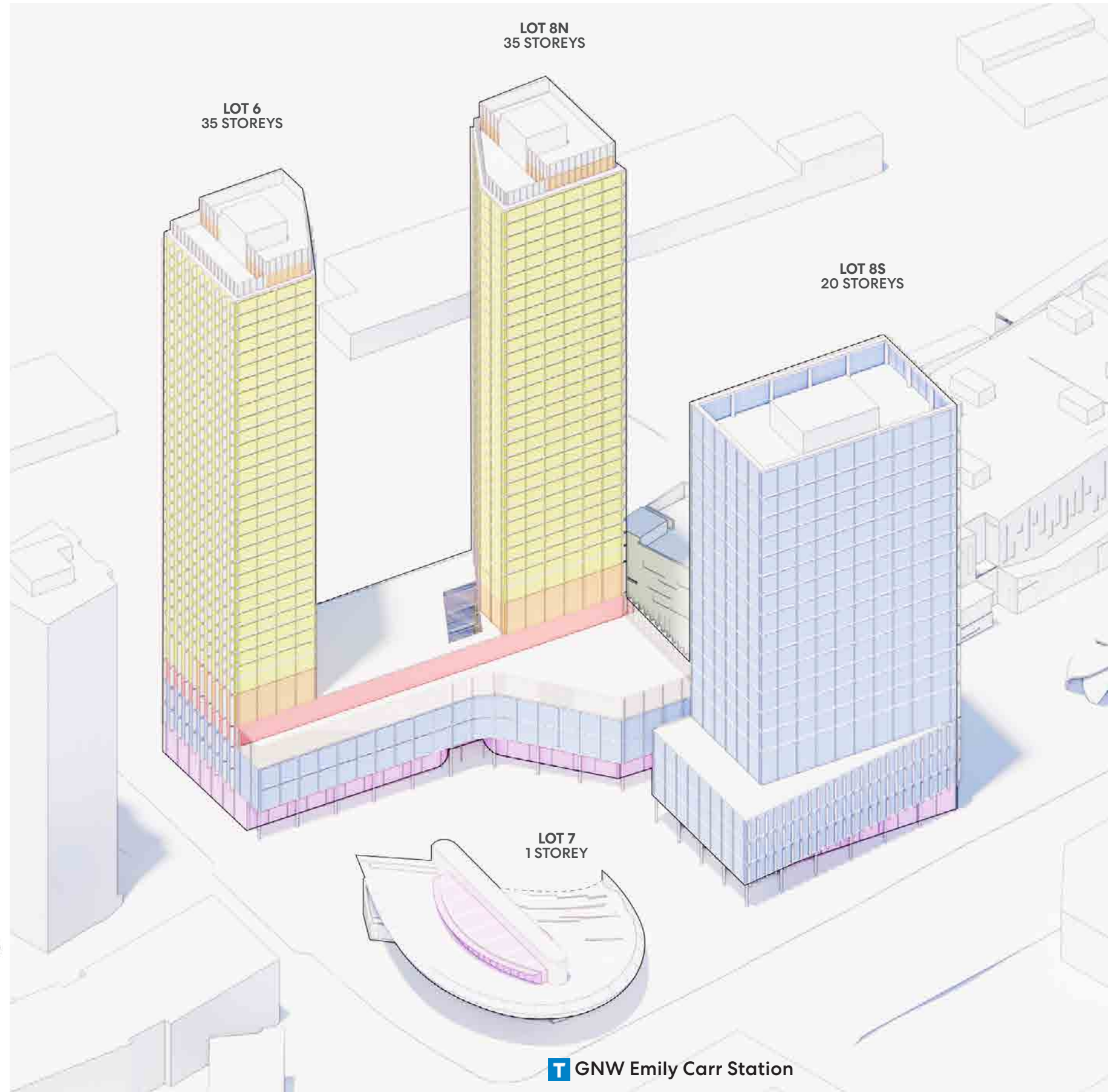
LOCATION	RESIDENTIAL	RETAIL	OFFICE	CHILDCARE	LOADING	TOTAL
LOT 6	216536.79 ft ²					
LOT 8N	216641.86 ft ²	37641.94 ft ²	74186.91 ft ²	23371.35 ft ²	5871.18 ft ²	
LOT 7	-	22917.35 ft ²	-	-	-	
LOT 8S	-	10762.22 ft ²	269496.76 ft ²	-	-	
SUB TOTAL	-	71321.51 ft ²	343683.67 ft ²	-	-	
TOTAL	433178.65 ft ²	415005.18 ft ²	23371.35 ft ²	5871.18 ft ²	877426.37 ft ²	

FSR SUMMARY (METRIC)

LOCATION	RESIDENTIAL	RETAIL	OFFICE	CHILDCARE	LOADING	TOTAL
LOT 6	20116.93 m ²					
LOT 8N	20126.69 m ²	3497.05 m ²	6892.19 m ²	2171.27 m ²	545.45 m ²	
LOT 7	-	2129.09 m ²	-	-	-	
LOT 8S	-	999.84 m ²	25037.07 m ²	-	-	
SUB TOTAL	-	6625.98 m ²	31929.26 m ²	-	-	
TOTAL	40243.61 m ²	38555.24 m ²	2171.27 m ²	545.45 m ²	81515.58 m ²	

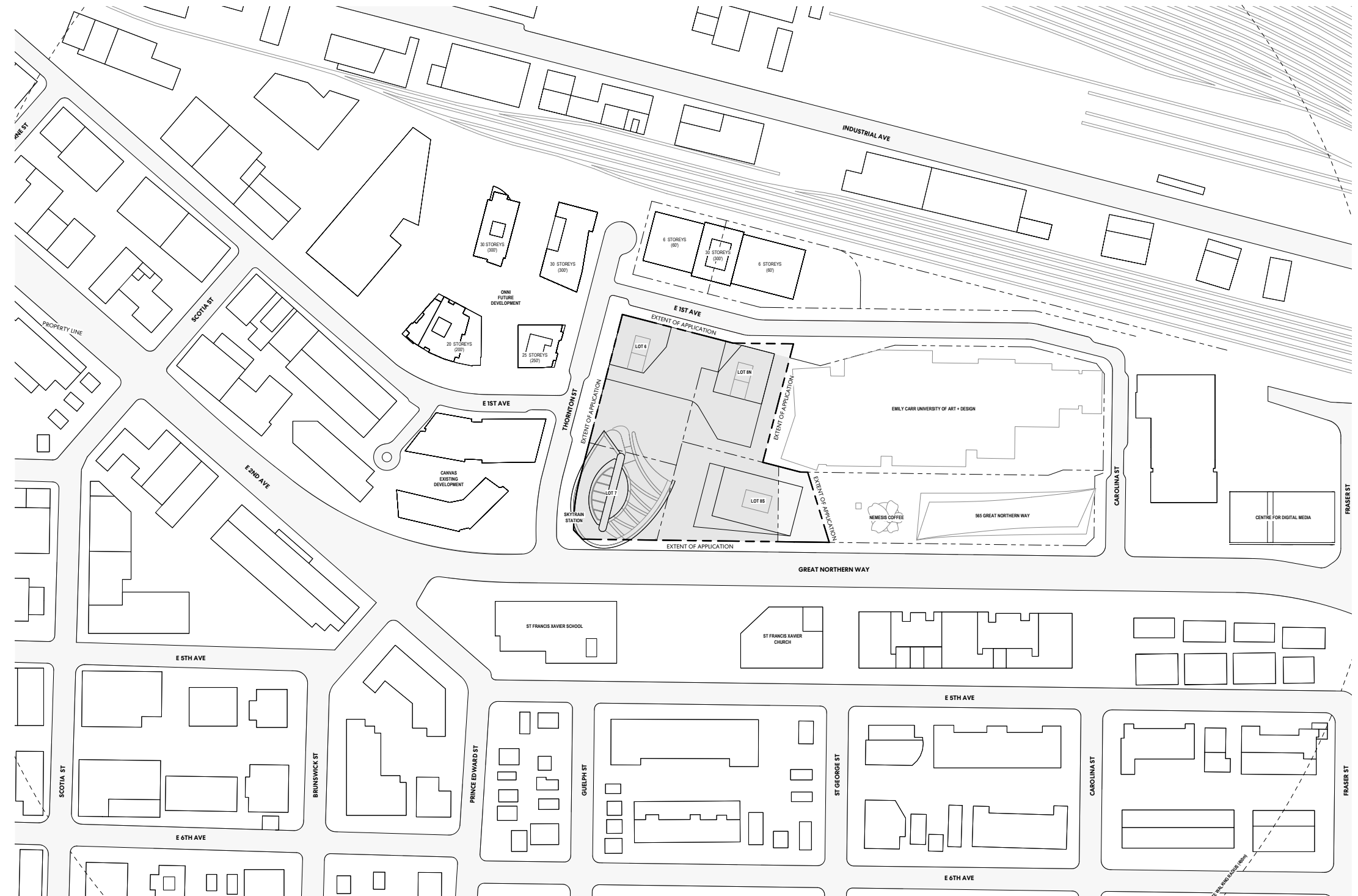
FSR	6.41
-----	------

- Retail
- Commercial/Office
- Childcare
- Amenity
- Residential



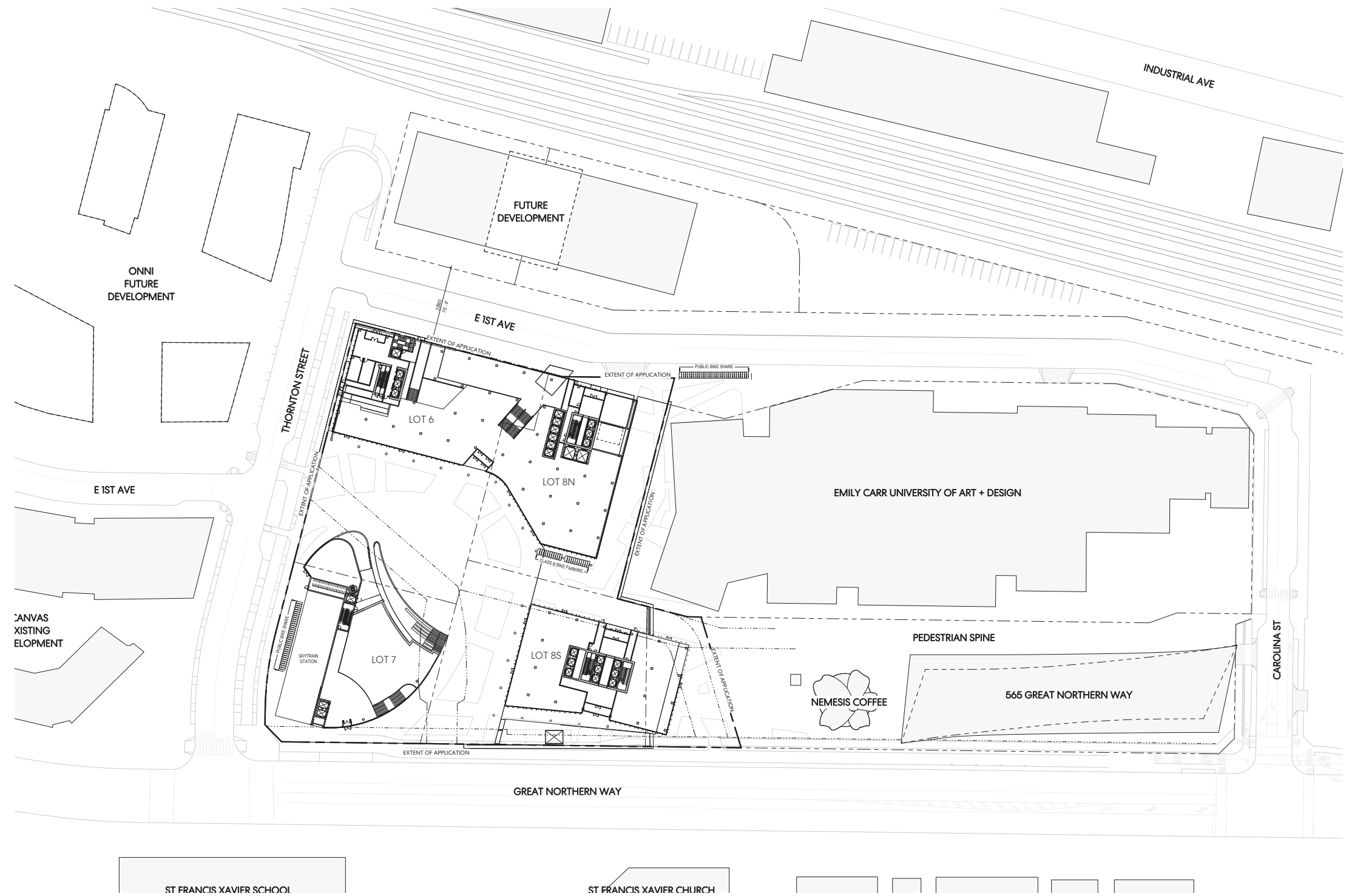
8.2 Context Map

Site Area Including Station Headhouse: 12,716 sq.m (136,874 sq.ft)
 Site Area Excluding Station Headhouse: 12,214 sq.m (131,470 sq.ft)
 Site Coverage: 61.90%



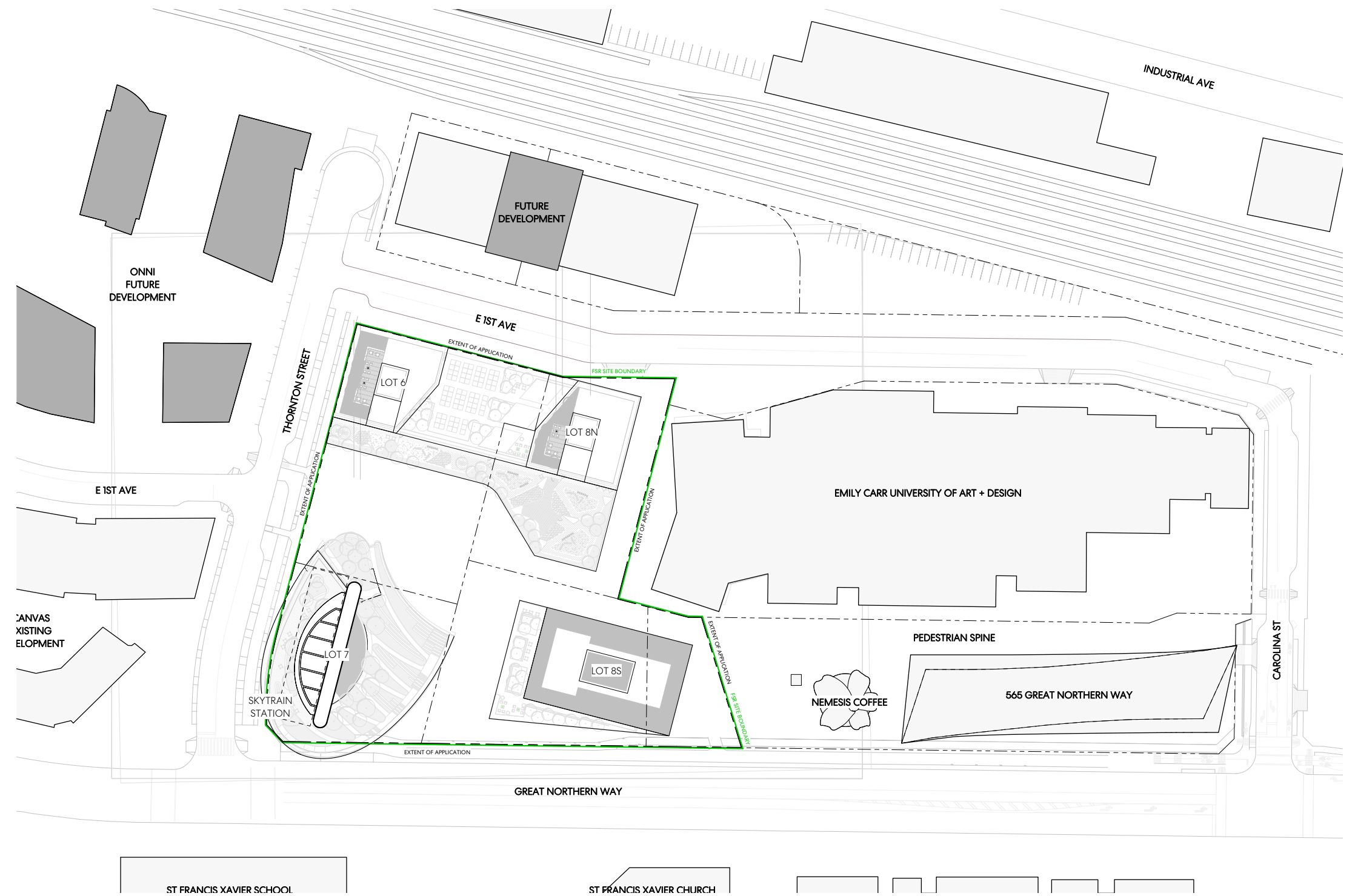
8.3 Site Plans

Site Plan - Grade Level



Site Plans

Site Plan - Roof Level



8.4 Floor Plans

Level P5

PARKING STALL LEGND

XX - XX - ###
USE TYPE STALL#

USES

RE RESIDENTIAL
RE VIS RESIDENTIAL VISITOR PARKING
RE PL RESIDENTIAL PASSENGER LOADING
RE L RESIDENTIAL LOADING

CH CHILDCARE

RO RETAIL / OFFICE
RO PL RETAIL / OFFICE PASSENGER LOADING
RO L RETAIL / OFFICE LOADING

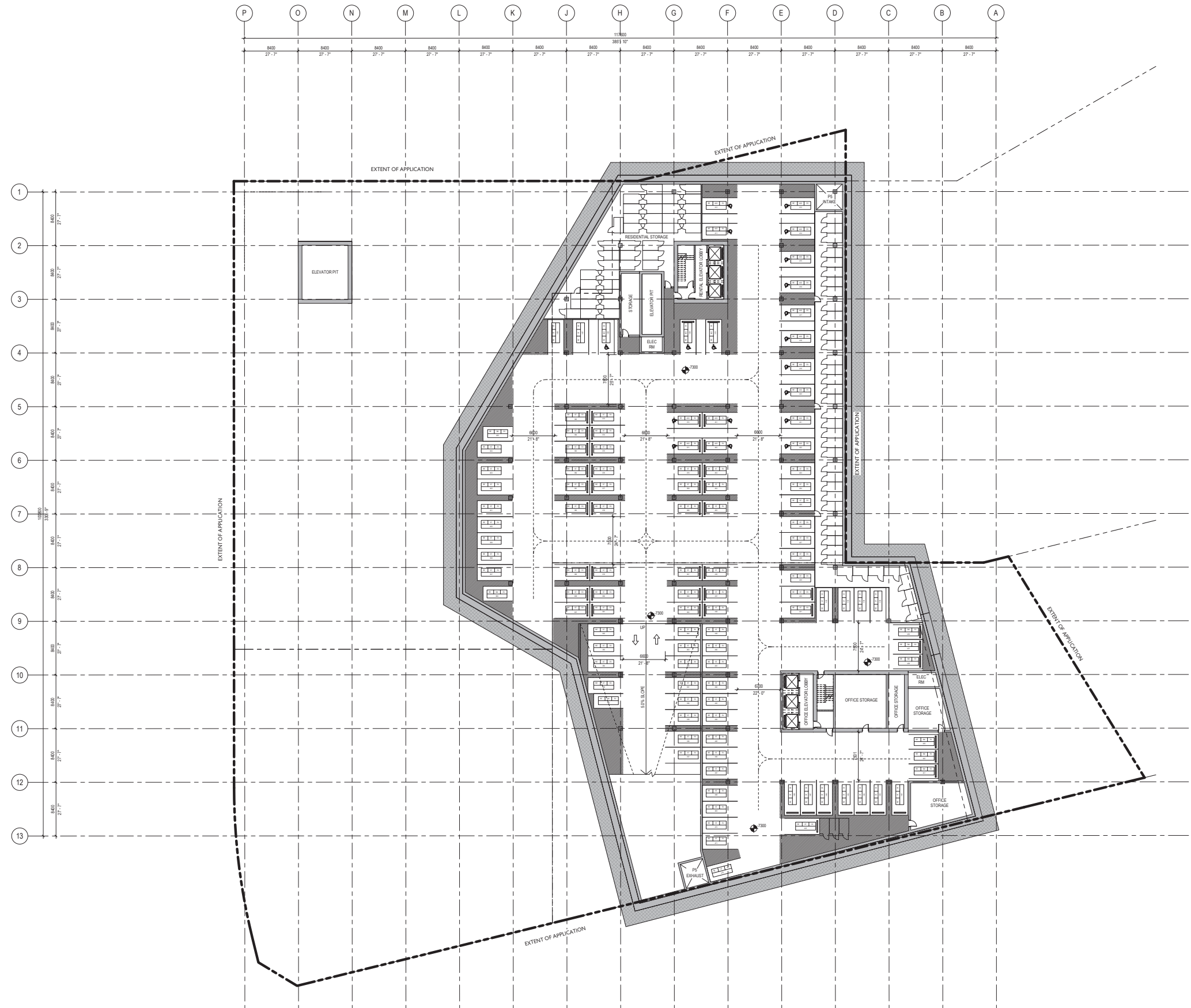
TYPES

ST STANDARD
SM SMALL
W WIDE
ACC ACCESSIBLE
A CLASS A
B CLASS B

VEHICULAR LEVEL 5 PARKING	
Stall Type	Count
ACC	19
SM	8
ST	75
	102

PARKING

RE	
ACC	19
SM	8
ST	75
	102



Floor Plans

Level P4

PARKING STALL LEGND

XX - XX - ###
USE TYPE STALL#

USES

- RE RESIDENTIAL
- RE VIS RESIDENTIAL VISITOR PARKING
- RE PL RESIDENTIAL PASSENGER LOADING
- RE L RESIDENTIAL LOADING
- CH CHILDCARE
- RO RETAIL / OFFICE
- RO PL RETAIL / OFFICE PASSENGER LOADING
- RO L RETAIL / OFFICE LOADING

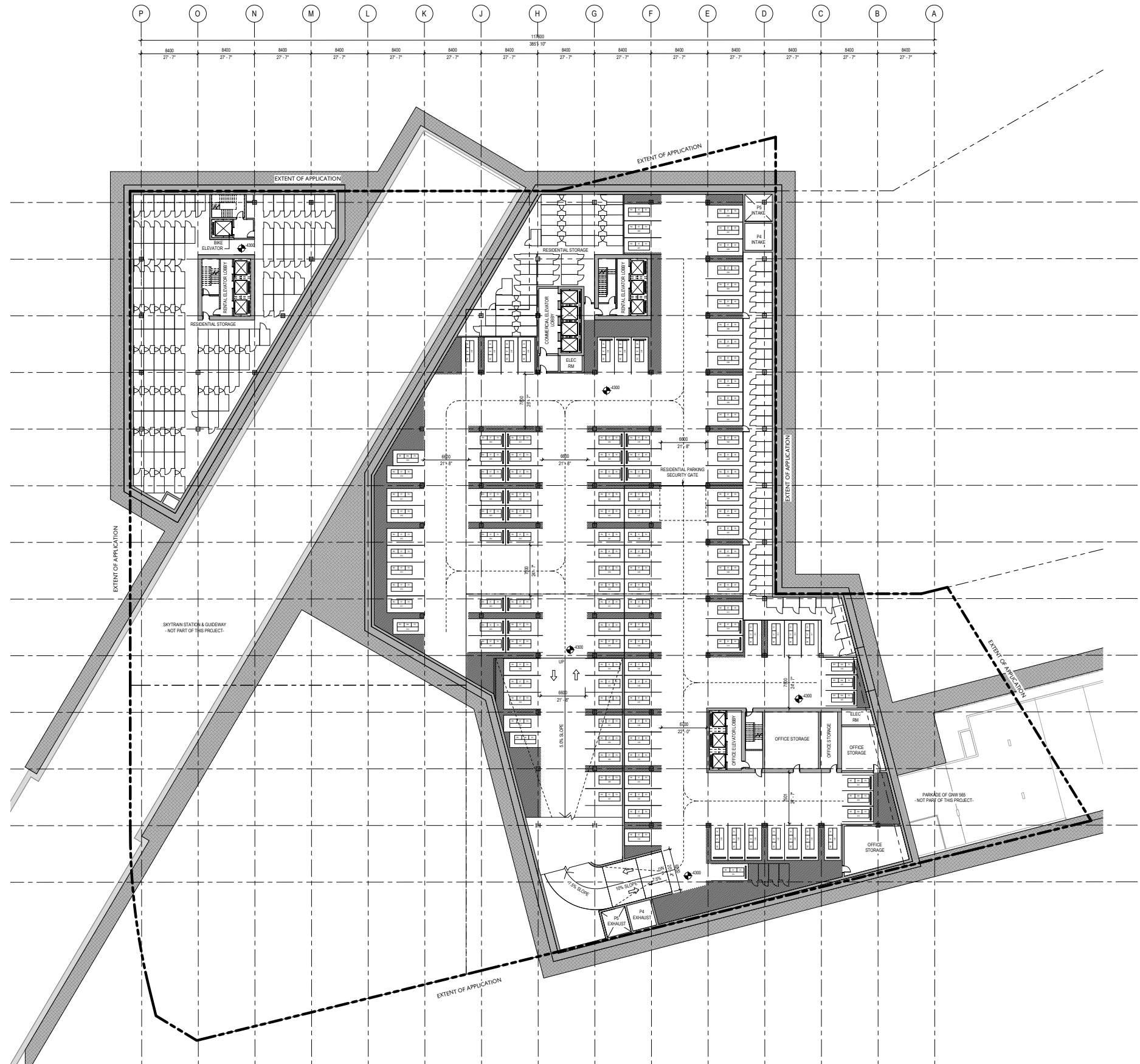
TYPES

- ST STANDARD
- SM SMALL
- W WIDE
- ACC ACCESSIBLE
- A CLASS A
- B CLASS B

VEHICULAR LEVEL 4 PARKING	
Stall Type	Count
RE	
SM	8
ST	61
RC	
SM	1
ST	59
	129

PARKING

RE	
SM	8
ST	61
RC	
SM	1
ST	59
	129



Floor Plans

Level P3

PARKING STALL LEGND

XX - XX - ###
USE TYPE STALL#

USES

- RE RESIDENTIAL
- RE VIS RESIDENTIAL VISITOR PARKING
- RE PL RESIDENTIAL PASSENGER LOADING
- RE L RESIDENTIAL LOADING
- CH CHILDCARE
- RO RETAIL / OFFICE
- RO PL RETAIL / OFFICE PASSENGER LOADING
- RO L RETAIL / OFFICE LOADING

TYPES

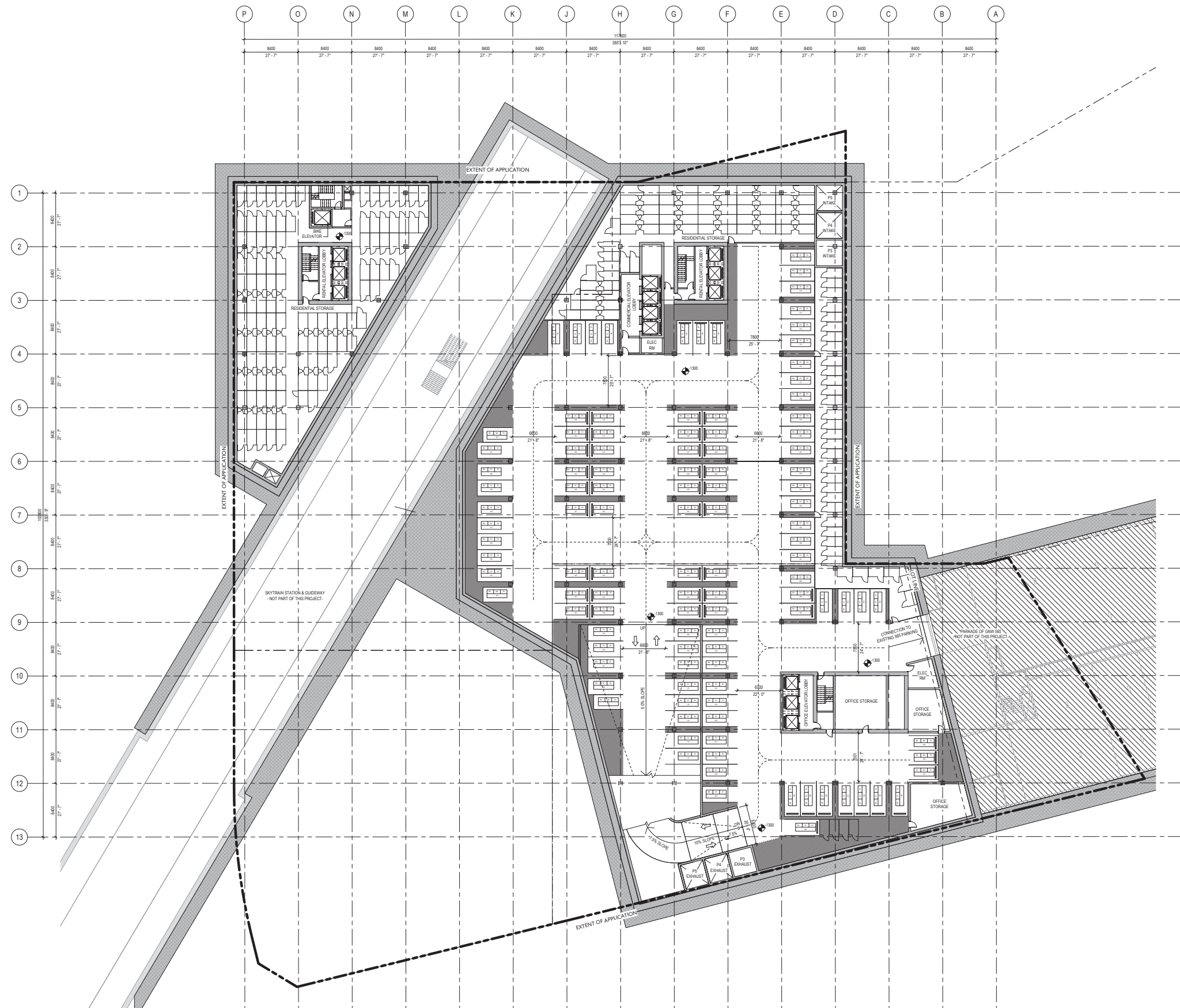
- ST STANDARD
- SM SMALL
- W WIDE
- ACC ACCESSIBLE
- A CLASS A
- B CLASS B

VEHICULAR LEVEL 3 PARKING

Stall Type	Count
SM	6
ST	108
	114

PARKING

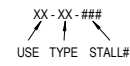
SM	6
ST	108
	114



Floor Plans

Level P2

PARKING STALL LEGND



USES

- RE RESIDENTIAL
- RE VIS RESIDENTIAL VISITOR PARKING
- RE PL RESIDENTIAL PASSENGER LOAD
- RE L RESIDENTIAL LOADING

- CH CHILDCARE

- RO RETAIL / OFFICE
- RO PL RETAIL / OFFICE PASSENGER LOAD
- RO L RETAIL / OFFICE LOADING

TYPES

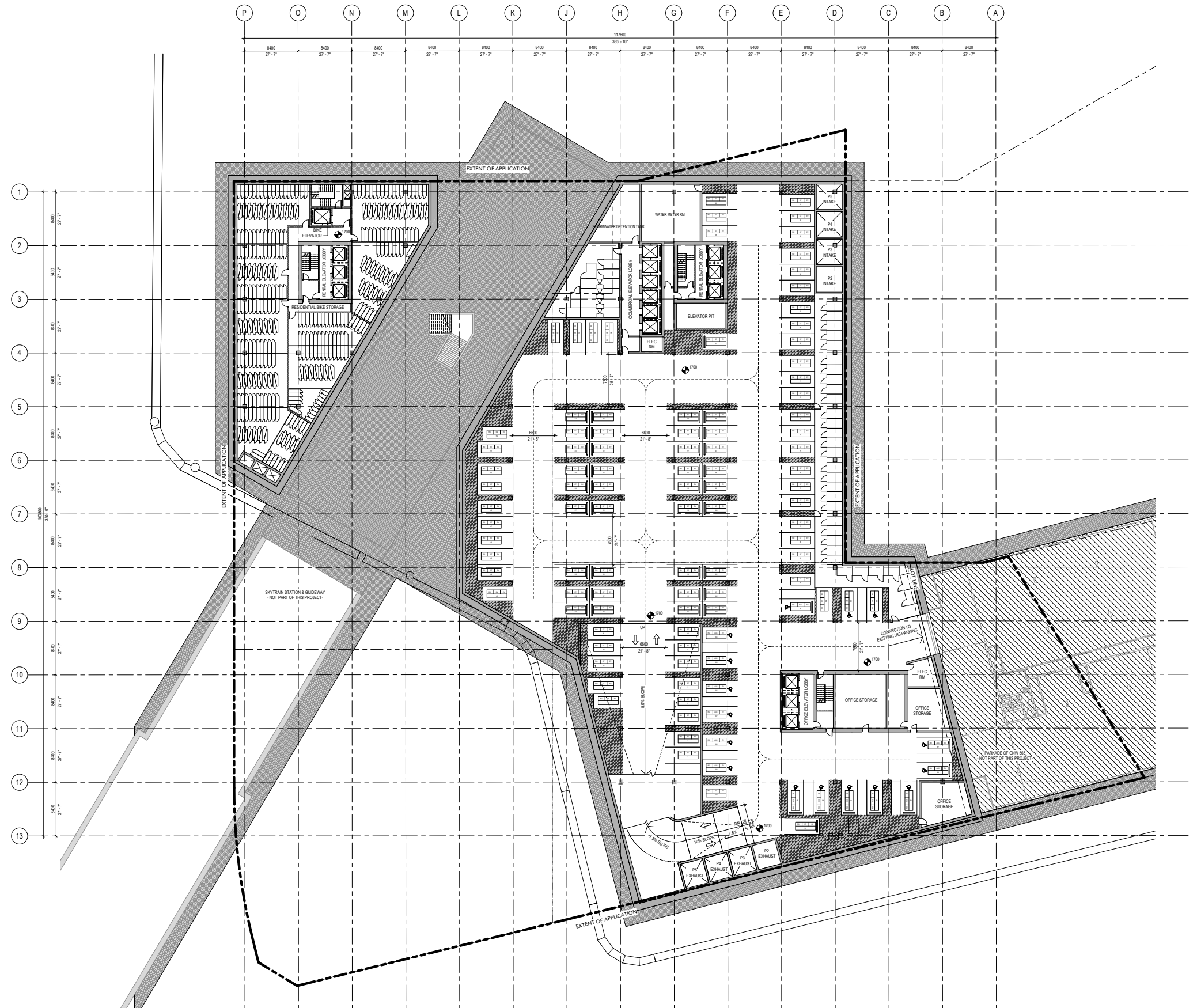
- ST STANDARD
- SM SMALL
- W WIDE
- ACC ACCESSIBLE
- A CLASS A
- B CLASS B

VEHICULAR LEVEL 2 PARKING

Stall Type	Count
CH	
ST	14
RO	
ACC	16
SM	4
ST	91
	125

PARKING

CH	
ST	14
RO	
ACC	16
SM	4
ST	91
	125



Floor Plans

Level P1

PARKING STALL LEGND

XX-XX-###
USE TYPE STALL#

USES

- RE RESIDENTIAL
- RE VIS RESIDENTIAL VISITOR PARKING
- RE PL RESIDENTIAL PASSENGER LOAD
- RE L RESIDENTIAL LOADING
- CH CHILDCARE
- RO RETAIL / OFFICE
- RO PL RETAIL / OFFICE PASSENGER LC
- RO L RETAIL / OFFICE LOADING

TYPES

- ST STANDARD
- SM SMALL
- W WIDE
- ACC ACCESSIBLE
- A CLASS A
- B CLASS B

VEHICULAR LEVEL 1 PARKING	
Stall Type	Count
A	3
B	4

LOADING

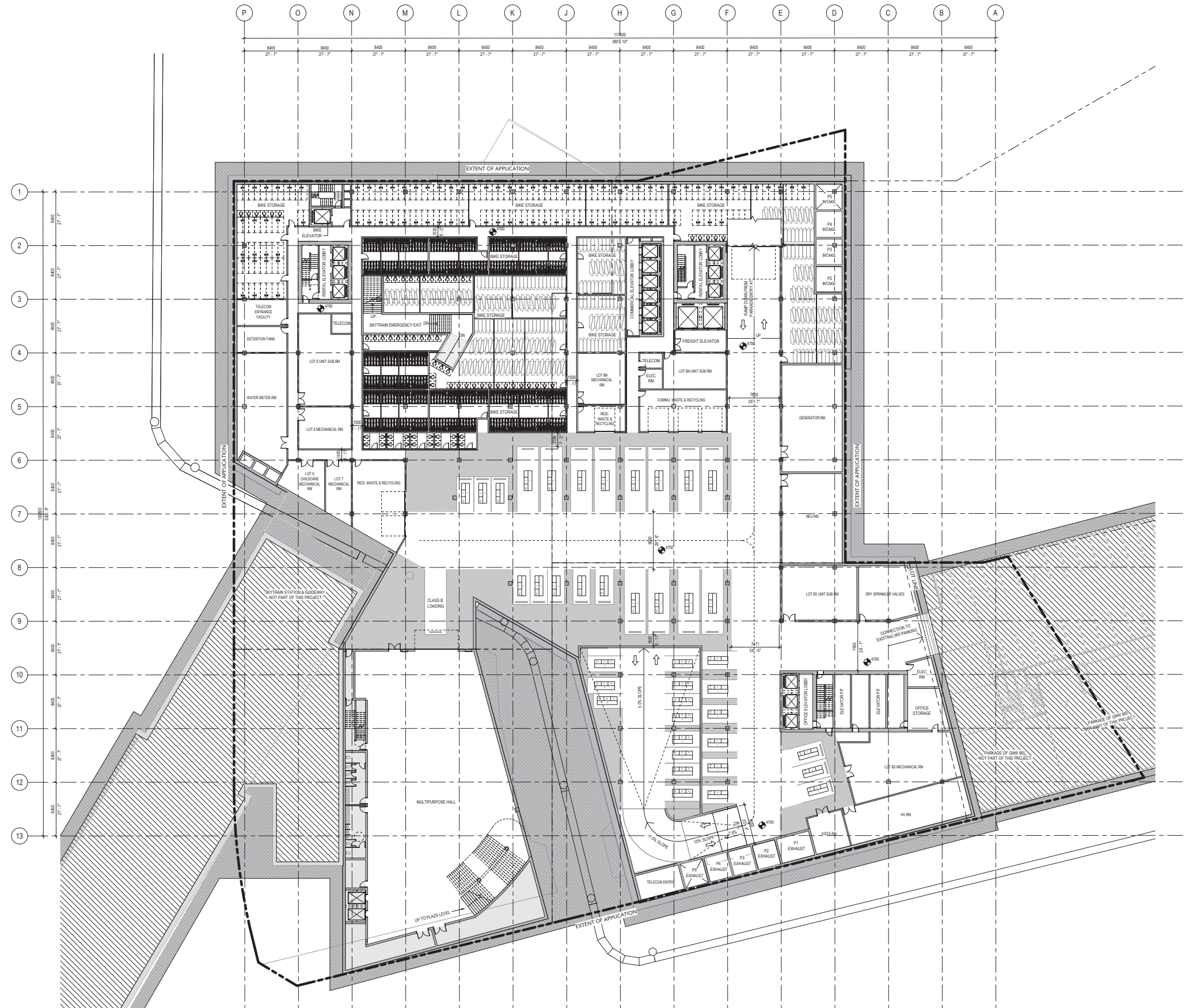
RE L	
A	3
B	4

RE PL

A	4
---	---

RO L

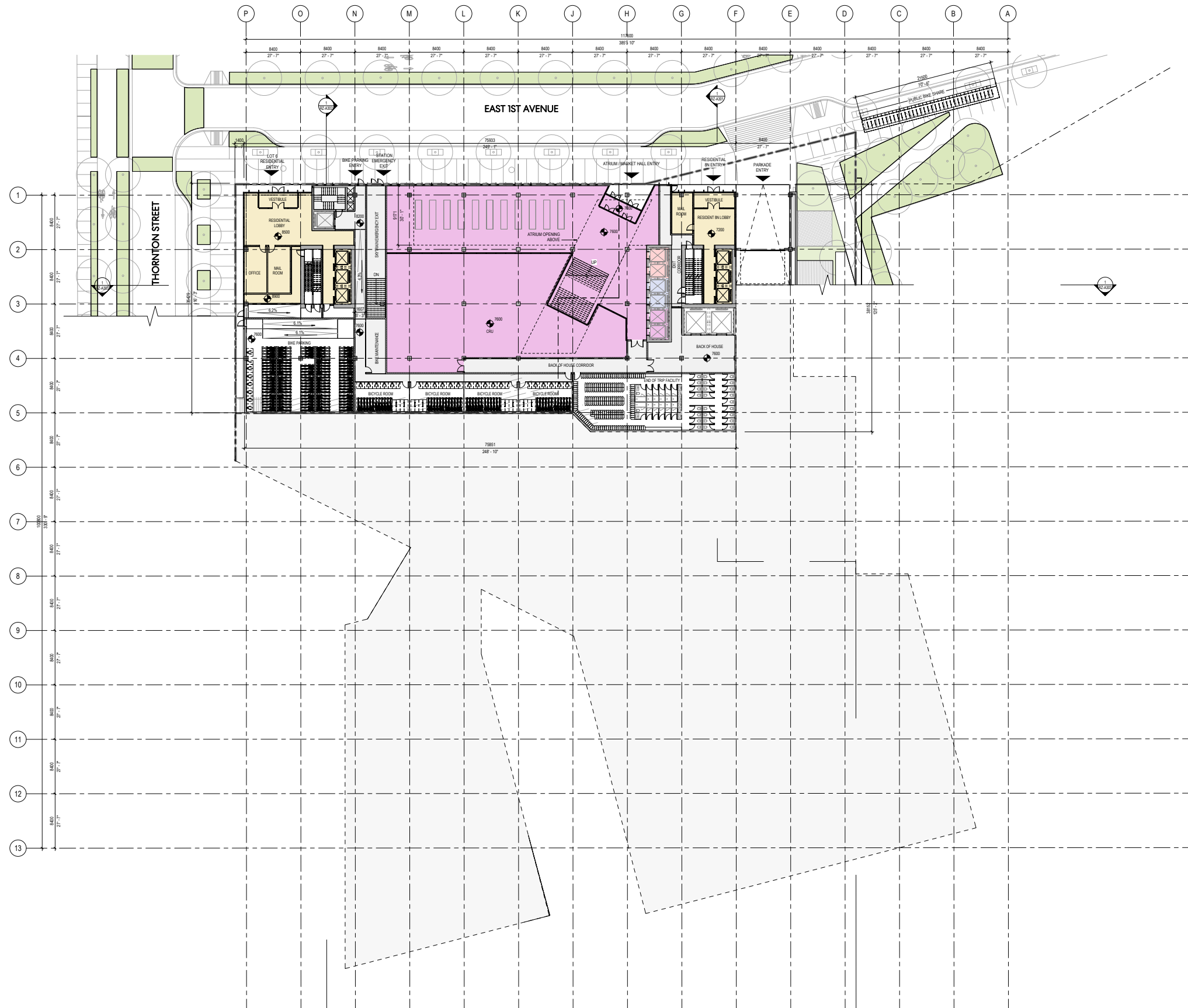
A	4
B	9



Floor Plans

Level 01 - Market Hall

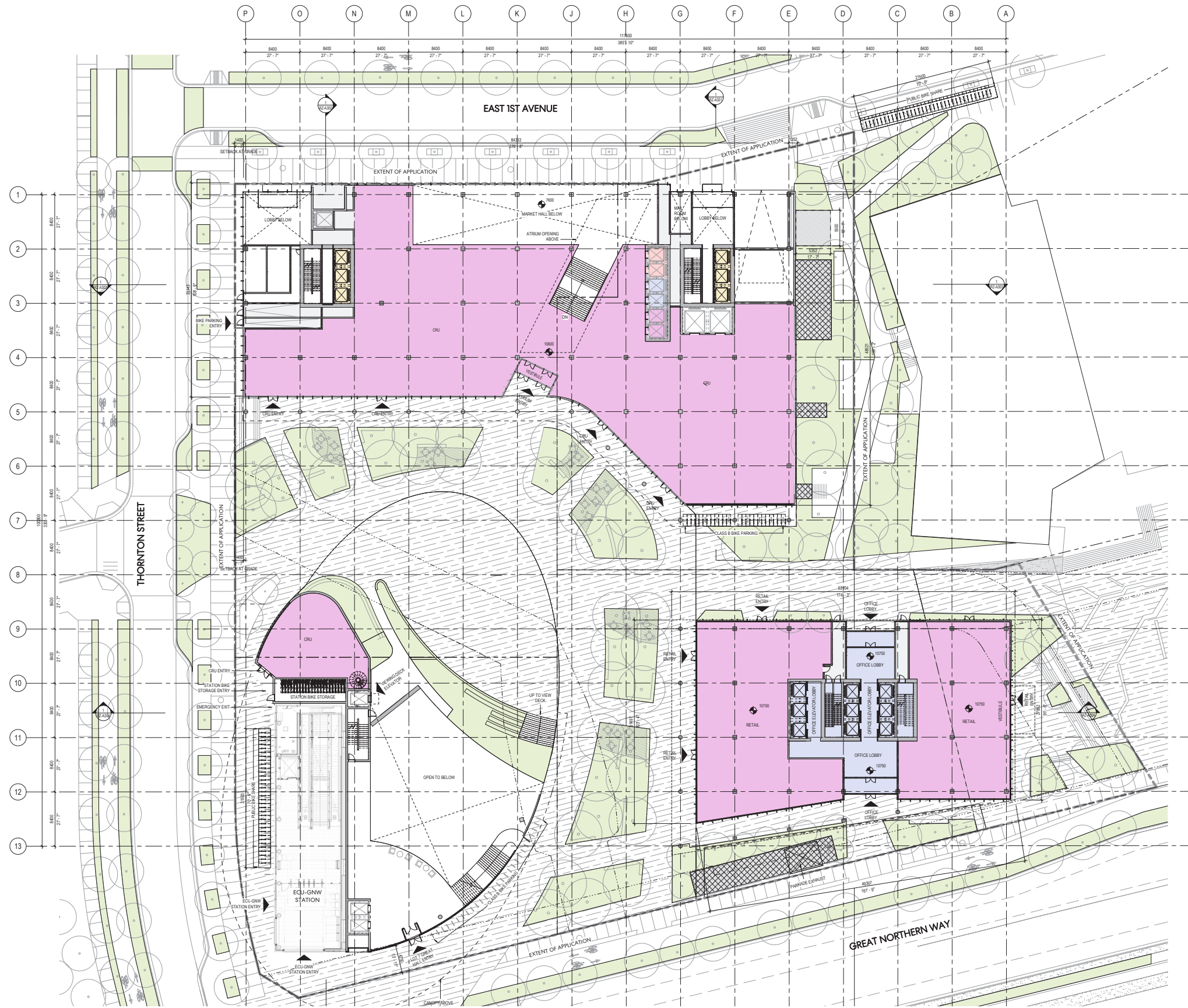
- RESIDENTIAL - RENTAL
- RESIDENTIAL - LOBBY
- RESIDENTIAL - AMENITY
- OFFICE
- OFFICE - LOBBY
- OFFICE - AMENITY
- CHILDCARE
- RETAIL
- PATIO
- BOH
- MECH



Floor Plans

Level 01 - Plaza

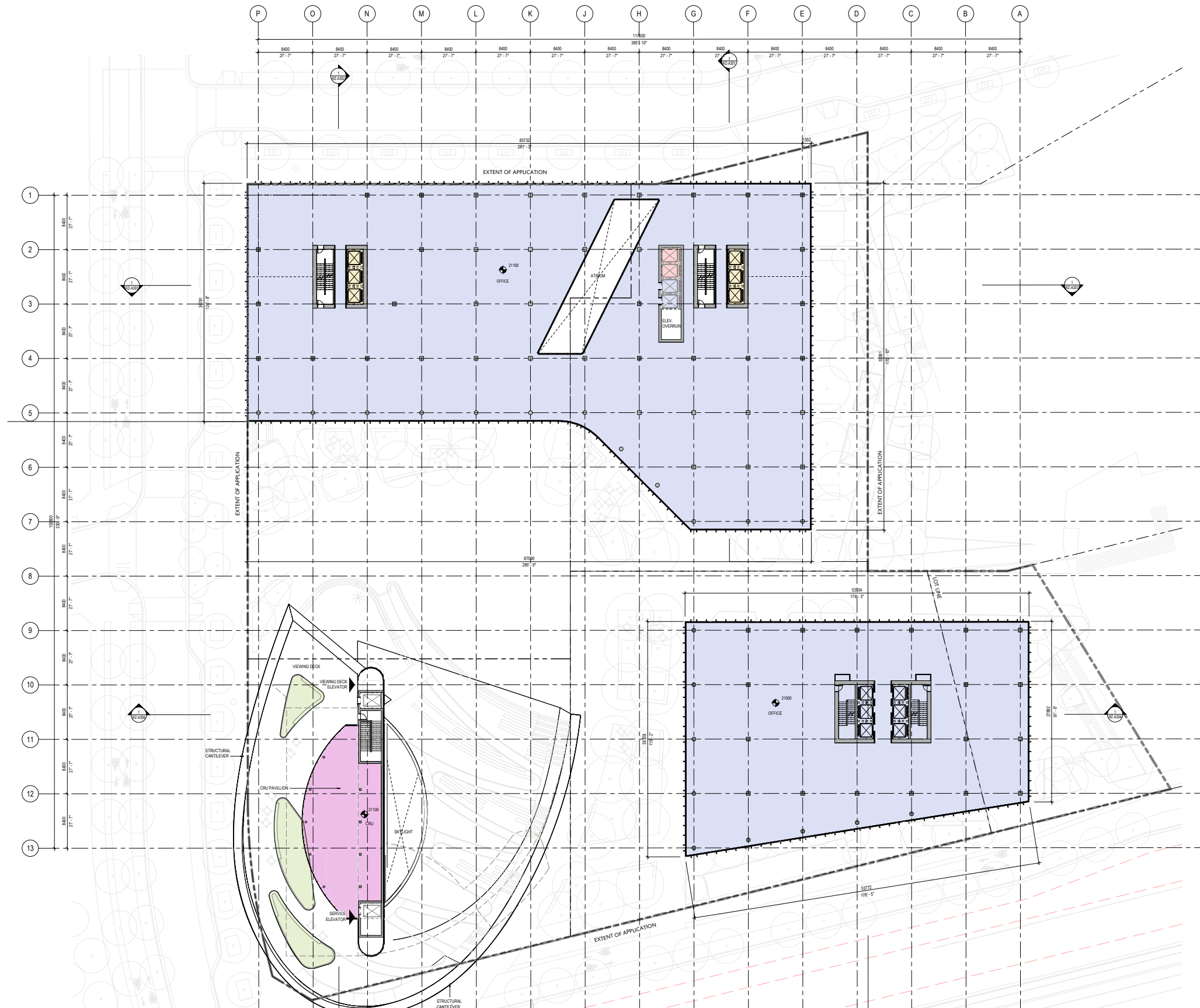
- RESIDENTIAL - RENTAL
- RESIDENTIAL - LOBBY
- RESIDENTIAL - AMENITY
- OFFICE
- OFFICE - LOBBY
- OFFICE - AMENITY
- CHILDCARE
- RETAIL
- PATIO
- BOH
- MECH



Floor Plans

Level 02-03 (Podium Typical)

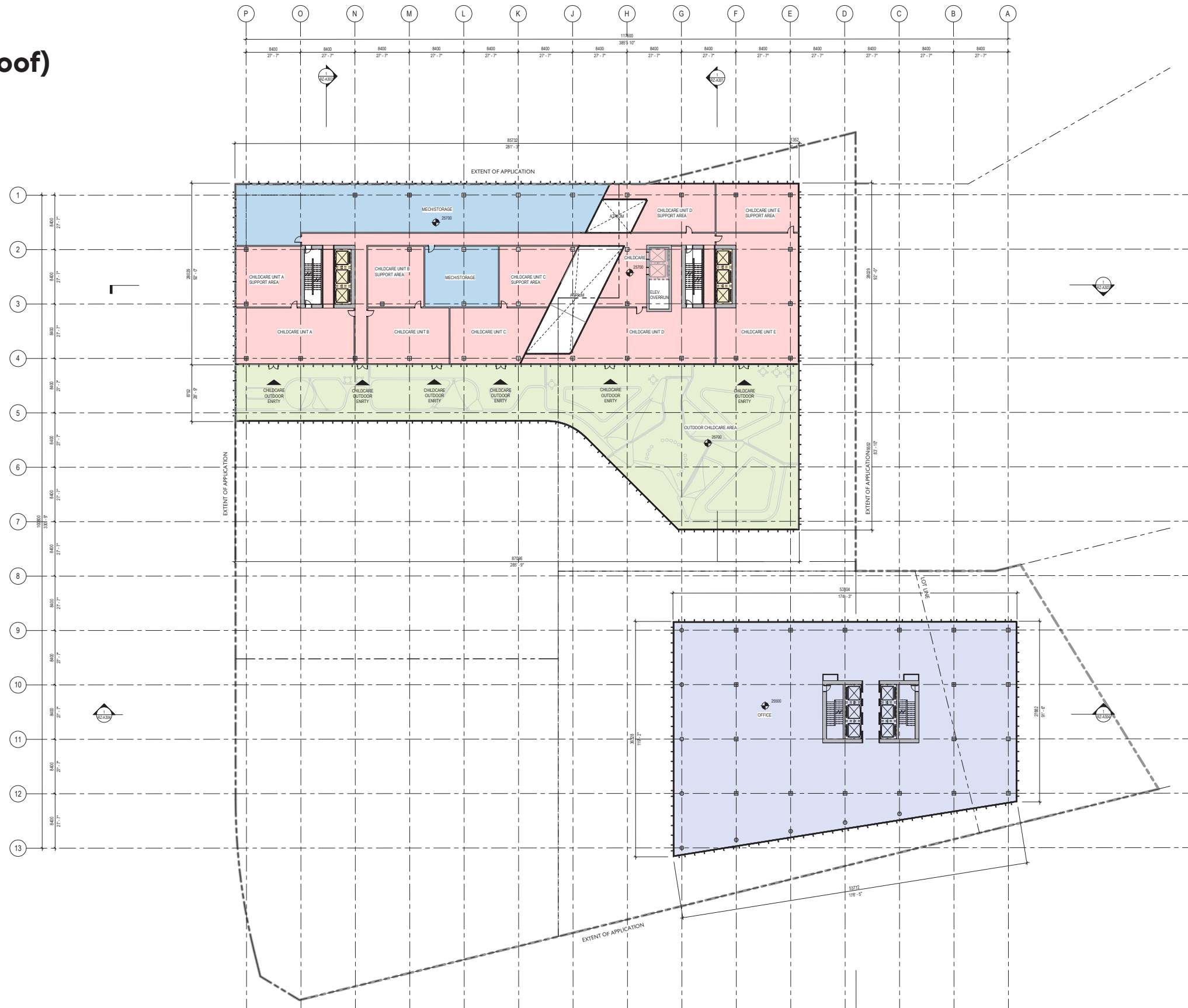
- RESIDENTIAL - RENTAL
- RESIDENTIAL - LOBBY
- RESIDENTIAL - AMENITY
- OFFICE
- OFFICE - LOBBY
- OFFICE - AMENITY
- CHILDCARE
- RETAIL
- PATIO
- BOH
- MECH



Floor Plans

Level 04- Childcare (Podium Roof)

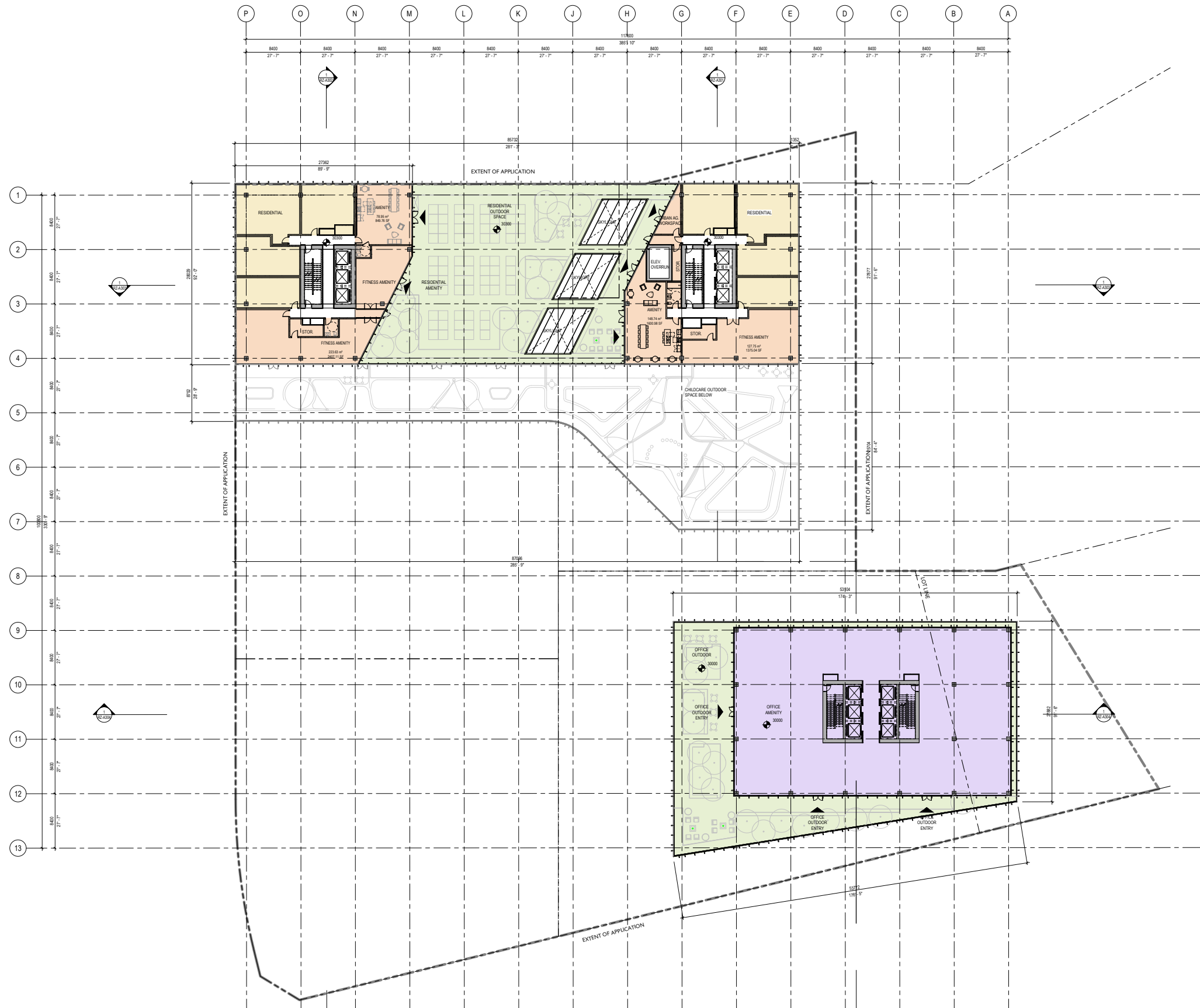
- RESIDENTIAL - RENTAL
- RESIDENTIAL - LOBBY
- RESIDENTIAL - AMENITY
- OFFICE
- OFFICE - LOBBY
- OFFICE - AMENITY
- CHILDCARE
- RETAIL
- PATIO
- BOH
- MECH



Floor Plans

Level 05 Amenity

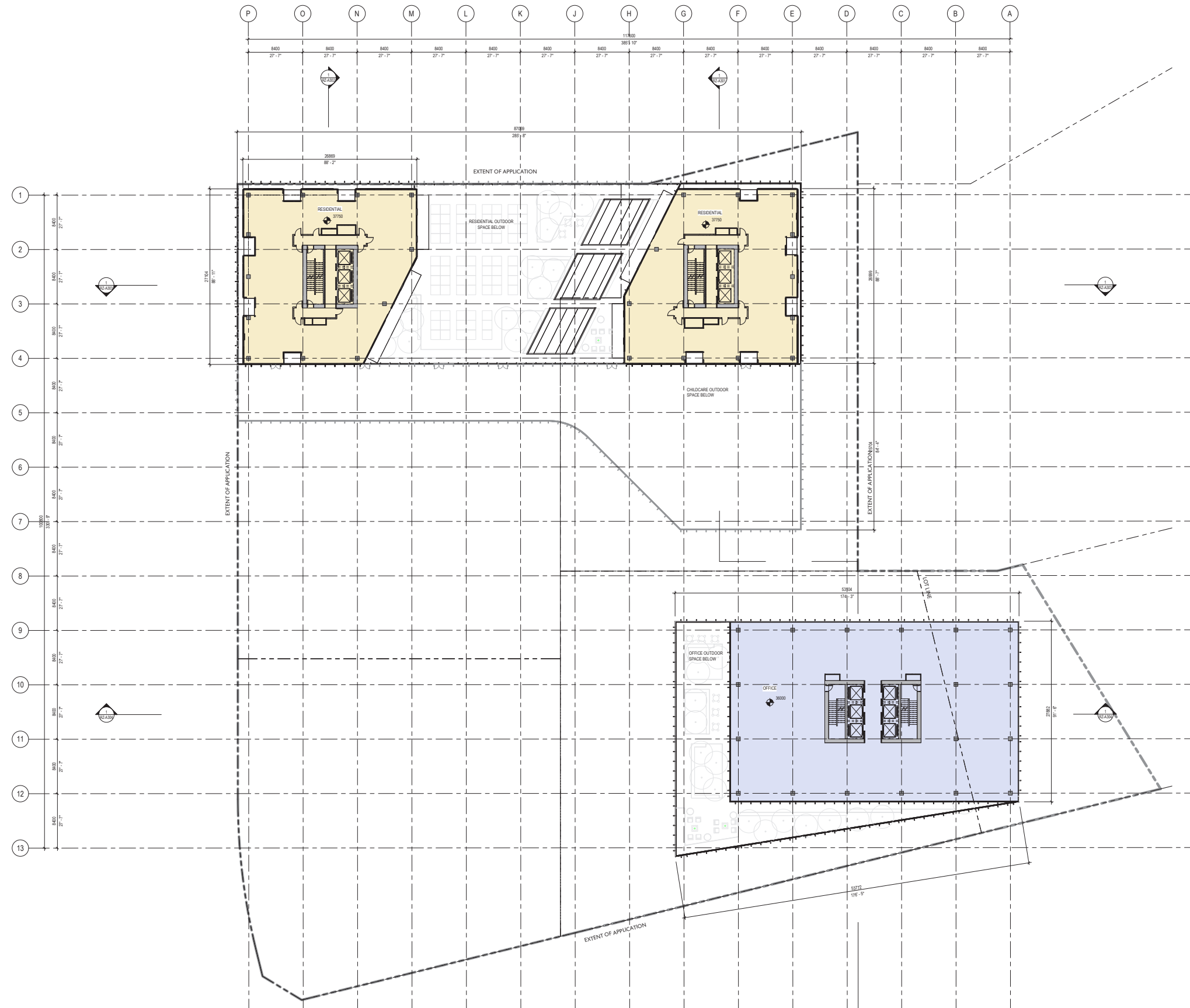
- RESIDENTIAL - RENTAL
- RESIDENTIAL - LOBBY
- RESIDENTIAL - AMENITY
- OFFICE
- OFFICE - LOBBY
- OFFICE - AMENITY
- CHILDCARE
- RETAIL
- PATIO
- BOH
- MECH



Floor Plans

Level 06 (Tower Typical)

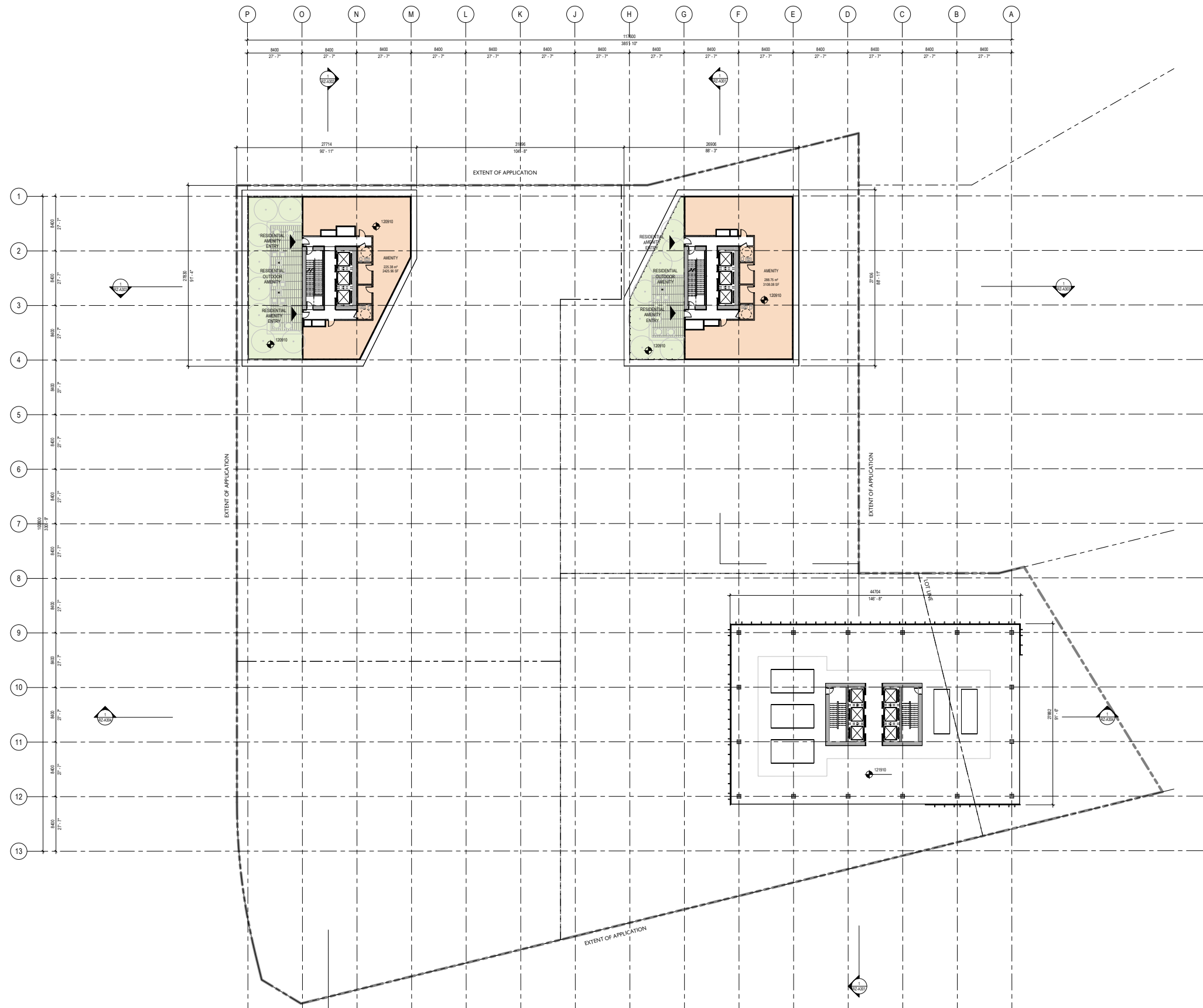
- RESIDENTIAL - RENTAL
- RESIDENTIAL - LOBBY
- RESIDENTIAL - AMENITY
- OFFICE
- OFFICE - LOBBY
- OFFICE - AMENITY
- CHILDCARE
- RETAIL
- PATIO
- BOH
- MECH



Floor Plans

Level 36 Tower Roof Amenity

- RESIDENTIAL - RENTAL
- RESIDENTIAL - LOBBY
- RESIDENTIAL - AMENITY
- OFFICE
- OFFICE - LOBBY
- OFFICE - AMENITY
- CHILDCARE
- RETAIL
- PATIO
- BOH
- MECH

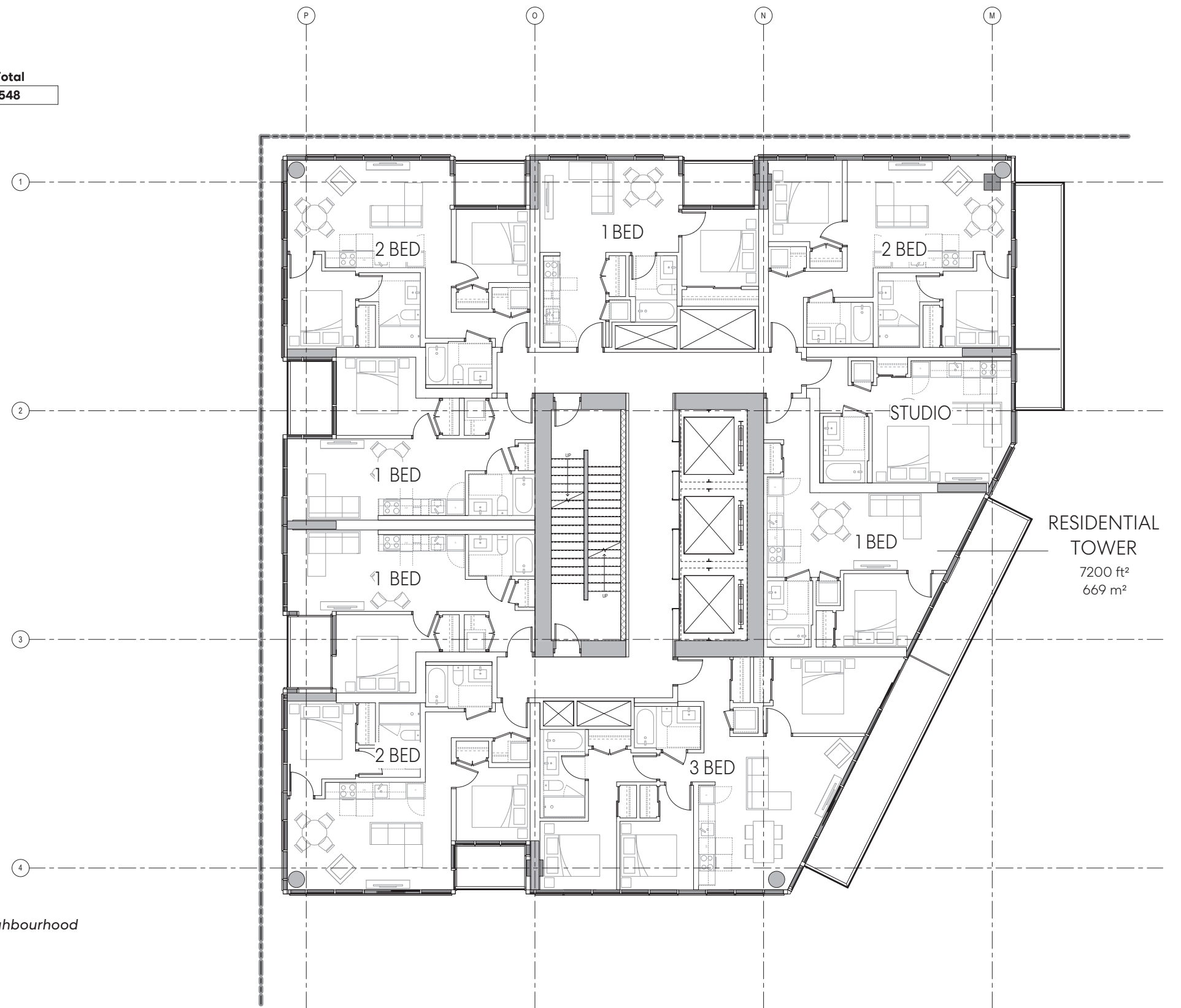


Floor Plans

Enlarged Typical Residential

	Studio	1 BD	2 BD	3 BD	Total
Total Units Both Towers	60	244	184	60	548

% Provided	11%	45%	34%	11%
Family Units ≥2 BD			244	
% Family Housing (35% Req.)			45%	



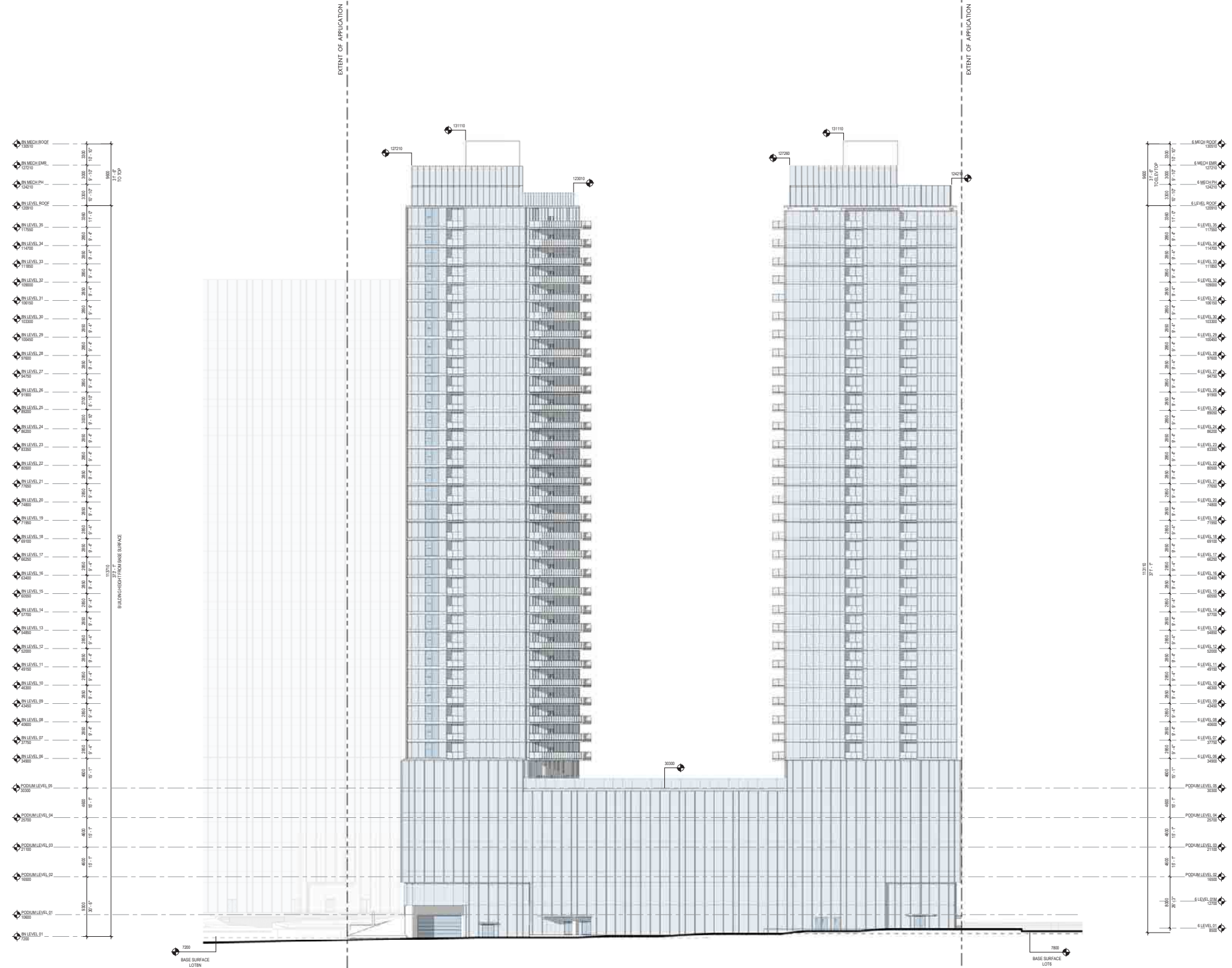
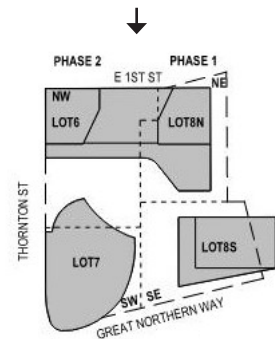
Note:
20% of rental units to be below market at rates 20% below CMHC'S average rent for the neighbourhood



8.5 Elevations

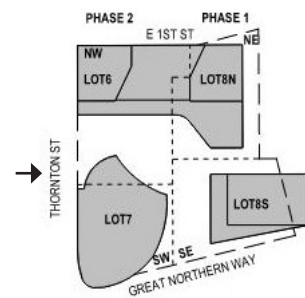
North Elevation

BUILDING STOREYS & HEIGHT	LOT 6	113.3M (371' 1")
	LOT 7	15.5M (50' 10")
	LOT 8N	113.7M (373' 1")
	LOT 8S	93.35M (306' 3")

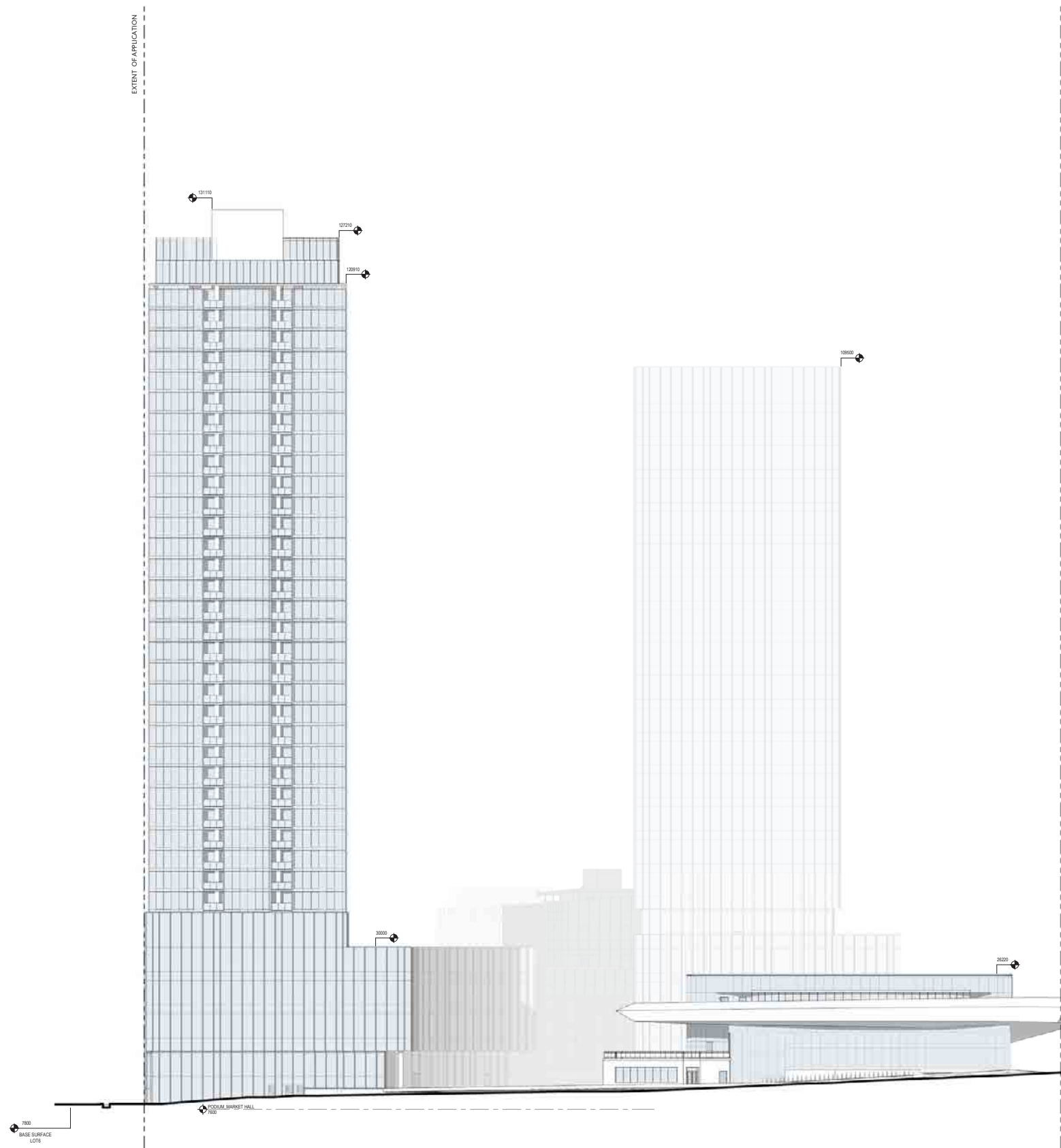


Elevations

West Elevation



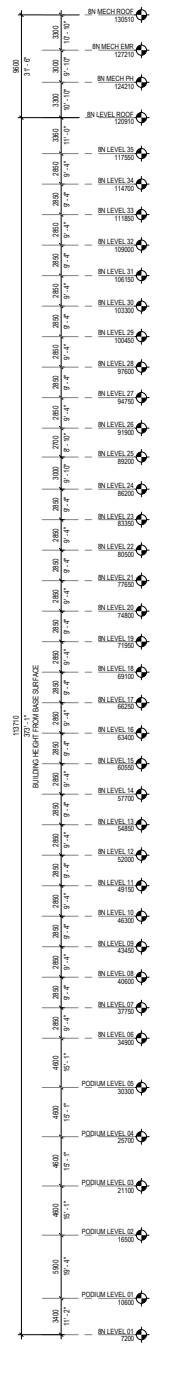
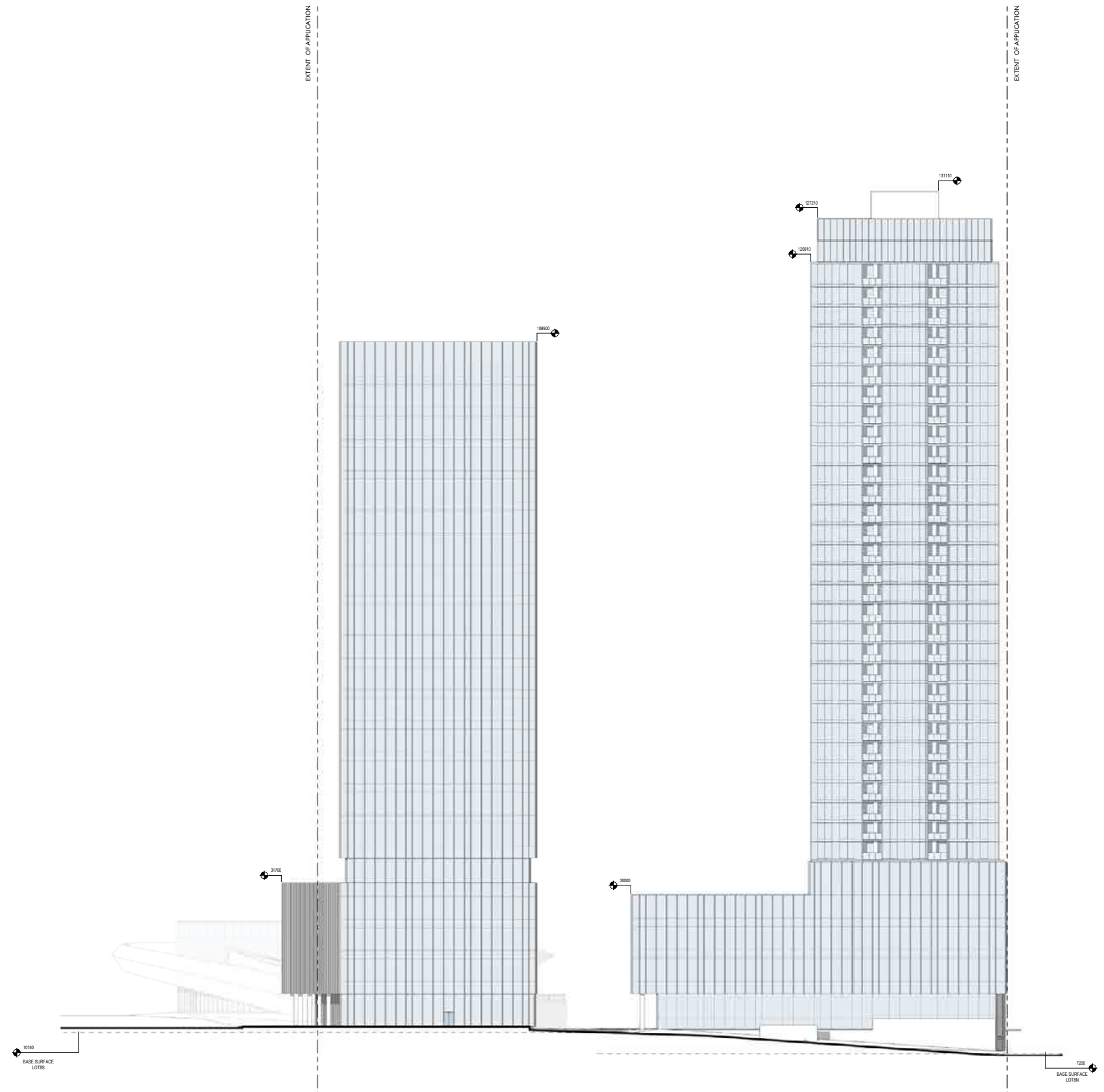
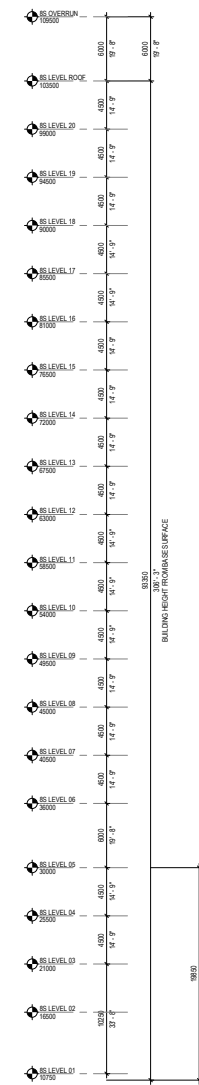
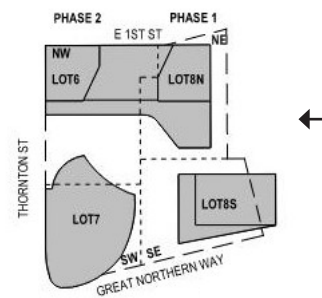
Level	Height (ft)	Height (m)
MECH ROOF	12000	3658
MECH FIBR	12210	3722
MECH PH	12410	3785
ELEV. ROOF	12810	3905
ELEV. 35	11700	3561
ELEV. 34	11400	3475
ELEV. 33	11100	3389
ELEV. 32	10800	3303
ELEV. 31	10500	3217
ELEV. 30	10200	3131
ELEV. 29	9900	3045
ELEV. 28	9600	2959
ELEV. 27	9300	2873
ELEV. 26	9000	2787
ELEV. 25	8700	2701
ELEV. 24	8400	2615
ELEV. 23	8100	2529
ELEV. 22	7800	2443
ELEV. 21	7500	2357
ELEV. 20	7200	2271
ELEV. 19	6900	2185
ELEV. 18	6600	2099
ELEV. 17	6300	2013
ELEV. 16	6000	1927
ELEV. 15	5700	1841
ELEV. 14	5400	1755
ELEV. 13	5100	1669
ELEV. 12	4800	1583
ELEV. 11	4500	1497
ELEV. 10	4200	1411
ELEV. 09	3900	1325
ELEV. 08	3600	1239
ELEV. 07	3300	1153
ELEV. 06	3000	1067
POODUM LEVEL 05	2700	981
POODUM LEVEL 04	2400	895
POODUM LEVEL 03	2100	809
POODUM LEVEL 02	1800	723
ELEV. 019	1500	637
POODUM LEVEL 01	1200	551
ELEV. 01	900	465



Level	Height (ft)	Height (m)
ELEV. ROOF TOP	12000	3658
7 LEVEL ROOF	10200	3131
7 LEVEL RIM	10000	3045
7 LEVEL 01	9000	2787
BASE SURFACE LOT 7	0	0

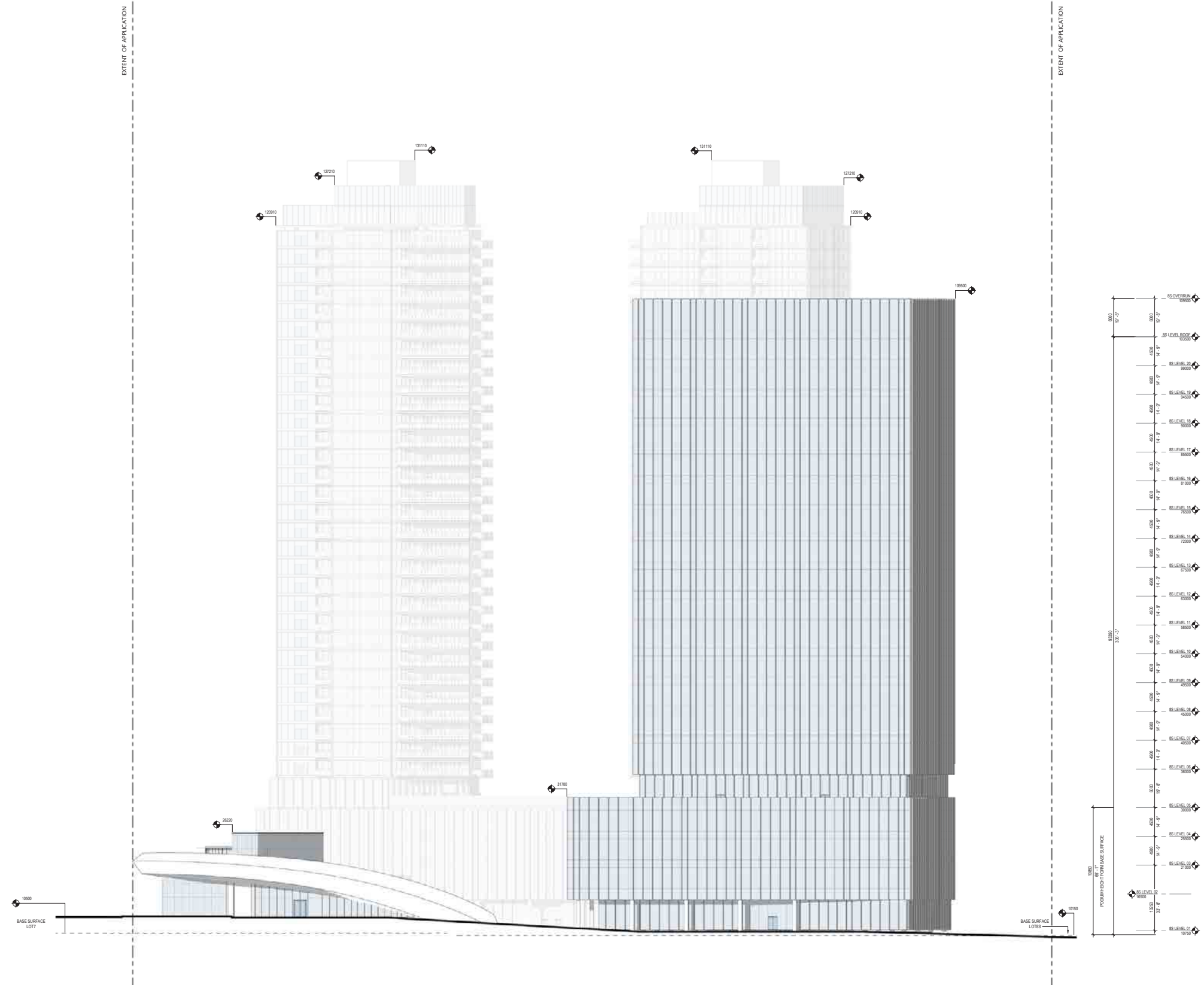
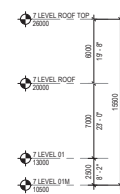
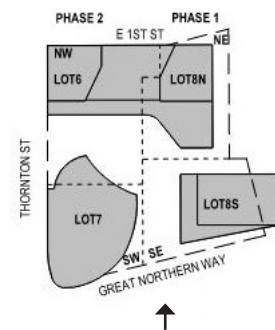
Elevations

East Elevation



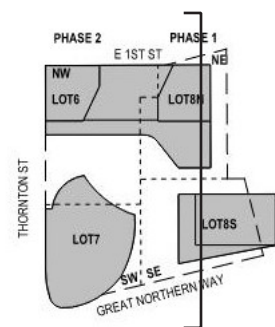
Elevations

South Elevation



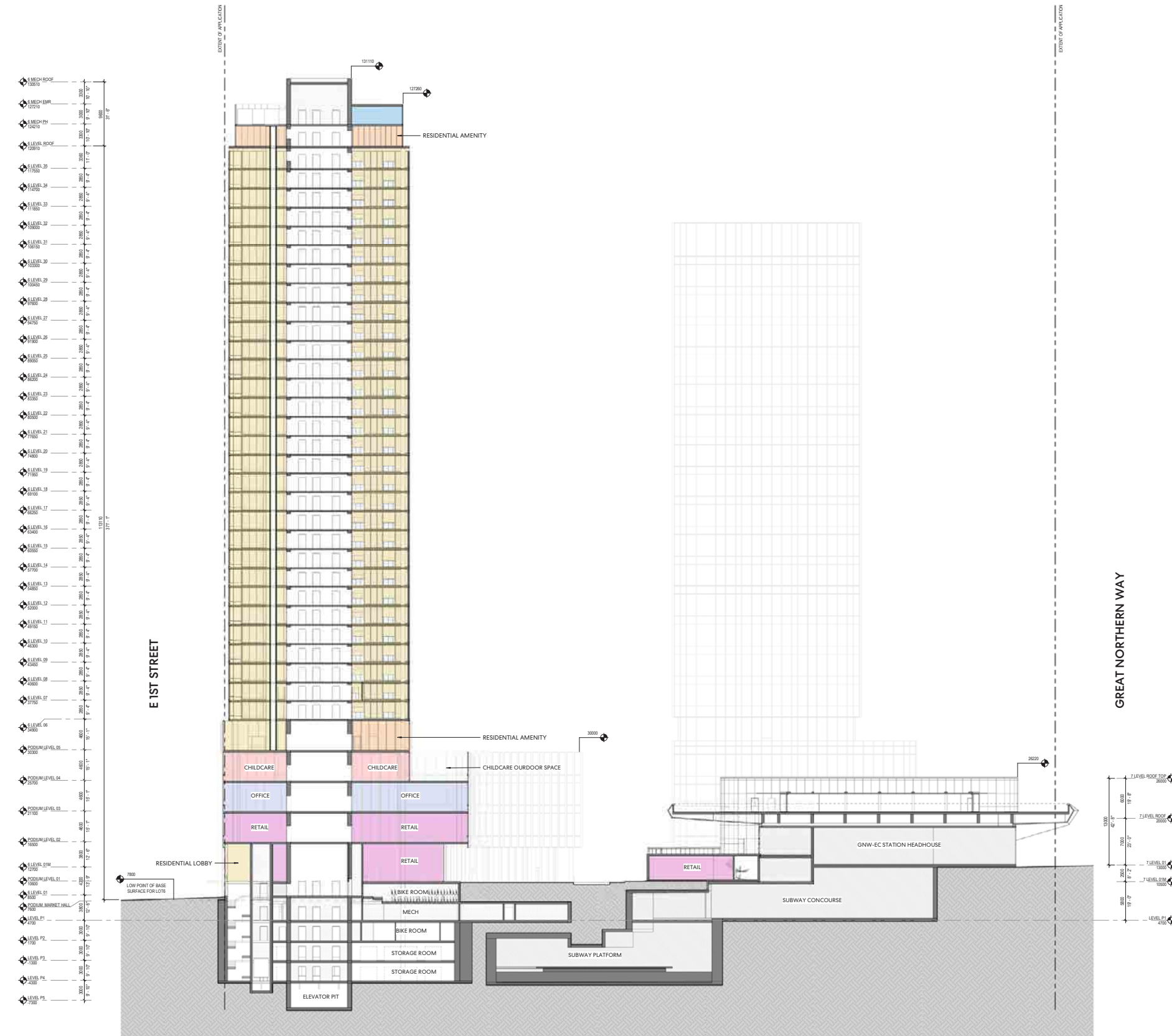
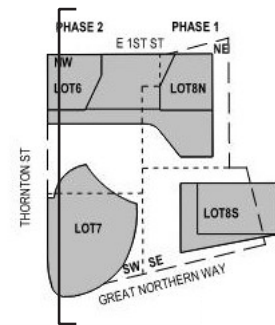
8.6 Sections

N-S Section 1

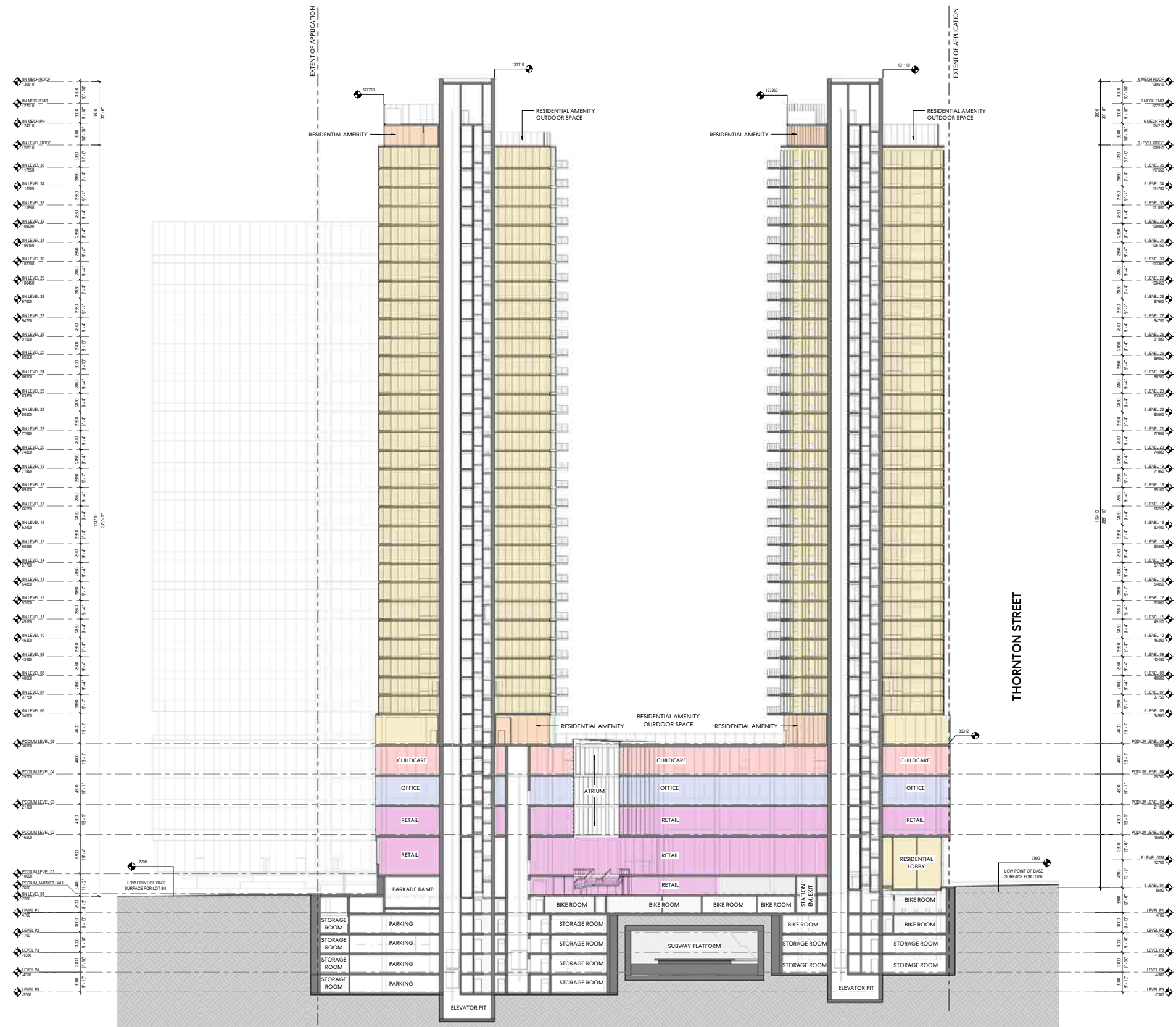
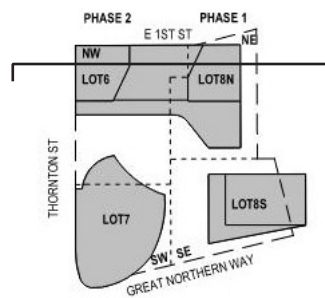


Sections

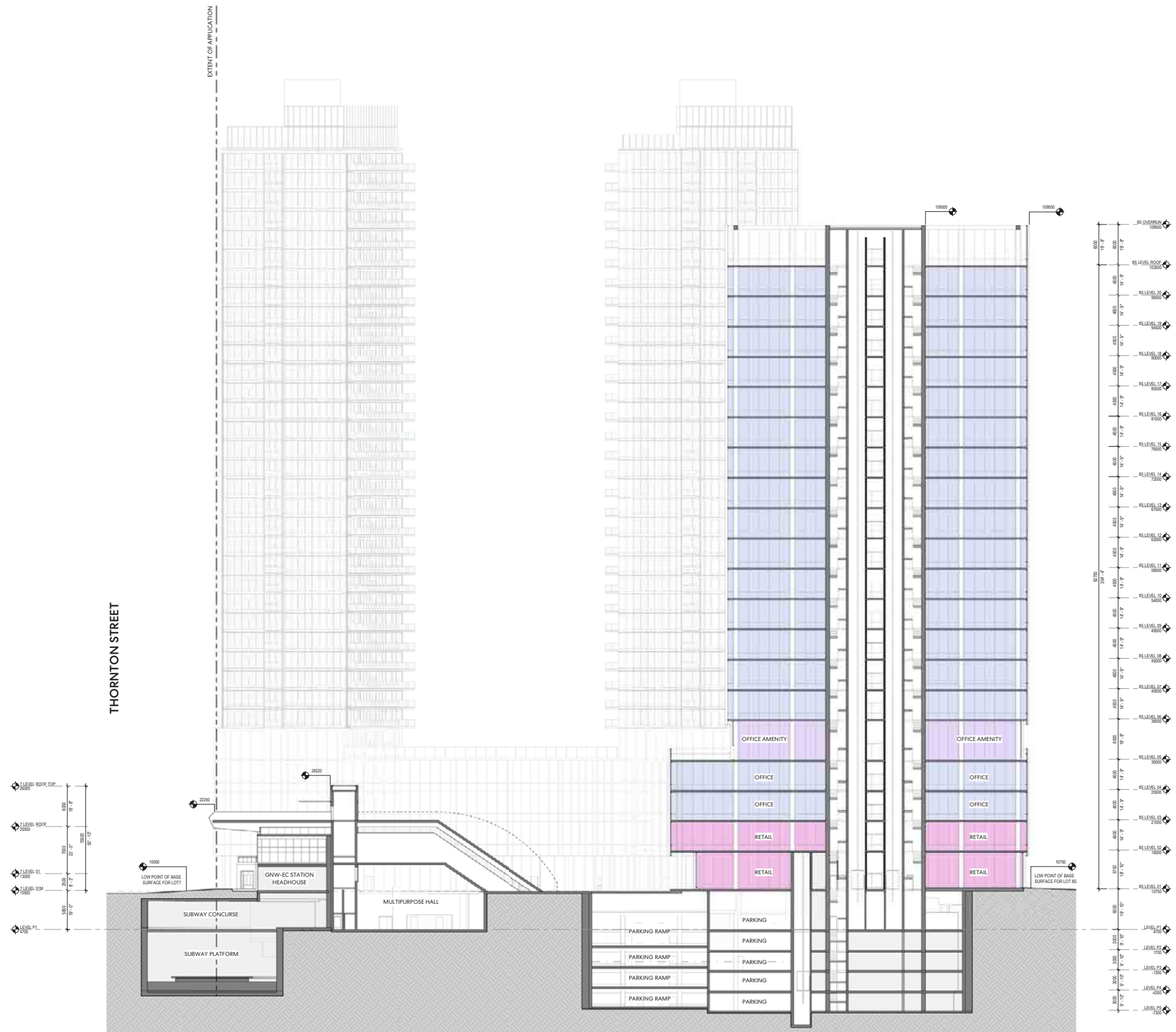
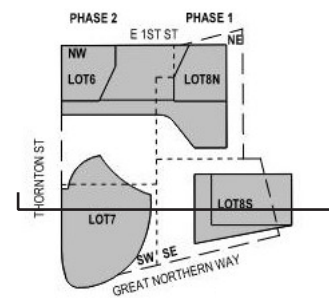
N-S Section 2



W-E Section 1



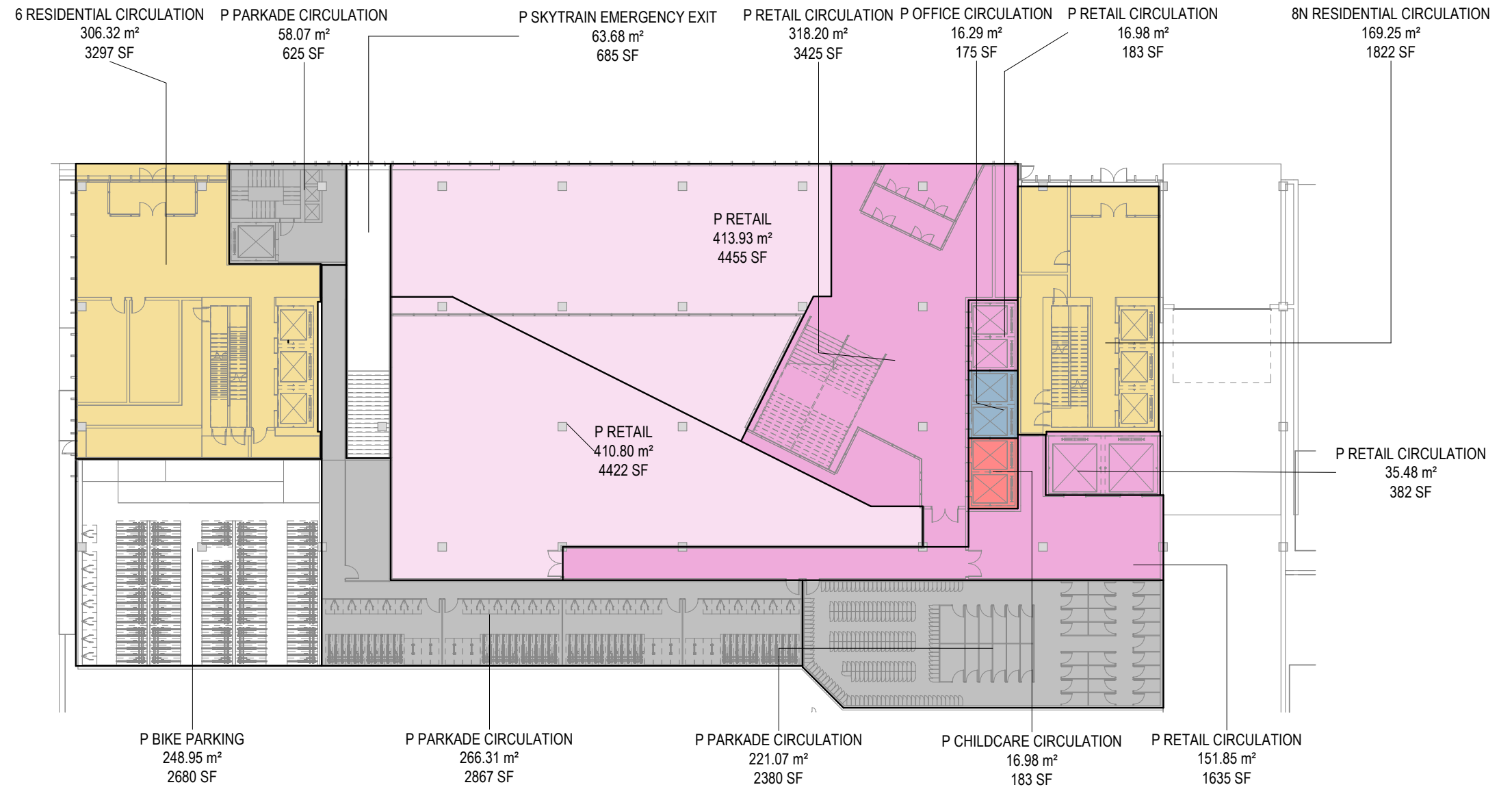
W-E Section 2



8.7 FSR Overlays

Lots 6 & 8N Podium - Market Hall

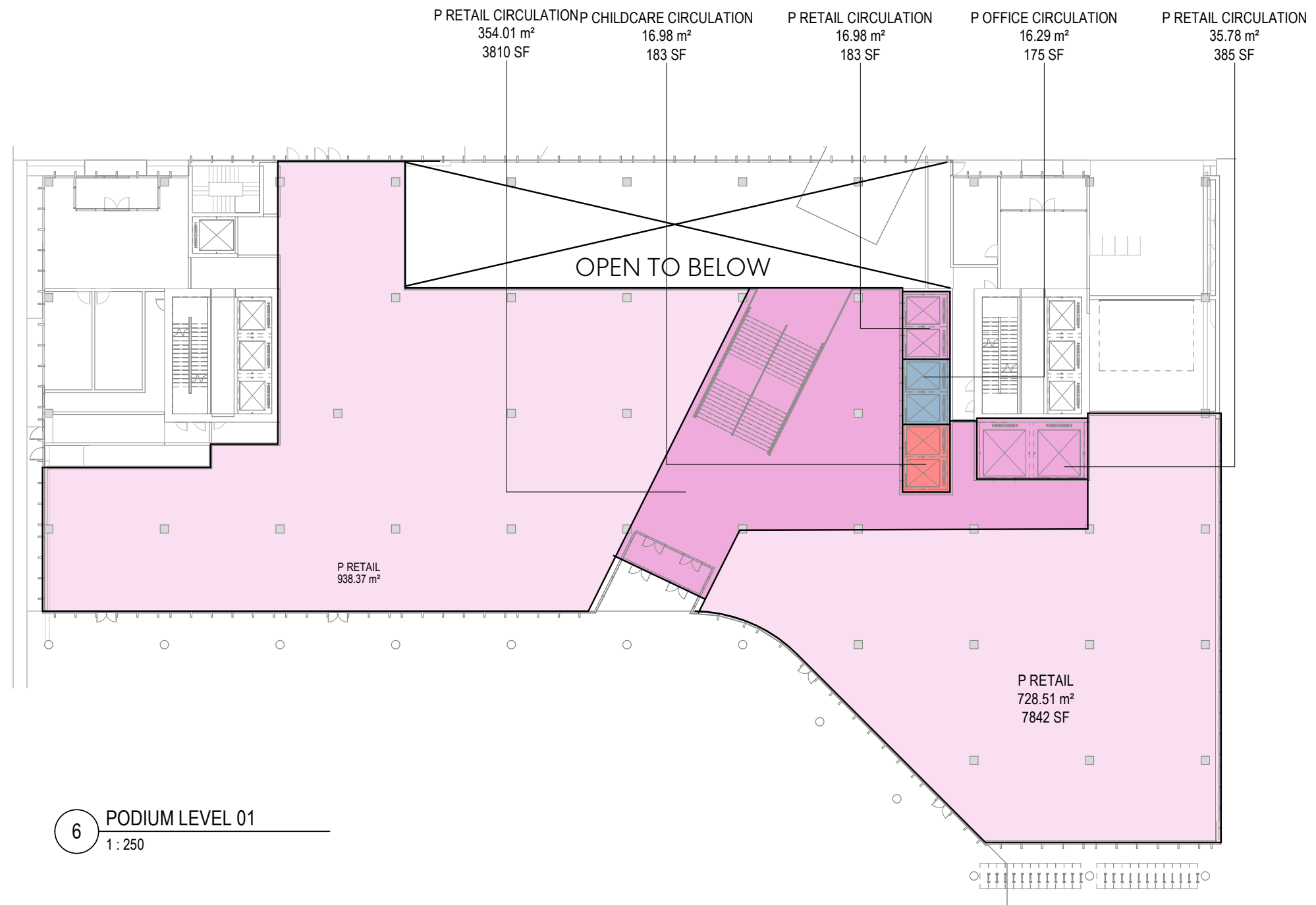
GFA SUMMARY - PODIUM MARKET HALL		
BIKE PARKING	545.45 m ²	5871.18 ft ²
CHILDCARE CIRCULATION	16.98 m ²	182.76 ft ²
OFFICE CIRCULATION	16.29 m ²	175.34 ft ²
RESIDENTIAL CIRCULATION	475.57 m ²	5119.04 ft ²
RETAIL	824.73 m ²	8877.34 ft ²
RETAIL CIRCULATION	522.51 m ²	5624.22 ft ²
FSR EXCLUSION		
PUBLIC	312.63 m ²	3365.13 ft ²
	2714.16 m ²	29215.01 ft ²
FSR AREA - PODIUM RETAIL (MARKET HALL LEVEL)		
P RETAIL	410.80 m ²	4421.86 ft ²
P RETAIL	413.93 m ²	4455.47 ft ²
P RETAIL CIRCULATION	16.98 m ²	182.76 ft ²
P RETAIL CIRCULATION	35.48 m ²	381.86 ft ²
P RETAIL CIRCULATION	318.20 m ²	3425.04 ft ²
P RETAIL CIRCULATION	151.85 m ²	1634.55 ft ²
	1347.24 m ²	14501.56 ft ²
FSR AREA - PODIUM RESIDENTIAL (MARKET HALL LEVEL)		
6 RESIDENTIAL CIRCULATION	306.32 m ²	3297.22 ft ²
8N RESIDENTIAL CIRCULATION	169.25 m ²	1821.82 ft ²
	475.57 m ²	5119.04 ft ²
FSR AREA - PODIUM CHILDCARE (MARKET HALL LEVEL)		
P CHILDCARE CIRCULATION	16.98 m ²	182.76 ft ²
	16.98 m ²	182.76 ft ²
FSR AREA - PODIUM OFFICE (MARKET HALL LEVEL)		
P OFFICE CIRCULATION	16.29 m ²	175.34 ft ²
	16.29 m ²	175.34 ft ²
FSR AREA - PODIUM BIKE PARKING (MARKET HALL LEVEL)		
P PARKADE CIRCULATION	266.31 m ²	2866.59 ft ²
P PARKADE CIRCULATION	221.07 m ²	2379.55 ft ²
P PARKADE CIRCULATION	58.07 m ²	625.05 ft ²
	545.45 m ²	5871.18 ft ²
FSR AREA EXCLUSION - PODIUM PUBLIC (MARKET HALL LEVEL)		
P SKYTRAIN EMERGENCY EXIT	63.68 m ²	685.45 ft ²
P BIKE PARKING	248.95 m ²	2679.68 ft ²
	312.63 m ²	3365.13 ft ²



5 PODIUM_MARKET HALL
1 : 250

Lots 6 & 8N Podium Level 01

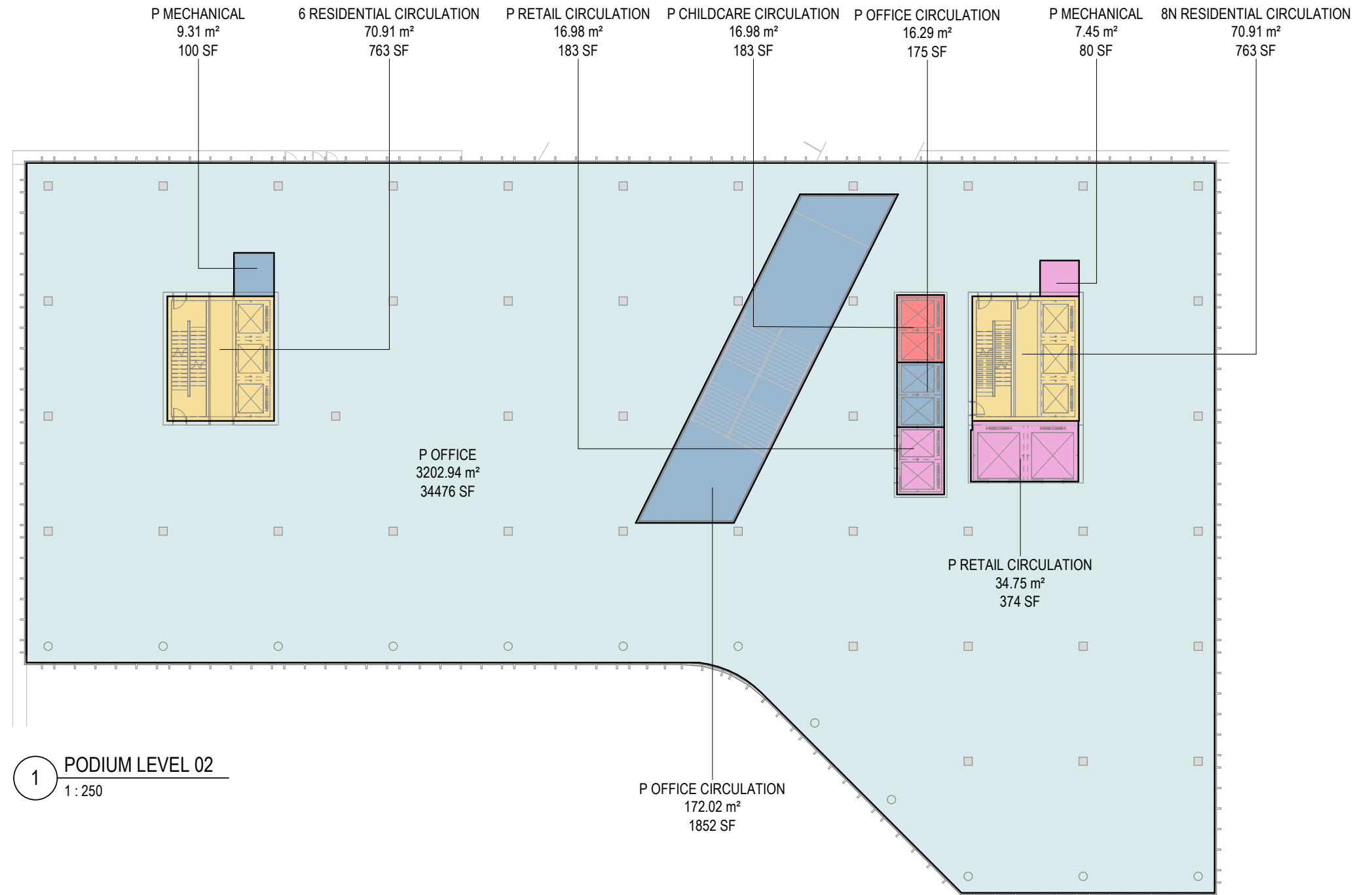
GFA SUMMARY - PODIUM LEVEL 1		
CHILDCARE CIRCULATION	16.98 m ²	182.76 ft ²
OFFICE CIRCULATION	16.29 m ²	175.34 ft ²
RETAIL	1666.88 m ²	17942.16 ft ²
RETAIL CIRCULATION	406.77 m ²	4378.38 ft ²
	2106.92 m ²	22678.65 ft ²
FSR AREA - PODIUM RETAIL (LEVEL 01)		
P RETAIL	938.37 m ²	10101 ft ²
P RETAIL	728.51 m ²	7842 ft ²
P RETAIL CIRCULATION	354.01 m ²	3810 ft ²
P RETAIL CIRCULATION	35.78 m ²	385 ft ²
P RETAIL CIRCULATION	16.98 m ²	183 ft ²
	2073.65 m ²	22321 ft ²
FSR AREA - PODIUM CHILDCARE (LEVEL 01)		
P OFFICE CIRCULATION	16.29 m ²	175 ft ²
	16.29 m ²	175 ft ²
FSR AREA - PODIUM OFFICE (LEVEL 01)		
P OFFICE CIRCULATION	16.29 m ²	175 ft ²
	16.29 m ²	175 ft ²



6 PODIUM LEVEL 01
1 : 250

Lots 6 & 8N Podium - Level 02

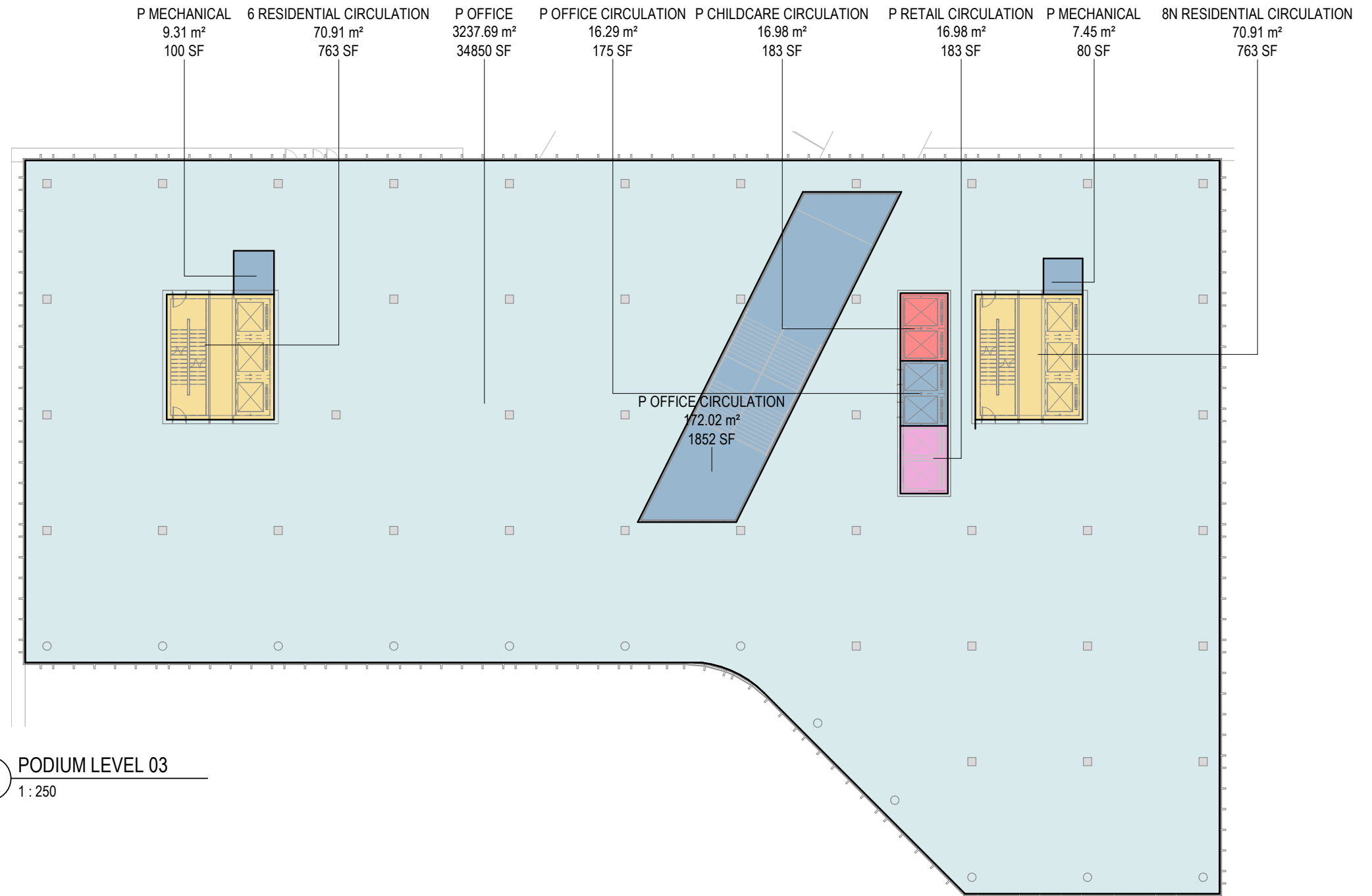
GFA SUMMARY - PODIUM LEVEL 2		
CHILDCARE CIRCULATION	16.98 m ²	182.76 ft ²
OFFICE	3202.94 m ²	34476.13 ft ²
OFFICE CIRCULATION	197.62 m ²	2127.16 ft ²
RESIDENTIAL CIRCULATION	141.82 m ²	1526.51 ft ²
RETAIL CIRCULATION	59.19 m ²	637.08 ft ²
	3618.54 m ²	38949.64 ft ²
FSR AREA - PODIUM RETAIL (LEVEL 02)		
P RETAIL CIRCULATION	34.75 m ²	374 ft ²
P MECHANICAL	7.45 m ²	80 ft ²
P RETAIL CIRCULATION	16.98 m ²	183 ft ²
	59.19 m ²	637 ft ²
FSR AREA - PODIUM RESIDENTIAL (LEVEL 02)		
6 RESIDENTIAL CIRCULATION	70.91 m ²	763 ft ²
8N RESIDENTIAL CIRCULATION	70.91 m ²	763 ft ²
	141.82 m ²	1527 ft ²
FSR AREA - PODIUM CHILDCARE (LEVEL 02)		
P CHILDCARE CIRCULATION	16.98 m ²	183 ft ²
	16.98 m ²	183 ft ²
FSR AREA - PODIUM OFFICE (LEVEL 02)		
P OFFICE	3202.94 m ²	34476 ft ²
P OFFICE CIRCULATION	16.29 m ²	175 ft ²
P OFFICE CIRCULATION	172.02 m ²	1852 ft ²
	3391.24 m ²	36503 ft ²



Lots 6 & 8N Podium Level 03

GFA SUMMARY - PODIUM LEVEL 3		
CHILDCARE CIRCULATION	16.98 m ²	182.76 ft ²
OFFICE	3237.69 m ²	34850.20 ft ²
OFFICE CIRCULATION	16.77 m ²	180.50 ft ²
OFFICE CIRCULATION	188.31 m ²	2026.90 ft ²
RESIDENTIAL CIRCULATION	141.82 m ²	1526.51 ft ²
RETAIL CIRCULATION	16.98 m ²	182.76 ft ²
TOTAL GROSS FLOOR AREA	3618.54 m ²	38949.64 ft ²
FSR AREA - PODIUM RETAIL (LEVEL 03)		
P RETAIL CIRCULATION	16.98 m ²	183 ft ²
	16.98 m ²	183 ft ²
FSR AREA - PODIUM RESIDENTIAL (LEVEL 03)		
6 RESIDENTIAL CIRCULATION	70.91 m ²	763 ft ²
8N RESIDENTIAL CIRCULATION	70.91 m ²	763 ft ²
	141.82 m ²	1527 ft ²
FSR AREA - PODIUM CHILDCARE (LEVEL 03)		
P CHILDCARE CIRCULATION	16.98 m ²	183 ft ²
	16.98 m ²	183 ft ²
FSR AREA - PODIUM OFFICE (LEVEL 03)		
P OFFICE	3237.69 m ²	34850 ft ²
P OFFICE CIRCULATION	16.29 m ²	175 ft ²
P MECHANICAL	9.31 m ²	100 ft ²
P MECHANICAL	7.45 m ²	80 ft ²
P OFFICE CIRCULATION	172.02 m ²	1852 ft ²
	3442.76 m ²	37058 ft ²

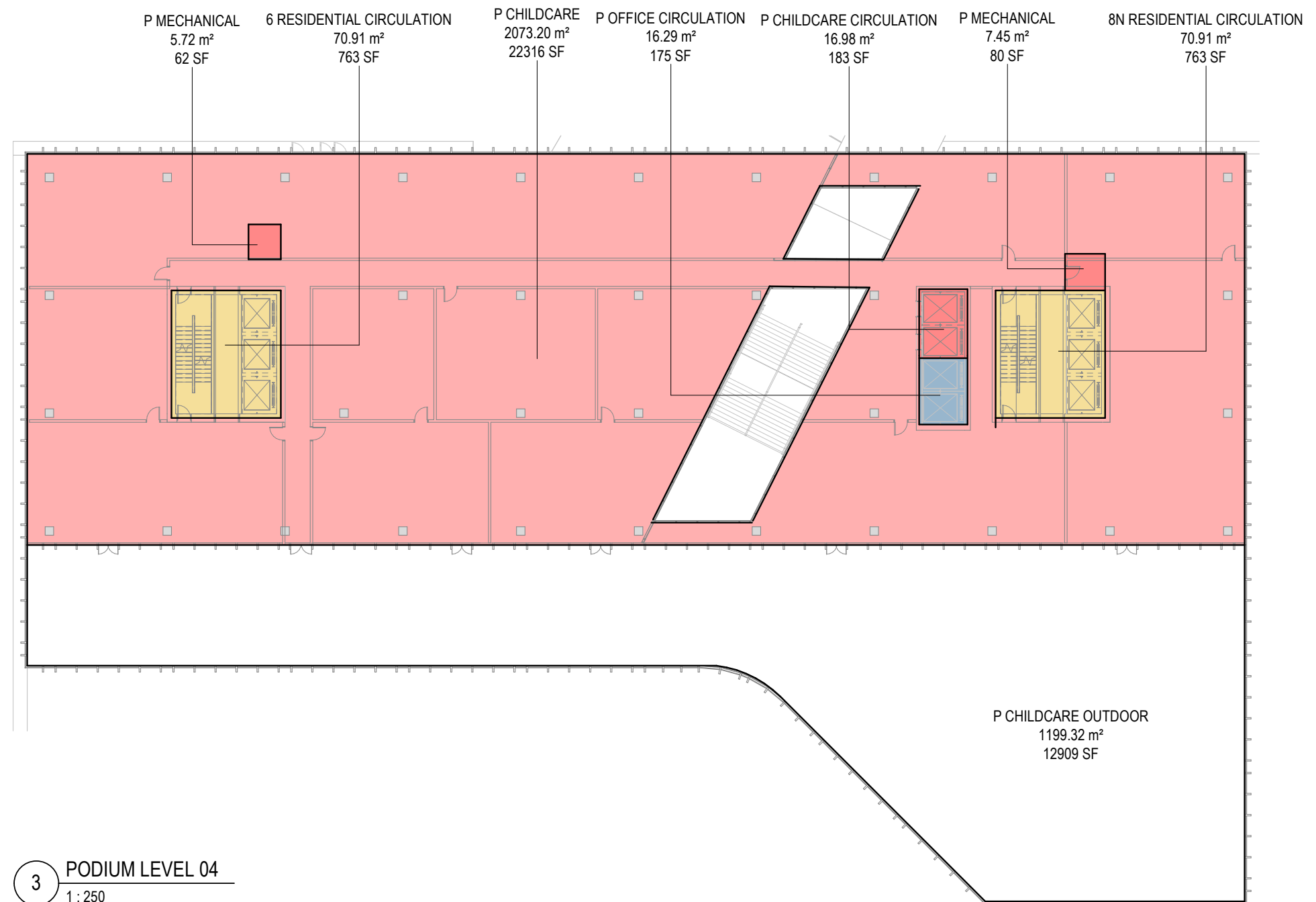
IN



2 PODIUM LEVEL 03
1 : 250

Lots 6 & 8N Podium - Level 04

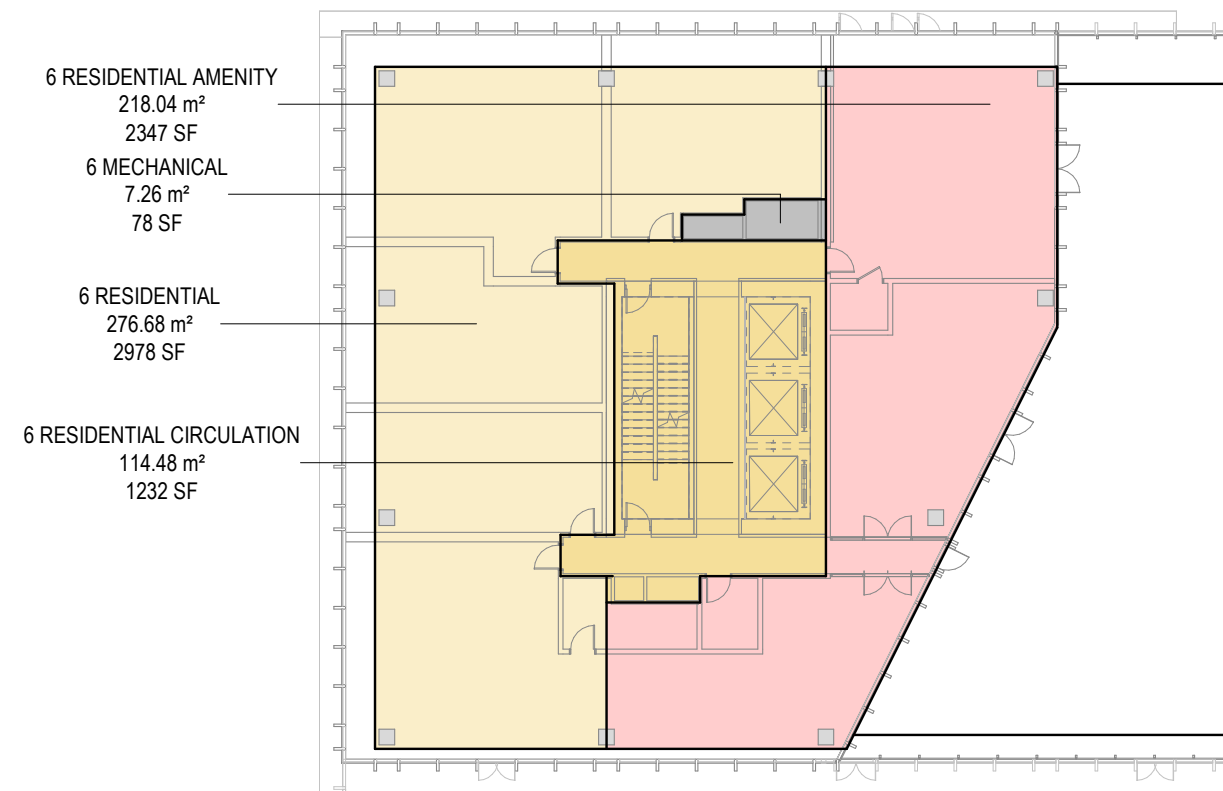
GFA SUMMARY - PODIUM LEVEL 4		
CHILDCARE	2073.20 m ²	22315.71 ft ²
CHILDCARE CIRCULATION	30.16 m ²	324.59 ft ²
OFFICE CIRCULATION	16.29 m ²	175.34 ft ²
RESIDENTIAL CIRCULATION	141.82 m ²	1526.51 ft ²
TOTAL GROSS FLOOR AREA	2261.46 m ²	24342.15 ft ²
FSR AREA - PODIUM CHILDCARE (LEVEL 04)		
P CHILDCARE	2073.20 m ²	22316 ft ²
P CHILDCARE CIRCULATION	16.98 m ²	183 ft ²
	2090.18 m ²	22498 ft ²
FSR AREA - PODIUM RESIDENTIAL (LEVEL 04)		
6 RESIDENTIAL CIRCULATION	70.91 m ²	763 ft ²
8N RESIDENTIAL CIRCULATION	70.91 m ²	763 ft ²
	141.82 m ²	1527 ft ²
FSR AREA - PODIUM OFFICE (LEVEL 04)		
P OFFICE CIRCULATION	16.29 m ²	175 ft ²
	16.29 m ²	175 ft ²
NON GFA - PODIUM CHILDCARE OUTDOOR SPACE (LEVEL 05)		
P CHILDCARE OUTDOOR	1199.32 m ²	12909 ft ²
	1199.32 m ²	12909 ft ²



3 PODIUM LEVEL 04
1 : 250

Lot 6 - Level 05

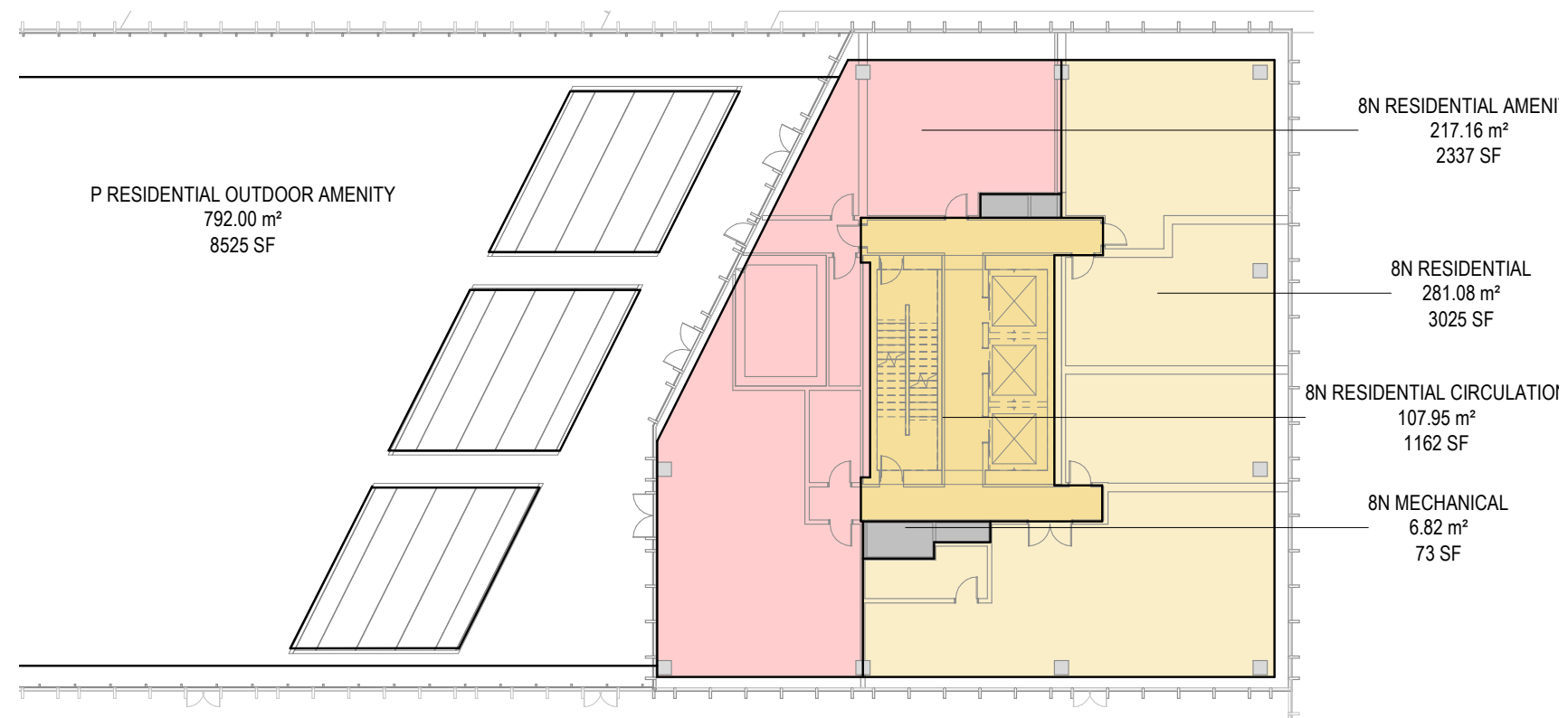
GFA SUMMARY - LOT 6 LEVEL 05		
MECHANICAL	7.26 m ²	78 ft ²
RESIDENTIAL	276.68 m ²	2978 ft ²
RESIDENTIAL CIRCULATION	114.48 m ²	1232 ft ²
	398.43 m ²	4289 ft ²
FSR EXCLUSION		
RESIDENTIAL AMENITY	218.04 m ²	2347 ft ²
	218.04 m ²	2347 ft ²
	616.47 m ²	6636 ft ²
FSR AREA - LOT 6 RESIDENTIAL (LEVEL 05)		
RESIDENTIAL	276.68 m ²	2978 ft ²
RESIDENTIAL CIRCULATION	114.48 m ²	1232 ft ²
	391.16 m ²	4210 ft ²
FSR AREA - LOT 6 MECHANICAL (LEVEL 05)		
MECHANICAL	7.26 m ²	78 ft ²
	7.26 m ²	78 ft ²
FSR AREA - LOT 6 AMENITY EXCLUSION (LEVEL 05)		
RESIDENTIAL AMENITY	218.04 m ²	2347 ft ²
	218.04 m ²	2347 ft ²



5 PODIUM LEVEL 05
1 : 200

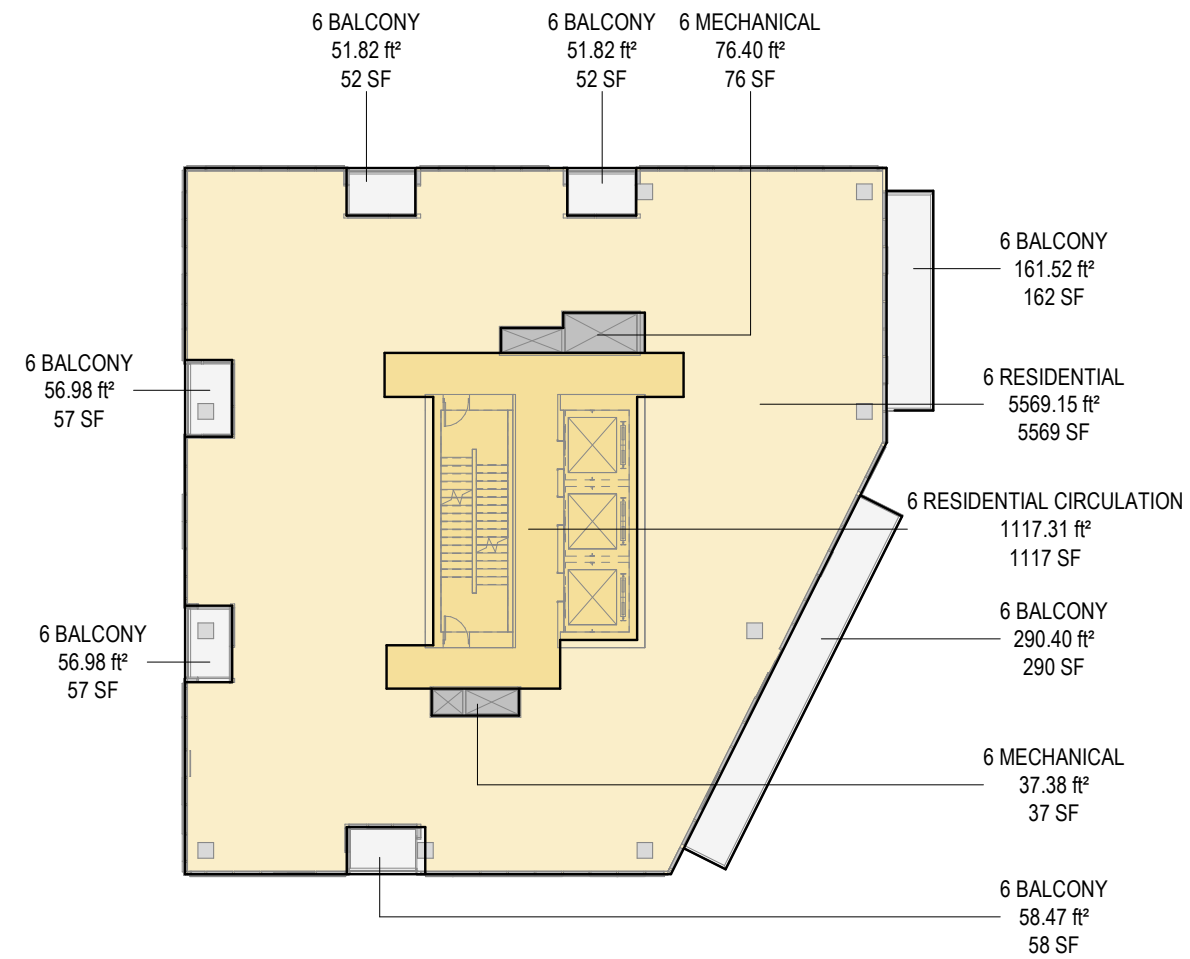
Lot 8N - Level 05

GFA SUMMARY - LOT 8N LEVEL 05		
MECHANICAL	10.28 m ²	111 ft ²
RESIDENTIAL	281.08 m ²	3025 ft ²
RESIDENTIAL CIRCULATION	107.95 m ²	1162 ft ²
	399.31 m ²	4298 ft ²
FSR EXCLUSION		
RESIDENTIAL AMENITY	217.16 m ²	2337 ft ²
	217.16 m ²	2337 ft ²
	616.47 m ²	6636 ft ²
FSR AREA - LOT 8N RESIDENTIAL (LEVEL 05) Copy 1		
RESIDENTIAL	281.08 m ²	3025 ft ²
RESIDENTIAL CIRCULATION	107.95 m ²	1162 ft ²
	389.02 m ²	4187 ft ²
FSR AREA - LOT 8N MECHANICAL (LEVEL 05) Copy 1		
MECHANICAL	6.82 m ²	73 ft ²
MECHANICAL	3.46 m ²	37 ft ²
	10.28 m ²	111 ft ²
FSR AREA - LOT 8N AMENITY EXCLUSION (LEVEL 05) Copy 1		
RESIDENTIAL AMENITY	217.16 m ²	2337 ft ²
	217.16 m ²	2337 ft ²



Lot 6 - Level 08

GFA SUMMARY - LOT 6 TYP RESI FLOOR		
MECHANICAL	10.57 m ²	114 ft ²
RESIDENTIAL	517.39 m ²	5569 ft ²
RESIDENTIAL CIRCULATION	103.80 m ²	1117 ft ²
	631.76 m ²	6800 ft ²
FSR AREA - LOT 6 RESIDENTIAL (TYP RESI FLOOR)		
RESIDENTIAL	517.39 m ²	5569 ft ²
RESIDENTIAL CIRCULATION	103.80 m ²	1117 ft ²
	621.19 m ²	6686 ft ²
FSR AREA - LOT 6 MECHANICAL (TYP RESI FLOOR)		
MECHANICAL	3.47 m ²	37 ft ²
MECHANICAL	7.10 m ²	76 ft ²
	10.57 m ²	114 ft ²
NON GFA - LOT 6 BALCONY (TYP RESI)		
BALCONY - OPEN	4.81 m ²	52 ft ²
BALCONY - OPEN	5.29 m ²	57 ft ²
BALCONY - OPEN	4.81 m ²	52 ft ²
BALCONY - OPEN	15.01 m ²	162 ft ²
BALCONY - OPEN	26.98 m ²	290 ft ²
BALCONY - OPEN	5.43 m ²	58 ft ²
BALCONY - OPEN	5.29 m ²	57 ft ²
	67.63 m ²	728 ft ²

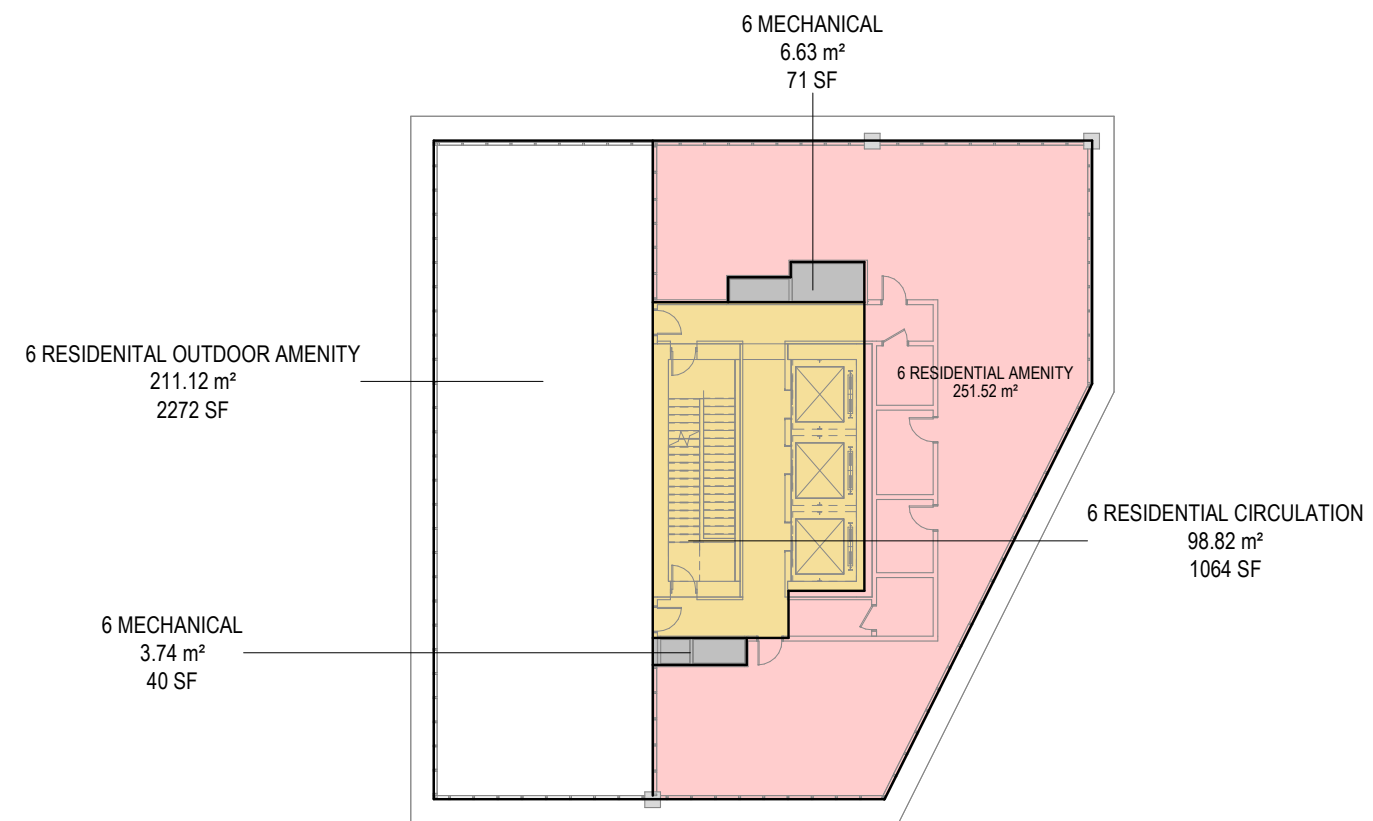


7 6 LEVEL 08
1 : 200

6 MECHANICAL

Lot 6 - Tower Roof

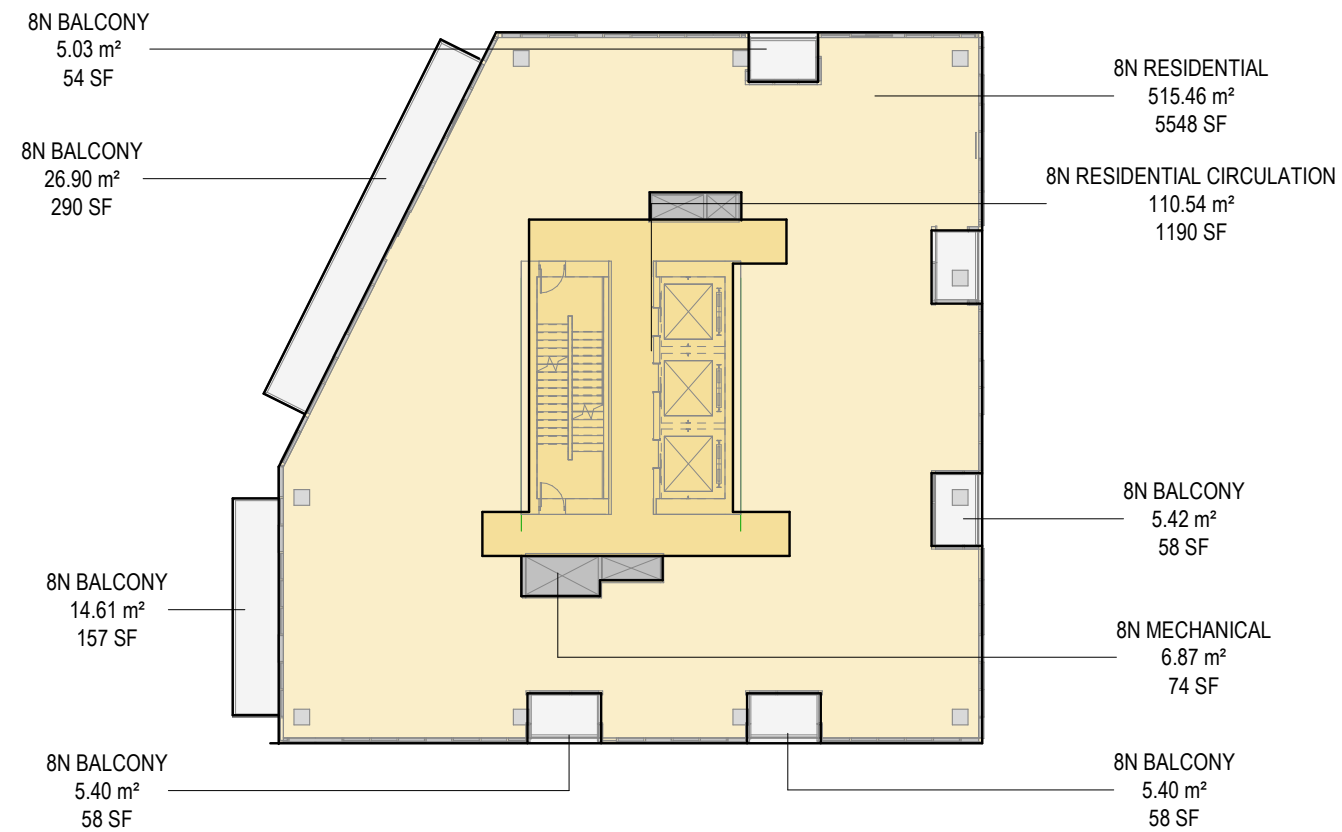
GFA SUMMARY - LOT 6 ROOF		
MECHANICAL	10.37 m ²	112 ft ²
RESIDENTIAL CIRCULATION	98.82 m ²	1064 ft ²
	109.20 m ²	1175 ft ²
FSR EXCLUSION		
RESIDENTIAL AMENITY	251.52 m ²	2707 ft ²
	251.52 m ²	2707 ft ²
	360.72 m ²	3883 ft ²
FSR AREA - LOT 6 RESIDENTIAL (ROOF)		
RESIDENTIAL CIRCULATION	98.82 m ²	1064 ft ²
	98.82 m ²	1064 ft ²
FSR AREA - LOT 6 MECHANICAL (ROOF)		
MECHANICAL	6.63 m ²	71 ft ²
MECHANICAL	3.74 m ²	40 ft ²
	10.37 m ²	112 ft ²
FSR AREA - LOT 6 AMENITY EXCLUSION (ROOF)		
RESIDENTIAL AMENITY	251.52 m ²	2707 ft ²
	251.52 m ²	2707 ft ²
NON GFA - LOT 6 OUTDOOR SPACE (ROOF)		
RESIDENTIAL OUTDOOR AMENITY	211.12 m ²	2272 ft ²
	211.12 m ²	2272 ft ²



8 6 TOWER ROOF
1 : 200

Lot 8N - Level 08

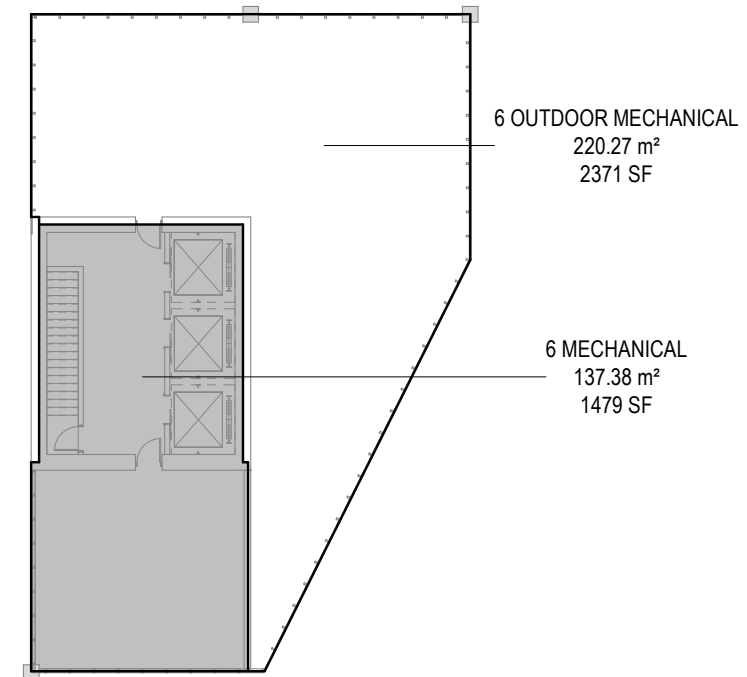
GFA SUMMARY - LOT 8N TYP RESI FLOOR		
MECHANICAL	10.50 m ²	113 ft ²
RESIDENTIAL	515.46 m ²	5548 ft ²
RESIDENTIAL CIRCULATION	110.54 m ²	1190 ft ²
	636.49 m ²	6851 ft ²
FSR AREA - LOT 8N RESIDENTIAL (TYP RESI FLOOR) Copy 1		
RESIDENTIAL	515.46 m ²	5548 ft ²
RESIDENTIAL CIRCULATION	110.54 m ²	1190 ft ²
	625.99 m ²	6738 ft ²
FSR AREA - LOT 8N MECHANICAL (TYP RESI FLOOR) Copy 1		
MECHANICAL	6.87 m ²	74 ft ²
MECHANICAL	3.63 m ²	39 ft ²
	10.50 m ²	113 ft ²
NON GFA - LOT 8N BALCONY (TYP RESI)		
BALCONY - OPEN	26.90 m ²	290 ft ²
BALCONY - OPEN	14.61 m ²	157 ft ²
BALCONY - OPEN	5.40 m ²	58 ft ²
BALCONY - OPEN	5.42 m ²	58 ft ²
BALCONY - OPEN	5.03 m ²	54 ft ²
BALCONY - OPEN	5.40 m ²	58 ft ²
BALCONY - OPEN	5.42 m ²	58 ft ²
	68.18 m ²	734 ft ²



4 8N LEVEL 08
1 : 200

Lot 6 - Mech Penthouse

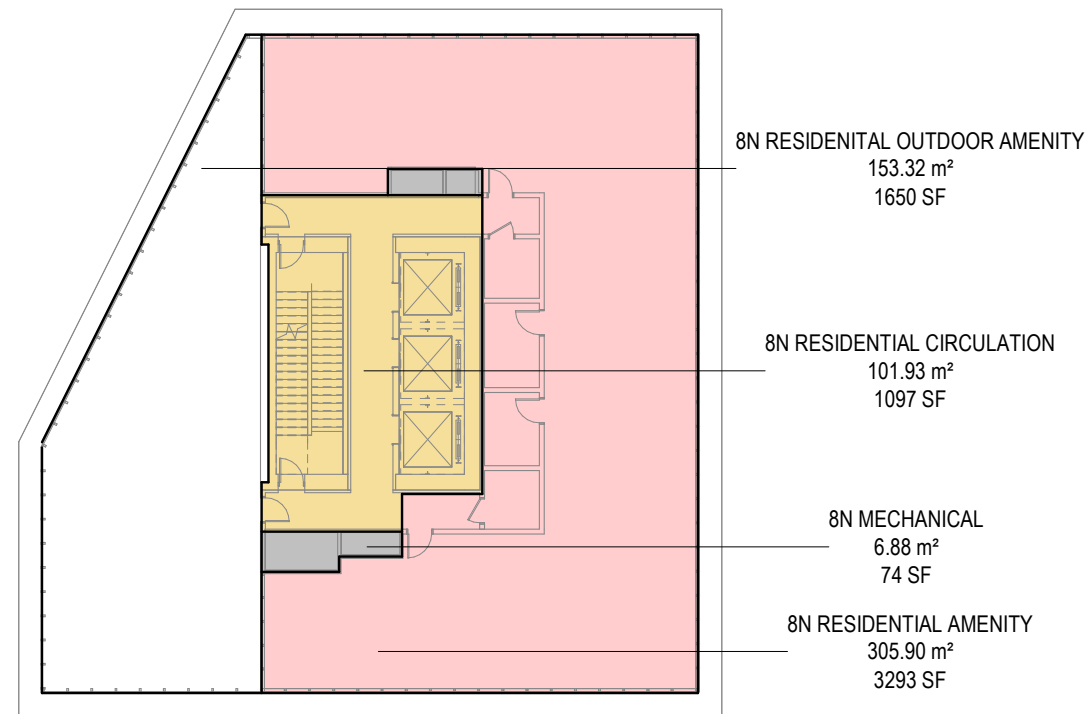
GFA SUMMARY - LOT 6 MECH PENTHOUSE		
OUTDOOR MECHANICAL	220.27 m ²	2371 ft ²
	220.27 m ²	2371 ft ²
FSR AREA - LOT 6 MECHANICAL (MECH PENTHOUSE)		
MECHANICAL	137.38 m ²	1479 ft ²
	137.38 m ²	1479 ft ²
NON GFA - LOT 6 OUTDOOR SPACE (MECH PENTHOUSE)		
OUTDOOR MECHANICAL	220.27 m ²	2371 ft ²
	220.27 m ²	2371 ft ²



1 6 MECH PH
1 : 200

Lot 8N - Tower Roof

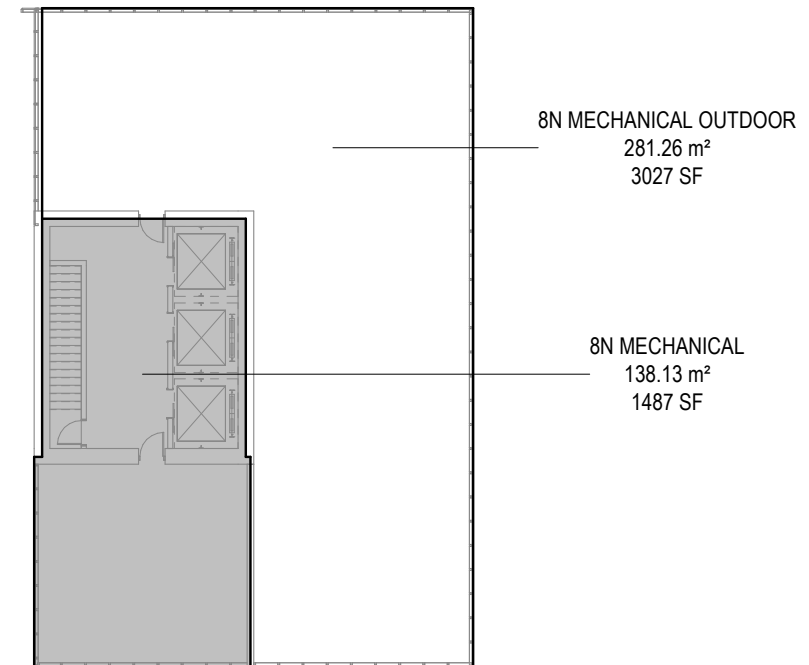
GFA SUMMARY - LOT 8N ROOF		
MECHANICAL	10.52 m ²	113 ft ²
RESIDENTIAL CIRCULATION	101.93 m ²	1097 ft ²
	112.45 m ²	1210 ft ²
FSR EXCLUSION		
RESIDENTIAL AMENITY	305.90 m ²	3293 ft ²
	305.90 m ²	3293 ft ²
	418.36 m ²	4503 ft ²
FSR AREA - LOT 8N RESIDENTIAL (ROOF)		
RESIDENTIAL CIRCULATION	101.93 m ²	1097 ft ²
	101.93 m ²	1097 ft ²
FSR AREA - LOT 8N MECHANICAL (ROOF)		
MECHANICAL	6.88 m ²	74 ft ²
MECHANICAL	3.64 m ²	39 ft ²
	10.52 m ²	113 ft ²
FSR AREA - LOT 8N AMENITY EXCLUSION (ROOF) Copy 1		
RESIDENTIAL AMENITY	305.90 m ²	3293 ft ²
	305.90 m ²	3293 ft ²
NON GFA - LOT 8N OUTDOOR SPACE (ROOF)		
RESIDENTIAL OUTDOOR AMENITY	153.32 m ²	1650 ft ²
	153.32 m ²	1650 ft ²



2 8N TOWER ROOF
1 : 200

Lot 8N - Mech Penthouse

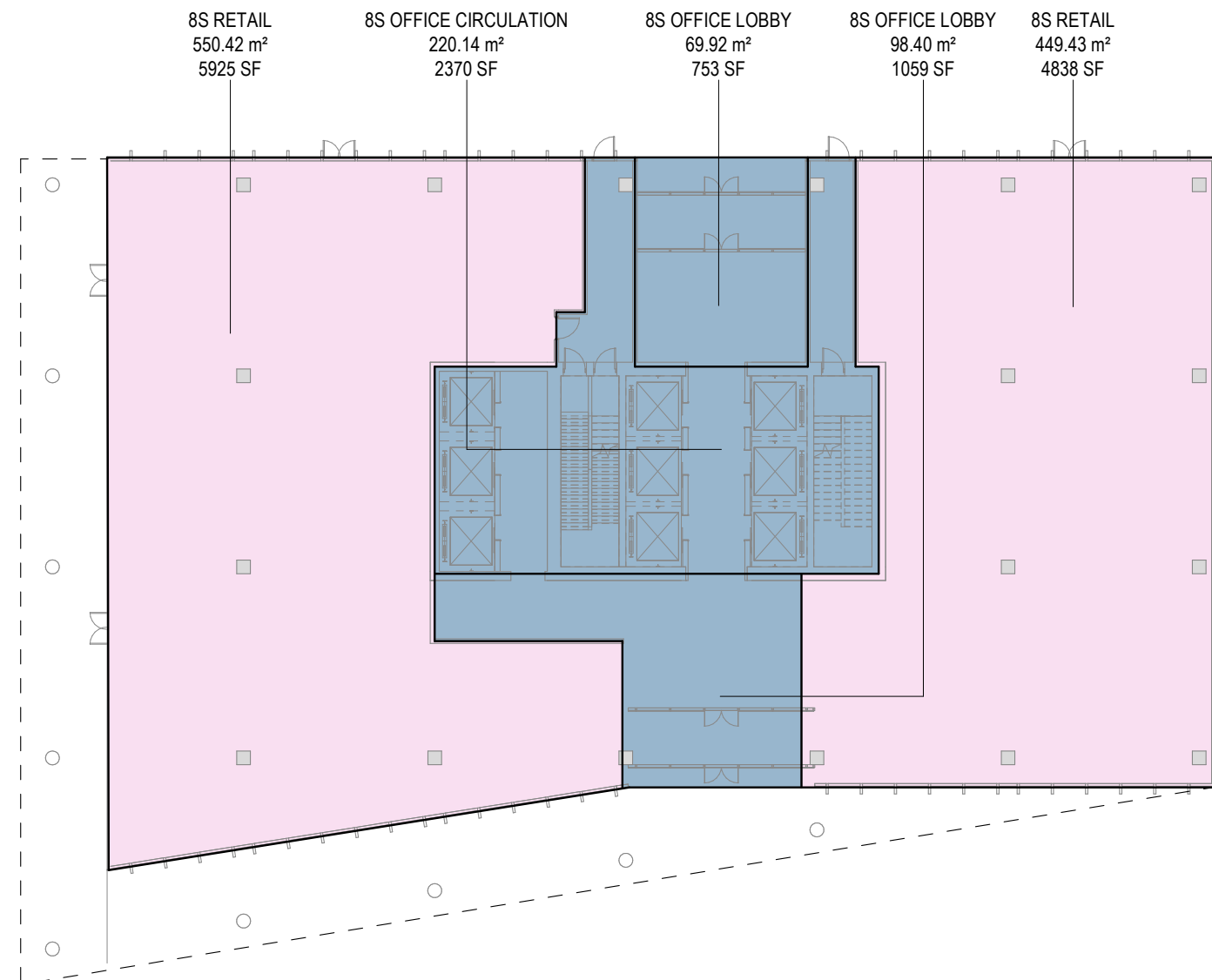
GFA SUMMARY - LOT 8N MECH PENTHOUSE		
OUTDOOR MECHANICAL	281.26 m ²	3027 ft ²
	281.26 m ²	3027 ft ²
FSR AREA - LOT 8N MECHANICAL (MECH PENTHOUSE)		
MECHANICAL	138.13 m ²	1487 ft ²
	138.13 m ²	1487 ft ²
NON GFA - LOT 8N OUTDOOR SPACE (MECH PENTHOUSE)		
OUTDOOR MECHANICAL	281.26 m ²	3027 ft ²
	281.26 m ²	3027 ft ²



3 8N MECH PH
1 : 200

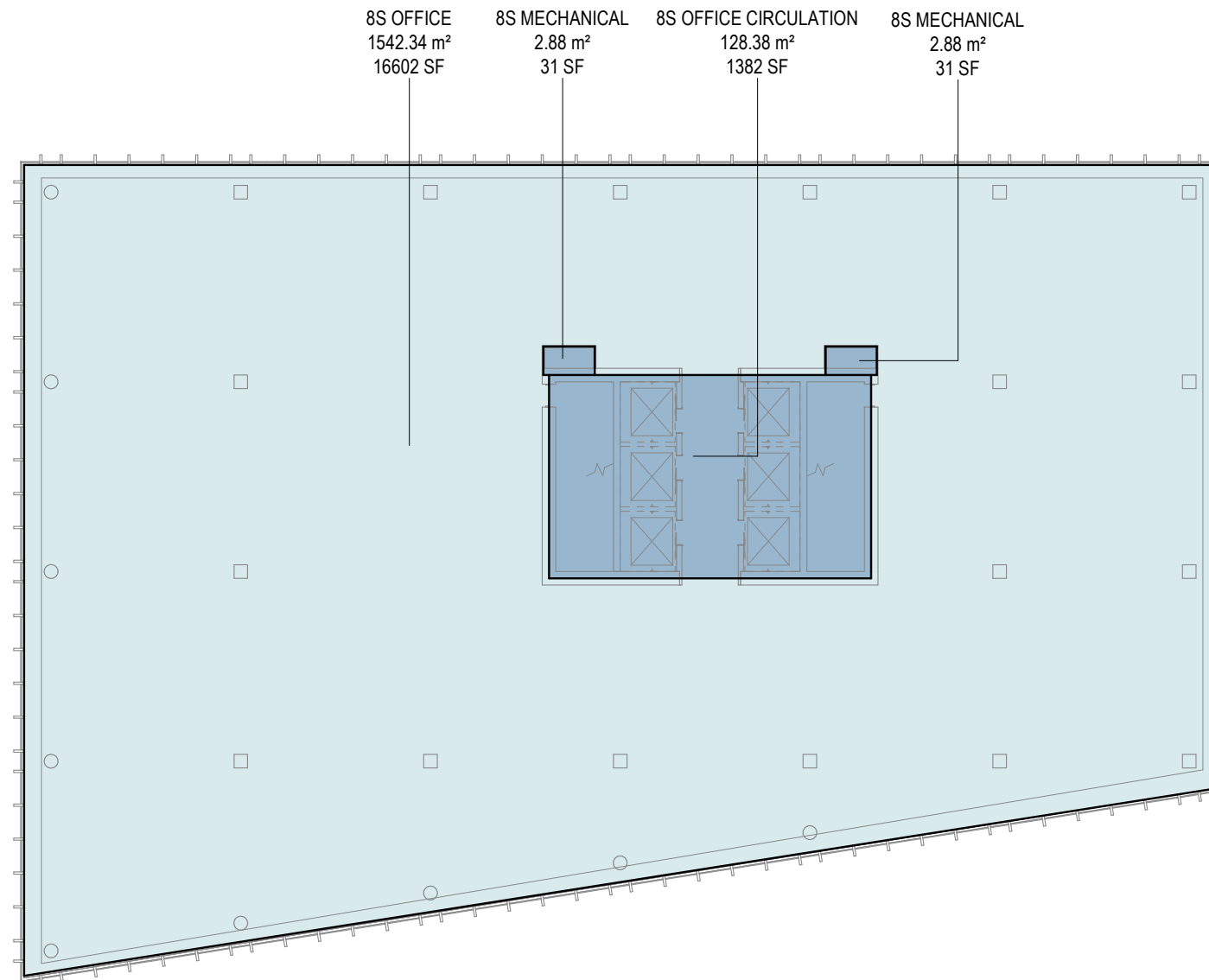
Lot 8S - Ground Level

GFA SUMMARY - LOT 8S LEVEL 01		
Function	GFA	GFA Imperial
OFFICE CIRCULATION	388.46 m ²	4181 ft ²
RETAIL	999.84 m ²	10762 ft ²
	1388.30 m ²	14944 ft ²
FSR AREA - LOT 8S OFFICE (LEVEL 01)		
8S OFFICE LOBBY	69.92 m ²	753 ft ²
8S OFFICE CIRCULATION	220.14 m ²	2370 ft ²
8S OFFICE LOBBY	98.40 m ²	1059 ft ²
	388.46 m ²	4181 ft ²
FSR AREA - LOT 8S RETAIL (LEVEL 01)		
8S RETAIL	550.42 m ²	5925 ft ²
8S RETAIL	449.43 m ²	4838 ft ²
	999.84 m ²	10762 ft ²



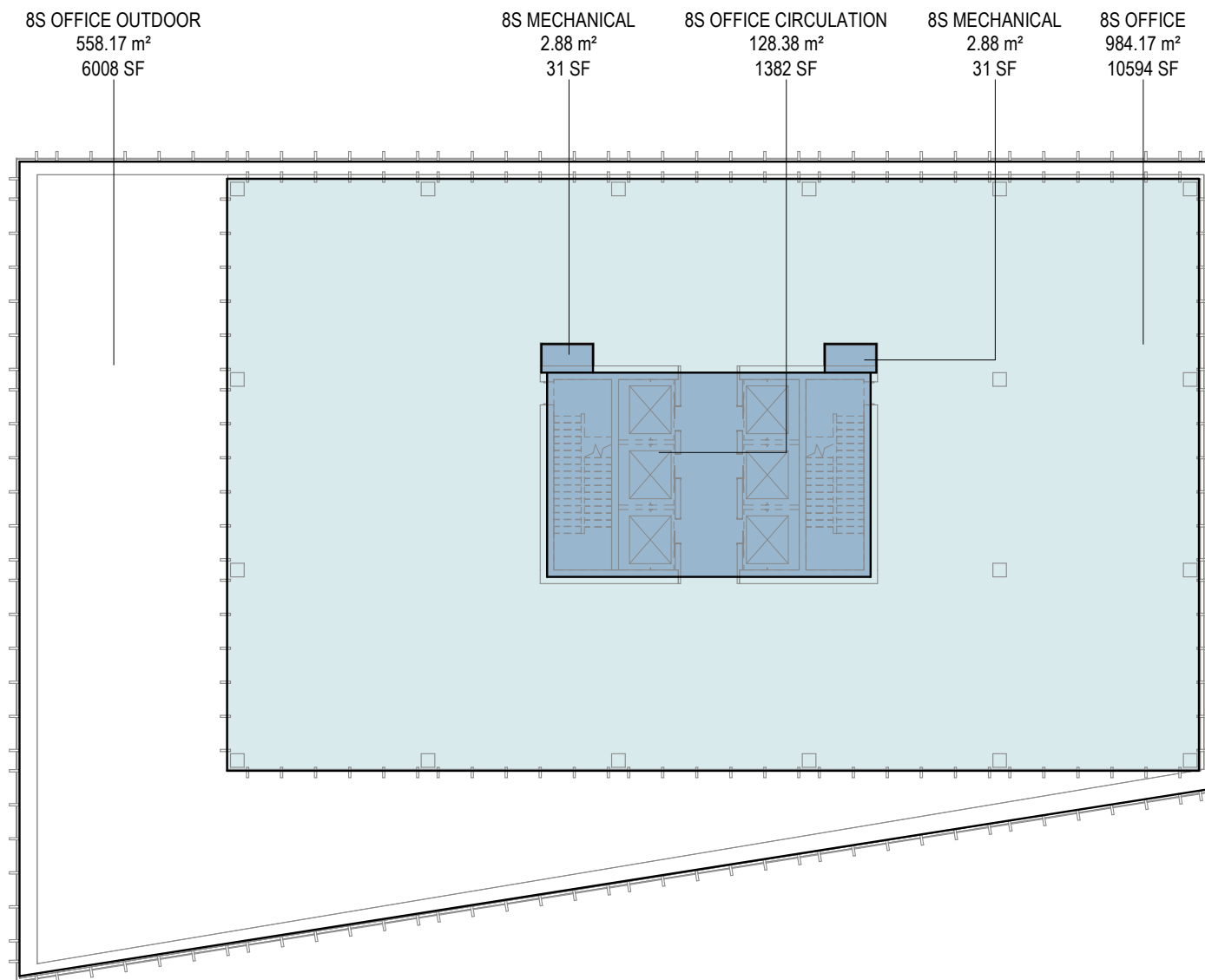
Lot 8S - Levels 02 to 04

GFA SUMMARY - LOT 8S TYP LOWER OFFICE LEVEL		
OFFICE	1542.26 m ²	16601 ft ²
OFFICE CIRCULATION	134.14 m ²	1444 ft ²
	1676.40 m ²	18045 ft ²
FSR AREA - LOT 8S OFFICE (LEVEL 02 - 04)		
8S OFFICE	1542.26 m ²	16601 ft ²
8S OFFICE CIRCULATION	128.38 m ²	1382 ft ²
8S MECHANICAL	2.88 m ²	31 ft ²
8S MECHANICAL	2.88 m ²	31 ft ²
	1676.40 m ²	18045 ft ²



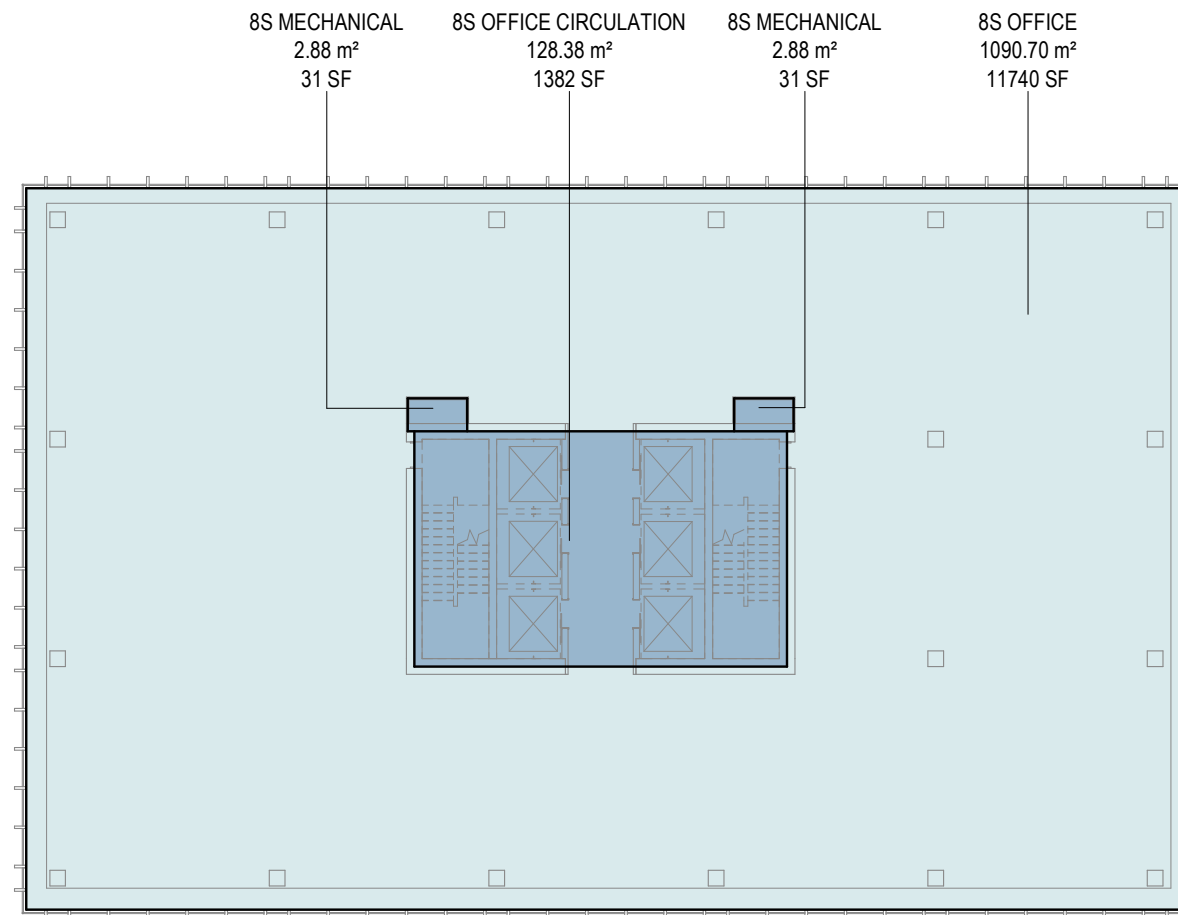
Lot 8S - Level 05

GFA SUMMARY - LOT 8S (LEVEL 05)		
Function	GFA	GFA Imperial
OFFICE	984.17 m ²	10594 ft ²
OFFICE CIRCULATION	134.14 m ²	1444 ft ²
TOTAL GROSS FLOOR AREA TOWER 6	1118.31 m ²	12037 ft ²
FSR AREA - LOT 8S OFFICE (LEVEL 05)		
8S OFFICE	984.17 m ²	10594 ft ²
8S OFFICE CIRCULATION	128.38 m ²	1382 ft ²
8S MECHANICAL	2.88 m ²	31 ft ²
8S MECHANICAL	2.88 m ²	31 ft ²
	1118.31 m ²	12037 ft ²
NON GFA - LOT 8S OUTDOOR SPACE (LEVEL 05)		
8S OFFICE OUTDOOR	558.17 m ²	6008 ft ²
	558.17 m ²	6008 ft ²



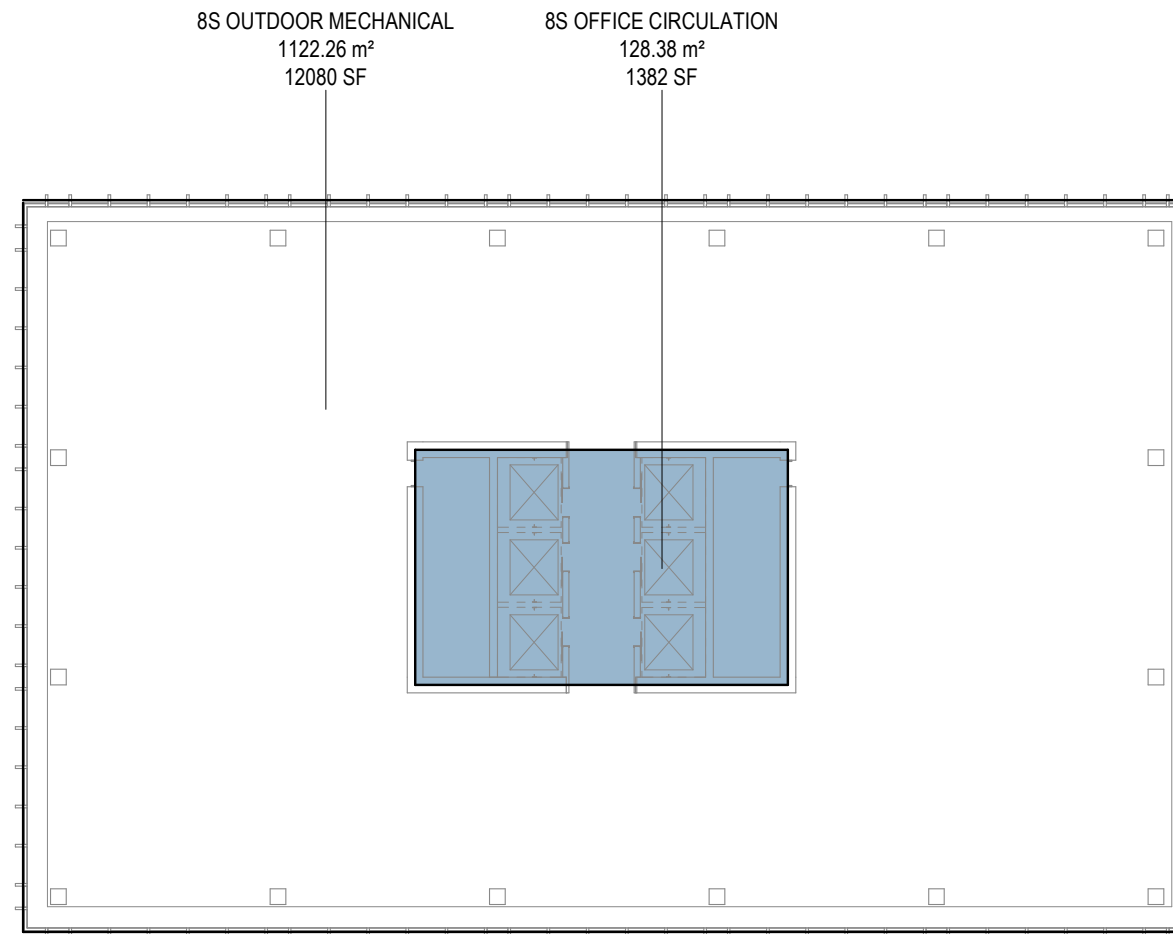
Lot 8S - Levels 05 to 20

GFA SUMMARY - LOT 8S TYP UPPER OFFICE LEVEL		
Function	GFA	GFA Imperial
OFFICE	1090.70 m ²	11740 ft ²
OFFICE CIRCULATION	134.14 m ²	1444 ft ²
TOTAL GROSS FLOOR AREA TOWER 6	1224.84 m ²	13184 ft ²
FSR AREA - LOT 8S OFFICE (LEVEL 06 - 20)		
8S OFFICE	1090.70 m ²	11740 ft ²
8S OFFICE CIRCULATION	128.38 m ²	1382 ft ²
8S MECHANICAL	2.88 m ²	31 ft ²
8S MECHANICAL	2.88 m ²	31 ft ²
	1224.84 m ²	13184 ft ²



Lot 8S - Level Roof

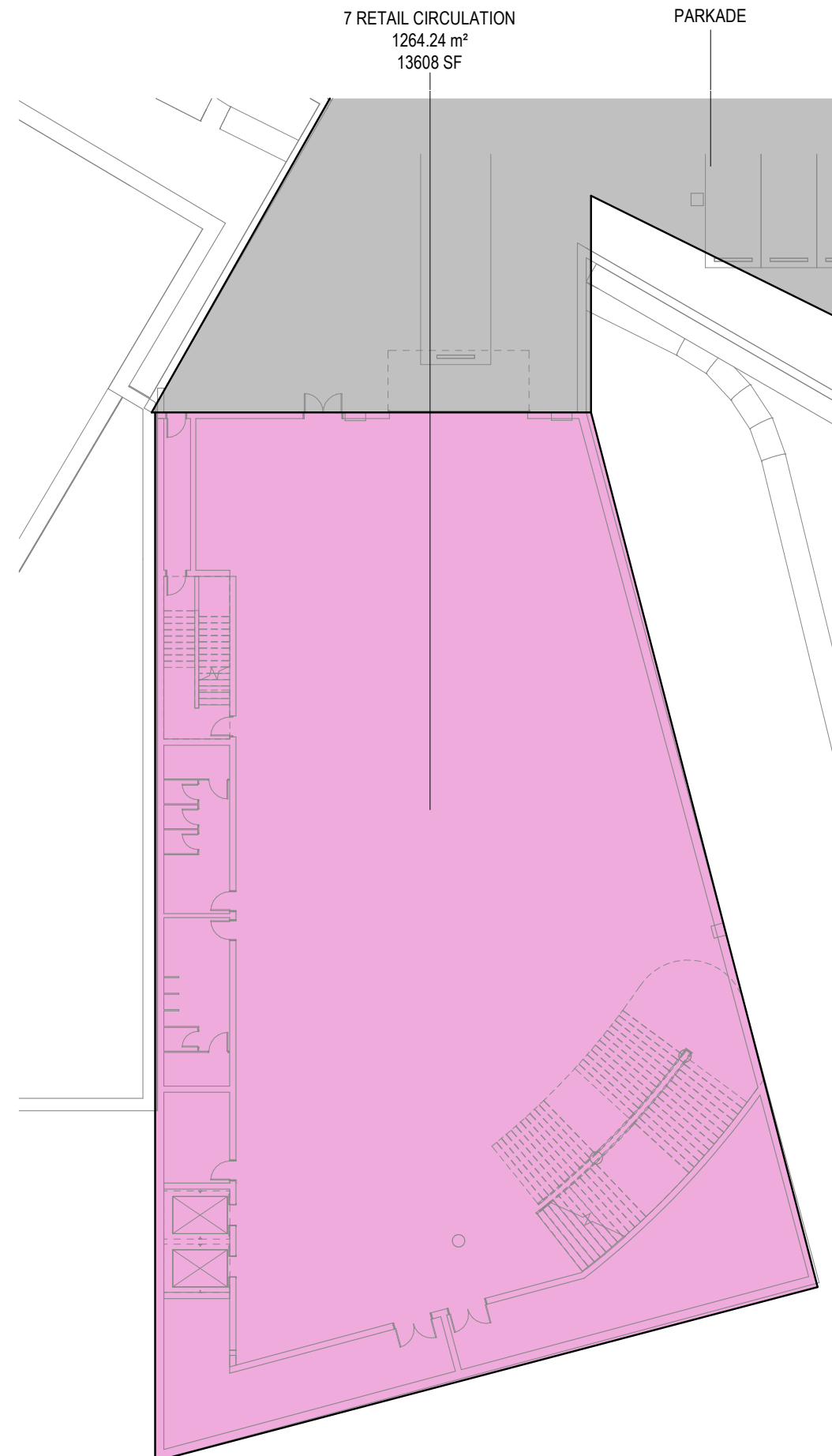
GFA SUMMARY - LOT 8S ROOF		
OFFICE CIRCULATION	128.38 m ²	1382 ft ²
	128.38 m ²	1382 ft ²
NON GFA - LOT 8S OUTDOOR SPACE (ROOF)		
8S OUTDOOR MECHANICAL	1122.26 m ²	12080 ft ²
	1122.26 m ²	12080 ft ²



5 8S LEVEL ROOF
1 : 200

Lot 7 - Level P1

AREA SUMMARY - LOT7 LEVEL P1		
RETAIL CIRCULATION	1264.24 m ²	13608.15 ft ²
	1264.24 m ²	13608.15 ft ²
	1264.24 m ²	13608.15 ft ²
FSR AREA - LOT 7 RETAIL (LEVEL P1)		
7 RETAIL CIRCULATION	1264.24 m ²	13608.15 ft ²
	1264.24 m ²	13608.15 ft ²



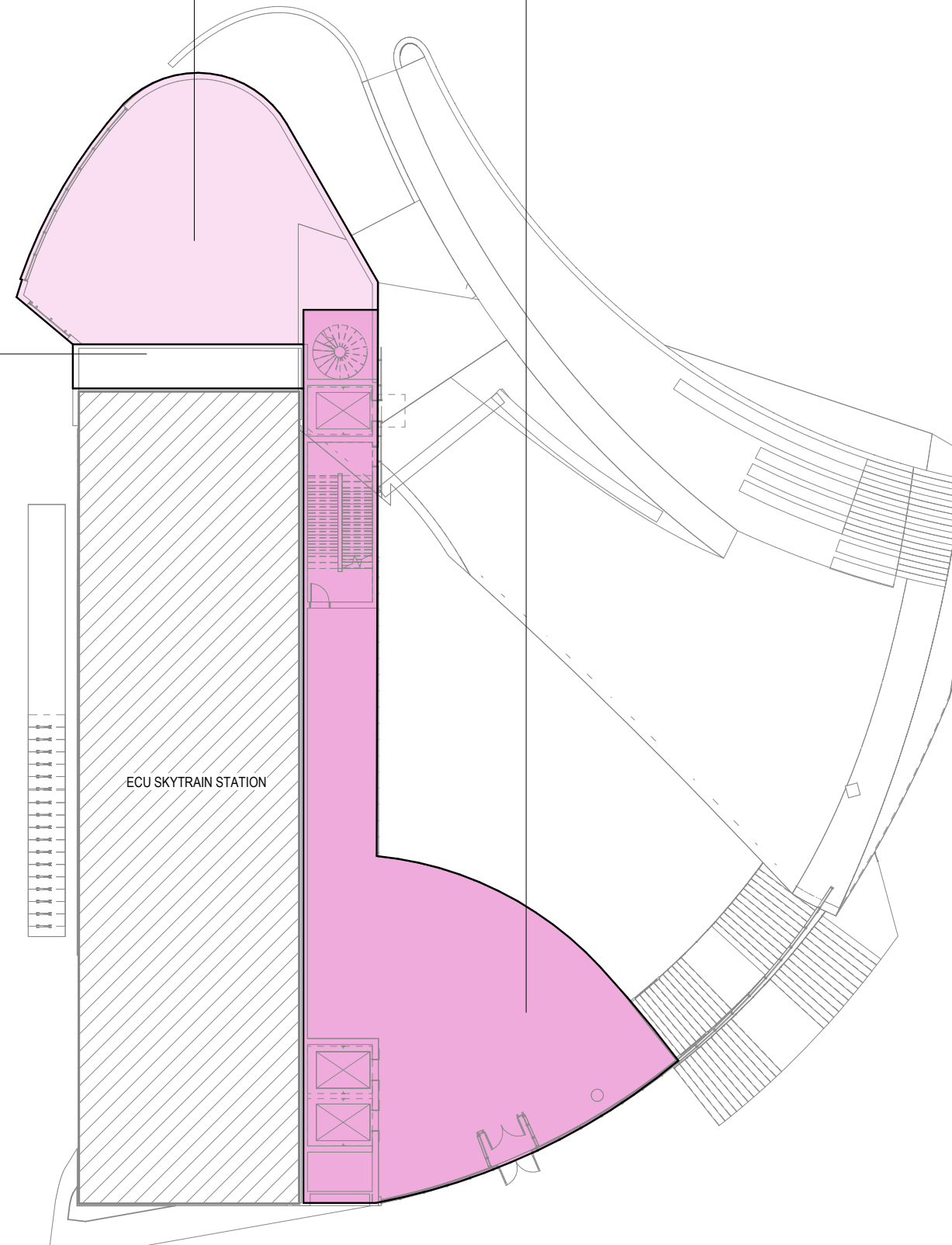
Lot 7 - Level 01

AREA SUMMARY - LOT7 GROUND LEVEL		
RETAIL	166.82 m ²	1795.66 ft ²
RETAIL CIRCULATION	323.30 m ²	3479.94 ft ²
	490.12 m ²	5275.59 ft ²
PUBLIC	24.71 m ²	266.01 ft ²
SR EXCLUSION	24.71 m ²	266.01 ft ²
	514.83 m ²	5541.61 ft ²
FSR AREA - LOT 7 RETAIL (LEVEL 01)		
RETAIL	166.82 m ²	1795.66 ft ²
RETAIL CIRCULATION	323.30 m ²	3479.94 ft ²
	490.12 m ²	5275.59 ft ²

7 TRANSLINK BIKE PARKING
24.71 m²
266 SF

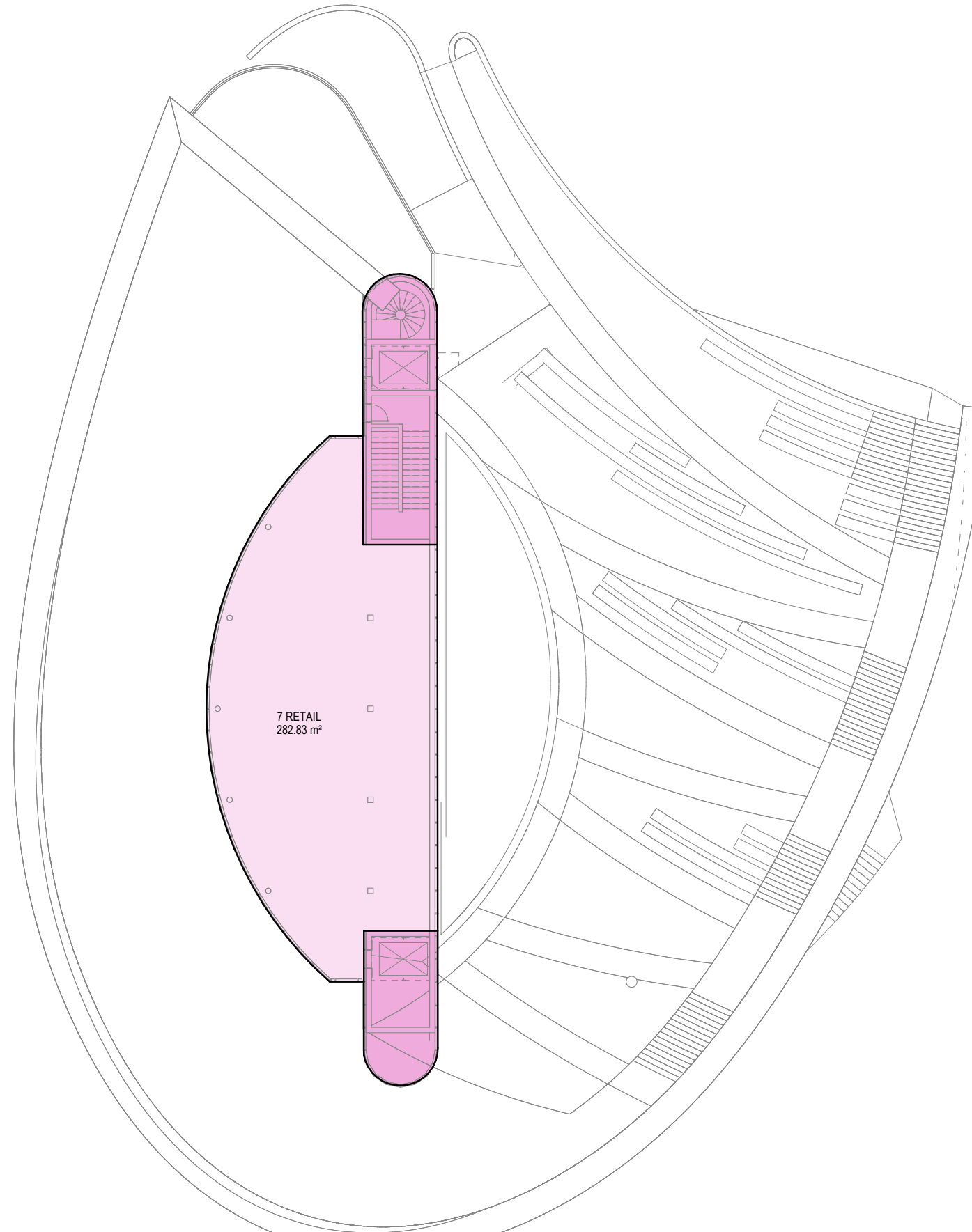
7 RETAIL
166.82 m²
1796 SF

7 RETAIL CIRCULATION
323.30 m²
3480 SF



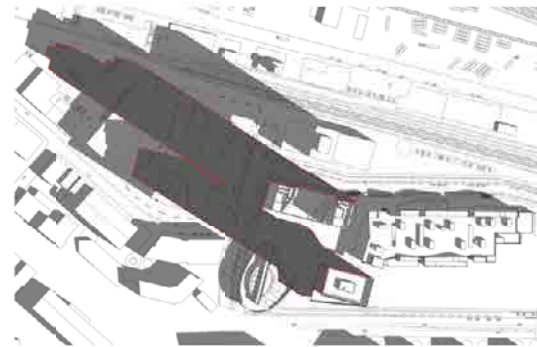
Lot 7 - Roof

AREA SUMMARY - LOT7 LEVEL ROOF		
RETAIL CIRCULATION	91.90 m ²	989.21 ft ²
	91.90 m ²	989.21 ft ²
RETAIL	282.83 m ²	3044.39 ft ²
	282.83 m ²	3044.39 ft ²
TOTAL GROSS FLOOR	374.73 m ²	4033.60 ft ²
FSR AREA - LOT 7 RETAIL (ROOF)		
7 RETAIL	282.83 m ²	3044.39 ft ²
7 RETAIL CIRCULATION	59.08 m ²	635.97 ft ²
7 RETAIL CIRCULATION	32.82 m ²	353.25 ft ²
	374.73 m ²	4033.60 ft ²

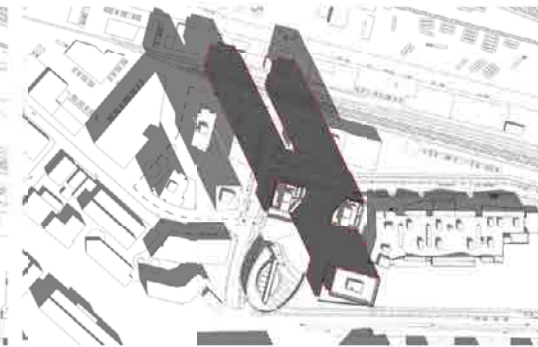


8.8 Shadow Studies

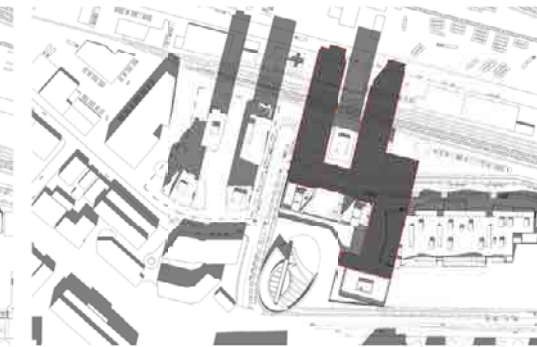
March 21



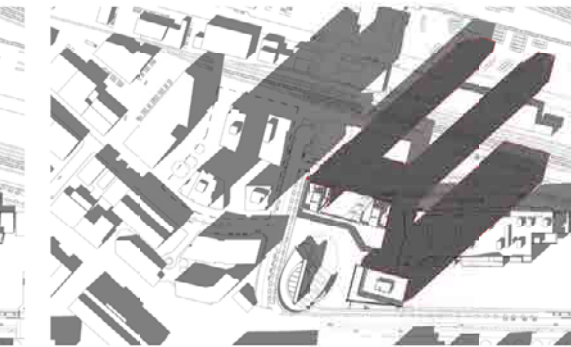
1 Shadow study - March 1000
1:2000



2 Shadow study - March 1200
1:2000

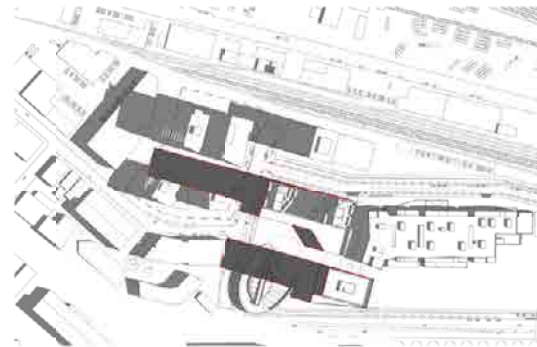


3 Shadow study - March 1400
1:2000

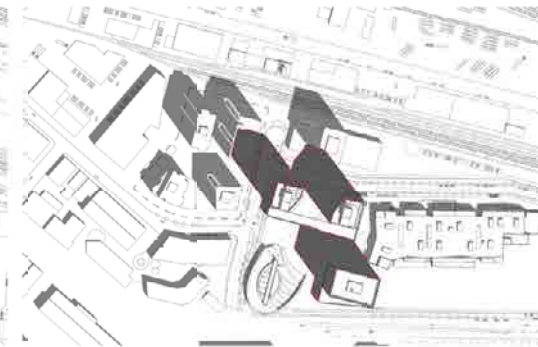


4 Shadow study - March 1600
1:2000

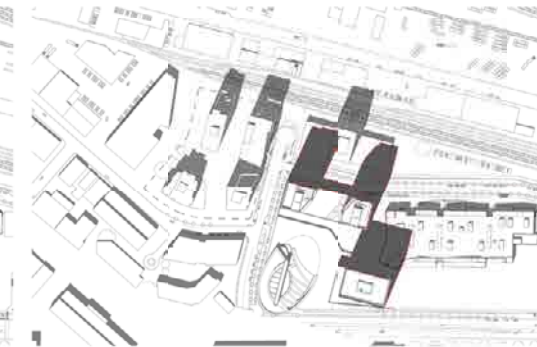
June 21



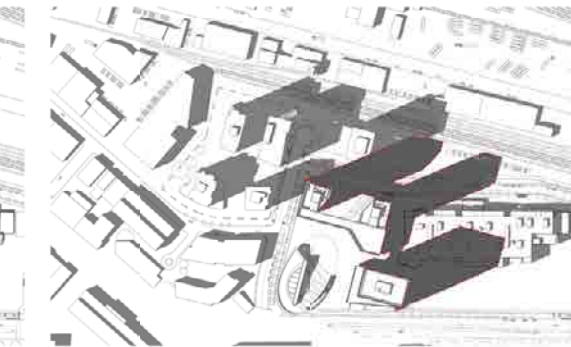
5 Shadow study - June 1000
1:2000



6 Shadow study - June 1200
1:2000

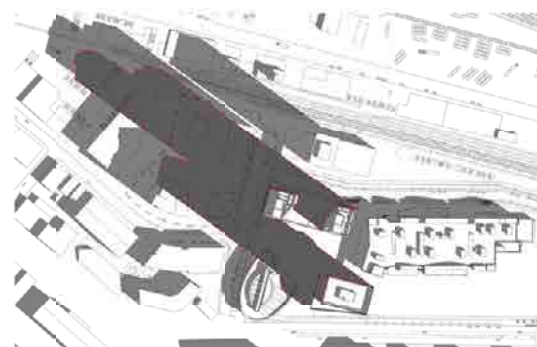


7 Shadow study - June 1400
1:2000



8 Shadow study - June 1600
1:2000

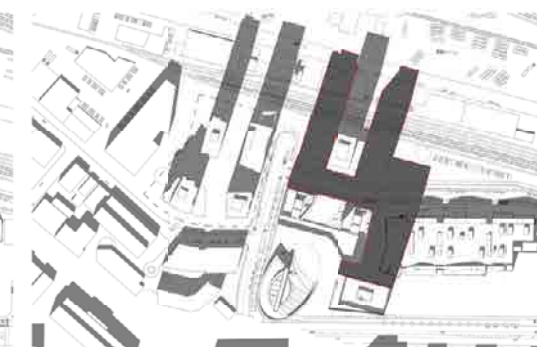
September 22



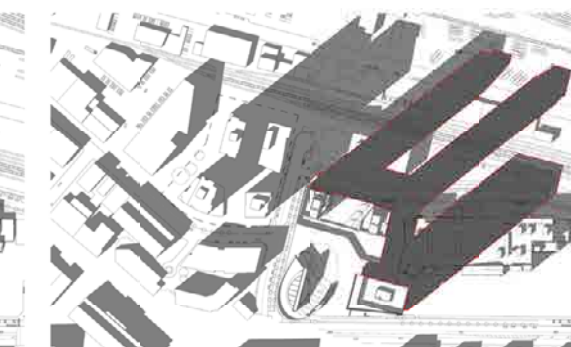
9 Shadow study - September 1000
1:2000



10 Shadow study - September 1200
1:2000



11 Shadow study - September 1400
1:2000



12 Shadow study - September 1600
1:2000

PAGE LEFT INTENTIONALLY BLANK

1220 Homer Street
Vancouver, British Columbia
Canada, V6B 2Y5

Perkins&Will