Project Team

Holborn

Holborn is a Vancouver-based developer with an international background and global vision. Holborn's diverse portfolio of projects and real estate management services throughout British Columbia include retail, residential, office and hotel properties.

We believe that buildings are living and emotional spaces, which is why we look at how people will move inside them and out.

Our mission is to elevate the lifestyle of the people who choose to live, work and stay in what we build.

Excellence Through Innovation

We are driven by the satisfaction of doing something better than what has been done before. We believe there is always a better way to do something and that it's our job to find it.

People Focused

We strive to bring out the best in our people, and create spaces that satisfy the needs and desires of

Social & Environmental Responsibility

We believe in building developments that create healthier communities through thoughtful and responsible design.





Trump International Hotel & Tower Vancouver





IBI Group Architects

IBI Group is a globally integrated architecture, planning, engineering, and technology firm. From high-rises to industrial buildings, schools to state-of-theart hospitals, transit stations to highways, airports to toll systems, bike lanes to parks, we design every aspect of a truly integrated city for people to live, work, and play. We organize our expertise into three sectors: Intelligence, Buildings, and Infrastructure.

Intelligence: systems design and software development.

Buildings: building architecture, interior design, and building engineering.

Infrastructure: planning, urban design, landscape architecture, transportation, and civil engineering.



WWW.IBIGROUP.COM

PFS Studio

PFS Studio, formerly Phillips Farevaag Smallenberg (PFS), is a planning, urban design, and landscape architectural firm located in Vancouver, BC. PFS Studio is well known for both planning and built works and the firm's portfolio of work demonstrates its success in completing projects that have faced a high degree of complexity in both process and approvals. Large-scale urban planning, public realm, community design, natural lands strategies, parks, and public open space design work are at the core of PFS Studio's practice. PFS Studio is committed to incorporating best practices for environmental, social, and economic sustainability as we strive to meet the demands and challenges of our clients and of our growing communities.









Arbutus Walk, Vancouver









Residential & Mixed-use Developments throughout Metro Vancouver





Hastings Park Italian Rain Gardens

Richmond City Hall

Aplin & Martin

Aplin & Martin Consultants Ltd. is a qualityoriented and employee-owned company. represented by accredited Professional Engineers, Professional Planners and support staff, with project experience in policy analysis and technical design across BC and abroad.

Aplin & Martin delivers complete design and contract administration services, including road design, grading, earthworks balancing, erosion mitigation, sediment control, water distribution and sewer collection systems. wastewater treatment plants, pump stations and stormwater management systems. We are at the forefront of sustainable development, tackling complex land use and engineering serviceability projects.



Arbortech

Arbortech Consulting has been providing consulting arborist services to the municipal. land development and construction sector for over 20 years.

Arbortech has developed industry accepted protocols and standards for tree impact assessment, as well as refined innovations in mitigation and treatment options to best manage tree preservation with the highest standards of efficacy, and best cost efficiency.

We employ a solutions based approach with the most comprehensive reviews, and the most practical solutions for tree protection.

ARBORTECHCONSULTING



Bunt & Associates

Founded in 1993, Bunt & Associates is one of the largest specialist transportation planning and engineering consulting companies in Western Canada. We have over 50 professional and technical staff in four offices located in Vancouver, Victoria, Calgary, and Edmonton.

Our strenaths lie in providing enterprising solutions to urban transportation planning challenges and in assisting our clients in attaining their project goals. Bunt & Associates is a true specialist consultant, providing services related to transportation exclusively.

Light House

Light House is a not-for-profit company that provides innovative yet practical approaches to achieving sustainable communities and high performance buildings. Our interdisciplinary team of planners, engineers, green building experts and engagement specialists work with developers and local governments to achieve economic advantage while increasing environmental and community performance. The Light House team is recognized for their award-winning work in formulating green building policies and sustainability strategies that reduce the overall impacts of individual buildings and capitalize on synergies within the larger site context while reducing overall environmental impacts, increasing economic returns and building social capacity.



Underhill Geomatics

The Underhill group cover a broad range of disciplines including engineering, surveying, mapping, and GIS services.

Underhill Geomatics Ltd. is wholly owned by the partners of Underhill & Underhill.

Underhill & Underhill (U&U) has specialized in land surveying since 1913. For development related projects, U&U offers a full range of legal land surveying services in British Columbia, the Yukon, and the Northwest Territories.

Our services include air space subdivisions, strata titles, building locations, road surveys, mineral claims, provincial boundaries, rightsof-way, volumetric surveys, retracements, and First Nations land claim settlements.

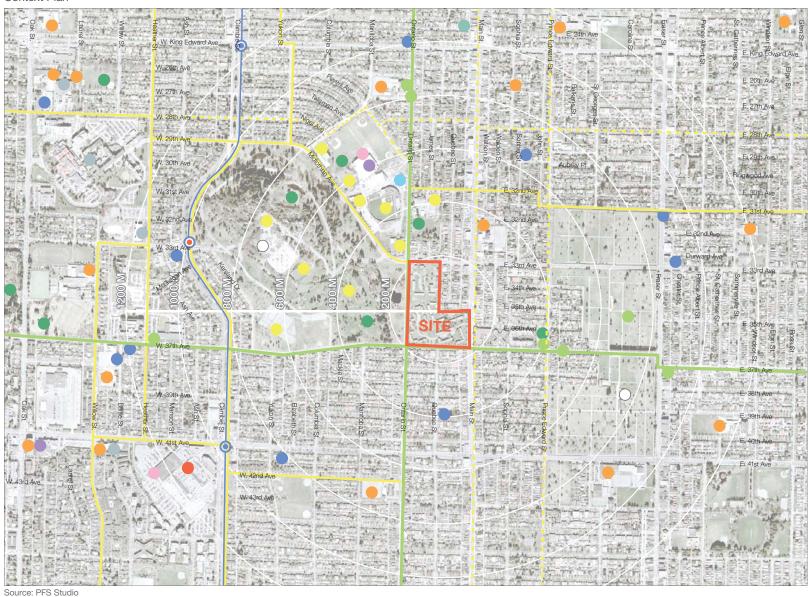






Site Context

Context Plan







Queen Elizabeth Park

Hillcrest Community Centre



Existing view along Main Street

- O- Canada Line
- Future Station at 33rd Ave & Cambie St.
- Bike Routes Formal
- Bike Routes Informal
- Greenways
- Parks
- Open Spaces
- Farmers' Market/Community Gardens
- Schools
- Libraries
- Hospitals
- Community Centres
- Recreational Programs
- Shopping Mall
- Community Services
- Places of Worship
- **Events Spaces**

LITTLE MOUNTAIN REZONING | FALL 2015



Process

Policy Statement

Key Principles

The overarching direction



Create a complete community. Provide a balanced mix of uses that makes Little Mountain a socially sustainable and functionally complete community.



Create a clear and accessible system of public open space. Provide an interconnected and highly public open space system that is accessible, legible and animated.



Design for green mobility. Foster pedestrian, bike. and transit-friendly infrastructure and amenities that reduce motorized vehicle

impacts and use.



Excel in urban design and built form. Support compact mid-rise development density, massing and height that fits into its urban and natural surroundings



Achieve a high standard of sustainability. Improve the environmental social and economic vitality of the site through specific sustainability strategies.

Guiding Principles

The aspirations for the site



Integration and permeability



Public space focus



Sustainable public spaces



Streets for people



Legibility and



Transitional edges



Solar access

Opportunities for



Greenways/bikeways

Distinct quadrants



Community hub



Main Street



Variation



Sequential views





Visible green



Memory and trees



Integrated social housing

Rezoning Application

Objectives

The desired end results



Complete community. Create a diverse and vibrant community, addressing existing needs and new demands for neighbourhood amenities and housing.



Contextual integration. Ensure integration of the site with the surrounding natural environment and neighbouring community.



Vibrant public realm. Ensure the site is unified by accessible, varied, and interconnected public spaces that maximize solar access and sequential views.



Memory.

Reflect the spaces, people, and history of the site through landscape, urban, and building design elements.



Balanced mobility. Provide safe and permeable multimodal transportation infrastructure, prioritizing walkability, bicycles, and transit access.



Unity and variety.

Foster a unified site design while also maximizing variety, punctuation, and visual interest through the design of buildings and voids.



Sustainable design. Increase passive and active sustainable practices through sitewide and buildingspecific strategies.

Design Strategies

The design's plan of action



Permeability. Incorporate multimodal paths through the site that connect to the surrounding street network and other major

community uses.

Housing Mix. Include a variety of housing types and tenures and supporting



Open Space System. Include a public open space system that is interconnected, legible, and accessible.



Spatial Definition.

Conceive buildings as defining elements that reinforce the public realm of streets and open spaces.



Street Orientation.

Focus on rich. detailed. and pedestrianoriented streetfront facades and uses to foster active use of the public realm.



New Central Street.

Make the new central street with adjoining linear rain garden the organizing element of



Small Scale. Break down

blocks into smaller buildings, each with varied heights, massing, and architectural



Sun Access.

Design building orientation and massing to increase sun access to public spaces and dwelling units



Street & Path Network. Include a network

of streets and pedestrian mews that increases connectivity and encourages walkability.



Height Transition.

Transition building height and massing towards the edges to ensure respectful contextual integration.



References. Retain historical pattern of open spaces, streets. and trees

Past

striving to retain significant trees.

Sequential Views. Increase sequential views through building placement and street network design.





Project Description

Site & Project Highlights

- Location: Located between 33rd and 37th Avenues, and Ontario and Main Street.
- Size: 15 acres
- # of Market Units: ~ 1,400
- # of Non-market Units: 282
- Community Amenities:
 - A Little Mountain Neighbourhood House
 - **B** 69 Space Daycare
- Parks & Open Space:
 - 1 New Central Street
 - 2 Green Wedge Park
 - 3 Community Plaza + Green
 - 4 Community Gardens

- Retail/Commercial
- Neighbourhood House
- Daycare
- Housing Non-market Seniors
- Housing Non-market Family
- Housing Non-market Family (above)
- Housing Market
- Project Boundary



Parcel-Based Development Statistics

		Approximate Gross Building Area* by Use m² (sq.ft.)					
Parcel	Parcel Area m²/(sq. ft.)	Market Residential	Non-market Residential (Family)	Non-market Residential (Senior)	Retail / Commercial	Neighbour- hood House	Daycare
AA	2,601 (27,995)	9,835 (105,860)	0	0	0	0	0
AB	3,742 (40,274)	0	3,530 (38,000)	0	0	1,115 (12,000)	764 (8,224)
AC	1,944 (20,923)	0	6,242 (67,189)	0	720 (7,745)	0	0
ВА	2,099 (22,594)	6,730 (72,440)	0	0	0	0	0
ВВ	1,916 (20,628)	0	0	3,942 (42,431)	0	0	0
ВС	3,458 (37,223)	0	8,514 (91,640)	0	1,858 (20,000)	0	0
CA	4,548 (48,957)	9,929 (106,880)	0	0	0	0	0
CB/CC	7,709 (82,983)	24,549 (264,246)	0	0	0	0	0
CD	4,736 (50,981)	19,515 (210,059)	0	0	0	0	0
DA	2,181 (23,478)	6,369 (68,560)	0	0	0	0	0
DB/DC	4,980 (53,609)	15,703 (169,029)	0	0	0	0	0
DD	3,047 (32,799)	15,400 (165,760)	0	0	0	0	0
EA	2,195 (23,624)	0	4,667 (50,240)	0	0	0	0
EB	2,554 (27,491)	8,022 (86,348)	0	0	0	0	0
EC	1,646 (17,717)	7,211 (77,615)	0	0	0	0	0
AREA	49,356	123,263 (1,326,797)	22,953 (247,069)	3,942 (42,431)	2,578 (27,745)	1,115 (12,000)	764 (8,224)
FSR	(531,276)	1.99	0.37	0.07	0.04	0.02	0.01
AREA	61,846	154,615 (1,664,266)					
FSR	(665,706)	2.5					

View from Southwest





Community Amenities

Land Use Plan



Parks & Open Spaces

- New Wedge Park; City owned, maintained by the Park Board
- New Community Plaza; City owned, maintained by the Park Board
- Contribution to Queen Elizabeth Park improvements
- Surrounding road improvements

Daycare

- City owned facility with 69 spaces: Infant, toddler, preschooler, and preschool aged children
- Secure outdoor area at western end of Community Plaza includes four existing trees and a variety of play spaces and activities

Neighbourhood House

- City owned facility, with access from the Community Plaza and excellent exposure to Main Street
- Includes a variety of multi-purpose rooms
- Includes a community kitchen, providing opportunities for residents and neighbours to share the cost and prepare food together

Community Garden

- ~ 470 m² area devoted to community gardens located within the Quebec Street extension
- Offer residents opportunity to grow their own affordable, nutritious food



















Community Amenities - Non-market Housing

Land Use Plan



BC Housing Family Housing

- ~43 Units owned by BC Housing for low-income families
- 4 Story building, in close proximity to transit (Route #33), Hillcrest Community Centre and Queen Elizabeth Park.





City of Vancouver Housing

- 48 Units, owned by the City of Vancouver developed in Phase 1
- 4 Stories overtop of Neighbourhood House and Daycare





BC Housing Family Housing

- ~138 Units owned by BC Housing for low-income families developed in Phase 1
- Two 8-Story buildings with immediate access to Main Street, transit, and adjacent to the Neighbourhood House and Daycare





BC Housing Seniors Housing

- Occupied in 2014
- 53 Units for independent seniors and people with disabilities
- Owned by BC Housing; operated by More Than a Roof Mennonite Housing Society







Building BB - Non-market Seniors Housing

Mayor Gregor Robertson, City of Vancouver

"...Little Mountain is a neighbourhood with an important place in Vancouver's history. Managed and operated by More than a Roof, today's opening of 53 affordable apartments for seniors is an important milestone in our work together to build an inclusive and vibrant new community at Little Mountain."

Lorne Epp, executive director, More Than a Roof

"A home is more than just a roof above your head. With the opening of these 53 new affordable rental apartments, our seniors now have more access to quality housing in the community they know and love, a place where they can continue to live independently and maintain an active healthy lifestyle."

Joo Kim Tiah, president & CEO, Holborn Properties

"Holborn is proud to be a partner in this important project that is renewing this urban neighbourhood."













View from Southeast





Phasing

- One building (the non-market building BB) is already complete.
- As proposed, the retail and commercial space, as well as a large portion of non-market housing units and the community facilities will be delivered in Phase 1.
- The objective of Phase 2 is to connect the road network and deliver the first market residential units.
- Phases 1 and 2 will have a completely accessible and connected public realm, experiencing the lowest impacts from the construction of later phases.
- Phases 1 will accelerate the development of the Community Plaza which will anchor the neighbourhood with retail and community-supporting uses.
- The later phases are proposed in coordination with access and public realm considerations, and to minimize construction impacts.



Building BB - Seniors Housing







Building Heights

- Building heights vary, including the stepping-back of upper floors, meeting the following objectives:
 - Ensure appropriate transitions with surround existing residential developments.
 - Maintain solar access on the Community Plaza and Wedge Park.
 - Create a focal point through siting the tallest buildings central to the development.



View from Southeast

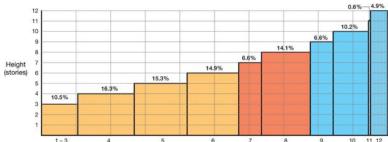


Site Sections





Building Site Percent Coverage by Height





Up to 6 storeys

7-8 storeys

9-10 storeys

12 storeys

--- Project Boundary



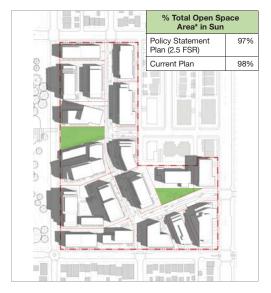
→ Height Transition Downward

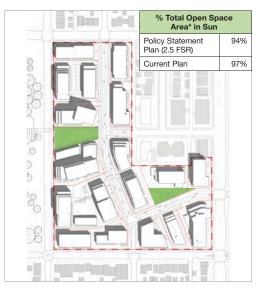
View from Southwest

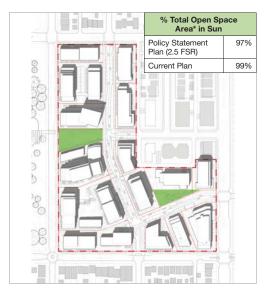




Shadow Studies



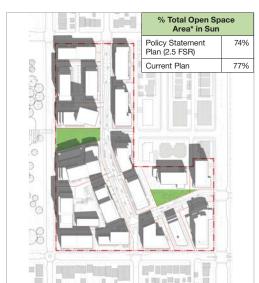




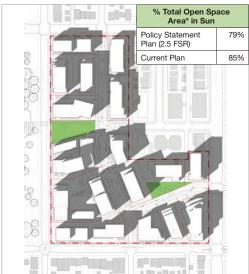


12 PM 10 AM 2 PM 4 PM

% Total Open Space Policy Statement Plan (2.5 FSR) Current Plan







*Note: Open Space includes the Wedge Park and Community Plaza.





Public Realm



The public realm concept plan for Little Mountain integrates a network that prioritizes pedestrian and cyclist movements and links together key neighborhood public spaces. Key components include:

- New Central Street
- Green Wedge Park
- Community Plaza + Green
- Community Gardens



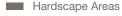
Open Space Network – fully integrated and interconnected network of paths and open spaces, both within the site and to the adjacent neighbourhoods.

- New Central Street
- 2 Wedge Park
- Community Plaza
 - Community Gardens
- Open Space Network
- Open Space
- Connecting Spines
- --- Project Boundary



Natural and Hardscape Areas coordinated palette helping create a cohesive character and strong sense of place.





--- Project Boundary



New Central Street & Quebec Street Extension

- Defining element on site
- Primary north/south connector from 33rd Avenue to Quebec Street
- Urban Trail 3 m wide sidewalk providing safe mobility option for pedestrians and vulnerable populations, including seating and integrated public art opportunities
- Linear rain garden buffer between public/private, stormwater management, increased habitat and green space
- Quebec Street extension with community gardens and pedestrian/bike access



Precedent - Urban Trail



Precedent - Linear Rain Garden



Precedent - Private to Public Connections Over Rain Garden









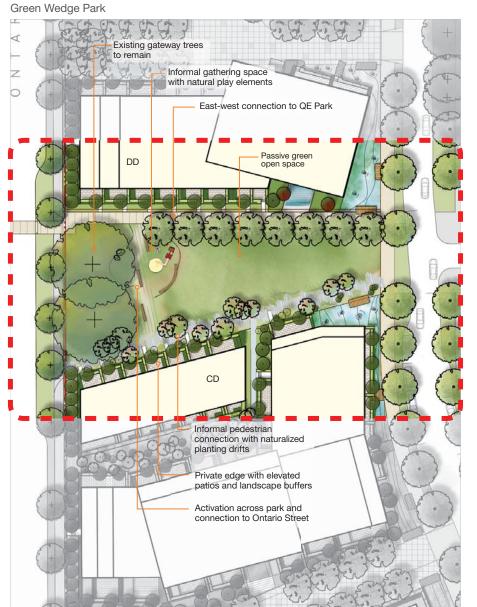
New Central Street





Green Wedge Park

- Prominent landscape feature, including retaining 2 large trees, providing historical context
- Preserved as a City-owned community park
- Gateway into the neighbourhood from the west, and a primary connector to Queen Elizabeth Park
- Passive open space: informal gathering area, seating opportunities, and natural play
- Detailed park design to be determined



Precedent - Naturalized Plantings



Precedent - Natural Play Elements



Precedent - Informal Gathering Space





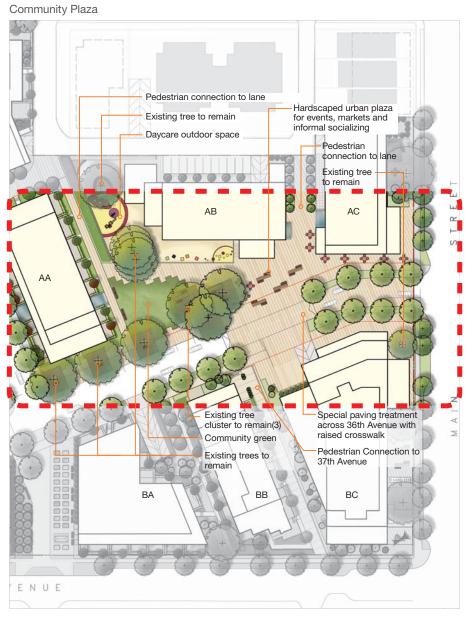


Green Wedge Park



Community Plaza

- Neighbourhood social heart
- Informal gathering
- Diverse seating
- Community Green
- Possible space for farmer's market, performances, events, festivals
- Special paving extends plaza across 36th Ave.



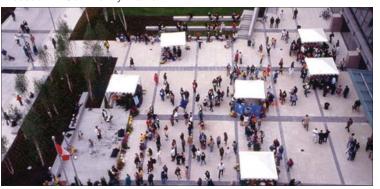
Precedent - Community Green and Plaza



Precedent - Outdoor Seating



Precedent - Community Market







Private Open Spaces

- 1 Arrival courts welcoming plazas to residential parcels and provide access to below grade parking
- 2 Courtyards 'gardenesque' in character and offer shared common open space for residents
- 3 Private rooftop patios ensure residents have access to private outdoor open space
- 4 Planted (extensive) green roofs visual green amenity, stormwater management, increased habitat and heat-island mitigation

Rooftop Gardens



Arrival Courts and Courtyards















Sustainability - Highlights



Green Mobility

- No parking/loading from Ontario, 37th & 33rd
- Permeable network
- Bicycle storage and support measures
- Spaces for car-share vehicles and electric charging stations
- Green mobility opportunities will be promoted with residents



Sustainable Site Design

- North-south orientation ensures sun access
- Compact, mid-rise buildings increase energy efficiency
- Passive design elements
- Cross-ventilation opportunities
- Paved surfaces minimized
- Deciduous trees planted on west and south building



Access to Nature & Habitat Creation

- Safe, legible and accessible connections to open spaces
- Bird-friendly building design
- All off-site street trees kept; most existing large and healthy on-site trees maintained
- Over 350 new trees will be planted (7:1 tree replacement rate)
- · Tree canopy creates habitat



Sustainable Food Systems

- Community Gardens
- Food-bearing trees
- Edible landscaping
- Holborn will facilitate a Neighbourhood Garden Association
- Community kitchen and Farmers' Market











Rainwater Management

- · "Linear Rain Garden"
- Rainwater runoff rates reduced with green roofs, tree canopy, and permeable surfaces
- Rainwater harvesting will be considered
- · All buildings will have on-site storm detention systems



Zero Waste Design

- Increase diversion streams to 90% or more by 2020
- Ample in-building garbage and recycling
- On-site composting facility
- Education and outreach initiatives



Low Carbon Energy

- All buildings "district energy ready"
- District energy utility could be located below Community Plaza
- Until connection, utility site may double as main thermal energy supply
- Increased energy efficiency and reduced greenhouse gas emissions



Affordable Housing

- 282 new non-market housing units;
- 224 are replacement housing
- 10 reserved for Musqueam Nation
- 48 in a City-owned building
- Unit types & sizes, and construction technology ensures more than 50% of family-oriented units and a greater variety of tenures and price ranges

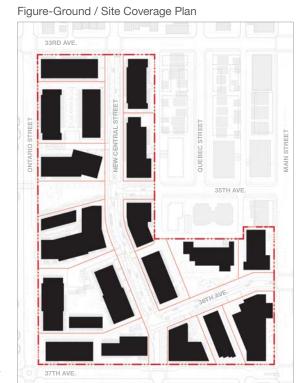




Building Coverage & Setbacks

Coverage

- Gross site coverage is 40%, representing a good balance between buildings and open space.
- Buildings frame the public realm, while also providing for sequential views and focal points throughout the site.



Building Footprint (40% of site area) --- Project Boundary

Arbutus Walk - Comparable site coverage





Setbacks

- Building setbacks are varied in order to:
 - Protect existing trees on 33rd, 36th and 37th (buildings notched along Main Street)
 - Provide generous at-grade patio areas along existing and proposed public streets
 - Ensure adequate room for the linear rain garden
 - Provide outdoor seating opportunities for commercial uses
- 5' Setback (Main Street)
- 5' Minimum Setback (Public Alley)
- 8 12' Setback (Internal Streets/ Wedge Park)
- 12' Typical Setback (Existing Streets)
- 16 26' Setback (for Rain Garden)
- 16' + Setback (to Protect Trees)
- Project Boundary

Setback provides outdoor seating opportunity



Building Setbacks



Typical setback for residential patios



Setbacks will preserve existing trees





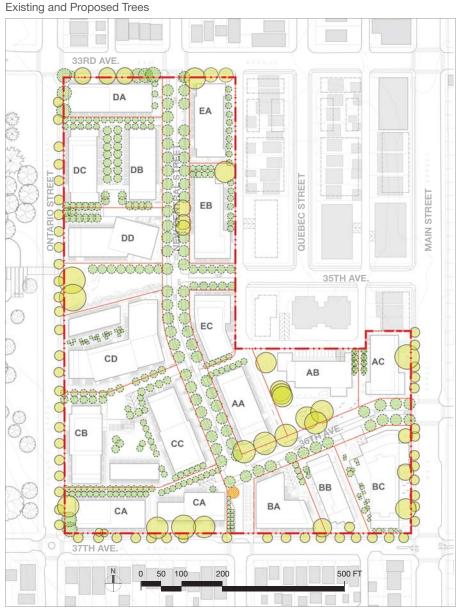
Existing & Proposed Trees

Existing Tree Retention

- 64% retention rate (including street trees)
- Strategies proposed will ensure long term health and survivability of existing trees

Proposed Trees

- ~350 new trees will be planted
- Proposed tree palette establishes a hierarchy, assisting with wayfinding throughout the site.
- Planted trees improve habitat and contribute to the City of Vancouver urban forest.



Existing Retained Trees









Proposed Tree Palette





Existing Trees



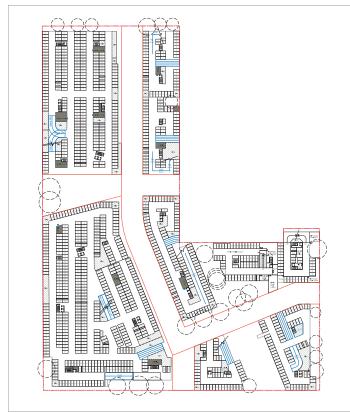
Proposed Public Trees Transplanted Existing Tree



Project Boundary

Plans & Cross Sections

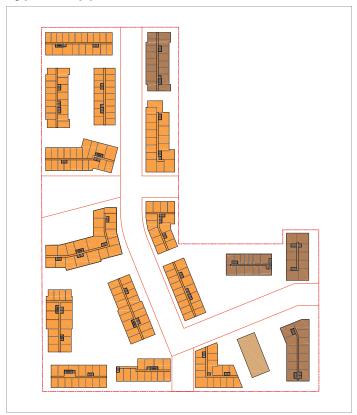
Underground Level



Ground Floor



Typical Upper Level











Mobility

Pedestrian, Bicycle & Access to Transit

- Prioritized pedestrian movements through a network of on-street sidewalks, north/south Urban Trail, and east/west pedestrian mews
- Bicycle connections to Ontario Street and 37th Avenue greenways
- Site is served by the #3 Main Street bus and the #33 UBC/29th Avenue Station bus
- Rapid transit station located approximately 1 km away: King Edward and Oakridge Canada Line Stations



Local Street Bikeways

IIII Painted Shared Use

Painted Bike Lanes

3+ m Multiuse Space / Urban Trail

Shared Public Paths

" Shared Semi Private Residential Paths

Sidewalks

Laneway Connections

Bus Stops

Pedestrian Path to Transit

Bike Access to Parking Amenities

Bike Access to Existing CoV Bike Routes

--- Project Boundary

Vehicular

- Vehicular circulation primarily along new central street, 35th and 36th.
- All parking and loading accessed from new central street or lanes
- Emergency vehicle access along Quebec Street extension
- Auto drop-off/loading on Parcels C&D



Public Street

Emergency Vehicle Access

▲ Vehicular Access to Parking Amenities

IIIIII Pedestrian Crossing

Proposed New Traffic Signal

Possible New Traffic Signal

--- Project Boundary

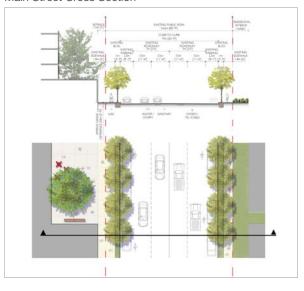
Street Cross Sections – Existing Streets

Main Street

- Retail and commercial frontages
- Widened sidewalks at commercial frontages
- Special architectural and site detailing to preserve existing trees



Main Street Cross Section

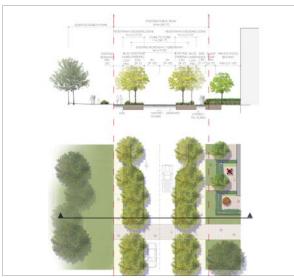


Ontario Street

- Enhanced pedestrian connection from Wedge Park to Queen Elizabeth Park
- Replaced parking with planted refuges at crossing for enhanced pedestrian safety



Ontario Street Cross Section



33rd Avenue

- Typical City of Vancouver sidewalks and boulevards
- Preservation of existing trees
- Enhanced street trees as needed



33rd Avenue Cross Section



37th Avenue

- Typical City of Vancouver sidewalks and boulevards
- Preservation of existing street trees and site trees



37th Avenue Cross Section





Street Cross Sections – Proposed Streets

New Central Street

- Public street
- Internal connector between East 33rd Avenue, 36th Avenue and Main Street
- Traffic calmed
- Urban Trail along west side
- Neighbourhood character
- On-street parking



New Central Street Cross Section



East 36th Avenue

- Public street
- On-street parking
- Primary neighborhood access point from Main Street
- Raised crosswalk at Community Plaza
- Plaza treatment extends across 36th Avenue to read as public realm

East 36th Avenue Cross Section



Quebec Street Extension

- Public dedication
- Pedestrian and cyclist connection with adjacent community gardens
- Demonstration orchard opportunity
- Emergency vehicle access



Quebec Street Extension Cross Section

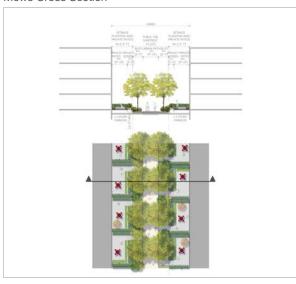


Pedestrian Mews

- 3m Statutory Rights-of-way
- Provide connections across development parcels
- Support pedestrian and cyclist mobility
- Adjacent, ground-floor residential units elevated to provide adequate separation and privacy



Mews Cross Section





View from Northeast





View from Northwest





View from Northwest



