



GATEWAY RESIDENCES

APPLICATION FOR REZONING AND DEVELOPMENT PERMIT 752 MARINE DRIVE

MARCH 2018

APPLICANT AND OWNER
PARK ROYAL SHOPPING CENTRE HOLDINGS LTD.
100 PARK ROYAL SOUTH
WEST VANCOUVER, BC, V7T 1A2

ARCHITECTURE
DIALOG
406-611 ALEXANDER STREET
VANCOUVER, BC, V6A 1E1

LANDSCAPE ARCHITECTURE
VAUGHAN LANDSCAPE PLANNING AND DESIGN
1406 CLYDE AVE
WEST VANCOUVER, BC, V7T 1G1

CIVIL
APLIN & MARTIN CONSULTANTS LTD
#201-12448 82ND AVENUE
SURREY, BC, V3W 3E9

LAND SURVEYORS
CHAPMAN LAND SURVEYING LTD.
#107 - 100 PARK ROYAL SOUTH
WEST VANCOUVER, BC, V7T 1A2

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View from SE

1.0 EXECUTIVE SUMMARY

This document represents a revised application for the Rezoning, and Development Permit for the site of 3 C-1 zoned properties at 752 Marine Drive, Park Royal South. This proposal is in full compliance with the Council-approved Marine Drive Local Area Plan and Design Guidelines, including height and density in the design of the two buildings that crown the mix of residential, commercial and community uses on the site.

The proposed development builds on the rich history of the site, and seeks to take the conventional definition of the shopping mall to the next level, reflecting an evolution in thinking that promotes mixed-use development. The strength of this development concept relies largely on the interplay between the two residential buildings, the mix of land uses, and design quality of the public realm. The objective is to create a vibrant and welcoming public realm while introducing 203 residential units to expand the availability and choice of housing types in the District of West Vancouver.

The proposed site is located at the nexus of retail, office, residential, and recreational uses and activities at Park Royal. The building and landscape designs are based on extensive public consultation and Park Royal's Vision and Neighborhood Principles. The ultimate goal is to create a place where people can shop, live, learn, be entertained, and enjoy their leisure time, day and evening.

This revised Development Application is for that portion of the project that lies within the District of West Vancouver jurisdiction. The portion of the project that lies within the Squamish First Nation lease is provided here for information purposes, and is subject to SNADP review, but will be developed in the manner shown.

Two residential buildings are proposed atop a three-storey base plane development. The ground plane will be devoted to public-oriented uses including retail, restaurant, office and community activities. This base also provides an ideal scale for the pedestrian realm and the Village Square that sits at the heart of the development. The Square is designed to accommodate and host a broad range of outdoor activities, such as small concerts, fairs, farmer's markets, and casual socializing at outdoor cafes.

The two residential buildings are designed at slightly different heights with the East Tower at 14 storeys and the West Tower 11 storeys. The intent is to relate the development to the scale of the adjacent West Royal Towers in marking the easterly gateway to West Vancouver. A bold, vertical expression in the architecture of the easterly building marks the corner of Taylor Way and Marine Drive. Facades are designed on both buildings such that the north and east sides are more urban in quality, with greater solidity, while the south sides are bold with horizontal treatments in glass, open to waterfront views.

The project aspires to respect the distinctive, west coast character of West Vancouver, while achieving greater sustainability through urban strategies and green building design.

1.1 PROJECT DATA

Area Calculations

*Note: Exterior balconies are not included in area calculations

East Block	Residential	Commercial	Services	Supportive Housing	Childcare	Res. Amenity	Mech
Level 1	1,525	6,687					
# of Units/Floor 0							
Level 2	6,280					1,245	
# of Units/Floor 6							
Level 3 thru 12 (area per floor)	8,914						
# of Units/Floor 9							
Level 13	7,459						
# of Units/Floor 6							
Level 14	3,907						
# of Units/Floor 2							

West Block	Residential	Commercial	Services	Supportive Housing	Childcare	Res. Amenity	Mech
Level 1	1,723	13,216	750				
# of Units/Floor 0							
Level 2 (incl. Childcare)				9,690	3,898		
# of Units/Floor 11							
Level 3	13,588						
# of Units/Floor 16							
Level 4	10,407						
# of Units/Floor 13							
Level 5 thru 9 (area per floor)	7,829						
# of Units/Floor 10							
Level 10	6,557						
# of Units/Floor 7							
Level 11	3,729						
# of Units/Floor 2							

South Block	Residential	Commercial	Services	Supportive Housing	Childcare	Res. Amenity	Mech
Level 1 & 2		9,681					

Sub Totals	Residential	Commercial	Services	Supportive Housing	Childcare	Res. Amenity	Mech
	183,460	29,584	750	9,690	3,898	1,245	0

	Combined Sites	Fee Simple Only	East Tower	West Tower
Total GFA	228,627	218,946	104	99
Total Site Area	101,613	60,461	1 BDRM	1 BDRM
FAR	2.25	3.62	2 BDRM	2 BDRM
Site Coverage	34.5%	45.5%	3 BDRM	3 BDRM
				Studio
				Supportive
				Total No. Units
				203

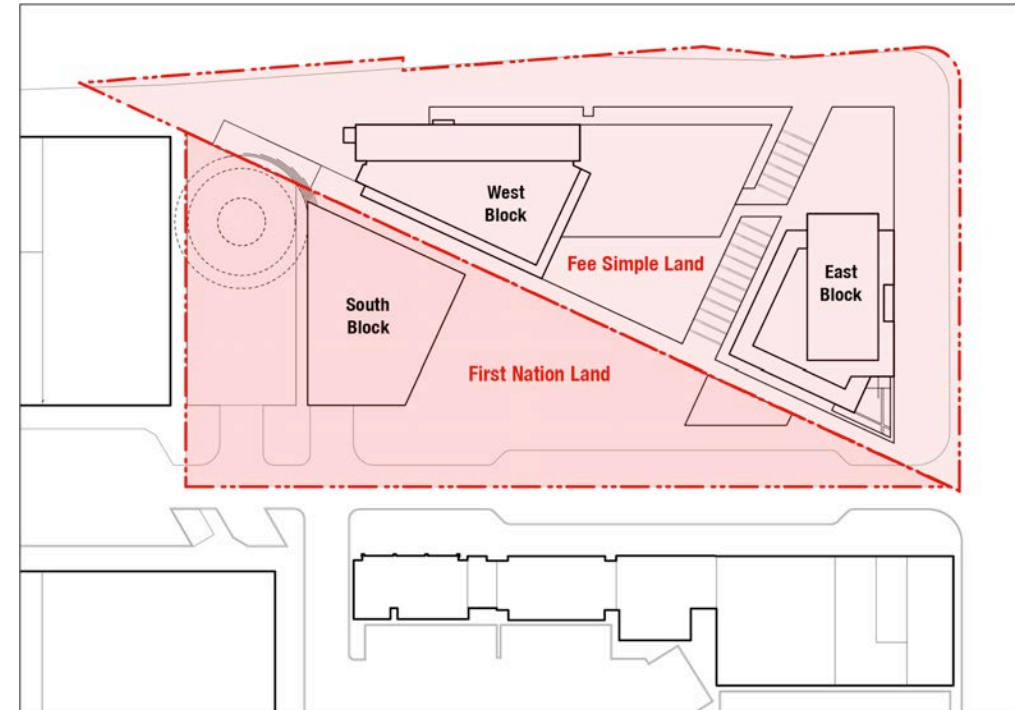
East Tower Height	14 Floors + Mech	
	47.20m	(55.05m Geodetic)
West Tower Height	11 Floors + Mech	
	38.05m	(45.90m Geodetic)

Vehicle parking	Commercial	Residential	Residential Visitor	Total
	30	203	20	253
	@ 1 per 1,000 sqft	@ 1 per unit	@ 0.1 per unit	

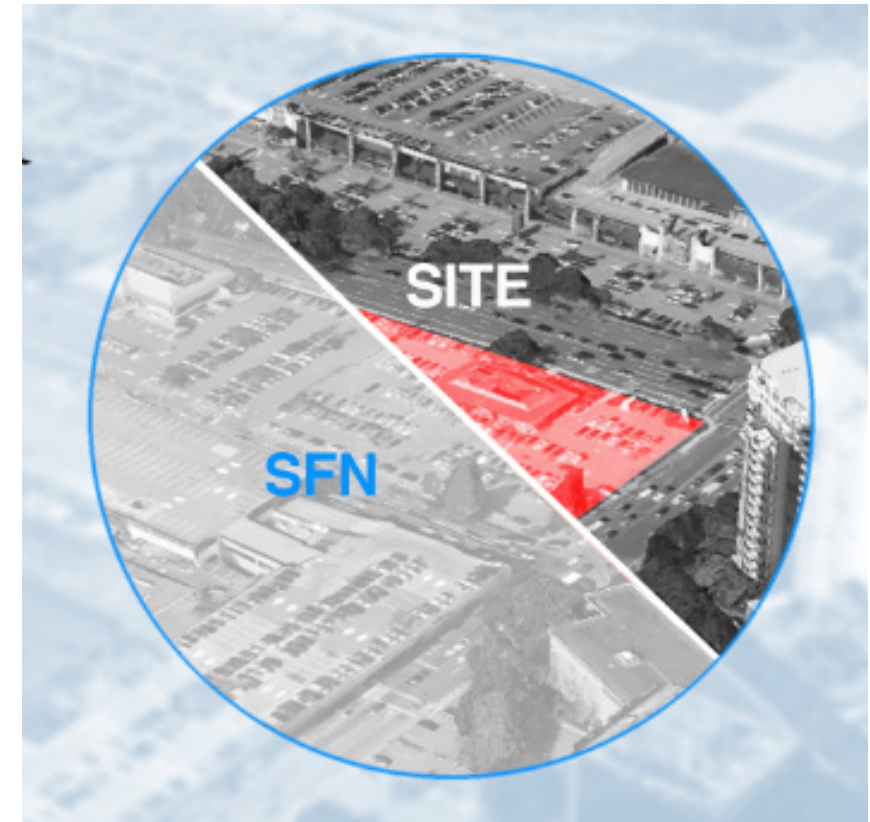
Secure Bike Parking	Commercial	Residential	Total
	30	254	284
	@ 1 per 1,000 sqft	@ 1.25 per unit	

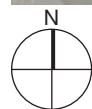
Loading	Class A	Class B	Total
	2	3	5

Note: Two Class B loading stalls are below grade and one is at grade on street



2.0 PROJECT CONTEXT





2.1 SITE

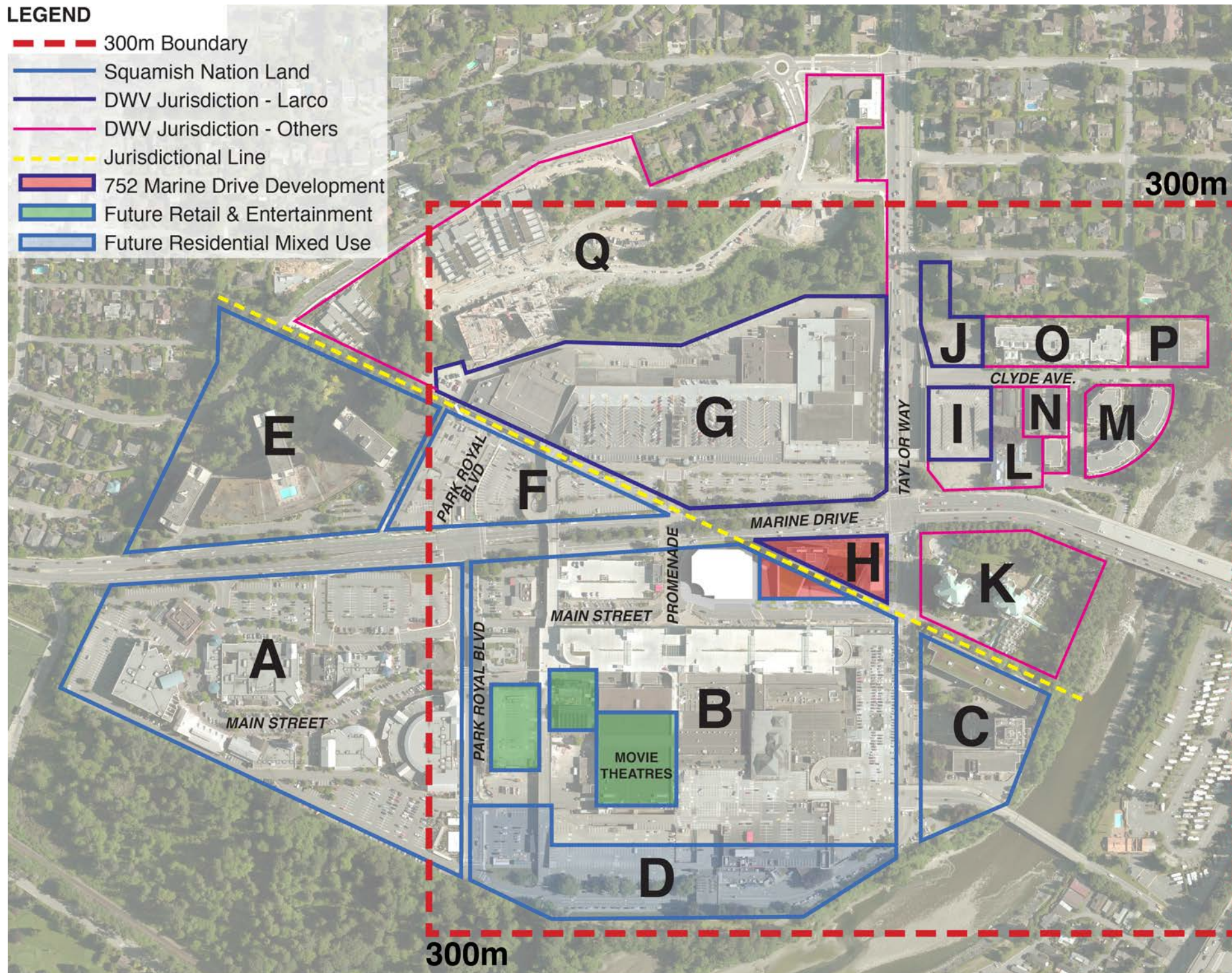
The proposed site is located at the nexus of retail, office, residential, and recreational uses and activities, and will enhance the existing conditions.

- To the North, are the 'Evelyn Drive' development and retail services
- To the East, are the West Royal residential towers and residential developments planned for Marine Drive in North Vancouver
- To the South, are retail services, office and commercial interests, the Spirit Trail, the waterfront, and Squamish First Nation lands
- To the West, are the Ambleside shopping district, Ambleside Park, West Vancouver Playing Fields, and Park Royal Towers

Park Royal Towers consist of 3 towers, that stand at 18, 18, and 17 storeys, and have a total of 505 units. West Royal Towers are comprised of 2 residential towers, that stand at 17 and 23 storeys, and have a total of 171 units. The ongoing redevelopment activity to North, East, and West suggest that higher-density, mixed-use developments are suitable for the area, and that the proposed site aligns with the current development and planning goals and initiatives for Park Royal and, more broadly, West Vancouver

LEGEND

- - - 300m Boundary
- Squamish Nation Land
- DWV Jurisdiction - Larco
- DWV Jurisdiction - Others
- - - Jurisdictional Line
- █ 752 Marine Drive Development
- █ Future Retail & Entertainment
- █ Future Residential Mixed Use



NEIGHBOURHOOD AREA PLAN

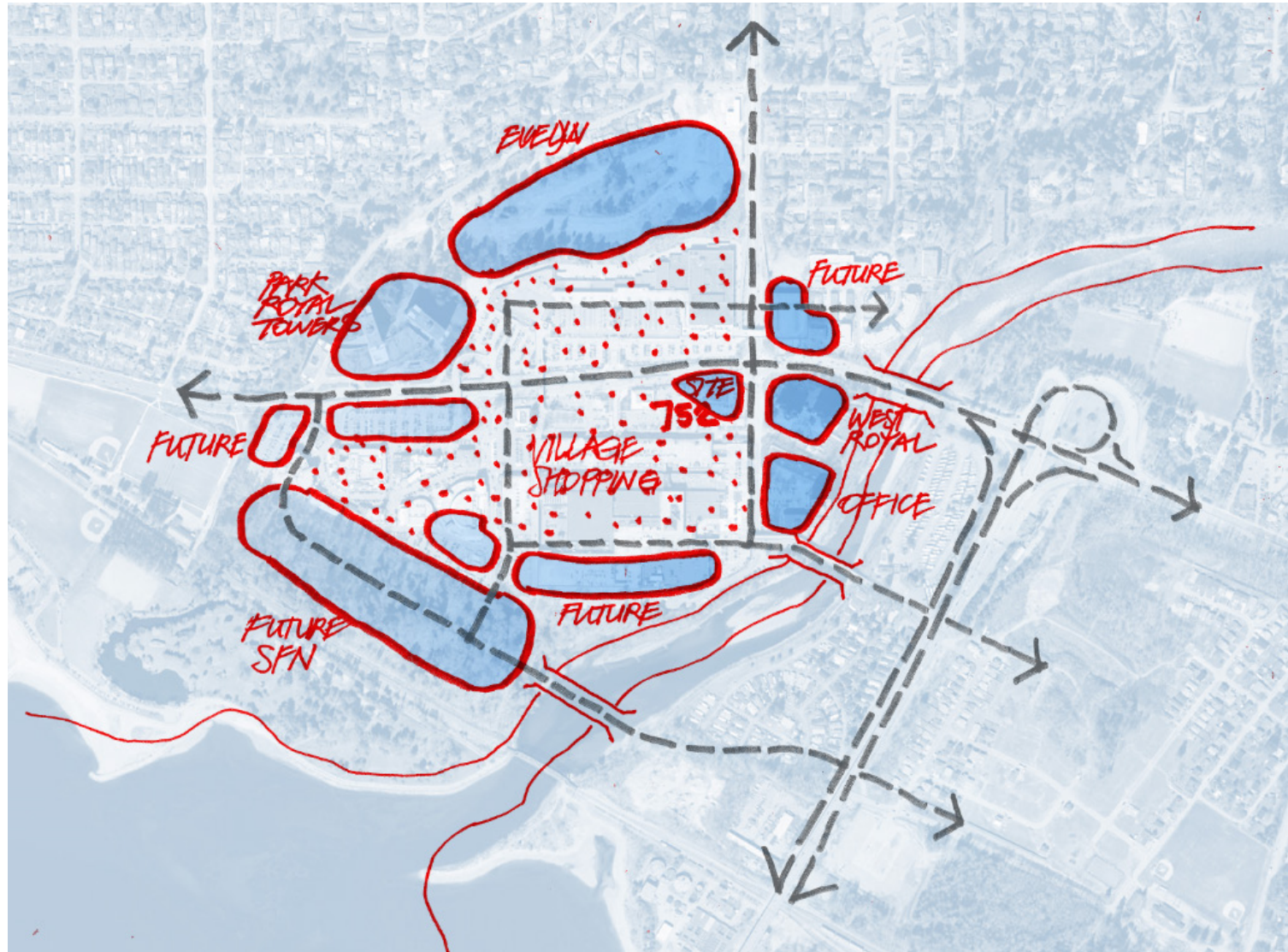
- A. The Village (SN)**
Mixed Land Use
- B. Park Royal South (SN)**
Mixed Land Use
- C. 100 Park Royal / Self Storage (SN)**
Mixed Land Use
- D. Squamish Nation Lease Land (SN)**
Future Residential/Commercial
- E. Park Royal Towers (SN)**
High-Rise Residential Land Use
- F. Park Royal North - Intersection**
Mixed Land Use (SN)
- G. Park Royal North (DWV)**
CD30 Zoning - Commercial & Full Service Gas Station
- H. 752 Marine Drive (DWV)**
C1 Zoning - Commercial & Residential
Application submitted Dec2012 for rezoning to higher density
- I. Park Royal North Parkade (DWV)**
CD30 Zoning - Parking Struct.
- J. Vacant Land - CD30 Zone (DWV)**
CD30 Zoning - Parking
- K. Existing High-Rise Residential (DWV)**
- L. Existing Office (DWV)**
Potential Future Development
- M. Existing Residential (DWV)**
- N. Existing Commercial (DWV)**
- O. Existing Retirement Living (DWV)**
- P. Existing Office (DWV)**
- Q. Evelyn Drive Development**
Residential - Under Construction (DWV)



3.0 URBAN DESIGN ANALYSIS

This section of the application shows the urban design ideas for the proposed Park Royal masterplan:

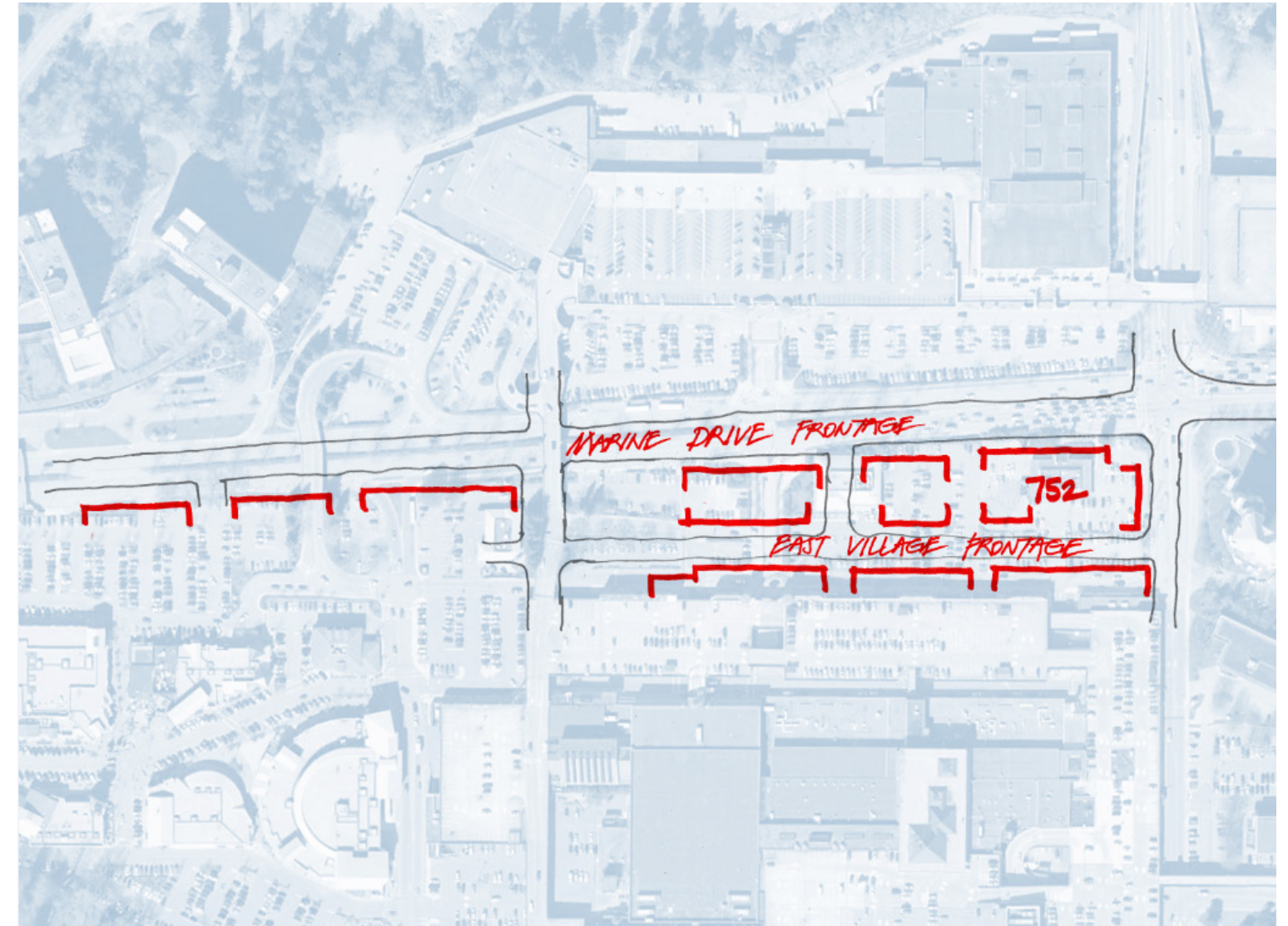
- 3.1 Park Royal as a town centre
- 3.2 Reinforcing the urban street edges
- 3.3 Pedestrian continuity
- 3.4 Network of village open spaces
- 3.5 Site organized on two geometries
- 3.6 An active public meeting place
- 3.7 Master Traffic Plan
- 3.8 Master Bike Plan



3.1 PARK ROYAL AS A TOWN CENTRE

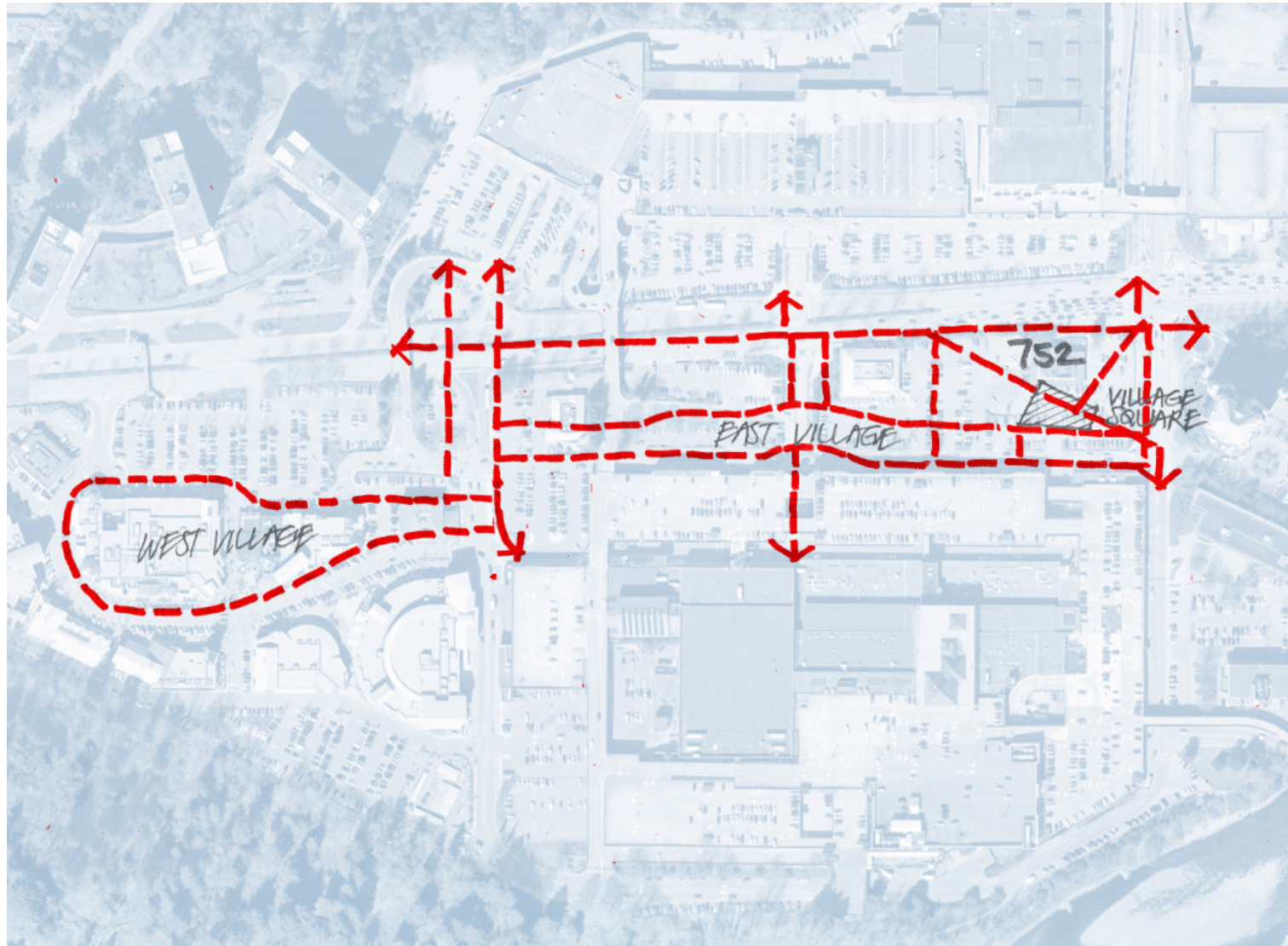
The long-term vision for Park Royal is to allow it to evolve over time to become a more complete community. This means that new residential, office and community activities will be added to both north and south mall sites to round out the mix of uses and reduce the current dominance of commercial retail. The existing pattern of residential development is located on the perimeter edges of the malls. This model is appropriate for the future infill of residential uses where the perimeter is of higher scale and the retail villages occupy the centre.

The proposed site organization is derived from the interplay of two geometries: the orthogonal grid of the Marine Drive/Taylor Way intersection; and, the diagonal line between the jurisdictions of the Squamish First Nation and the District of West Vancouver. This collision of angles has guided the architecture for Gateway Residences that is unique and part of this place.



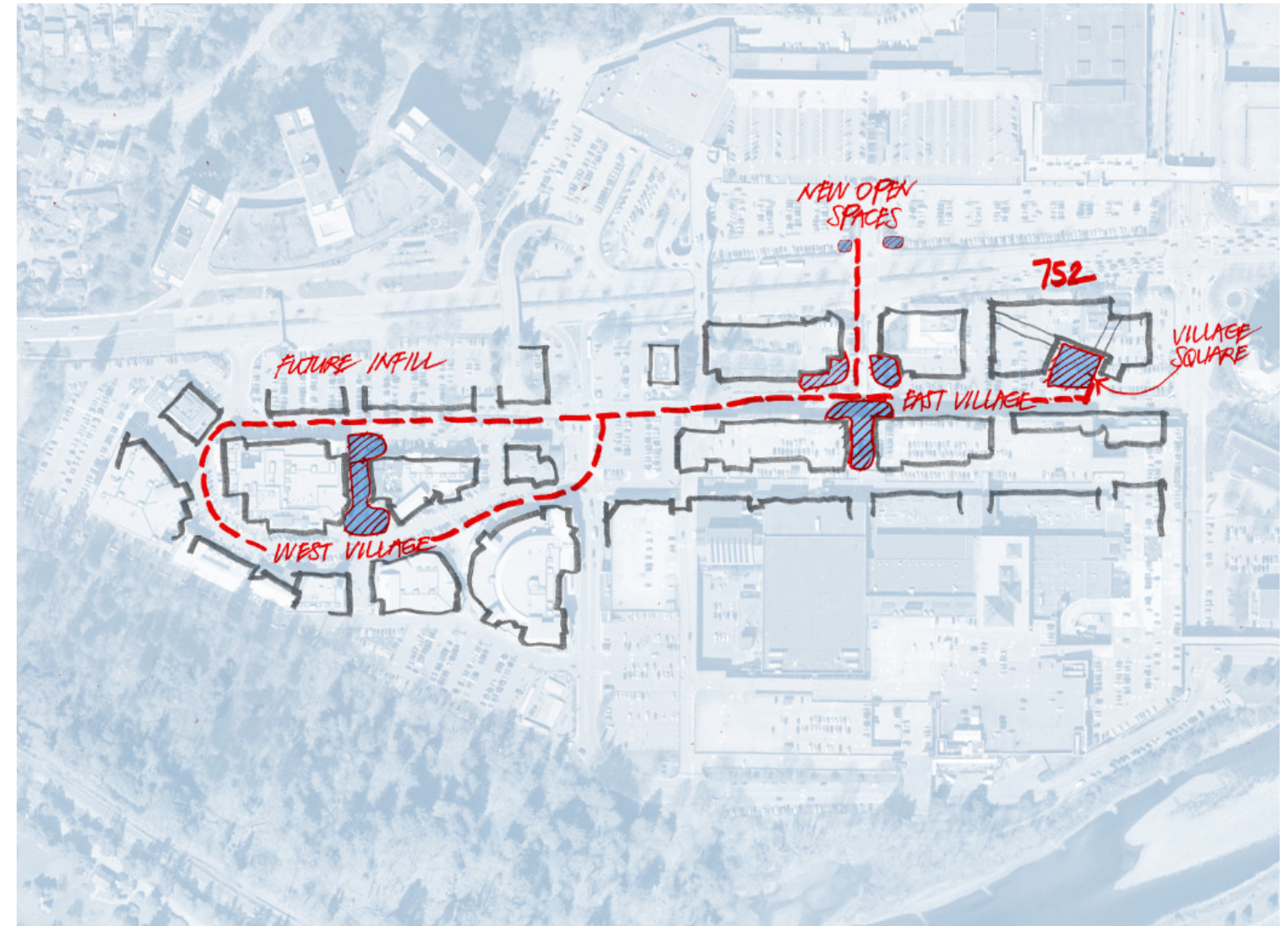
3.2 REINFORCING THE URBAN STREET EDGES

One of the District's planning policies is to create a more urban street interface along Marine Drive. This strategy of defining urban edges is also appropriate along the internal streets that are evolving as part of the fabric of both North and South Malls.



3.3 PEDESTRIAN CONTINUITY

Although the malls are largely car-oriented today there will be an increasing use of alternative means of access and movement over time. Therefore, pedestrian and bicycle linkages form an important piece of the new urbanism of Park Royal.



3.4 NETWORK OF VILLAGE OPEN SPACES

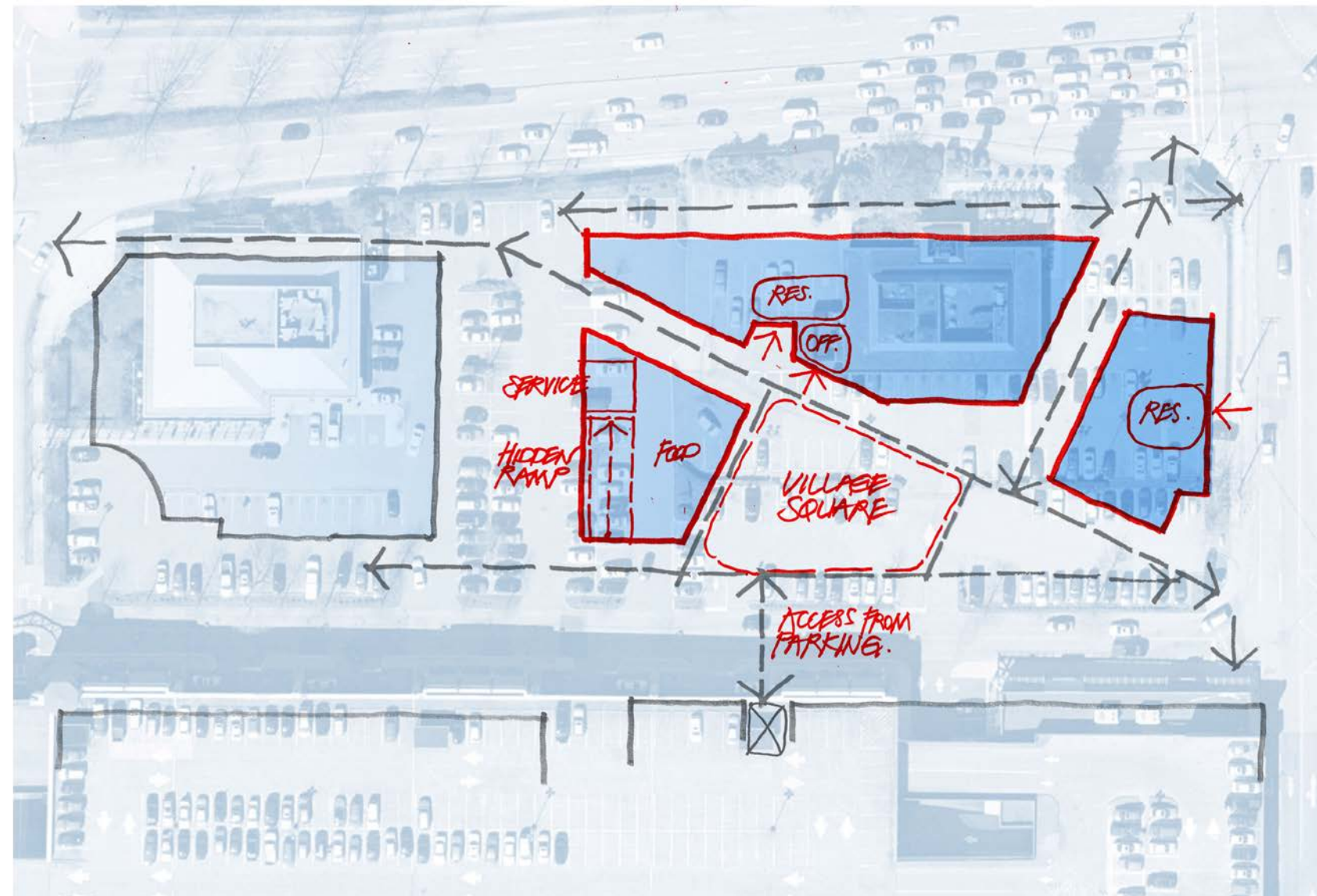
Several small plaza spaces either exist, or are being added to, the South Mall as new retail is developed along Marine Drive. In the future more open space will likely be required to support the outdoor activities of residents living in the community. One such space is being planned for the Gateway Residences project as a "village square".

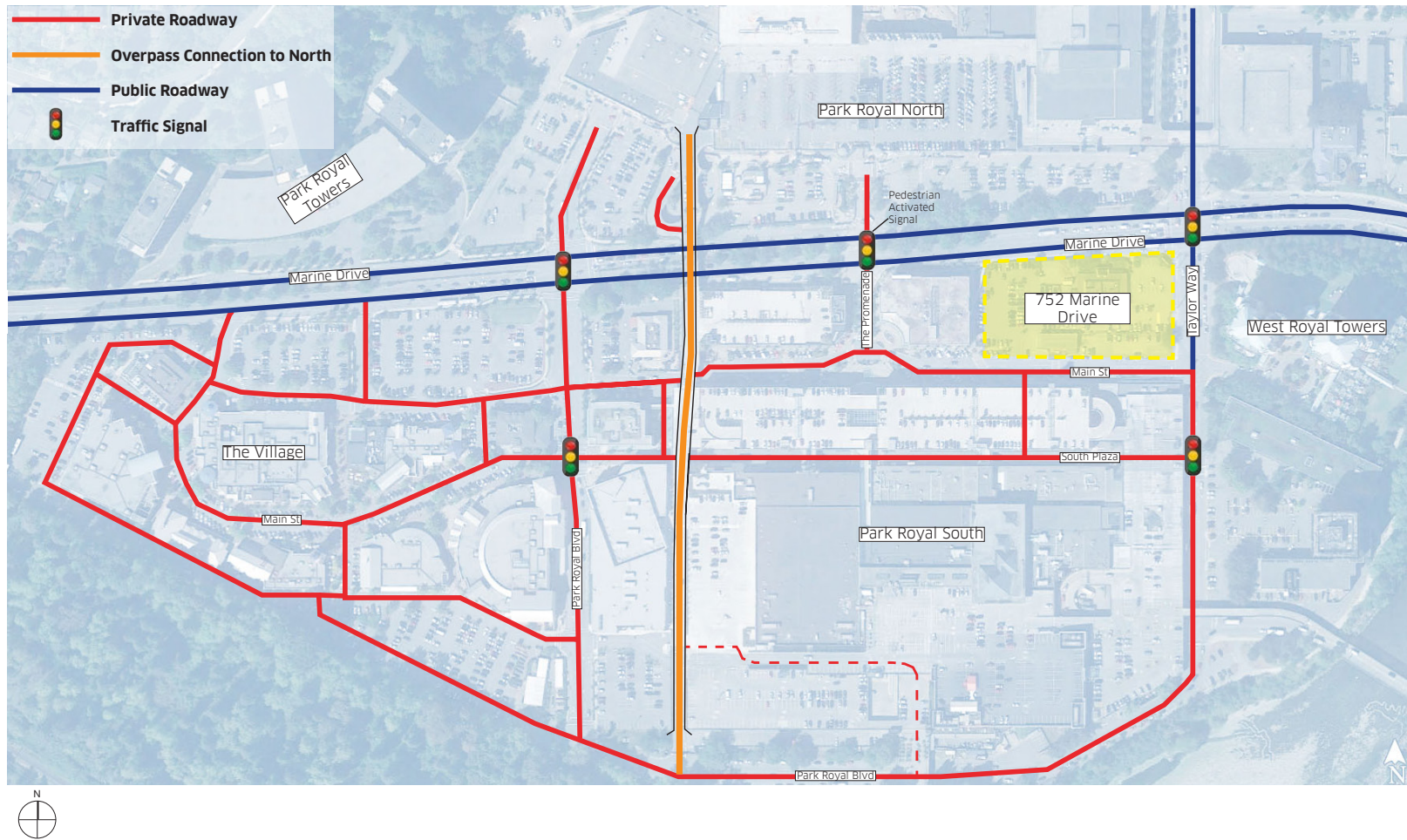
3.5 SITE ORGANIZED ON TWO GEOMETRIES

The proposed site organization is derived from the interplay of two geometries: the orthogonal grid of the Marine Drive/Taylor Way intersection and the diagonal line between the jurisdiction of the Squamish First Nation and the District of West Vancouver. This collision of angles will lead to an architecture that is unique and part of this place.

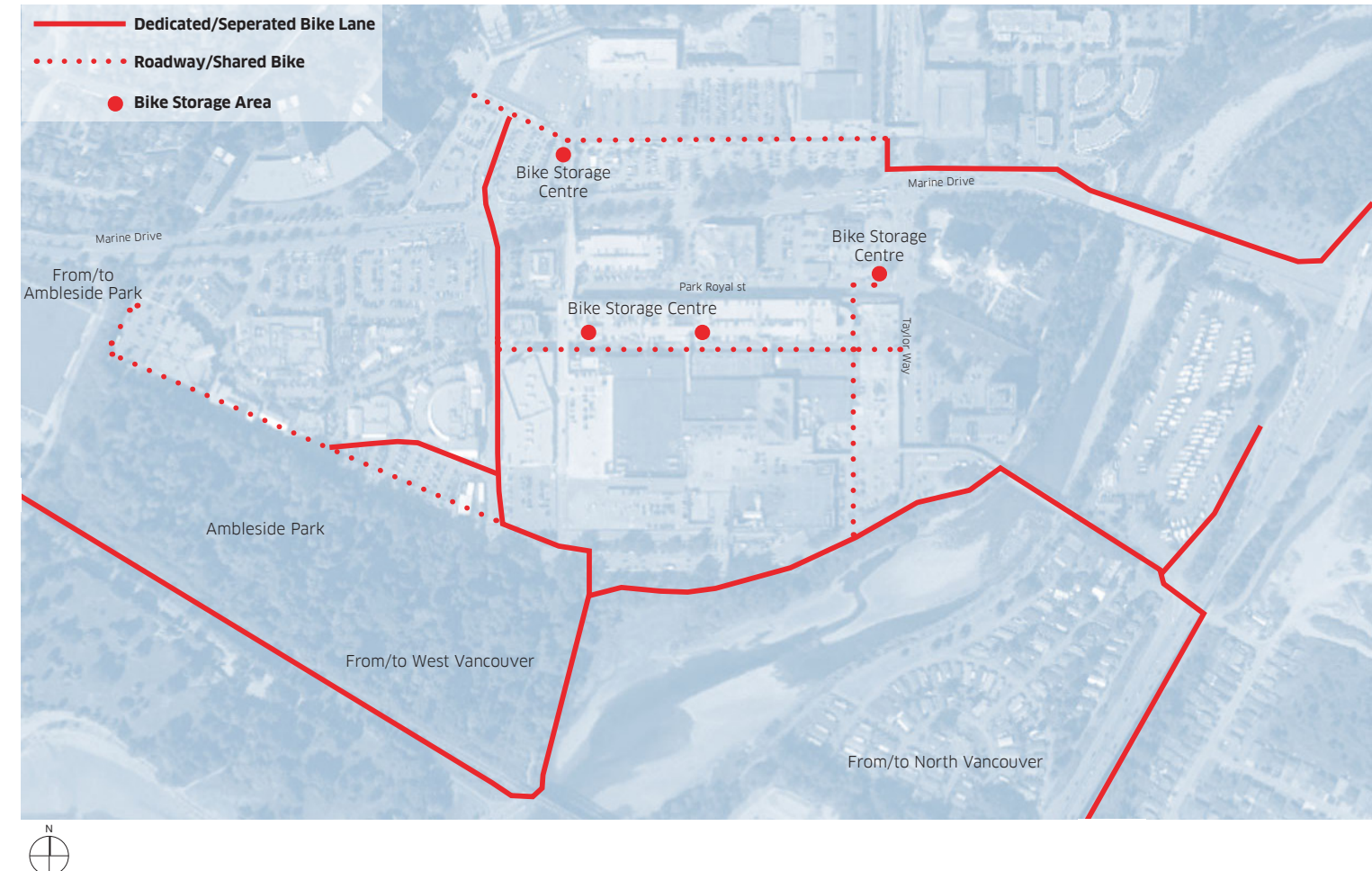
3.6 AN ACTIVE PUBLIC MEETING PLACE

The village square is positioned as an anchor at the east end of the new East Village. It will be a place of coming together for both local residents and the general public, both day and evening. Many varied activities can take place here such as Saturday markets, small concerts, cafe seating, food, truck parking, antique car shows, festivals and many more community and cultural events. The space will be largely hard-surfaced to ensure it is usable during all seasons. And, it will be animated at its edges through the selection of retail tenants that will attract people.





3.7 MASTER TRAFFIC PLAN



3.8 MASTER BIKE PLAN

4.0 DESIGN CONCEPT

This section of the application contains design objectives and comparisons of the previous submission with the new updated submission:

- 4.1 Park Royal Vision
- 4.2 Park Royal Design Principles
- 4.3 The Marine Drive local area plan
- 4.4 Comparison to previous submission
- 4.5 Previous height comparison
- 4.6 Sustainability
- 4.7 Materials



Birds-Eye



Community



Design Excellence



Living



Connectivity



Public Realm



Sustainability

4.1 PARK ROYAL VISION

Park Royal will continue to be a thriving neighborhood – a community within a community where people can shop, live, learn, be entertained and enjoy their leisure time, day and evening. Guided by the goals of the broader community, Park Royal will draw on principles of sustainable neighborhood design to grow and set the foundation for a vibrant and active community into the future.

Park Royal is committed to achieving this Vision of a mixed-use, complete community for the site at 752 Marine Drive. To realize the Vision, six principles will guide future development at Park Royal.

4.2 PARK ROYAL NEIGHBOURHOOD PRINCIPLES

COMMUNITY

Promote a healthy and sustainable community by supporting community amenities and services, housing choice, and a strong local economy.

DESIGN EXCELLENCE

Provide high quality urban design that adds to the village experience, creates a sense of neighborhood, and delivers a sustainable community.

LIVING

Introduce suitable, sustainable and varied housing types in a highly desirable urban setting.

CONNECTIVITY

Improve connections on the site, to West Vancouver, and Squamish Nation lands, including walking, biking, and public transit.

PUBLIC REALM

Extend the outdoor village street experience by expanding retail and improving the public realm for future residents and guests by introducing gathering spaces, art and amenities that highlight First nations culture and that achieve the high standards expected and appreciated by the broader community.

SUSTAINABILITY

Consider sustainable design principles at all stages of project development so that sustainability permeates from construction through occupancy.

4.3 THE MARINE DRIVE LOCAL AREA PLAN

The Gateway Residences project builds on, and reinforces the local area planning work that has taken place over the past year by DWV. Following are the key planning and land use objectives identified in section 1.3 of the local area plan.

Reinforce urban centres

Gateway Residences is a mixed use development that will transform the east end of the Park Royal urban centre with a mix of uses and an engaging public realm.

Connect the dots

Gateway Residences is conceptualized around the movement of people through the site. Marine Drive is designed as a greenway connecting east-west towards Lions Gate centre.

Engage with the natural environment

The Marine Drive streetscape improvements set the stage for stronger public access from Park Royal to the Capilano River natural area.

Views and legibility

Gateway Residences is a “landmark” project that provides a foreground on the west edge of the view corridor south down Taylor Way towards the Lions Gate Bridge.

Respond to context

The context for Gateway Residences includes the malls of Park Royal, adjacent residential projects, and future development in the northeast quadrant of Marine and Taylor. Built form respects the scale of West Royal Towers to the east by terracing down in height from that development.

Connect to park royal

The design is focused on reinforcing connections to places surrounding the site itself including the Marine Drive/Taylor Way intersection, both North and South malls, Marine Drive retail to the west, and Park Royal 100 to the east.

Meet housing objectives

Gateway Residences includes a special needs housing component with 9 units to be managed by VRS, Vancouver Resource Society. As well, a significant percentage of the residential units will be rental tenure.

Secure appropriate amenities

The project includes a child care facility, a public square, destination retail uses, and a streetscape design that will support a variety of program activities.

Minimize trip generation

Parking will be minimized in this development. A comprehensive Transportation Demand Management Plan has been prepared to minimize trip generation from the project. A cycling end of trip facility is planned as well as bike maintenance and rentals. Additional curb lane space has been provided to TransLink for bus movement and stops.

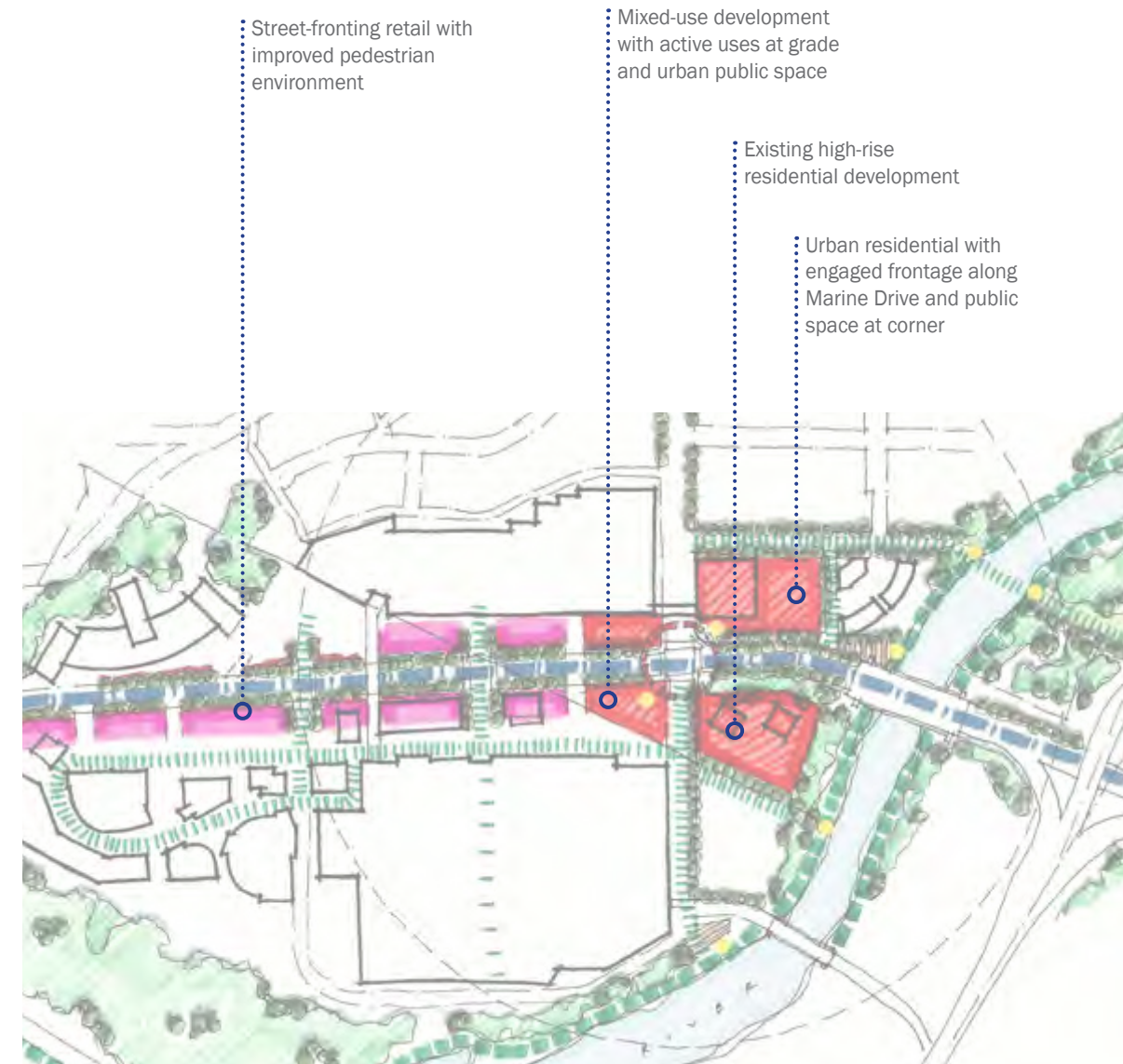


Figure 3.8 from Local Area Plan

BUILT FORM DESIGN GUIDELINES FROM SECTION 3.3.2 OF THE LOCAL AREA PLAN

The DWV's Local Area Plan provides the following direction that the planning for Gateway Residences has followed and complied with:

"The built form for the area south of Marine Drive within DWV's jurisdiction at Gateway Residences should be consistent with the following guidelines:

- Mark the south side of the Marine Drive and Taylor Way intersection with a primary mid-rise building (of 12-14 storeys) that responds to the corner, and a secondary mid-rise form with lower massing that responds to Marine Drive, and creates a varied skyline.
- Building massing and expression to help shape public space including connections to and from Marine Drive, and between the corner and open space that relates to - and benefits from - southern exposure.
- Encourage forms distinct from, but complementary to, existing buildings with the West Royal Towers having the greatest visual presence.
- Orient principal flatiron building along Taylor Way with secondary mid-rise building providing a strong presence on Marine Drive.
- Complete a view and shadowing impact analyses as part of development review.
- Reinforce Marine Drive axis and respond to the Burrard Inlet viewshed with particular consideration given to the view of the Lions Gate Bridge from the intersection of Taylor Way and Keith Road."

PUBLIC REALM GUIDELINES FROM SECTION 3.3.3 OF THE LOCAL AREA PLAN

The design for Gateway Residences has complied with the direction for the public realm as provided for in the DWV's Local Area Plan:

- A public plaza of significant size, located on the interior of the site and oriented to take advantage of southern sun exposure, with active uses at its edge.
- Public connection that visually and physically connects the northeast corner of the site to the plaza, and to public spaces further across the intersection, to recognize the prominence the corner has on the public realm.
- Generous sidewalks that reflect the urban character of Marine Drive and provide space for street trees and other public realm amenities to make a comfortable environment for pedestrians and transit users.
- Public art in locations that reflects its importance and contributes to the sense of place.

GATEWAY RESIDENCE DESIGN PRINCIPLES

The Gateway Residences development has been fashioned around a set of urban design principles and guidelines that have both informed the Marine Drive Local Area Plan and responded to key elements within the plan. These principles include:

- A legible cluster of higher buildings marking the urban centre
- The context is enhanced through a comprehensive public urban realm
- Both TOD and TDM strategies are employed in the program for Gateway Residences
- Access to the Capilano River is enhanced through a greenway approach on Marine Drive
- Building heights are determined by, and transition in scale, from the adjacent development
- The plan for Gateway Residences is generated from pedestrian movement to adjacent areas
- Gateway Residences strengthens the gateway into West Vancouver
- The development is a complete community through its choice of land uses
- A new public square is planned for the citizens of West Vancouver
- The sustainability target is LEED Gold equivalency.

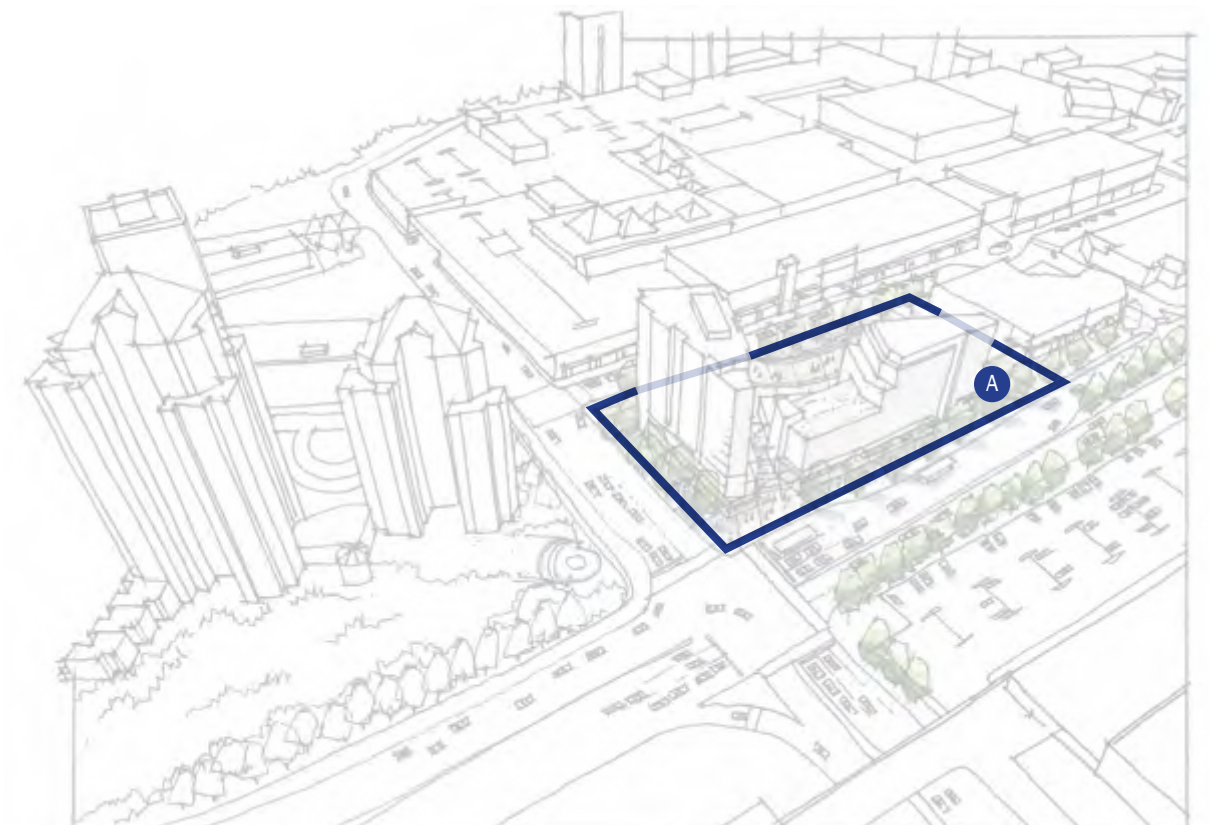


Figure 3.12 from Local Area Plan

4.4 COMPARISON TO PREVIOUS SUBMISSION



View from South West



View from South East



View from North East



View from North West

PREVIOUS DESIGN SUBMISSION

Earlier designs for Gateway Residences were reviewed on four occasions by Planning Staff and the Design Review Committee. The DRC approved the design of the previous application with the qualification that they had concerns about both the height and density of the development.



View from South West



View from South East



View from North East



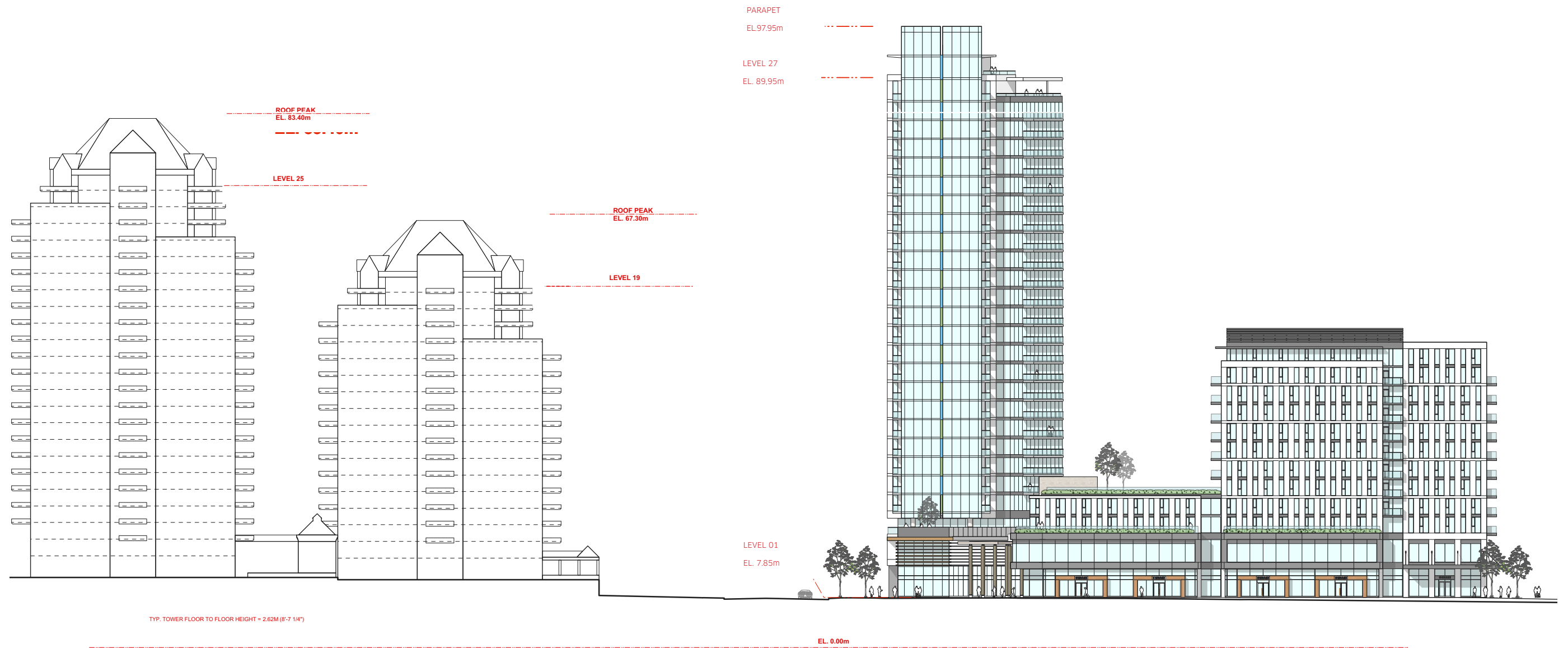
View from North West

REVISED DESIGN STRATEGY

The revised design is in compliance with the adopted Marine Drive Local Area Plan and addresses the DRC concerns with the following additional highlights:

- 1 - The revised design for Gateway Residences builds on a very strong urban design idea. The architecture is derived from the two geometries that intersect at this site and, in turn, generate a unique and distinct form of development.
- 2 - Commercial uses extend along Marine Drive as far as can be accommodated, to better relate with the new retail to the west.
- 3 - The glass canopy has been removed from the galleria allowing for a more distinct separation between the two podiums.
- 4 - The Village Square has been reshaped, and will continue to serve as an anchor at the east end of the East Village.
- 5 - Retail and food-serving uses surround the new square to animate its edges.
- 6 - The ramp to underground parking has been incorporated within a retail building to conceal it from the public realm.
- 7 - An alternate ramp location is designated to access the site from Taylor Way in the unlikely event that the access across First Nation's land is relinquished.
- 8 - Most importantly, building heights are dramatically reduced with the east tower at 14 storeys and the west tower at 11 storeys in height. This adjustment allows both towers to take on more of a slab-like form, more street-related and, therefore, more urban.
- 9 - As a result of the lowering of building height the density is substantially reduced.

4.5 HEIGHT COMPARISON



PREVIOUS MARINE DRIVE ELEVATION

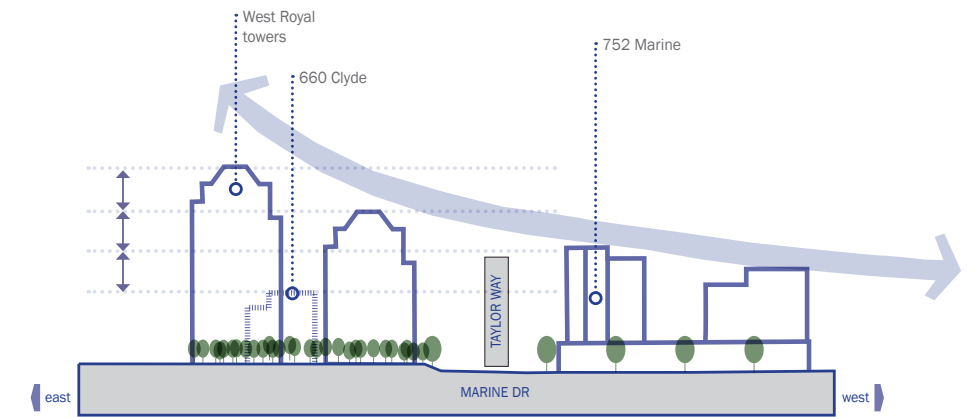
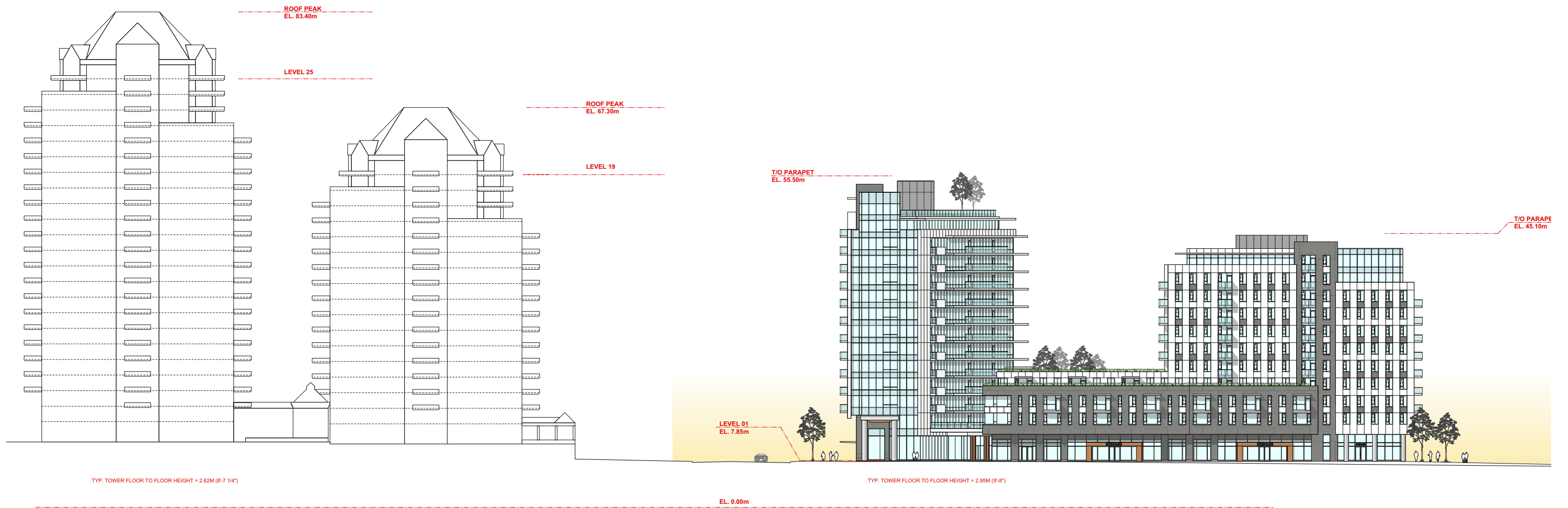


Figure 3.11 FROM THE LOCAL AREA PLAN



CURRENT MARINE DRIVE ELEVATION

4.6 SUSTAINABILITY



SUSTAINABILITY STRATEGY

The applicant and design team are committed to incorporating green building principles into the design and long-term operations of the proposed residential development at 752 Marine Drive. The project will be registered with the Canada Green Building Council's LEED v4 for New Construction buildings rating system and will target LEED Gold level design. The following list and preliminary LEED Scorecard highlights prominent sustainable features which will achieve 62 points this quantity represents the minimum required to exceed threshold for LEED Gold (60 points) and the addition of 2 buffer points demonstrates a commitment to exceed the minimum requirements for Gold in lieu of LEED Gold certification.

This residential development will become a showcase project for energy performance and environmentally responsible building construction though:

LOCATION AND TRANSPORTATION

The project is located on a previously developed infill site, avoiding sensitive habitats and taking advantage of existing infrastructure and surrounding amenities which promote a walkable community. The development's design densifies the existing site to maximize land usage. The site is located within a short walking distance both Taylor Way and directly adjacent to Marine Drive. This location provides optimum connectivity to pedestrian, bicycle and public transit options. The connection Marine Drive offers immediate connection to over 10 different bus lines within 400m of the site. By locating along these transit corridors combined with secured storage for bicycles and bicycle networks along Capilano Pacific and Spirit bicycle trails affords a distinct advantage for carless commuters.

SUSTAINABLE SITES

To aid in the enrichment of the District of West Vancouver's visual vegetated space, planting has been proposed throughout the site including portions of the building's roof. Vegetation will be limited to the ground levels and some roof spaces to support the local ecology amenity spaces. Vegetation on the ground level will be done to enhance the built environment and generate more of an engaging public space at the ground level. Vegetation will help to develop a comfortable space for occupants to enjoy the outdoors and access peaceful outdoor space in a more densely developed area of West Vancouver. Where opportunities exist on the ground and roof level, planting will be selected to support local native ecology, including pollinators, by providing additional variety and access to vegetation within the dense urban area.

Material density and solar reflectivity will be considered for hardscapes finishes to ensure the project minimizes the urban heat island effect in West Vancouver.

An erosion and sedimentation control plan will be implemented to minimize erosion and sedimentation during demolition, site preparation and throughout construction. Best practices will be implemented during construction to optimize air quality for site workers and the surrounding area, and provide a clean and healthy building for future residents.

WATER USE EFFICIENCY

The project will address water management through several interrelated design approaches. Firstly, by low flow plumbing fixtures, the project will be targeting a +40% reduction in the use of potable water through selection of plumbing fixtures.

Secondly, the project will target increased cooling tower water efficiency as a means of reducing the potable water required for the building's cooling system. This will be done by selecting systems which maximize the number of cooling cycles achieved before potable water make-up is required.

Irrigation will also be a special focus of the design team and irrigation reduction measures will be utilised wherever feasible. The project team hopes to demonstrate a 50% reduction in potable water use reduction through the water conscious selection of planting and irrigation systems.

ENERGY EFFICIENCY

The 752 Marine Drive project is committed to meeting the District of West Vancouver's energy requirements. It is our understanding that the District had notified the province of British Columbia that it has started to consult on the BC Energy Step Code. The District has not yet officially notified the province on its final decision; however, early indication suggests that Step 3 will likely be applicable to this project. LEED certification may or may not be pursued for this project. To meet the stringent energy requirements, the multi-disciplinary design team is committed to incorporate many sustainable features into the building design. The building thermal envelope will be optimized to maximize energy savings and occupant comfort. The lighting design will utilize highly efficient fixtures to reduce electricity consumption and excessive internal heat gains. The mechanical system will feature high performance heating and/or cooling systems which may include heat pump technology. The ventilation system, which brings fresh air to the building, will likely have heat recovery which extracts and recovers waste heat from the exhaust air. The combination of these energy conservation measures allow the project to meet the District of West Vancouver's energy requirements. The design will be further evaluated and optimized during design development and construction documentation stages to ensure it is on track to meeting the District's energy requirements. The design will then be verified based on building permit drawings to ensure compliance and a detailed energy modeling report will be submitted as part of the BP package.

BUILDING MATERIALS

Through the use of a building lifecycle impact assessment and innovative material product disclosures, the project will aim to demonstrate building lifecycle impact reductions in overall Co2 emissions, depletion of non-renewable energy resources, eutrophication and other global impact categories. Materials will be selected to provide industry regulated ingredient declarations, and identify the environmental impacts associated with each material. Where feasible, materials will be selected to have 3rd party verified certification like GreenScreen v1.2, Cradle to Cradle, or REACH. Construction waste management will be an integral part of the building process, firstly through source minimization, smart product selection, packaging and transport. Recycled content and regionally sourced materials will be preferred through the selection process, focusing on steel, concrete and glass components, reducing the impact of extracting of virgin resources. These materials retain their high value in the recycling chain, so once the service life of the proposed building comes to an end, re-use and integration into new building materials is a viable option. Furthermore, waste generated on site during construction will be addressed through a comprehensive waste management plan, detailing recycling facilities and documenting the diversion of standard debris from landfill.

INDOOR ENVIRONMENT

Ventilation air will be delivered to each zone within the floor by means of either the suite's Heat Recovery Ventilators or Fancoils. Outdoor air ventilation will be implemented and adhere to ASHRAE 62.1-2010 to reduce occupant exposure to indoor pollutants by ventilating with outdoor air. To maintain ongoing compliance with the ASHRAE 62.1-2010 ventilation standard, fancoils and or HRVs will provide feedback to the occupants as it relates to the supply of their ventilation.

To further improve the indoor air quality of the building, interior finishes and coatings will be specially selected to limit the quantities of harmful volatile organic compounds (VOCs) which would be off-gassed after installation. The selection of low emitting materials will also include the project's insulation in addition of the traditional scope of paints, sealants, flooring and formaldehyde free woods. Prior to occupancy, suites will be tested for the VOC emissions to ensure occupant's exposure to harmful emissions is minimized when they first move into their homes.

CONCLUSION

Building structure, window locations, glazing selection, building proportions, ventilation systems and natural elements will all be considered for their impact on the environment and wellness. Future building occupants will benefit from 752 Marine Drive's mandate to provide a holistic approach to addressing the requirements of the District of West Vancouver's LEED Gold level design and Step Code- Step 3 energy performance. This was done to demonstrate the project's commitment to sustainability and performance for the life of the building. A LEED Gold level checklist has also been provided to identify the specific measures proposed for LEED Gold level design.



752 Marine: Preliminary GOLD-level Checklist
LEED v4 BD+C: NEW CONSTRUCTION

Date Issued:

USGBC Project No.:

2018-01-17

YES	Maybe	NO
++	+	-
62	26	7

Project Total

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

1			
1			

Integrative Process Possible Points: 1

IPc1 Integrative Process

14	1		16
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Location + Transportation Possible Points: 16

				16
1				
2				
5				
5				
1				
			1	
		1		

- LTc1 LEED for Neighborhood Development Location
- LTc2 Sensitive Land Protection
- LTc3 High Priority Site
- LTc4 Surrounding Density and Diverse Uses
- LTc5 Access to Quality Transit
- LTc6 Bicycle Facilities
- LTc7 Reduced Parking Footprint
- LTc8 Green Vehicles

3	3	2	1
---	---	---	---

Sustainable Sites Possible Points: 10

Y			
1			
1		1	
		1	
			2
1	1		
		1	

- SSp1 Construction Activity Pollution Prevention
- SSc1 Site Assessment
- SSc2 Site Development: Protect or Restore Habitat
- SSc3 Open Space
- SSc4 Rainwater Management
- SSc5 Heat Island Reduction
- SSc6 Light Pollution Reduction

7	3	1	
---	---	---	--

Water Efficiency Possible Points: 11

Y			
Y			
Y			
1		1	
4	2		
1	1		
1			

- WEp1 Outdoor Water Use Reduction: 30%
- WEp2 Indoor Water Use Reduction: 20%
- WEp3 Building-Level Water Metering
- WEc1 Outdoor Water Use Reduction
- WEc2 Indoor Water Use Reduction
- WEc3 Cooling Tower Water Use
- WEc4 Water Metering

11	9		13
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Energy + Atmosphere Possible Points: 33

Y			
Y			
Y			
Y			
6			
3	7		8
1			
			2
			3
1			
		2	

- EAp1 Fundamental Commissioning and Verification
- EAp2 Minimum Energy Performance
- EAp3 Building-Level Energy Metering
- EAp4 Fundamental Refrigerant Management
- EAc1 Enhanced Commissioning
- EAc2 Optimize Energy Performance:
- EAc3 Advanced Energy Metering
- EAc4 Demand Response
- EAc5 Renewable Energy Production
- EAc6 Enhanced Refrigerant Management
- EAc7 Green Power and Carbon Offsets

8	3	3	
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Materials + Resources Possible Points: 13

Y			
Y			
3		3	
1	1		
1	1		
1	1		
2			

- MRp1 Storage & Collection of Recyclables
- MRp2 Construction and Demolition Waste Management Planning
- MRc1 Building Life-Cycle Impact Reduction
- MRc2 Building Product Disclosure & Optimization: Environmental Product Declarations
- MRc3 Building Product Disclosure & Optimization: Sourcing of Raw Materials
- MRc4 Building Product Disclosure & Optimization: Material Ingredients
- MRc5 Construction & Demolition Waste Management

9	6	1	
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Indoor Environmental Quality Possible Points: 16

Y			
Y			
1	1		
3			
1			
2			
1			
1	1		
	2	1	
	1		
	1		

- IEOp1 Minimum IAQ Performance
- IEOp2 Environmental Tobacco Smoke (ETS) Control
- IEOc1 Enhanced Air Quality Strategies
- IEOc2 Low-Emitting Materials
- IEOc3 Construction IAQ Management Plan
- IEOc4 Indoor Air Quality Assessment
- IEOc5 Thermal Comfort
- IEOc6 Interior Lighting
- IEOc7 Daylight
- IEOc8 Quality Views
- IEOc9 Acoustic Performance

6			
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Innovation + Design Process Possible Points: 6

1			
1			
1			
1			
1			
1			

- IDc1.1 Innovation: Occupant Comfort Survey
- IDc1.2 Innovation: Purchasing Plan - Lamps
- IDc1.3 Innovation Pilot: LEED O+M Starter Kit
- IDc1.4 Exemplary Performance: Access to Quality Transit
- IDc1.5 Exemplary Performance: Construction Waste Management
- IDc2 LEED™ Accredited Professional

3	1		
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Regional Priority Credits Possible Points: 4

1			
1			
1			
		1	

- RPC1.1 Regional Priority: Indoor Water Use Reduction (4 pts)
- RPC1.2 Regional Priority: Enhanced Commissioning (5 pts)
- RPC1.3 Regional Priority: Building Life-Cycle Impact Reduction (3 pts)
- RPC1.4 Regional Priority: Outdoor Water Use Reduction (2 pts)

4.7 MATERIALS



WOOD SOFFIT



VERTICAL FINS



GRAY ALUMINIUM GLAZING SYSTEM



GRAY BRICK



CEMENTITIOUS PANEL



GRAY METAL PANEL

5.0 LANDSCAPE & PUBLIC REALM DESIGN

- 5.1 PREFACE
- 5.2 FORMING SPACES
- 5.3 BORDERING CONDITIONS
- 5.4 EXPLORING SPACE
- 5.5 COLOURED SITE PLAN
- 5.6 PLAZA ACTIVITY RELATIONSHIP
- 5.7 PLAZA
- 5.8 MATERIALITY
- 5.9 THE CORNERS
- 5.10 LIGHT AND WATER
- 5.11 THE LIGHT COLUMNS
- 5.12 PUBLIC ART AND FOUNTAIN MAP
- 5.13 A TALE OF 2 CULTURES

5.1 PREFACE

The public realm for the Gateway Residences plays an important role in the Park Royal Neighbourhood Vision and the broader community it serves. Situated at the perceived “gateway” to West Vancouver and connected to the Squamish Nation lands the public realm is an inviting, welcoming and respectful of the jurisdictional and cultural values of both communities.

The guiding principles for the Park Royal Neighbourhood Vision emphasize the role the public realm plays stating “*Extend the outdoor village street experience by expanding retail and improving the public realm for future residents and guests by introducing gathering spaces, art and amenities that highlight the Squamish Nations culture and the high standards expected and appreciated by the broader community.*” The Marine Drive Local Area Plan and Design Guidelines calls for the Gateway to be expressed in the following manner, “*Gateways mark the transition from one distinct area to another, and help residents and visitors know when they have arrived at a particular destination. Features such as architecturally significant buildings, public gathering spaces, streetscape treatments, landscaping, signage, and public art all help to mark gateways.*”

The Public Realm and Open Space Guidelines for 752 Marine Drive should be consistent with the following guidelines:

- A public plaza of significant size, located on the interior of the site and oriented to take advantage of southern sun exposure, with active uses at its edge.
 - Public connection that visually and physically connects the northeast corner of the site to the plaza, and to public spaces further across the intersection, to recognize the prominence the corner has on the public realm.
 - Generous sidewalks that reflect the urban character of Marine Drive and provide space for street trees and other public realm amenities to make a comfortable environment for pedestrians and transit users.
 - Public art in locations that reflects its importance and contributes to the sense of place.
- “In addition to the convergence of the foregoing public realm expressions, the design considers existing and future influences. This includes factors like the urbanization of the east Main Street and its connection to residential living ; lifestyles that encourage alternate transportation and desire for walkable community; the continued evolution of gathering spaces and public art on the Park Royal property and; the complimentary and seamless transitions between the multiple precincts and jurisdictions that are Park Royal.”

The Public Realm and Landscape Design embraces and reflects these objectives. The following subsections focus on the plaza as the starting point and demonstrate how water, lighting, public art and landscaping not only weave a strong public realm tapestry for the Gateway Residences but connect on to Park Royal and continuing evolution as neighbourhood.

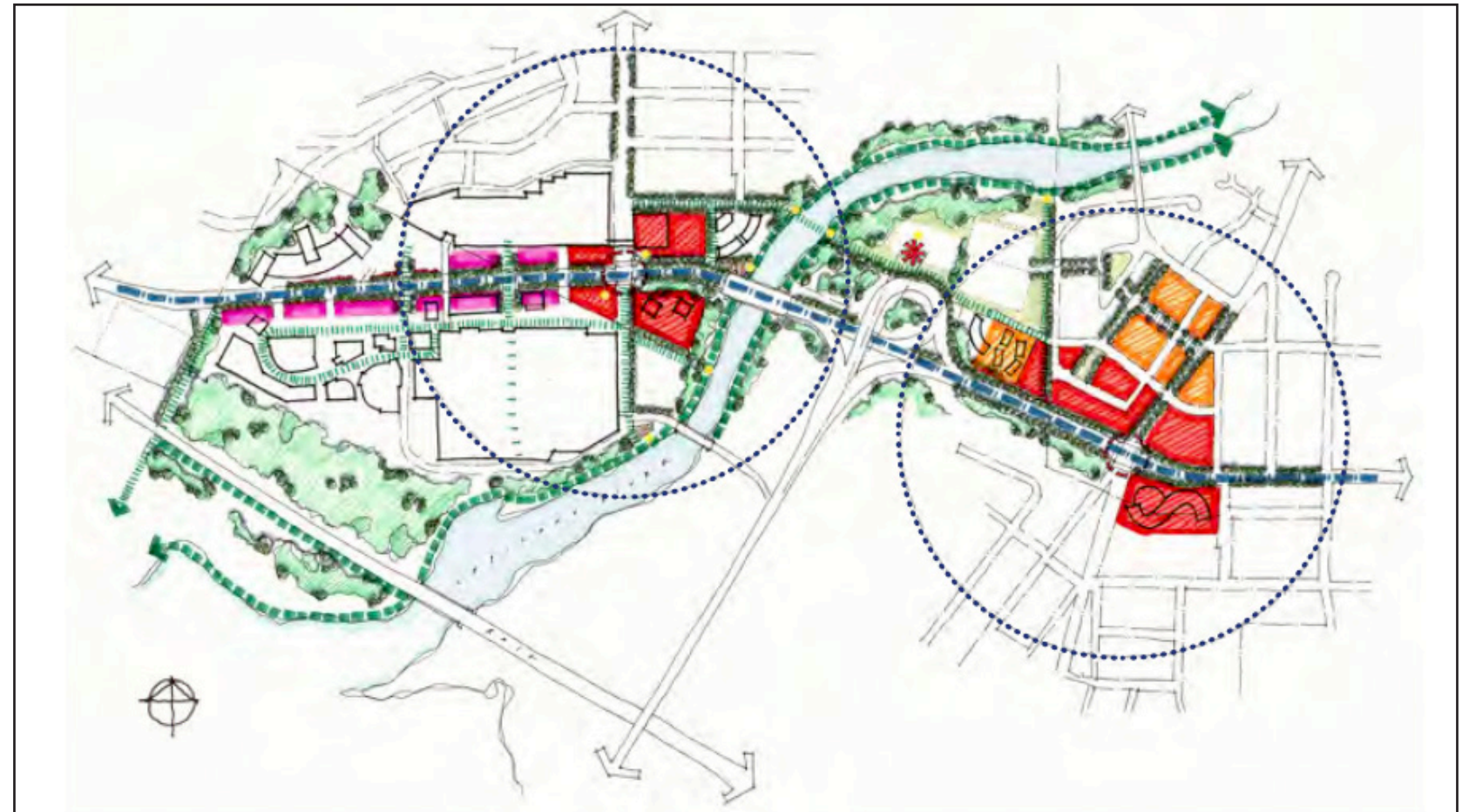


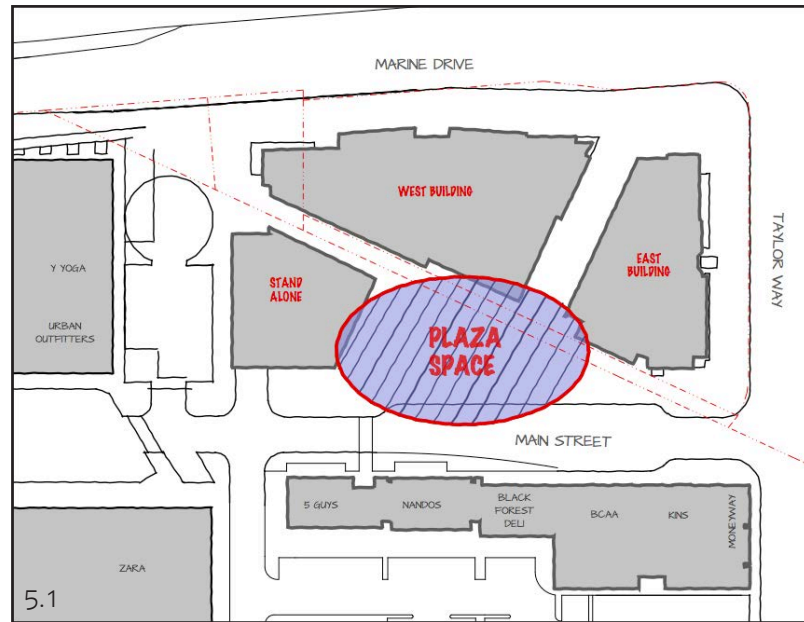
Figure 2.4 - Land Use Concept illustrating two urban centres linked by open space and green connections, and supported by transit



Figure 2.4 from The Marine Drive Local Area Plan and Design Guidelines

5.2 FORMING SPACES

The development of the public realm plan for the Gateway Residences has many factors acting to create the final design. From the Marine Drive Local Area Plan to the overall Park Royal design guidelines; from the urbanization of the east Main Street to the addition of residential living; from the focus of lifestyles that encourage alternate transportation to the need for a gathering space in the Park Royal precinct; the design of the public realm comes from a variety of influences.

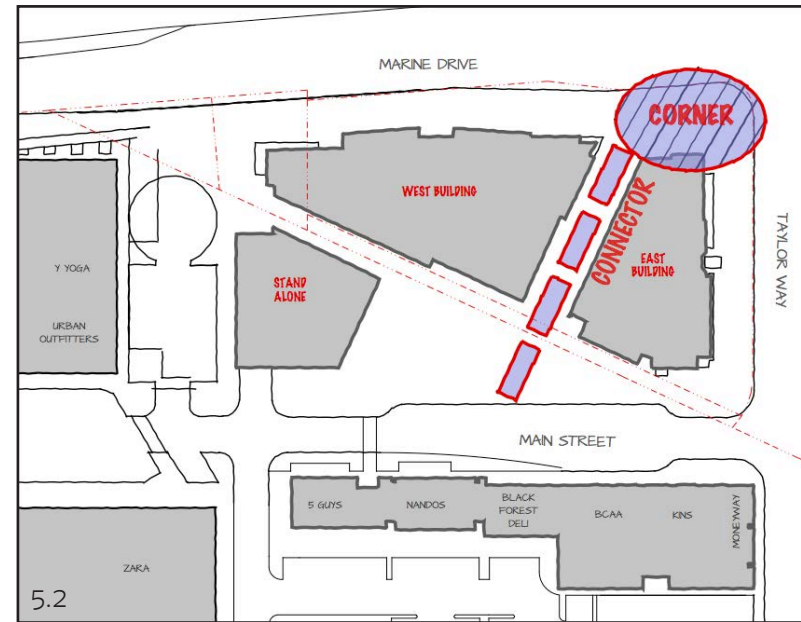


MARINE DRIVE LOCAL AREA PLAN AND DESIGN GUIDELINES: 752 MARINE DRIVE - PUBLIC REALM

- A PUBLIC PLAZA OF SIGNIFICANT SIZE, LOCATED ON THE INTERIOR OF THE SITE AND ORIENTED TO TAKE ADVANTAGE OF SOUTHERN SUN EXPOSURE, WITH ACTIVE USES AT ITS EDGE.

THE PLAZA

Given the size and prominent location, the plaza is the strongest element in the public realm plan for the Gateway Residences. As well, this size provides a welcoming space at the east end of the property complimenting the other established public gathering spaces at Park Royal. The “village” experience at Park Royal, is reflected in The Village at Park Royal (circa 2004) and the east Main Street (circa 2013) commonly referred to as the east village and most recently the externalization of Park Royal North (circa 2017). Numerous small gather spaces, beautiful public art and fountain locations form part of these areas. These experiences begin at the plaza outside of Whole Foods, continue down to the water wall and plaza outside of Simons, then connect to the Spindle Whorl at the breezeway to Park Royal South and the Thunderbird at the pedestrian signalized intersection to Park Royal North and continue to the dancing fountain at the east Main Street plaza. Each location allows for sitting, meeting, gathering and in the case of the Whole Foods Plaza, dining. The “gateway” town square” compliments these smaller installations bringing the largest public plaza as an outdoor community amenity. Outdoor concerts, events and other performances are easily accommodated in this new space.

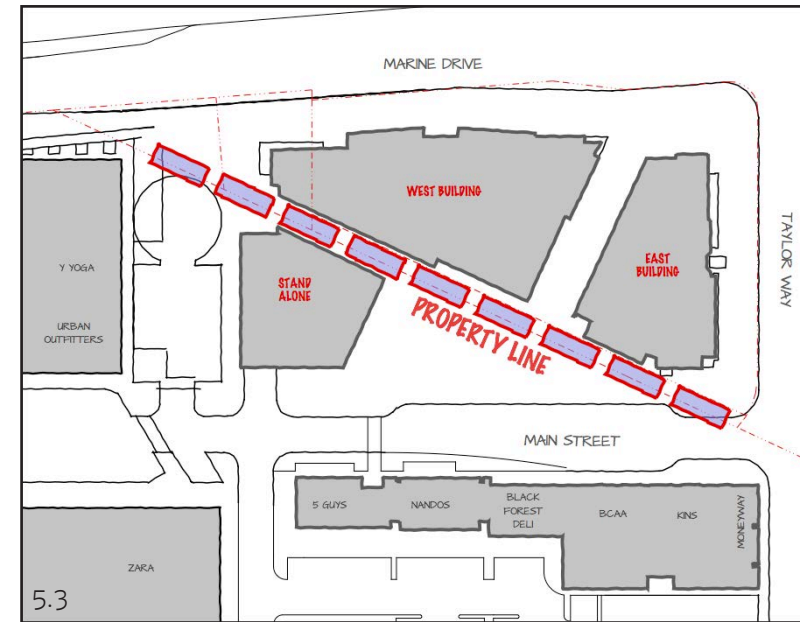


MARINE DRIVE LOCAL AREA PLAN AND DESIGN GUIDELINES: 752 MARINE DRIVE - PUBLIC REALM

- PUBLIC CONNECTION THAT VISUALLY AND PHYSICALLY CONNECTS THE NORTHEAST CORNER OF THE SITE TO THE PLAZA, AND TO PUBLIC SPACES FURTHER ACROSS THE INTERSECTION, TO RECOGNIZE THE PROMINENCE THE CORNER HAS ON THE PUBLIC REALM.

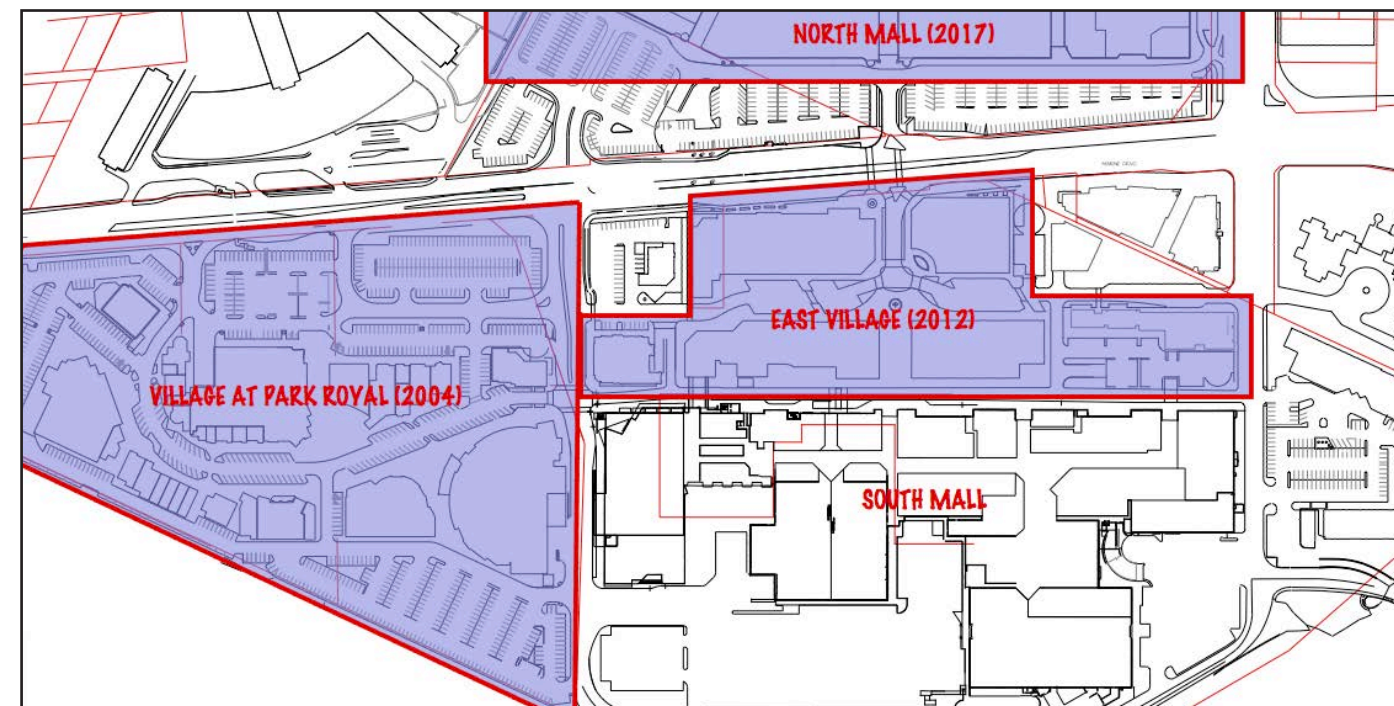
THE CORNER AND THE CONNECTION

The south west corner of Taylor Way and Marine Drive is one of the most prominent locations in West Vancouver. By creating a Galleria between the east and west buildings on the Gateway Residences we have the opportunity to respond to a pedestrian desire line as well as giving a powerful visual connection from Marine Drive to the plaza and from the plaza to Marine Drive and across to the development beyond.



THE EAST WEST PROPERTY LINE

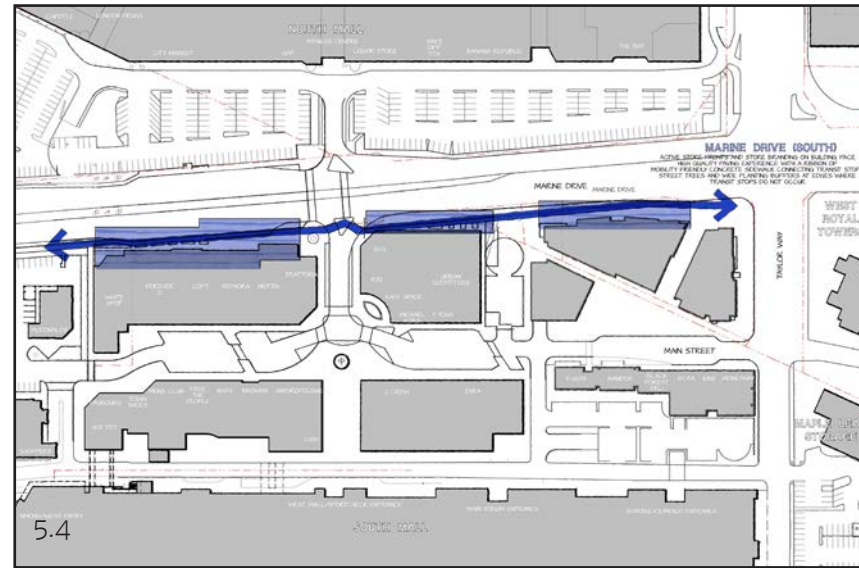
Running between the site from Marine Drive in the west down to Main Street in the east is a property line separating West Vancouver from the Squamish Nation. This dividing line creates a strong physical element on the site, especially when building set-backs are taken into account.



PARK ROYAL EXTERNAL MALL IMPROVEMENTS

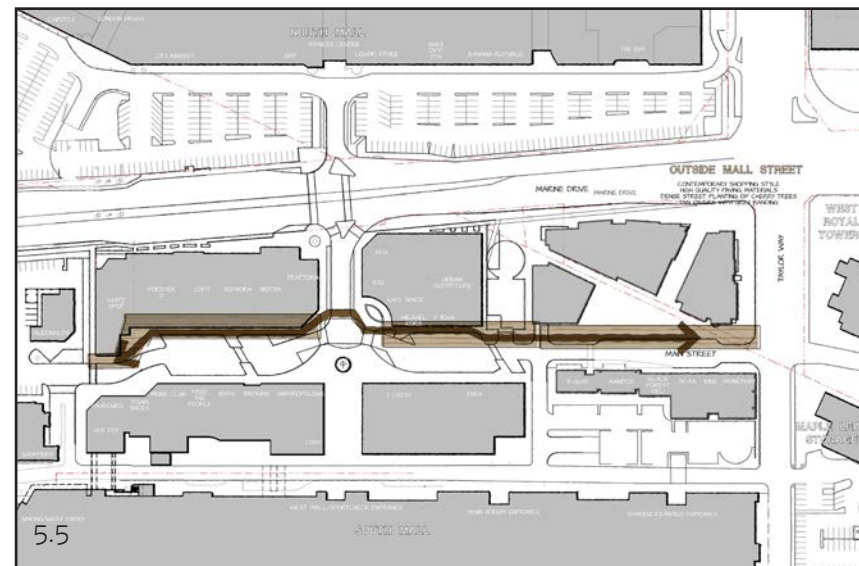
5.3 BORDERING CONDITIONS

The Gateway Residences is the final piece to fit in the east Main Street village. As such it borders on several very significant areas, each with its own unique character. The addition of residential in this area is a key component in the Park Royal Neighbourhood vision and it is directly across Taylor Way from the existing residential West Royal development that are to the east. To the north is Marine Drive and to the south is Main Street.



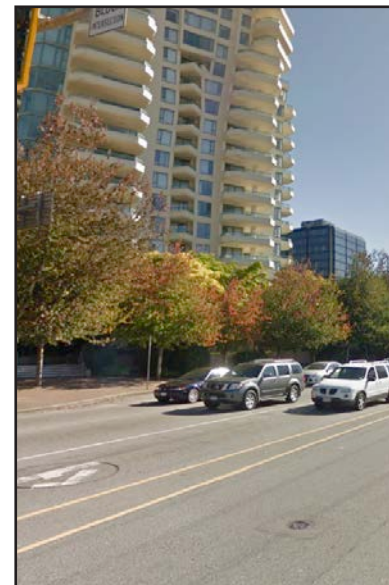
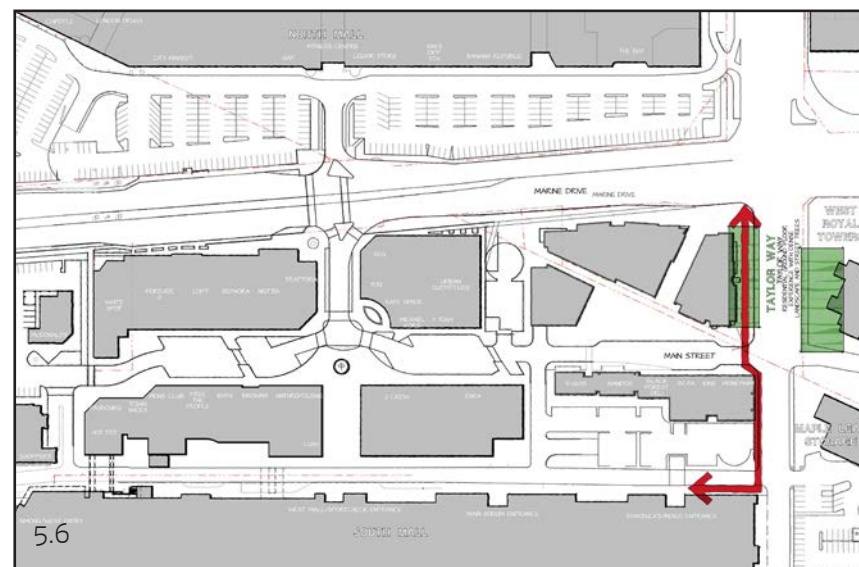
MARINE DRIVE

There has been a master plan treatment to Marine Drive through the Park Royal Precinct since the addition of the intersection. The design treatment fits well with the Marine Drive Local Area Plan and Design Guidelines. Marine Drive itself has several characters through the Park Royal Precinct, but the design standard at commercial buildings on Marine Drive is to have a wide concrete sidewalk (sidewalk should be built to City of Vancouver Wellness Walkway standards) with specialty paving on the building side of the sidewalk and a planting buffer on the vehicle side. The exception to this rule is when transit stops occur, in which case the sidewalk comes right up to the curb. The specialty paving pattern directly adjacent the building should reflect the design of the building but should use the East Village paving materials in the East Village and the West Village materials in the West Village (east village has light brown concrete pavers and contemporary stainless steel furniture while the West Village has red concrete pavers and historical black furniture). A double row of trees should be added where possible, one row on each side of the sidewalk. In the East Village the trees are Oaks and in the West Village they are Maples. The addition of a bike lane that is occurring may necessitate a revision to the treatment of the south side of Marine Drive. The space for a bike lane is being reserved by adding a lawn buffer where the future bike lane may occur as well as making sure no poles or trees are in this space.



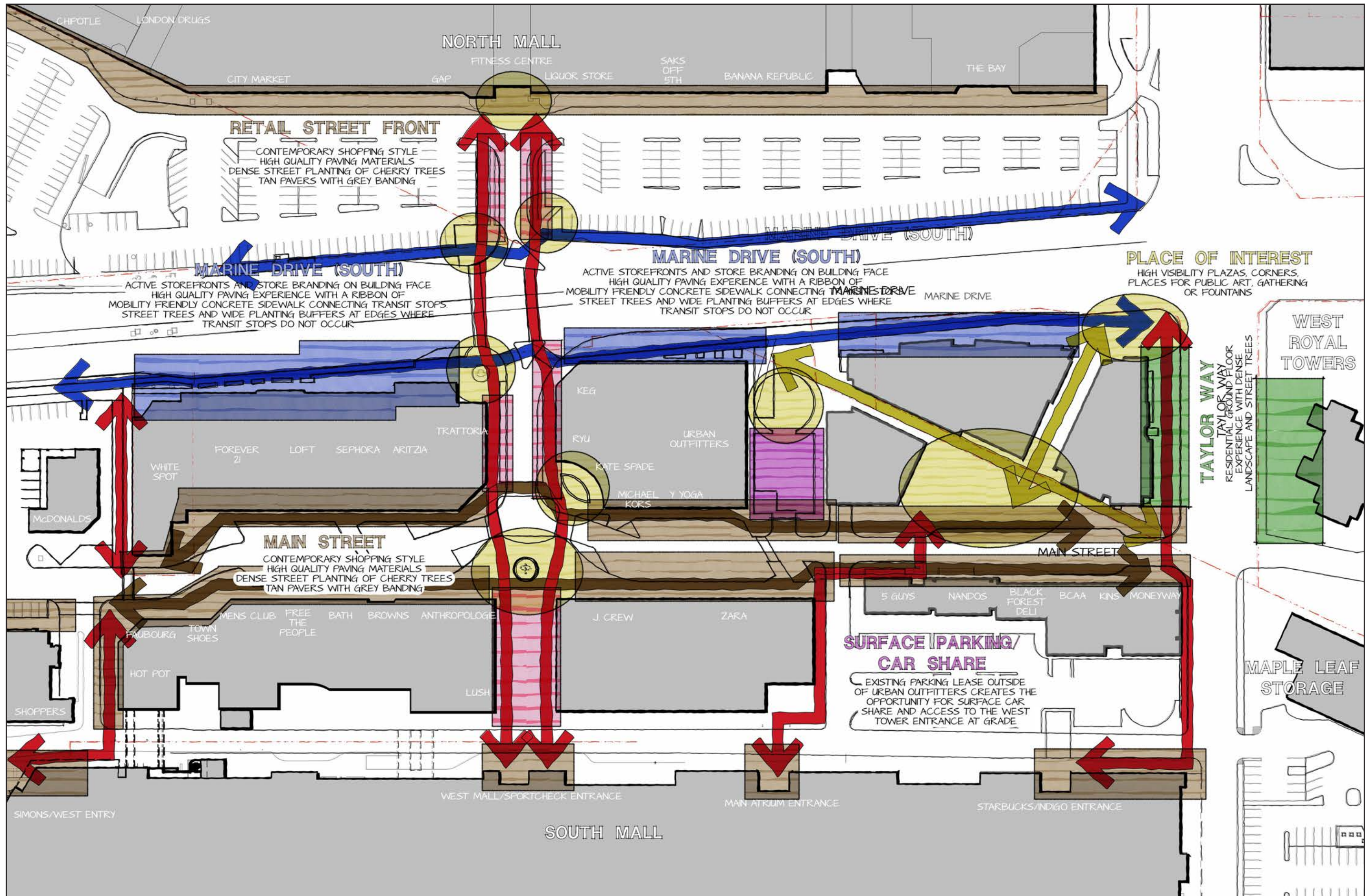
MAIN STREET

The treatment of Main Street has become the East Village shopping street standard (and has recently found its way over to the north mall exterior shopping environment). The treatment is simple, modern, functional and of extremely high quality. The paving is a simple light brown concrete paver with grey concrete paver bands. Along Main Street, the street tree is always Cherry Trees along the sidewalk with Honey locust used at all pedestrian crossings. As well, large, cast iron tree grates and modern stainless steel furniture is used throughout. All of these items are of the highest quality. The furniture is from Landscape Forms and the light fixtures are from Louis Poulsen. The overall feel is contemporary, simple and warm.



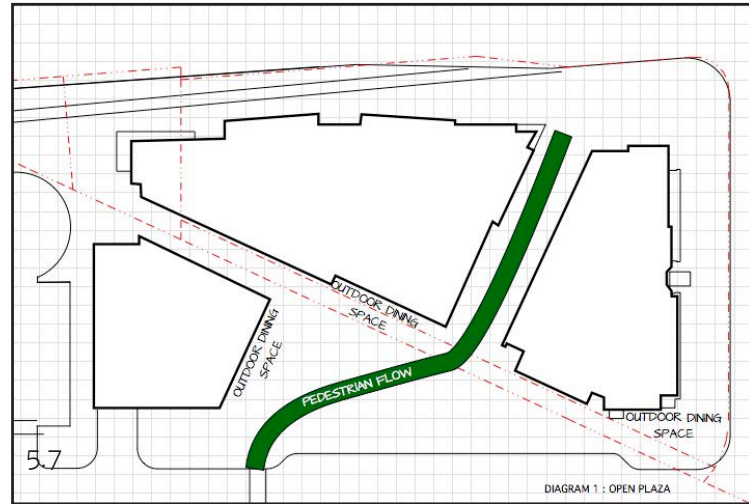
TAYLOR WAY

On the east border of the site is Taylor Way and directly across the street is the West Royal Towers. The treatment on that side of the street is one of a relatively dense landscape with no special paving or treatment along the street. Because this is the first residential development in the area, we are going to match the spirit of the treatment. A thicker landscape treatment with a simple concrete sidewalk between the building and the road. Additionally, we have the opportunity to add an bioswale for infiltration and possibly to treat street water as well.

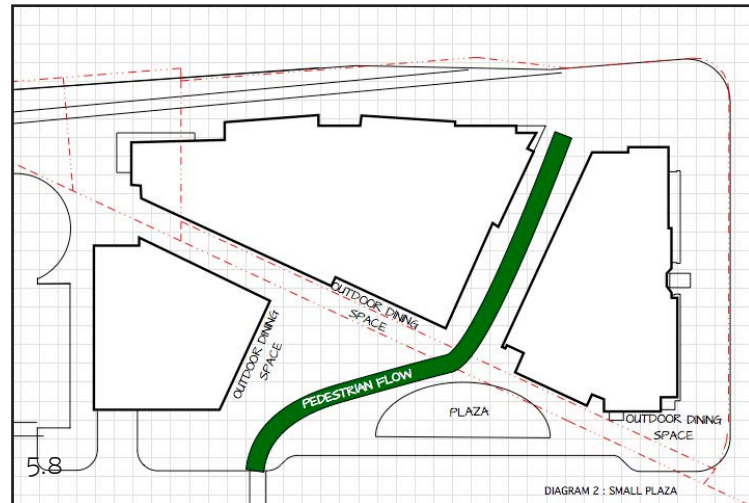


5.4 EXPLORING SPACE

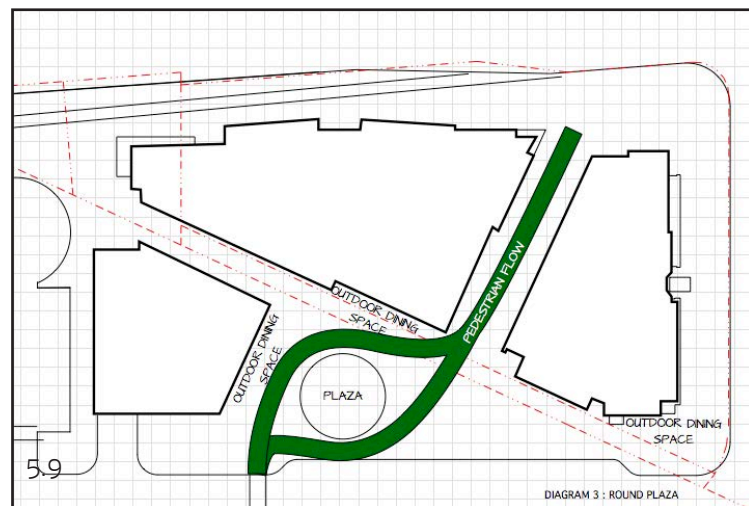
Matching desire lines and developing the most effective plaza space is a challenge. We explored the space in an attempt to determine how best to maximize the utility of the site and the user experience. We were mindful of the need to create a strong physical and visual presence connecting the plaza to Marine Drive.



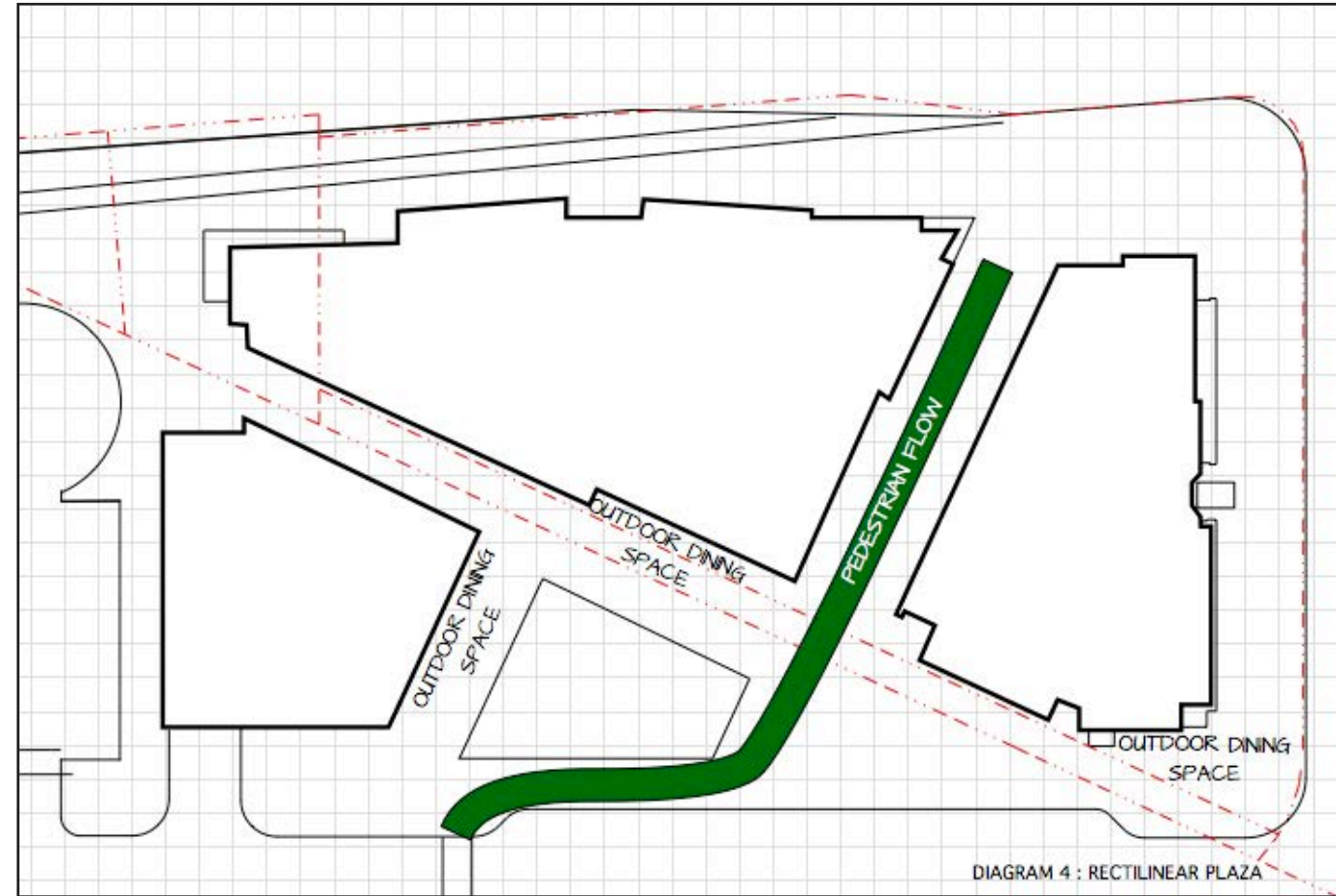
Initial reviews of this space looked at grade level plaza space that allowed for larger uses while putting a primary emphasis on desire lines through the site. The end product was a space that lacks character and identity.



Adding a sunken plaza that fit between the desire lines creates a plaza that is too small, too close to Main Street, and breaks up the site into awkward sizes that conflicted with the visual power of the Galleria. Additionally it is desirable to have the stage on the north side of the site to take advantage of the natural light exposure on the site.



A purpose designed plaza space, with stage and seating is highly desirable, but when created with desire lines and travel through the space, this fights the natural shape of the plaza and gave away valuable space, creating a plaza that is too small while failing to feel like it belonged in the space.

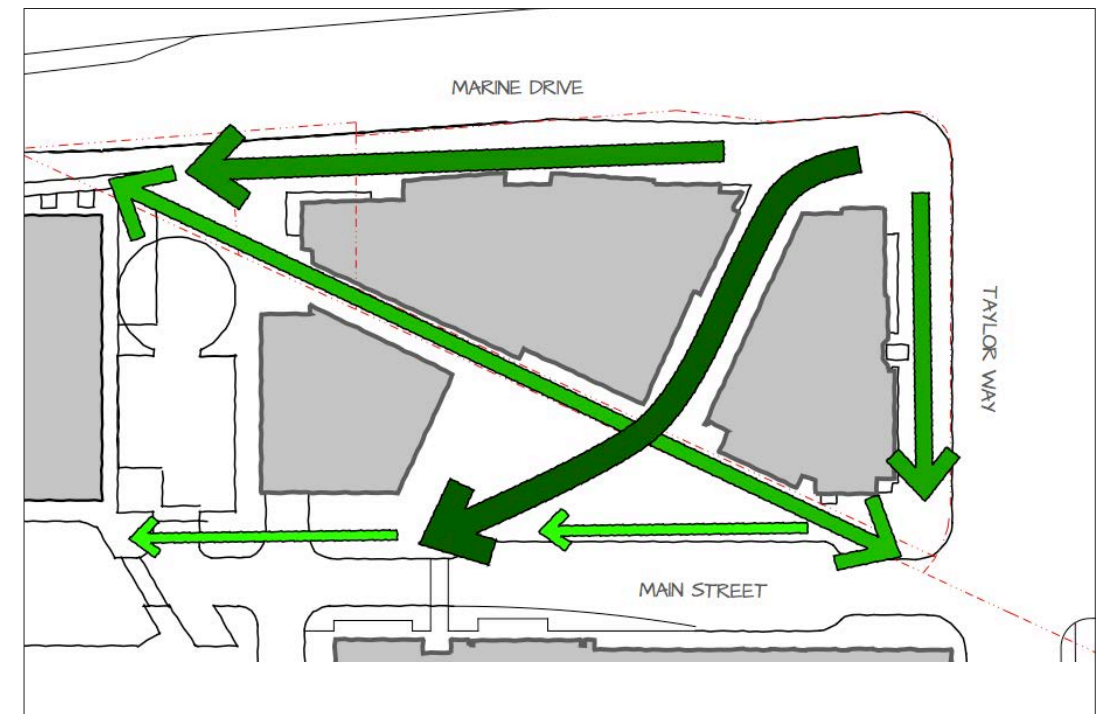


FINAL FORM

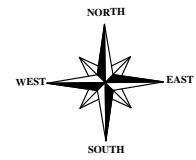
This led to the plaza space below. The plaza itself takes centre stage as the main unifying element. It is large and fits within the space while still respecting the public open space. It is central to the main commercial uses and takes advantage of the southern exposure of the site. Additionally, it uses the buildings as a framing element, helping to make the plaza feel natural in its space.

DESIRE LINES

Most of the pedestrian traffic will travel to and from the corner at Taylor Way and Marine Drive down to the crossing connecting to commercial storefronts and an elevator to the parking structure or west along Main Street. (Shown in dark green in the Desire Lines Image). Pedestrian traffic will also be travelling along Marine Drive or Taylor Way, with the remainder using the cross site cut through or walking along the north side of Main Street. These desire lines work very well with the form of the plaza and surrounding conditions.



5.5 COLOURED SITE PLAN



LEGEND

DATE	ISSUED

REV.	DATE	DESCRIPTION
3	MAR 20, 2018	INCREASED SPACE BETWEEN BUILDINGS ACROSS JURISDICTION LINE
2	MAR 14, 2018	MOVED ENTRANCE OF EAST TOWER
1	JAN 20, 2015	GENERAL

**PARK ROYAL
GATEWAY
RESIDENCES**

Vaughan
Landscape Planning
and Design
1406 Clyde Ave.,
West Vancouver, B.C.
Canada V7T 1G1
PH: 922-1885
FAX: 922-5485
office@vaughanplanning.com

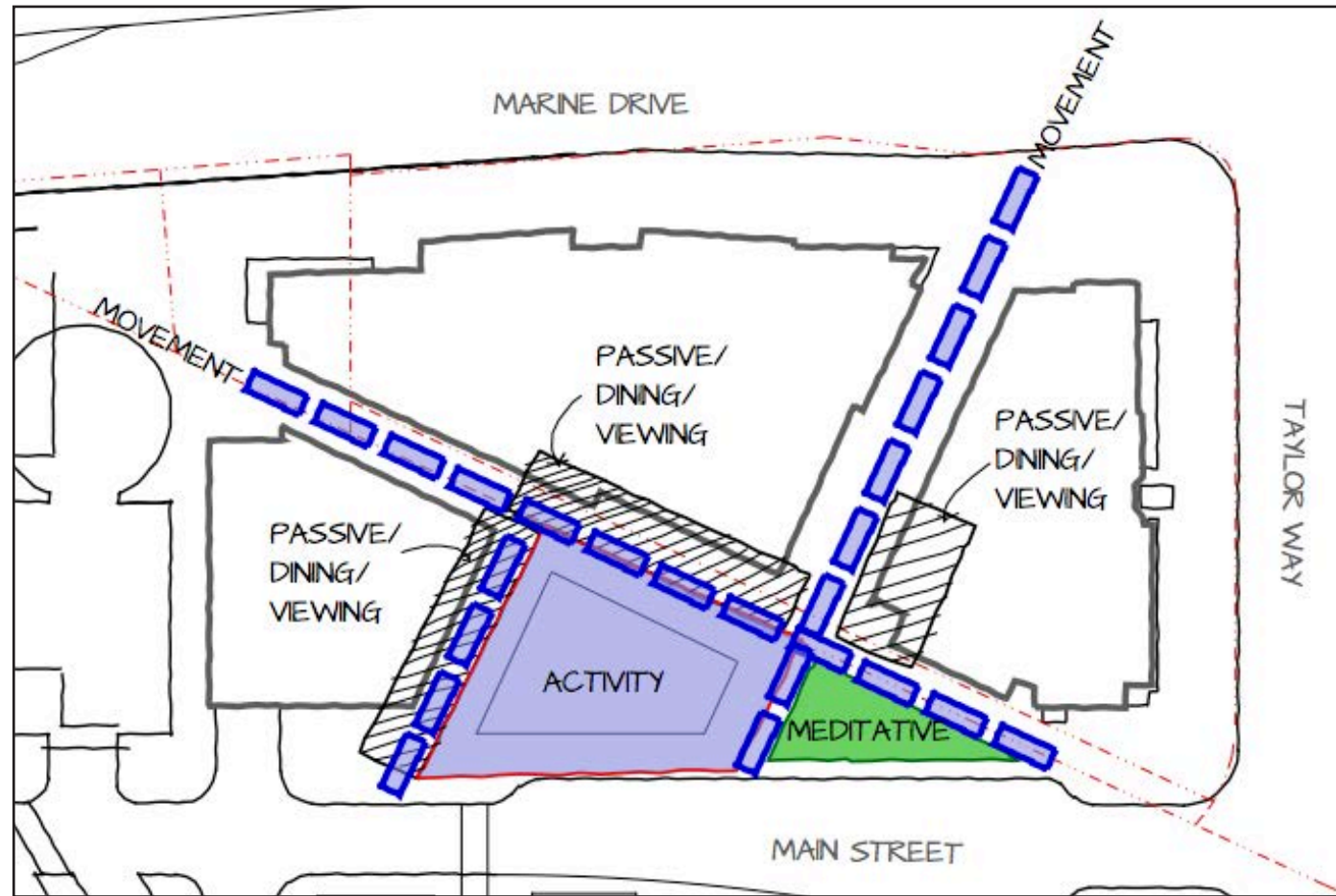
DESIGNED	MCV
SCALE	1:200
DATE	Oct 31, 2014

**COLOURED
LANDSCAPE PLAN**

DRAWING NO.	L3	REV	3
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THIS REVISION SUPERCEDES DRAWINGS
READING PREVIOUS REVISION NUMBER

5.6 PLAZA ACTIVITY RELATIONSHIP



This diagram shows the relationship of the plaza to its borders, the lawn space and the travel lanes.

The plaza itself is surrounded by a series of sentinels which will be critical in giving it an identity and location. These sentinels will be further designed as the open space moves forward through the Squamish Nation (see A Meeting of 2 Cultures for more). In addition, the sentinels add to the scale of the space. From the low spot in the plaza, the sentinels draw the eyes and your attention up, creating a nearby medium height scale before the more distant buildings.



As found in so many of the European plazas, such as Plaza del Castillo in Pamplona Spain and Plaza Major in Segovia Spain (seen below), the relationship with dining in Europe and the central square is integral. To be in the plaza is to be part of the dining experience, becoming the foreground activity to those who are enjoying a meal or a glass of wine. The food as well, draws people to the plaza creating a flow of activity. This relationship forms the a strong border relationship to the Gateway Residences Plaza layout at Park Royal.



The raised Lawn resting space will serve as a place of relaxation away from the hardscape of the plaza. It will be raised to keep it dry and give the sense of sitting on the hill. There will be trees for shade. The idea is that one can grab a book or a picnic or just a towel and sit on the lawn. This will also function as a small backyard like space for the residents of the tower. By raising it and moving it across the main walk from the plaza it also creates interest in the grade change being the same amount higher than the walk as the plaza is below. This space will also serve the less formal food service locations across Main Street, being the perfect place to eat a porchetta sandwich and eat an apple while enjoying the out of doors.

