

Marine Drive Context Study and Guidelines



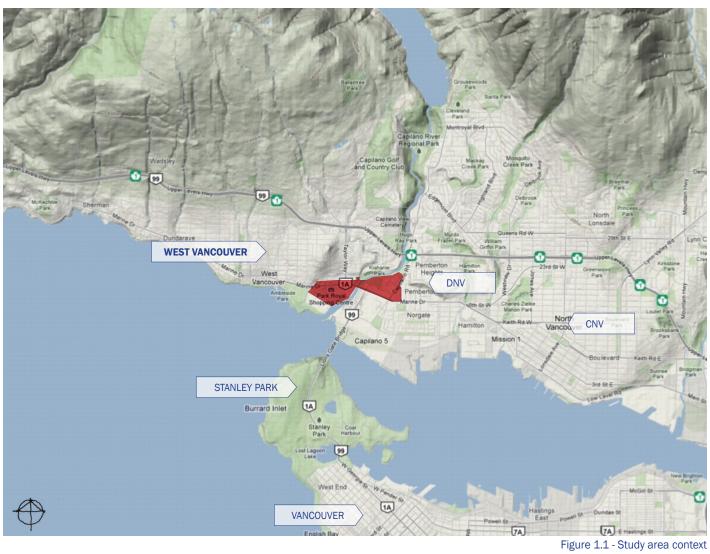
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1.0 Introduction

1.1 Purpose

The Marine Drive Context Study and Guidelines (the Study) articulates an overall planning and urban design framework for the Marine Drive corridor, and is intended to provide clarity and context, as well as set expectations, for future development. It is intended to provide Council with the context necessary to evaluate new development applications and to outline to the community and developers how growth in this part of West Vancouver (DWV) may be accommodated.

The purpose of the Study is to:

- » Describe the existing and emerging context of the Marine Drive corridor around Park Royal, including lands beyond DWV's jurisdiction;
- Situate current and anticipated DWV development applications within this multi-jurisdictional context;
- Outline a recommended approach for reviewing current and anticipated DWV applications within the study area boundary.

Overall, the Marine Drive corridor is intended to be comprised of a series of vibrant, mixed-use centres that support a variety of local and destination services, is well-served by transit, and includes key public realm investments to make it a desirable place to live, work, and play.



study area boundary
Figure 1.2 - Study area

1.2 Study Area

The Study is focused on lands around the Lions Gate Bridge, extending east and west from the bridgehead to include sites adjacent to and along Marine Drive. The corridor is a busy thoroughfare serving as a major connector between the neighbouring communities of West Vancouver, the Squamish Nation, and North Vancouver, as well as the primary access to the Lions Gate Bridge and Vancouver beyond. The area's most important natural feature, the Capilano River, bisects the study area and provides an amenity for local residents. Adjacent to the river is Klahanie Park, which includes sports facilities as well as treed access to the river's edge.

To the east, a high density mixed-use village centre is being developed around the intersection of Capilano Road and Marine Drive as per the District of North Vancouver's (DNV) Lions Gate Town Centre Plan, providing the planning context for the broader area and marking the easternmost edge of DWV and the study boundary. To the west, the study extends to the Park Royal Shopping Centre, an expanding destination retail and shopping experience set amidst an outdoor, walkable, pedestrian environment, which provides the planning context for the westernmost portion of the study.

Most of the land identified in the study area is outside the jurisdiction of the DWV. While the DWV has no authority over other lands, they are included in this scope of work to provide useful and coordinated context for the future development of all lands across this shared corridor.

While extensive development is anticipated in neighbouring jurisdictions, given existing land uses, ownership, and age of current structures, only a handful of DWV sites within the study area are expected to be redeveloped in the near term. These sites are examined in more detail in each of the sub-area sections, which, for the purpose of this study, are divided between an eastern and western sub-area. Should additional DWV sites come forward for redevelopment, the objectives and principles in this study would apply.

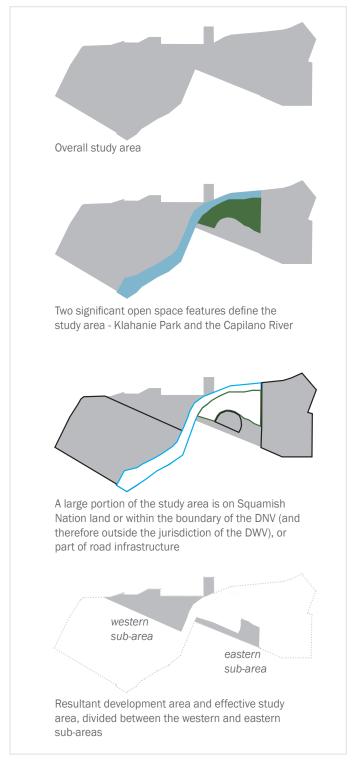


Figure 1.3 - Effective study area when significant natural and jurisdictional boundaries are removed

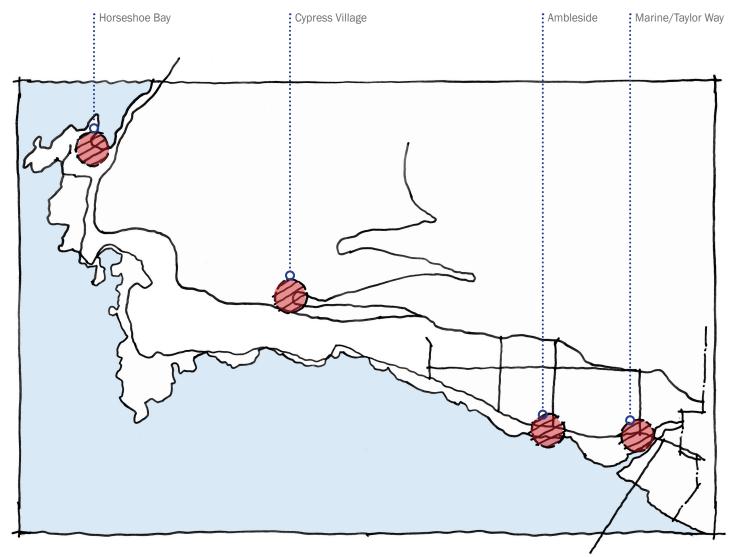


Figure 1.4 - OCP area studies

1.3 Official Community Plan (OCP) Review

This study has been prepared as part of the ongoing Official Community Plan (OCP) review. As most of the lands around Park Royal are outside of DWV's jurisdiction, this study differs from others that have been identified as part of the OCP review (namely Ambleside, Cypress Village, Horseshoe Bay, and upper Taylor Way¹).

For the Marine Drive area around Park Royal, the planning policy context is essentially already set, and the following Context Study is based on:

- An analysis of how DWV lands relate and should respond to their adjacent contexts (DNV and Squamish Nation leased lands);
- An understanding of how existing DWV OCP policy direction applies to this area.

Existing OCP Policy framework for the study area (summarized):

- » Gateway locations should be reinforced at the entry-points to DWV (Policy LE1, BF-C7)
- » Prominent buildings should earn density through superior design, environmental performance, housing objectives and amenities (Policy BF-A1, H7, H8, H9)
- » Urban centres should contain a variety of amenities and services supported by a mix of housing types (Policy LE3, BF-C2, SP2, SP5, SP8)
- » Marine Drive should be planned as an important east-west connection, facilitated by pedestrian, cycling, and transitsupportive infrastructure (Policy T1, T2, T3, T5)
- » Clyde Avenue (east of Taylor Way) should redevelop to mixeduse, with rental, parkland, heritage preservation, and access to the river (Policy BF-D2)

¹ Taylor Way / Marine Drive were originally conceived of as one OCP area study; however the current study addressing uniquely Marine Drive has been brought forward to provide context and guidance for current and pending development applications. An Upper Taylor Way study is expected to be undertaken in 2018 and will complete the analysis of this wider area. Upper Taylor Way presents a different context to Marine Drive and hence its findings are expected to be different.

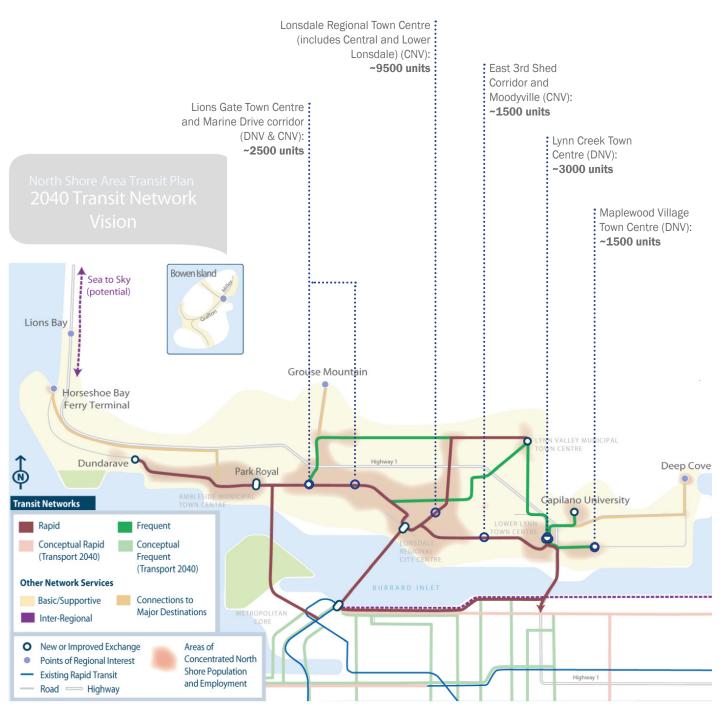


Figure 2.1 - North Shore Area Transit Plan 2040 Vision with municipal growth estimates added

2.0 Context

2.1 Regional and Sub-Regional Growth Management Context

The study area is situated within a broader growth management framework as part of the Regional Growth Strategy (RGS). This strategy provides guidance for accommodating growth in transitoriented centres and corridors. The RGS includes a number of regionally designated areas on the North Shore where transitoriented development is expected along or close to the Marine Drive corridor:

- » Lions Gate Town Centre, and the Marine Drive Frequent Transit Development Areas (DNV and CNV);
- » Lonsdale Regional Town Centre (CNV, which extends above the Marine Drive/3rd Street corridor to also include Central Lonsdale);
- » East 3rd Street Frequent Transit Development Area (including the Moodyville area, CNV);
- » Lynn Creek Town Centre and Frequent Transit Development Area (DNV);
- » Maplewood Village Centre (DNV).

These locations are acknowledged and planned for in both the City and District of North Vancouver's recently adopted OCPs. The Squamish Nation's 2004 Capilano Master Plan also identifies this area (in part) for economic development.

In addition to the current study, the ongoing review of West Vancouver's OCP will also include an area planning process for Ambleside, another centre on this corridor. As the remainder of this study will illustrate, the Park Royal area is situated in close proximity to taller forms and higher density development at the eastern "gateway" to West Vancouver (in relation to downtown Vancouver, leased Squamish lands, and DNV's Lions Gate Town Centre). Ambleside Town Centre's built form context is markedly different which will inform the plan for that centre accordingly.

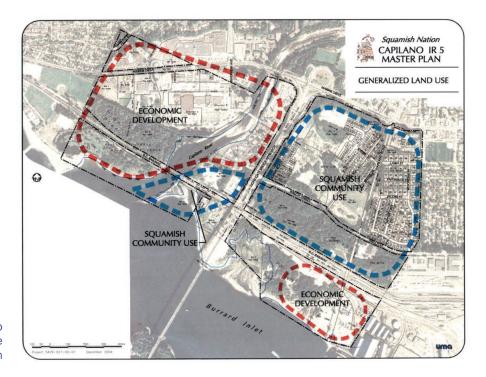


Figure 2.2 - The 2004 Squamish Nation's Capilano IR 5 Master Plan identifies a preferred land use plan for their jurisdiction

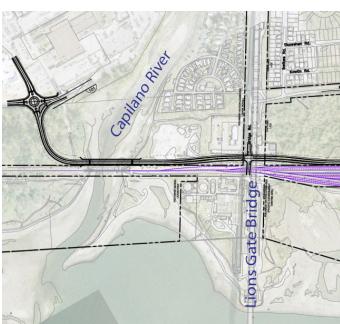


Figure 2.3 - Proposed western lower level route extension to Marine Drive would see an additional vehicular crossing parallel to the rail bridge

2.2 Transportation Context

Transportation and associated issues of congestion are certainly acknowledged as key issues in this area, situated as it is along a major east-west North Shore connection, and a major northsouth connection between downtown Vancouver and the Upper Levels Highway and the Sea to Sky corridor beyond. The coordination of the transportation network across this corridor is important and requires collaboration from the Province's Ministry of Transportation and Infrastructure (MOTI), which oversees Taylor Way and the highway; and TransLink which oversees the provision of public transit. Other agencies also impact transportation through this corridor, including BC Ferries and municipalities along the Sea to Sky Corridor. Recent multi-agency transportation plans focus on all facets of the transportation network: improving movement of vehicular traffic; increasing public transit services; and expanding active transportation infrastructure.

2.2.1 Vehicular Traffic

With respect to the Taylor Way / Marine Drive road network, considerable transportation planning has been completed and a number of initiatives proposed. Notably, these include Transport Canada's North Shore Trade Area Study (2008), which proposed the extension of the Low Level Road from North Vancouver across the Capilano River to create an east-west bypass to the Lions Gate Bridge (Figure 2.3). Another initiative, the Lions Gate to Highway 1 Connector Planning Study (2007), focused on options to improve functioning of the Lions Gate bridgehead. Arising from that 2007 study, a number of recommendations have already been implemented including implementation of the transit priority signal and bus only lane on Marine Drive (2011) and replacement of the Capilano Bridge (2011). Furthermore - and importantly - it is through the development process that additional rights-of-way can be secured and further improvements or expansions to the road network can be achieved, as sites redevelop, building footprints move back, and property lines are adjusted.

Beyond changes to the existing road network, the biggest impact on traffic and congestion can be had by reducing the number of single-occupant vehicles using the corridor by increasing transit, cycling and walking.

2.2.2 Public Transit

Improving transit service delivery and increasing ridership decreases the use of single-occupant vehicles. From an efficiency perspective, though buses make up only 2% of vehicles crossing the Lions Gate Bridge, they carry 28% of the passengers. The Marine Drive / Main Street corridor currently receives frequent transit service (defined as at least every 15 minutes in both directions, throughout the day and into the evening, every day of the week) and is a priority for higher capacity service investment and facility upgrades, including improvements to the Park Royal Exchange. Recent transit improvements include a bus priority lane and signal eastbound on Marine Drive towards the Lions Gate Bridge and expanded Community Shuttle services to Park Royal. A further commitment to rapid transit along this corridor is embedded in both the North Shore Area Transit Plan (2012) and the Mayors' Plan (reconfirmed 2016).

To facilitate transit improvements, Metro Vancouver and TransLink are currently coordinating a study (involving staff from the three North Shore municipalities, the Squamish Nation, and the MOTI) to help guide transit service and design on this corridor. The District will continue to collaborate with TransLink and other partners to identify opportunities to expand bus transit service and explore additional modes (e.g. using the rail corridor or providing ferry service) to further improve the functionality of the Marine Drive corridor.



Figure 2.4 - Public Transit: Example of queue jump bus lane

4,300,000



Annual Boardings: 4,295,000 million boardings on east-west North Shore transit routes that connect through Park Royal

4,800,000



Annual Boardings: 4,823,000 million boardings on north-south Downtown Vancouver transit routes that connect through Park Royal

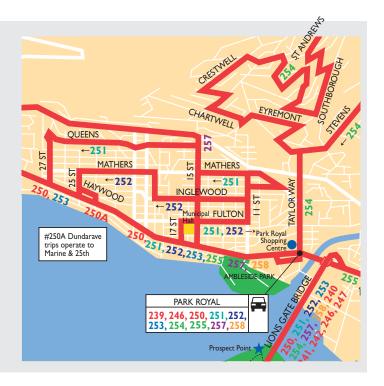
15 minutes



Connections Across the North Shore: Increased to Frequent Transit Network in 2011 providing service every 15 minutes (on all days) across the North Shore There are currently 10 bus routes utilizing the Park Royal exchange and connecting West Vancouver destinations across the region.

Travel times (minutes) from the Park Royal exchange to key destinations:

Lions Gate Hospital 15 Vancouver Art Gallery: 16 Orpheum Theatre: 17 Edgemont Village: 18 Queen Elizabeth Theatre: 20 20 Rogers Arena: Capilano Suspension Bridge: 24 Lonsdale Quay: 25 English Bay: 27 Science World: 31 Capilano University: 37 44 Granville Island: UBC: 59



2.2.3 Active Transportation

Pedestrian and cycling networks are key to improving connections both within the study area and across the North Shore (Master Cycling Network Plan, 2012). The study area contains an important piece of the Spirit Trail, a multi-modal pathway connecting the North Shore from Horseshoe Bay to Deep Cove (Figure 2.5). Expanded infrastructure for pedestrians and cyclists, including wider sidewalks and dedicated bike lanes, increases public safety, making these modes of transportation viable for area residents as they are able to easily access shops, services and amenities. A recent example of this is the completed bicycle trail connector between the Capilano Pacific Trail and Spirit Trail behind the West Royal Towers. The study area is also well positioned to benefit from recent upgrades to the bike lanes on the Lions Gate Bridge and through Stanley Park, providing

a safe, direct cycling route to downtown Vancouver. Additional improvements to the public realm to enhance transit users, pedestrians and cyclists ability to move to and through the study area could be achieved through re-development and inform many of the directions proposed in Section 3 of this report. Notably, this includes completing a key link of the Spirit Trail over the War Dance Bridge.

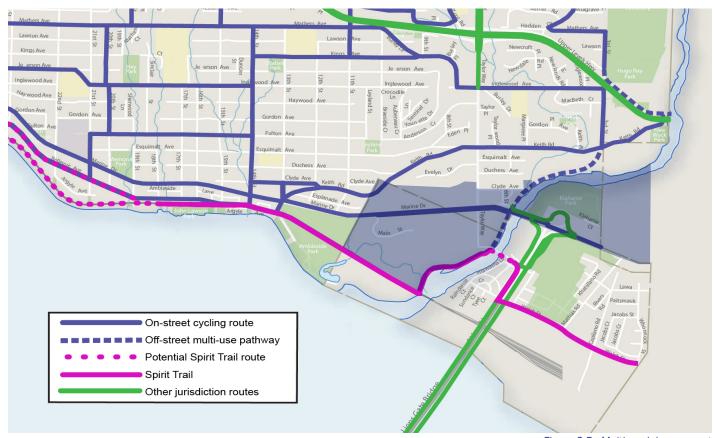
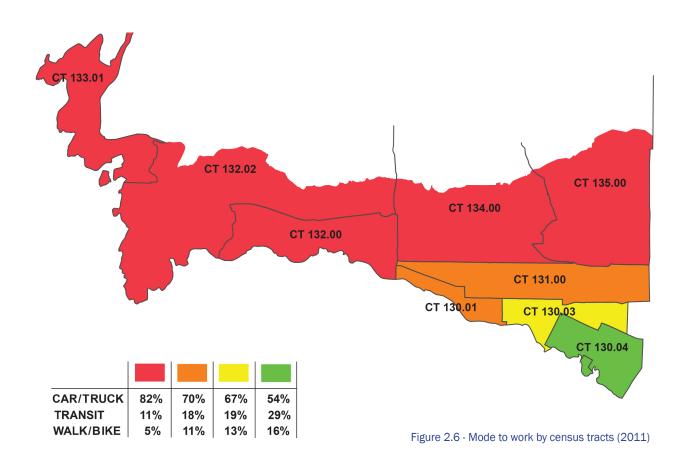


Figure 2.5 - Multi-modal movement across the study area

2.2.4 Integrating Transportation and Land Use Planning

Given the acknowledged transportation issues along the Marine Drive corridor, directing growth in this area may seem counterintuitive. However, the premise behind this transitoriented growth management framework is as follows: Increasing the population in more outer-lying low density residential neighbourhoods that do not have proximity to transit, services or amenities increases vehicular use through Taylor Way and Marine Drive, as those residents have little option but to drive to or through this area on their way to work or services. Conversely, accommodating new growth in the Park Royal area (or other mixed-use locations with similar characteristics) means accommodating growth in a location where residents can take transit, walk or cycle to shops, services, amenities, and their place of employment.

Data from the most recent published census (2011) regarding transportation mode to work confirms this planning approach, showing almost a 30% decrease in vehicular use and nearly a tripling in transit, walking or cycling in lands around the study area compared to the more western and northern census tracts (Figure 2.6). The same logic and outcomes can be extended to a wider regional level. Restricting development in the inner core pushes demand further out (e.g. the Sea-to-Sky corridor), which then generates traffic within the study area.

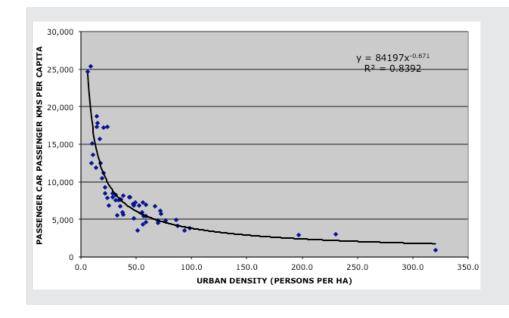


Accommodating growth by densifying urban areas has emerged as a much studied - and validated - tenet of smart growth. Figure 2.7 illustrates the close statistical relationship in question: increasing density reduces vehicle-kilometres travelled.

In addition to locating growth in sustainable, not sprawling, places (the "where"), sound transportation planning also relies on good land use (the "what"), and urban design (the "how"). Figure 2.8 summarizes and illustrates the effects of land use and design factors on travel behavior. While actual impacts will vary depending on specific conditions and the combination of factors applied, it is worth noting the quantifiable potential that planning and urban design decisions have on travel and modal choice, and ultimately, on the transportation network.

2.2.5 Summary

The transportation context described in this section informs the objectives and proposed guidelines presented in the following sections of this report. They include prioritizing lower tripgenerating land uses (residential uses generate less traffic than commercial); securing appropriate amenities and public realm improvements (to enable residents to walk and cycle within more complete neighbourhoods); and reducing parking requirements and promoting car share in new developments (to lower car ownership). These are described more fully in Section 3.



Urban Density vs. Private Car Travel: Increasing density reduces vehicle-kilometres travelled.

The graph below illustrates the negative relationship between density and per capita vehicle travel in 58 high-income cities. The relationship is statistically strong. The largest reductions result from relatively modest density increases, indicating the relatively modest land use policy changes can significantly reduce vehicle travel.

Figure 2.7 Research by World Transport, Policy & Practice http://www.eco-logica.co.uk/pdf/wtpp17.2.pdf

Factor	Definition	Travel Impacts
Regional accessibility	Location of development relative to regional centers.	Reduces per capita vehicle mileage. Central area residents typically drive 10-30% less than at the urban fringe
Density	People or jobs per unit of land area (acre or hectare).	Reduces vehicle ownership and travel, and increases use of alternative modes. A 10% increase typically reduces VMT 0.5-1% as an isolated factor, and 1-4% including associated factors (regional accessibility, mix, etc.).
Mix	Proximity between different land uses (housing, commercial, institutional)	Tends to reduce vehicle travel and increase use of alternative modes, particularly walking. Mixed-use areas typically have 5-15% less vehicle travel.
Centeredness (centricity)	Portion of jobs in commercial centers (e.g., central business districts and town centers)	Increases use of alternative modes. Typically 30-60% of commuters to major commercial centers use alternative modes compared with 5-15% at dispersed locations
Network Connectivity	Degree that walkways and roads are connected	Tends to reduce vehicle travel and improved walkway connectivity increases non-motorized travel
Roadway design	Scale, design and management of streets	Multi-modal streets increase use of alternative modes. Traffic calming reduces VMT and increases non-motorized travel
Active transport (walking and cycling)	Quantity, quality and security of sidewalks, crosswalks, paths, and bike lanes.	Improved walking and cycling conditions tends to increase nonmotorized travel and reduce automobile travel. Residents of more walkable communities typically walk 2-4 times more and drive 5-15% less than in automobile-dependent areas.
Transit quality and accessibility	Quality of transit service and whether neighborhoods are considered transit-oriented development (TOD)	Increases ridership and reduces automobile trips. Residents of transit oriented developments tend to own 20-60% fewer vehicles, drive 20-40% fewer miles, and use alternative
Parking supply and management	Number of parking spaces per building unit or acre, and how parking is managed and priced	Tends to reduce vehicle ownership and use, and increase use of alternative modes. Cost-recovery pricing (users finance parking facilities) typically reduces automobile trips 10-30%.
Site design	Whether oriented for auto or multi- modal accessibility	Can reduce automobile trips, particularly if implemented with improvements to other modes.
Mobility management	Strategies that encourage more efficient travel activity	Tends to reduce vehicle ownership and use, and increases use of alternative modes. Impacts vary depending on conditions.
Integrated smart growth programs	Travel impacts of integrated programs that include a variety of land use management strategies	Reduces vehicle ownership and use, and increases alternative mode use. Smart growth community residents typically own 10-30% fewer vehicles, drive 20-40% less, and use alternative mode 2-10 times more than in automobile-dependent locations, and larger reductions are possible if integrated with improved regional transit and more efficient transport pricing.

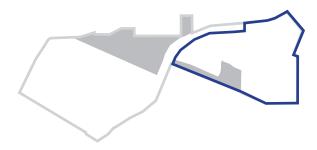
Figure 2.8 http://www.vtpi.org/landtravel.pdf Literature review summarizing impacts of land use and design factors on travel choice (Victoria Transportation Policy Institute)



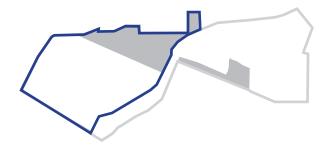


2.3 Adjacent Planning Context

As identified in Figure 1.3, the study area can be divided between an eastern and western sub-area:

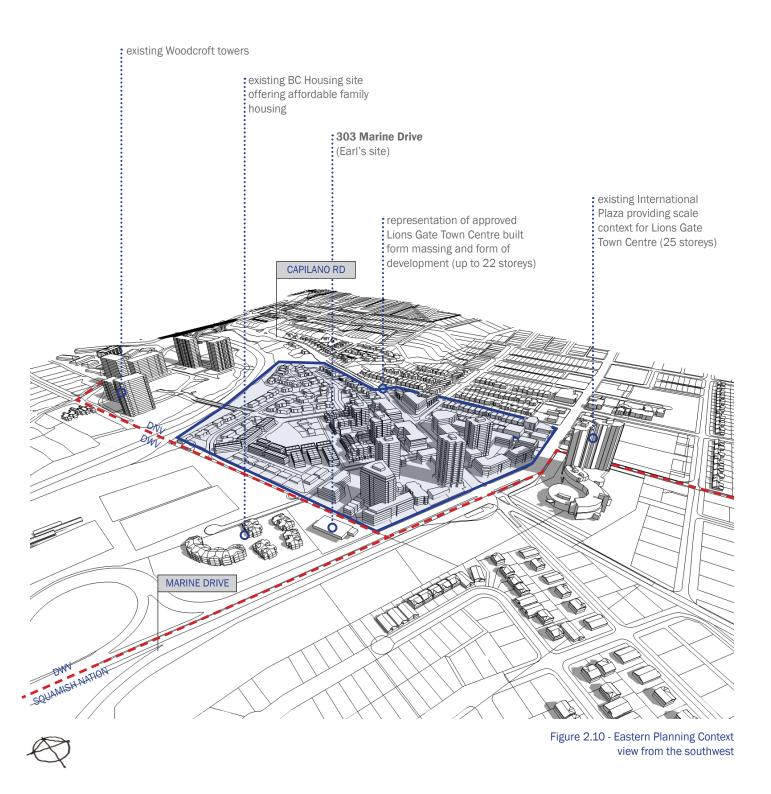


The eastern sub-area includes land east of the Capilano River.



The western sub-area includes land west of the Capilano River.

In this report, the context for each is examined separately but then brought together in the general objectives and principles and through the streetscape directions presented later in the study.



2.2.1 Adjacent Planning Context: East Sub-area



The DNV's Lions Gate Town Centre precinct (formerly the Lower Capilano Marine Village Centre) shares the border with the DWV and provides the planning context for the study's eastern subarea.

The adopted vision for the town centre is a vibrant, walkable neighbourhood with local-serving businesses, jobs, transit, amenities and recreation opportunities (including a new community centre) and a range of housing options. The plan describes the anticipated built form scale and land use for the village. Taller buildings are oriented towards the intersection of Capilano Road and Marine Drive, with transitional, lower buildings extending northwards. The scale defers to the existing tallest building - International Plaza at 25 storeys - at the southeast corner of the primary intersection. From there, building heights range down from 22 to 10 storeys. Commercial frontages are focused around intersections, primarily the intersection of Capilano Road and the new village heart connecting to Belle Isle Park, and the intersection of Marine Drive and Capilano Road. Including Marine Drive as it extends eastwards from the village centre as far as CNV, approximately 2500 units are planned for Lions Gate Town Centre, in addition to new park space, amenities and shops.

With respect to West Vancouver's jurisdiction in this sub-area, there are two sites situated effectively adjacent to DNV's Lions Gate Town Centre: 303 Marine Drive (current Earl's restaurant, where a development application has been received) and 350 Klahanie Court (current BC Housing site, where no development application has been received). As illustrated in the rendering of this sub-area, the scale of these DWV sites (currently one to three storeys) is considerably lower than the emerging context.

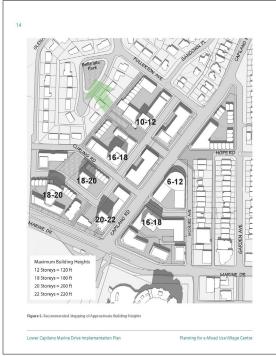
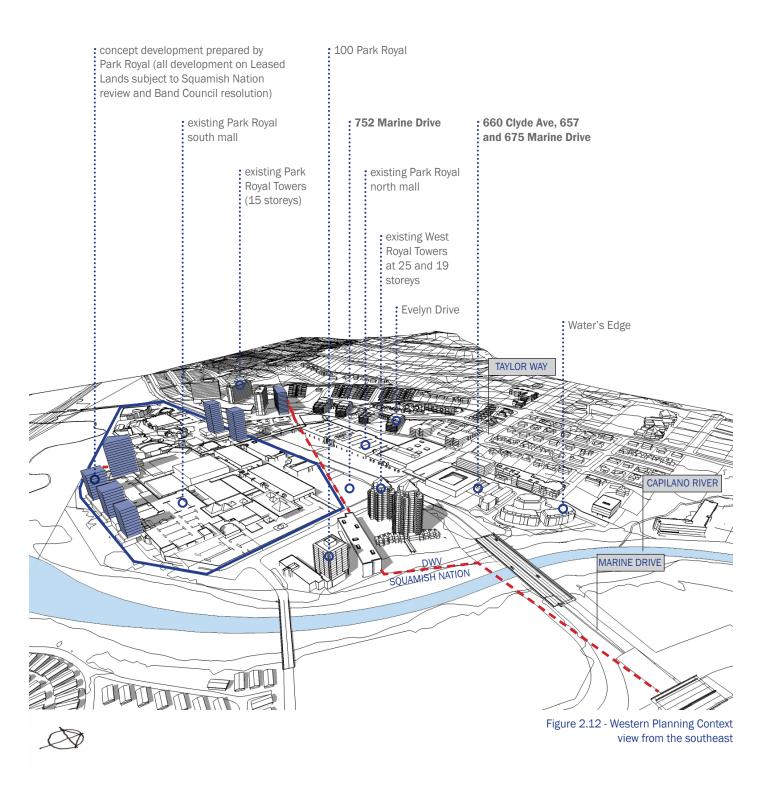


Figure 2.11 - Lower Capilano Marine Village Concept Plan (Lions Gate Town Centre)



2.2.2 Adjacent Planning Context: West Sub-area



The Park Royal Shopping Centre provides much of the context for the west sub-area. Park Royal South is situated on leased Squamish lands, and Park Royal retains development rights in accordance with their lease, subject to Squamish Nation review and Band Council resolution. Conversely, Park Royal North falls under the jurisdiction of the DWV and is subject to the District's review and approval process. However, due to current lease arrangements between Park Royal and commercial tenants, significant redevelopment of the North Mall is not anticipated in the short term.

To complement the success of the mall and introduce residential uses, Park Royal has created a development concept that includes future residential tower development around the site's perimeter. While conceptual, Park Royal's preliminary ideas seek to cluster towers towards the western side of the mall site, associated with the existing Park Royal Towers to the north. Another cluster of towers is contemplated to frame the southern edge of the mall site and to take advantage of the southern view. Concept development indicates buildings up to 16 storeys.

In the northeast corner of the mall site, and within the DWV boundary, are the West Royal Towers, a notable pair of residential towers that dominate much of the views from the Lion's Gate Bridge. The towers, constructed in the early 90's, are organized parallel to Marine Drive and at the intersection with Taylor Way, marking the gateway to the western sub-area. The towers are 25 and 19 storeys tall, although the architectural expression of the roof effectively adds another two storeys to the overall height of the towers. These towers are situated opposite 752 Marine Drive (former White Spot restaurant), the only portion of Park Royal South within DWV jurisdiction, and where a development application has been received.

In the northeast quadrant of this sub-area is Water's Edge, an existing five storey residential development overlooking the Capilano River and reinforcing the residential character of Clyde Avenue east of Taylor Way. A development application is anticipated for a site assembly at 660 Clyde, 657 and 675 Marine Drive. These lands are partially vacant but also include an important Hollingsworth-Downs designed heritage resource at 660 Clyde Avenue.



3.0 Urban Design & Planning Guidelines

This section of the Study introduces planning objectives and urban design principles that provide a basis for the evaluation of projects that fall within the study area.

The directions are borne out of existing OCP policy and an analysis of the study area's built form and scale, connections and pedestrian mobility, and the desire to define a cogent vision for the Marine Drive corridor.

Observations and commentary on the existing context is presented first, followed by overall objectives that lay out a broad framework within which more specific principles and directions for each sub-area are established.

3.1 Systems Analysis

The Study is set amidst an evolving planning and development context for West Vancouver. While this context will continue to change, initial observations specific to this part of the District help frame early priorities and values that shape the planning directions.

The following diagrams provide a summary of observations and provide additional context for area-wide systems analysis. The series of diagrams are organized around a concept that describes how certain elements are connected across the whole study area followed with a description of the significance of the observation, and its relationship to the principles.

Three themes emerged from the systems analysis which provide a basis for the directions presented in this study. They are:

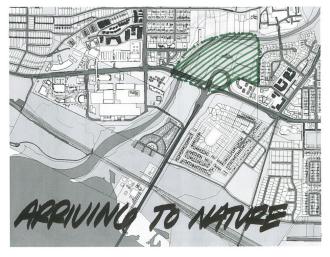
- Natural features contrast and bisect the urban character of the centres. Park space and the Capilano River are unique to this part of West Vancouver and should be celebrated as redevelopment occurs.
- Taller buildings already exist in each of the identified urban centres. New development will respond to this and contribute to a definable cluster of buildings marking the heart of each urban area.
- A healthy and complete community benefits from pedestrian connections that link existing and new amenities to housing. Pedestrian connections and cycling routes should be enhanced to be comfortable and safe, and should facilitate access to transit to support transit-oriented new development.

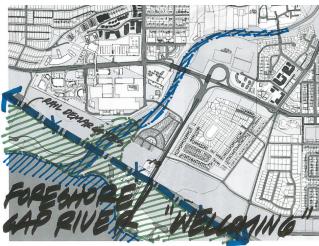
Observation Theme: Natural features

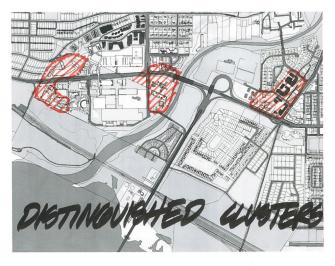
One of the most prominent features visible from the Lions Gate Bridge is Klahanie Park, which provides a strong landscaped contrast to the town centres which flank the park. A sense of arrival is enhanced by the foreshore water and the entry of the Capilano River. The natural systems are notable features in the landscape.

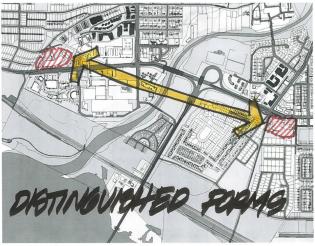


Reinforcing the direction for gateways in the OCP, clusters of taller buildings currently mark the centres. These nodes also provide services, amenities, and housing. Both east and west sub-areas contain unique architectural forms that can be seen from numerous vantage points. Park Royal Towers and West Royal Towers (west) and International Plaza (east) establish an existing scale and form of development that reinforce the urban centres concept.



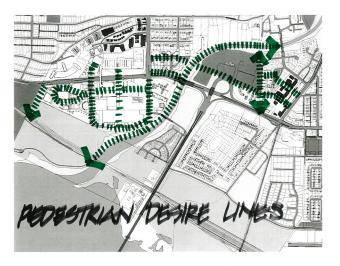


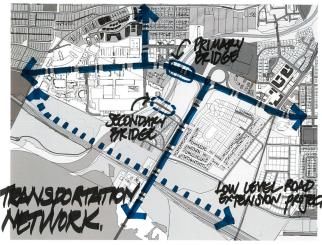




Observations Theme: Transportation and Mobility

Smaller, human-scale blocks make pedestrians feel comfortable. A porous block structure, extending outward to connect natural and recreational opportunities along the Capilano River, will reinforce a pleasant walking experience for all. Supporting this is a transportation network that includes frequent transit service that connects key nodes throughout the area.





3.2 Planning Objectives

The planning objectives build upon and reinforce the preceding systems analysis, OCP policy, and planning best practices. The design framework (Figure 3.1) summarizes and synthesizes the systems analysis work and introduces the concept of defined centres separated by natural features, yet connected by green links focused on pedestrian mobility.

Objectives derived from the development of this concept diagram include:

- Reinforce two centres. Given the natural features bisecting the study area, reinforcing two centres will help to define an appropriate urban design structure for the corridor. The centres, one focused around the Taylor Way intersection and another associated with Lions Gate Town Centre, are equidistant from Lions Gate Bridge and are about a ten minute walk from one another. While there should be some consistent elements between the centres (e.g. public realm), each should respond to and express its distinct context and setting.
- » Connect the dots. Today, the ability for pedestrians to safely and comfortably navigate east and west along Marine Drive is a challenge. Additional pedestrian paths would encourage pedestrian movement between centres. In addition, Marine Drive is an undesirable environment for pedestrians and cyclists and should be improved to encourage alternatives to vehicle travel.
- » Engage with the natural environment. The existing Klahanie Park is a key community asset, providing public open space and active recreation facilities. Its relationship to Capilano River, and proximity to the town centres, could be enhanced. Work towards creating additional ways to access the park from key pedestrian routes along primary streets.
- » Views and Legibility. One of the more significant ways the Marine Drive corridor is experienced is from the Lions Gate Bridge. The view northward from the bridge reveals development to the east and west, set apart by a landscaped 'welcome mat'. Creating distinct town centres, therefore, will reinforce an existing pattern of development.
- Respond to context. Lions Gate Town Centre and Park Royal Shopping Centre (including notable buildings such as International Plaza and Park Royal Towers), while outside the jurisdiction of the DWV, provide most of the context for each centre. Built form expression, materials, scale and composition, proportion, public space organization, and public realm treatment all contribute to the area's character and should be carefully considered in future development, and rooted in a clear design rationale.

- » Connect to Park Royal mall. The mall, by the nature of its 'outdoor shopping' character, creates patterns of pedestrian movement that should be reinforced as development occurs.
- » Meet housing objectives. Increasing density to provide for affordable or rental housing is appropriate within the study area (given proximity to employment, services, and amenities), where walking, cycling or taking transit can lower transportation costs for residents. Supportive housing is also appropriate, as the area is generally flat and highly accessible for mobility devices.
- » Secure appropriate amenities. In addition to rental and supportive housing, amenities should emphasize public realm improvements and connections to existing natural assets (Capilano River and Klahanie Park) and between different components of the study area. Public space should be secured in the form of open space / plazas, and for targeted appropriate uses (e.g. childcare in proximity to the employment hubs of downtown Vancouver and Park Royal).
- » Minimize trip generation. Commercial uses (office or retail) generate more traffic than residential uses, as visiting customers / clients outnumber resident trips over the course of a typical day. As well, residents in this location can meet their daily needs (employment, shops, services) on foot or by bus, taking pressure off the road system. Land use planning should therefore generally prioritize residential uses.

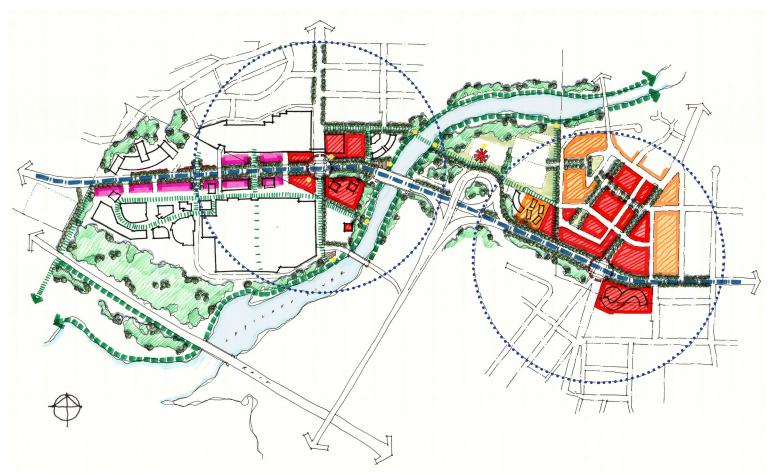


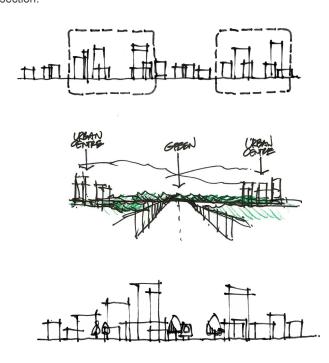
Figure 3.1 - Urban design framework illustrating two urban centres linked by open space and green connections, and supported by transit

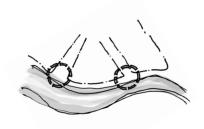


3.3 Urban Design Principles

The urban design principles for the study area build on the objectives, policies, and context analysis outlined above and provide a structure to direct new projects along the corridor. They address important elements such as public space, land use, pedestrian connections, placemaking, and built form that should be considered as the corridor evolves.

The principles are not specific to any sub-area, but rather provide overall guidance for projects being considered within the study area. More specific direction related to urban design, land use, and built form considerations for each sub-area is found in the relevant sub-area section.







Distinct Centres

Create urban nodes that are concentrated around clusters of taller buildings. These nodes should be legible in the landscape and from a variety of vantage points including the Lions Gate Bridge, Marine Drive, and from further north.

Distinct Context

Each centre should respond to its immediate context. While there should be consideration for elements of continuity (i.e. public realm) that help to create a coherent vision for Marine Drive, each project should be 'of this place' and respond to its local context.

Transit Supportive Development

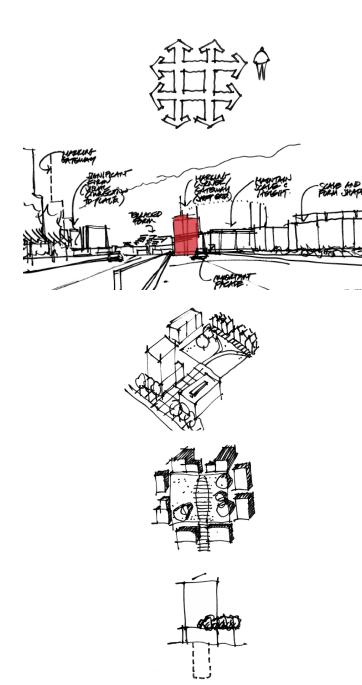
Development should respond to existing frequent (and planned rapid) transit service through transit-oriented design principles (TOD) and transportation demand management (TDM) strategies. This could include reducing resident parking requirements (to lower car ownership and use in this neighbourhood), promoting car share initiatives around the Park Royal hub, providing pedestrian and cycle infrastructure, and improving public realm connections to transit facilities.

Respond to the River

The Capilano River is a unique, natural amenity that the public realm should respond to. Improved public access along and to the river is encouraged.

Hierarchy

Each urban centre should demonstrate a clear hierarchy of buildings with appropriate transitions to surrounding lower scale. Taller buildings, given their prominence in the landscape, should demonstrate an excellence in architectural design and building efficiency.



Pedestrian Continuity

Primary consideration should be given to pedestrian movement within each of the town centres and connecting to the surrounding neighbourhood. Key connections to amenities and open space should be reinforced.

Express the Gateway

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.

Complete Communities

In consideration of other amenities (e.g. existing park, planned new community centre in DNV's Lions Gate Town Centre), new development should contribute to the overall livability of the area by providing appropriate new public spaces. It should also increase both rental and ownership housing options to address current and future demands of DWV residents.

Public Space, Public Life

Public space should be defined and framed by buildings that complement the scale of the open space. Consideration for overshadowing and active uses at grade will ensure public space remains animated and well-used, and part of the daily life of residents.

Sustainable Design

Environmentally sensitve buildings use less energy. Whether through connectivity to district energy or by reducing building energy use, high performance buildings should promote environmental design features.

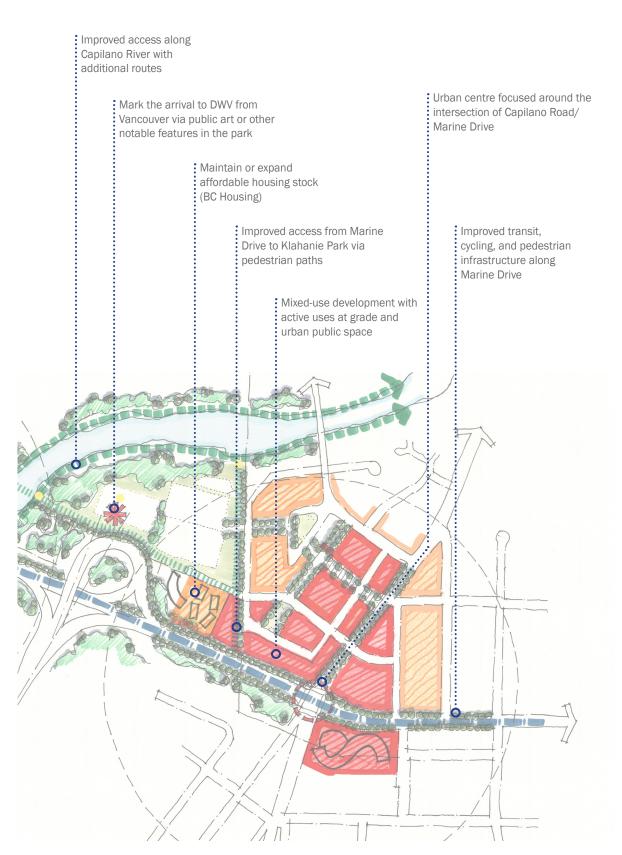


Figure 3.2 - East sub-area concept plan

3.4 Guidelines: East Sub-area



The east sub-area is envisioned as a community rich with good pedestrian connections, is well-served by transit, is close to amenities, and offers a wide range of housing choice. The direction for the land within the jurisdiction of West Vancouver is to support the creation of Lions Gate Town Centre, with complementary development within the DWV boundary in the form of a tower and corresponding street-oriented lower building forms. When complete, the town centre will deliver housing opportunities and public amenities commensurate with a vibrant, urban village.

The diagrams below represent the general arrangement of built form, open space, and connections that link the area together.

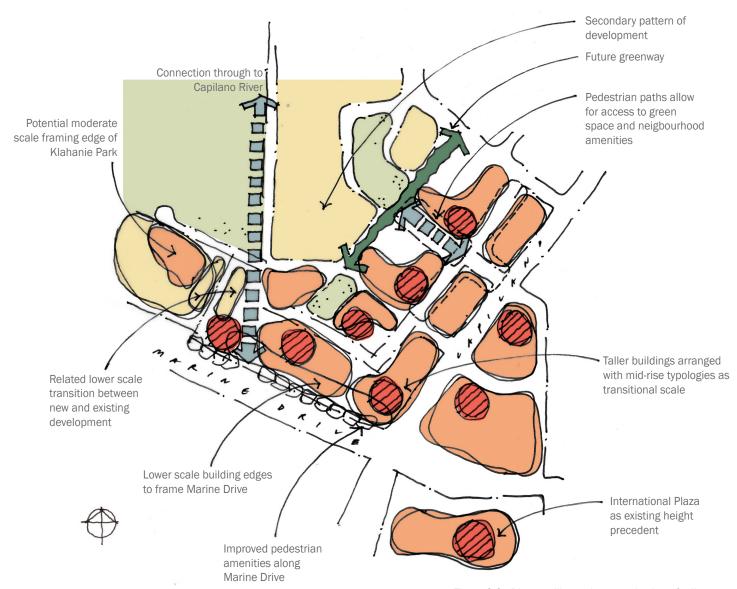


Figure 3.3 - Diagram illustrating organization of taller and lower buildings and open space connections proposed as part of the Lions Gate Town Centre

Urban Design

The design intent for the eastern sub-area is for the site to participate as part of the emerging town centre focused at Capilano Road and Marine Drive with a built form that ties in with the approved pattern of development, public realm intentions, and land uses envisioned there. Ultimately, the vision is for the site within the DWV's jurisdiction to read as part of this broader development, with lines between jurisdictions blurred.

The urban design direction builds on the design directions of Lions Gate Town Centre which proposes the stepping down of heights northward from International Plaza, with taller buildings arranged along Marine Drive. The proposed design direction for the active sites builds on this direction by proposing a tower along Marine Drive up to the same height as International Plaza, with a lower scale along the street frontage to tie in with sites further east. Transitional scale is expected to mediate between the active site and the current BC Housing site.

The suggested tower height is derived from an urban design analysis and is proposed to be the same as International Plaza for a variety of reasons:

- » this site is well-served by transit and is strategically located adjacent to a planned high frequency transit route;
- » higher density in this location enables the delivery of objectives around housing availability and affordability;
- » a taller tower helps to create variety in the skyline while distinctively marking the western extent of the town centre;
- » a taller, thinner built form allows for the creation of open space at grade which will help pedestrian movement between Marine Drive and Klahanie Park;
- » lower scale along Marine Drive contributes to the pedestrian environment and creates a continuity between this site and the other site in the town centre;
- » a tower at a similar height to International Plaza creates a balanced 'bookend' of buildings along Marine Drive which reinforces the town centre in the landscape.

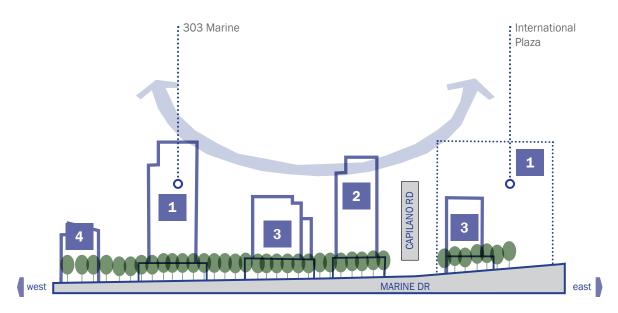


Figure 3.4 - Diagrammatic elevation along Marine Drive illustrating the hierarchy of buildings anticipated for Lions Gate Town Centre and taller buildings acting as 'bookends'

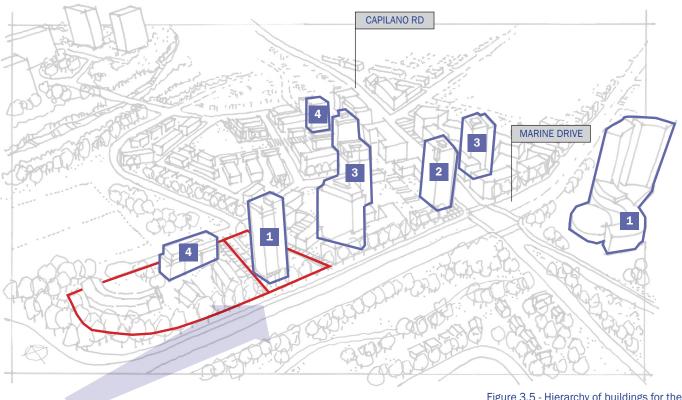


Figure 3.5 - Hierarchy of buildings for the Lions Gate Town Centre and DWV site*

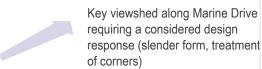
Building scale hierarchy

Number represents the hierarchy of building heights in the town centre, from the tallest to shortest.

- Tallest buildings represent the 'bookend' for Lions Gate Town Centre.
- Second tallest tower deferring in height to International Plaza.
- Third tallest group of towers.
- Lower buildings that transition from taller buildings fronting Marine Drive to lower forms on the periphery.



Sites within the DWV jurisdiction



^{*} Representation of Lions Gate Town Centre is based on approved DNV planning documents

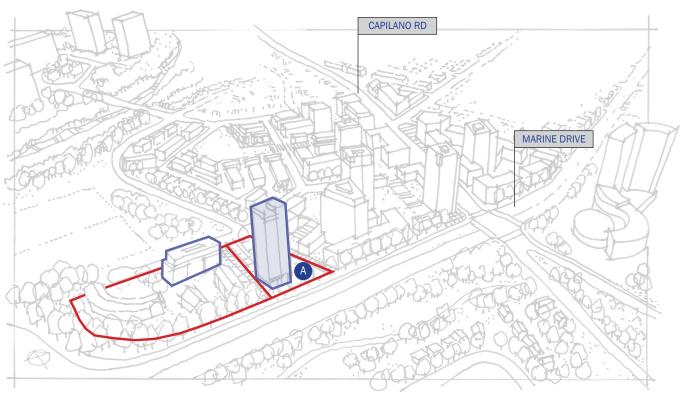


Figure 3.6 - Urban design considerations for 303 Marine Drive

A

303 Marine Drive

Site currently occupied by Earl's restaurant and zoned C1. In response to the Lions Gate Town Centre plan, this study anticipates future development for the site to include:

LAND USE:

- Residential use prioritized, including the significant provision of rental and/or supportive units, to meet housing objectives, generate less traffic than commercial uses, and not dissipate the planned commercial core in the adjacent Lions Gate Town Centre.
- Density to be generally compatible with approved densities in adjacent Lions Gate Town Centre.

BUILT FORM:

- A single, slender tower with small floorplates to mark the western edge of the town centre.
- Tower should be aligned with Marine Drive and respond to the eastward viewshed.
- Tower height to read as part of a collection of towers in the Town Centre that respond in scale to International Plaza (i.e. approximately 25 storeys, subject to satisfying housing objectives and urban design analysis).
- Transitional scale, such as townhouses, to the BC Housing site to the west.
- Lower-scale building expression fronting Marine Drive towards reinforcing a mixed-use node at Capilano Road and Marine Drive.
- A considered approach to the tower base and top such that the tower contributes to the public realm as well as a dynamic skyline.
- Tower to be slender in the landscape with massing and materials reflecting a coordinated architectural idea. The massing should be organized to mitigate the overall scale of the tower.
- View and shadowing impact analyses to be conducted as part of development review.
- Excellence in sustainable design and energy efficiency standards.

PUBLIC REALM:

- A north/south public space connection between Marine
 Drive and Klahanie Park to facilitate pedestrian mobility and
 connections to transit, and to increase the visibility between
 the park and Marine Drive.
- The landscape and building should be designed as a single composition, with strong physical and visual connections between interior common spaces and the outdoors.
- Public realm treatment along Marine Drive to correspond to the planned treatment at Lions Gate Town Centre to provide a consistent streetscape environment and to facilitate pedestrian and cyclist use.
- Broader, area-wide improvements to the pedestrian environment to facilitate access to services, amenities, and transit.

AMENITIES:

- Given existing and planned public space (e.g. Klahanie Park, new community centre in North Vancouver) amenities to focus on housing affordability / diversity.
- Community Amenity Contributions to be calculated on the basis of any increase in land value compared to the value under existing zoning.

TRANSPORTATION:

- Residential parking reductions to minimize car ownership, and the promotion of car share initiatives.
- Removal of existing driveways onto Marine Drive to enhance vehicular flow to the Lions Gate Bridge on-ramp.
- Assessment of additional right-of-way take for transportation improvements to be determined through development application process.
- Enhanced bike network infrastructure to improve connectivity to surrounding DNV bike routes.
- A Transportation Impact Assessment to be required as part of the development application, comparing the traffic impact of the proposed rezoning with that generated under current zoning.

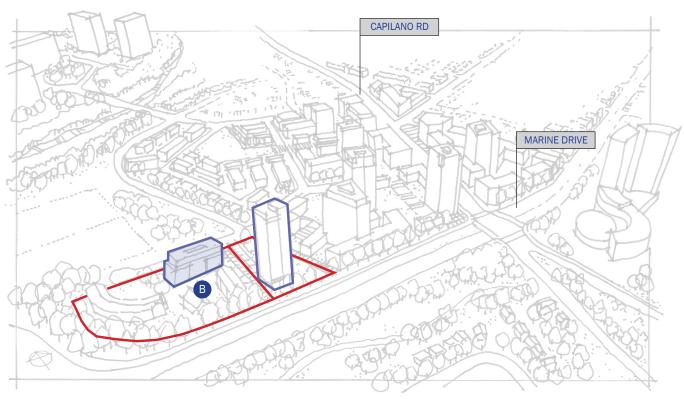


Figure 3.7 - Urban design considerations for 380 Klahanie Court

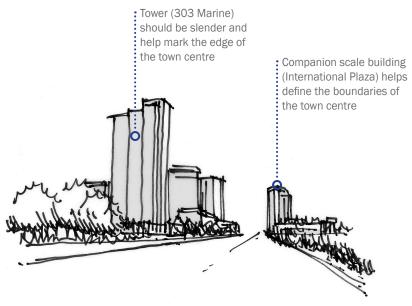
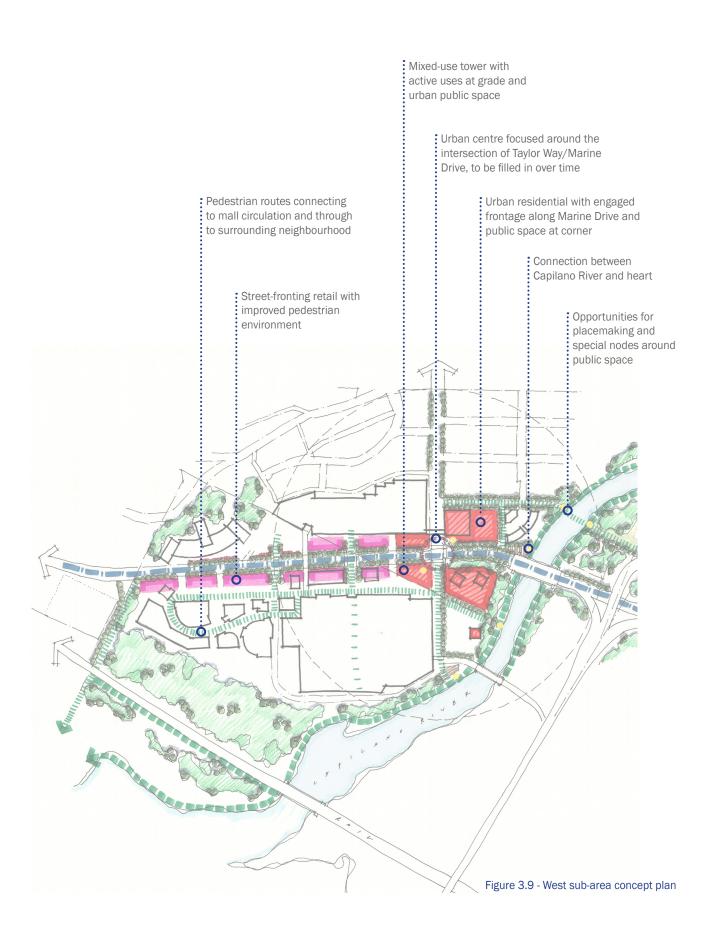


Figure 3.8 - Marine Drive viewshed requiring considered design response

B 380 Klahanie Court

Klahanie Court (BC Housing) currently provides affordable family housing. While there are no immediate plans for the site, this study anticipates future development to include:

- Continued or expanded provision of affordable rental housing on site.
- Potential infill that responds to and complements the tower and mid-rise typology proposed for Lions Gate Town Centre.
- Transitional scale, such as townhouses, towards the eastern edge of the site in response to 303 Marine Drive.
- A north/south public space connection between Marine Drive and Klahanie Park to facilitate pedestrian mobility, and to improve the visibility between the park and Marine Drive.

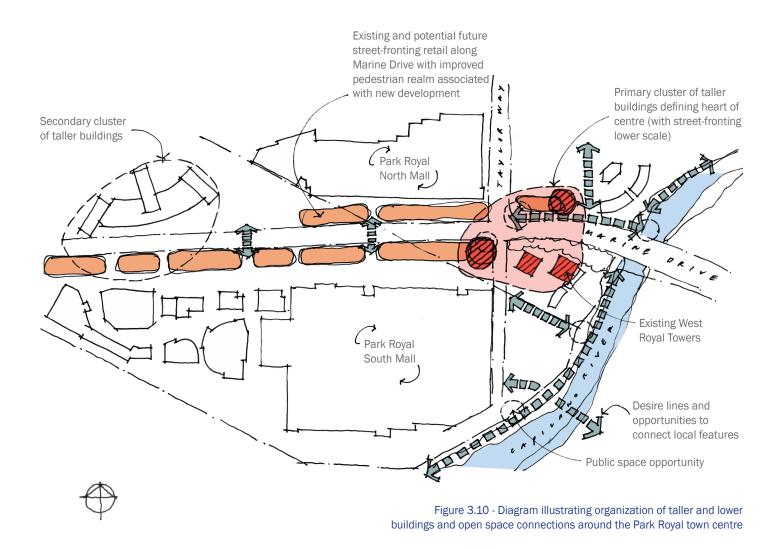


3.5 Guidelines: West Sub-area



The following section focuses on the west sub-area. The direction for this part of Marine Drive is to support the completion of a centre focused around the Taylor Way/Marine Drive intersection. This study anticipates a series of towers clustered around the intersection that builds on the scale already present at the West Royal Towers site. A transition in scale, from the tallest building on the southwest corner of the intersection, counterclockwise to the lowest centre building at the northeast corner reinforces a clear hierarchy in the urban landscape. Street-oriented lower building form is expected to help define public space and reinforce Marine Drive as a mixed-use, shopping environment.

The diagrams below represent the general arrangement of built form, open space, and connections that link the area together.



Urban Design

The design intent for the western sub-area is to contrast the bulk and presence of the existing West Royal Towers with slender, more finely-scaled buildings on the southwest and northeast corners of the Taylor Way intersection. The design strategy is to tie the buildings together around and across the intersection through correlated building heights that cascade down in scale.

One primary building and one lower building is suggested with the taller tower appropriate for the southwest corner. The relative difference in height between this building and the existing West Royal Towers informs the height on the northeast corner, setting up the cascading effect around the intersection.

The nature and character of the public space responds to the land use differences across Taylor Way. On the east side, residential uses support a public realm with wide sidewalks, landscaping, and connections to the Capilano River. Street frontages are to have appropriate residential separation with balconies and walkways providing the necessary buffer to Marine Drive. Conversely, on the west side a mixed-use environment warrants a more robust and urban public realm with wide sidewalks, hard surfaces, and urban streetscape elements. Grade level shops and services complement the public realm and provide animation on Marine Drive.

The suggested tower heights are derived from an urban design analysis and respond to the existing scale of West Royal Towers for a variety of reasons:

- » these sites are well-served by transit and strategically located adjacent to a planned high frequency transit route;
- » higher density in this location enable the delivery of objectives around housing availability and affordability;
- » the size of the West Royal Towers' floorplates and apparent bulk are significant; new buildings will provide contrast and offset this scale;
- » the West Royal Towers currently stand alone in the landscape which exaggerates their scale; new buildings will help to create a more cogent centre with complementary scaled buildings that create a dynamic and interesting skyline and an improved public realm;
- » taller buildings allow for the creation of open space at grade and that can respond in character to surround uses and natural features;
- » Thinner buildings can respond to and frame views.

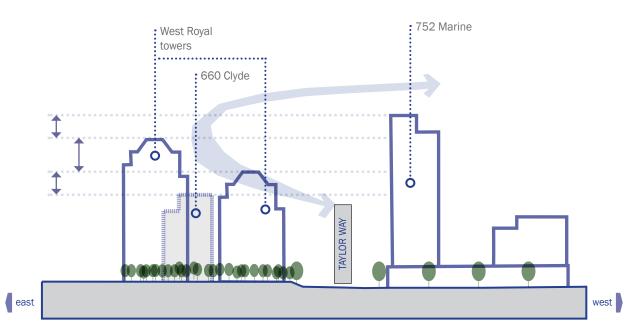


Figure 3.11 - Diagrammatic elevation along Marine Drive illustrating the hierarchy of buildings anticipated for the Taylor / Marine intersection and the progressive scale of towers.

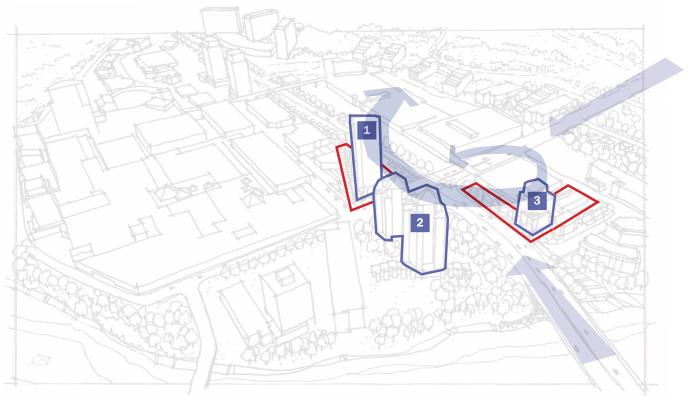


Figure 3.12 - Hierarchy of buildings for the Taylor Way intersection

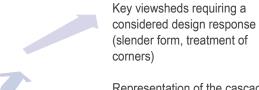
Building scale hierarchy

Number represents the intended hierarchy of tower heights in the town centre, from the tallest to shortest.

- Tallest building to mark Taylor Way/Marine Drive intersection and gateway to mixed-use area.
- Second tallest cluster of towers as precedent for heights around intersection (existing West Royal Towers).
- Third tallest group of buildings in the intersection, marks shift in Marine Drive alignment.



Sites within the DWV jurisdiction



Representation of the cascading scale anticipated for the Taylor Way / Marine Drive intersection

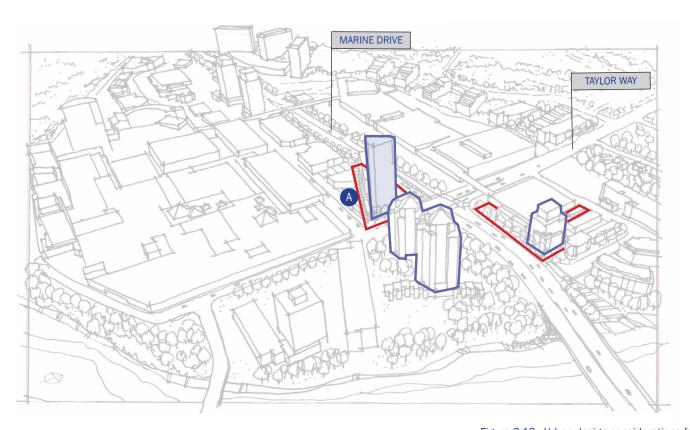


Figure 3.13 - Urban design considerations for sites under DWV jurisdiction

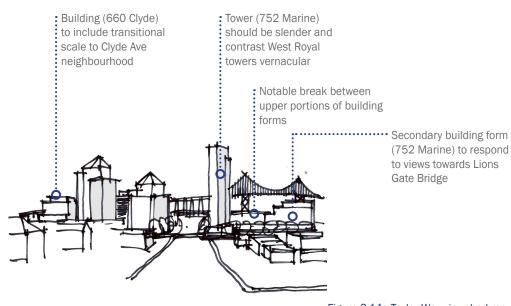


Figure 3.14 - Taylor Way viewshed requiring considered design response

A

752 Marine Drive

Site formerly occupied by a White Spot restaurant and zoned C1. To support the completion of the centre and to respond to the existing built form scale, this study anticipates future development for the site to include:

LAND USE:

- Primarily residential use, including the significant provision of rental and/or supportive units, to meet housing objectives, and generate less traffic than commercial uses.
- Commercial use at grade to integrate with existing commercial mall and animate street-level public space and transit user experience.
- Density to be generally compatible with comparable regionally significant North Shore urban centres.

BUILT FORM:

- A single, slender, signature tower with small floorplates to mark the intersection.
- Tower to read as part of a family of towers that responds in scale to the West Royal Towers.
- Tallest tower to be located on this site providing visual contrast to the West Royal Towers (i.e. 26 - 30 storeys, subject to satisfying housing and amenity objectives and urban design analysis).
- Tower should reinforce the Marine Drive axis and respond to the Taylor Way viewshed to Burrard Inlet (slender massing that frames the view and addresses views to the Lions Gate bridge towers from the Keith Road intersection).
- Tower to hold the corner while providing public space with a presence at the intersection.
- Secondary mid-rise building volume oriented towards Marine
 Drive to create a strong presence on the street and provide an
 architectural contrast to the main tower.
- A considered approach to the tower base and top such that the tower contributes to the public realm and a notable variation in skyline envisioned for the intersection.
- View and shadowing impact analyses to be conducted as part of development review.
- Excellence in sustainable design and energy efficiency standards.

PUBLIC REALM:

- Public space on site that reflects the urban centre context and relates to the public corner, including the incorporation of public art where feasible.
- Opportunity for the design of the public space around the intersection to be coordinated to create a more notable public amenity.
- Streetwall condition and scale along Marine Drive to contribute towards a continuous, comfortable environment for pedestrians and transit users (including weather protection and wide sidewalks).
- Broader, area-wide improvements to the pedestrian environment to facilitate access to services, amenities, and transit.

AMENITIES:

- Amenities to focus on meeting housing affordability / diversity objectives, public space, and location appropriate facilities such as childcare.
- Community Amenity Contributions to be calculated on the basis of any increase in land value compared to the value under existing zoning.

TRANSPORTATION:

- Residential parking reductions to minimize car ownership, and the promotion of car share initiatives.
- Public realm improvements on Marine Drive to enhance transit user comfort.
- Improvements to the War Dance bridge to complete the Spirit Trail
- Assessment of additional right-of-way take for transportation improvements to be determined through development application process.
- A Transportation Impact Assessment to be required as part of the development application, comparing the traffic impact of the proposed rezoning with that generated under current zoning.

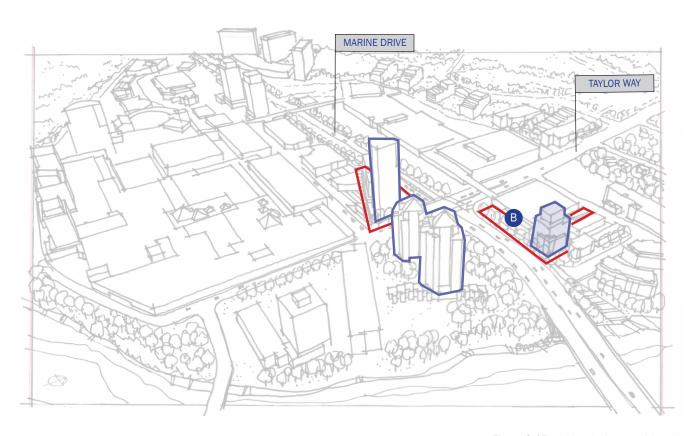
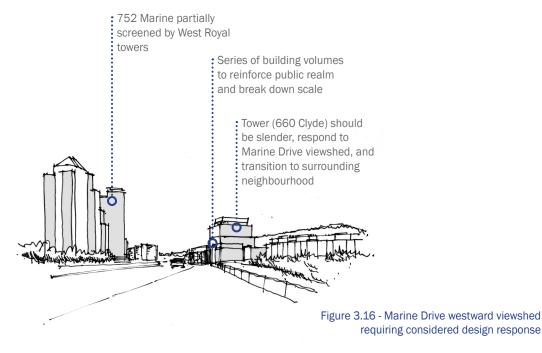


Figure 3.15 - Urban design considerations for sites under DWV jurisdiction



B 660 Clyde Ave, 657 and 675 Marine Drive

Partially vacant site contains a series of low buildings and a historic building located to the north. This study anticipates future development for the site to include:

LAND USE:

- Residential use as primary use, including the significant provision of rental and/or supportive units, to meet housing objectives, generate less traffic than commercial uses, and confirm the evolution of lands east of Taylor Way as a primarily residential area (e.g. West Royal, Water's Edge).
- Protection of the Hollingsworth-Downs designed heritage building at 660 Clyde Avenue with modest commercial use.
- Density to be generally compatible with existing OCP approved density, with potential variation to ensure OCP objectives are met (heritage preservation, open space, rental housing).

BUILT FORM:

- A series of building volumes that include a single, slender tower form as part of the defined town centre, with mid-rise elements oriented towards Marine Drive that respond to the existing scale of Water's Edge and frame the connection between Taylor Way and Capilano River.
- Tower to read as part of a collection of towers defining the town centre, with height deferring to 752 Marine Drive and West Royal Towers (i.e. 12 - 15 storeys, subject to satisfying housing and amenity objectives and urban design analysis).
- Massing to include transitional scale compatible with the existing scale of Water's Edge to the east.
- Building should respond to the shift in the Marine Drive alignment, such as the use of transparent materials, massing, placement and expression of vertical circulation, etc.
- Podium should align with Marine Drive and help define the desired connection to the Capilano River.
- A considered approach to the tower base and top such that the tower contributes to the public realm and a notable variation in skyline envisioned for the intersection.
- View and shadowing impact analyses to be conducted as part of development review.
- Excellence in sustainable design and energy efficiency standards.

PUBLIC REALM:

- A notable east/west connection from Capilano River to Taylor Way with a public realm strategy that draws from a riverfront experience and extends it into the centre, terminating in public space near the intersection.
- Public space to recognize and temper the current climate of the Taylor Way / Marine Drive intersection with an appropriate design, and look for opportunity for public art.
- Address the parkade edge with vertical landscape or hardscape elements to screen it from the planned public space.
- Tower to provide a transitional scale along Marine Drive with active edge to encourage pedestrian movement.
- Broader, area-wide improvements to the pedestrian environment to facilitate access to services, amenities, and transit.

AMENITIES:

- Amenities to focus on meeting housing affordability / diversity objectives, provision of public space and river connections, and heritage preservation.
- Community Amenity Contributions to be calculated on the basis of any increase in land value compared to the value under existing zoning.

TRANSPORTATION

- Residential parking reductions to minimize car ownership, and the promotion of car share initiatives.
- Enhance bike network infrastructure to improve connectivity to surrounding DNV bike routes.
- Assessment of additional right-of-way take for transportation improvements to be determined through development application process.
- A Transportation Impact Assessment to be required as part of the development application, comparing the traffic impact of the proposed rezoning with that generated under current zoning.

Artist renderings of a potential build-out for each of the urban centres, based on adjacent policy and application of the proposed guidelines for each sub-area.

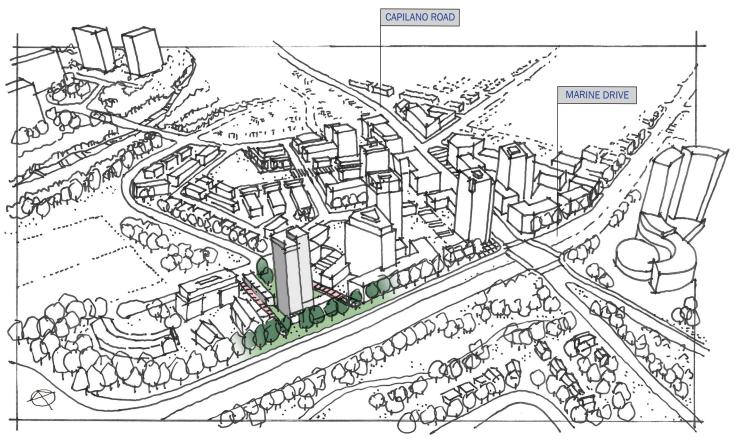


Figure 3.17 - East sub-area future build out

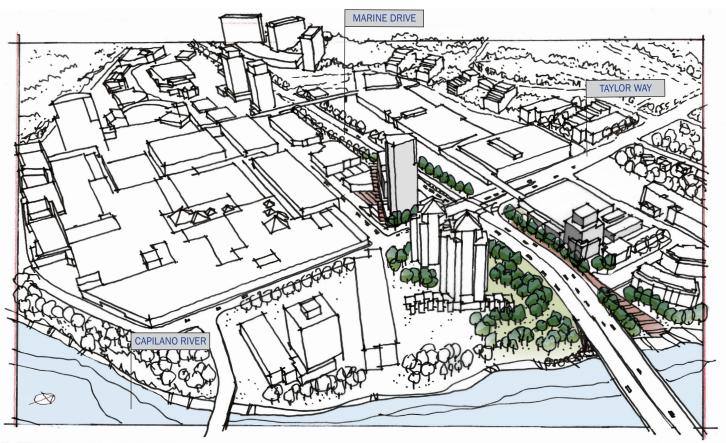


Figure 3.18 - West sub-area future build out



3.6 Marine Drive Streetscape

While the Study is focused on establishing an appropriate context to evaluate new development projects along Marine Drive, the nature and character of the street itself is important in contributing to a successful, walkable environment. Furthermore, the treatment of the streetscape is one way to introduce continuity amongst the urban centres in a cohesive manner.

The streetscape includes all elements contained within the street environment, from the face of one building to the face of the building opposite. For the purpose of this study, it involves the treatment of the ground plane (e.g. the design of sidewalks, the integration of bike lanes, the location and spacing of street trees), and how the corresponding ground floor use and design relates to, and contributes to, the quality and character of Marine Drive.

The following high level streetscape classification is used to suggest how Marine Drive can be different from one node to another, yet maintain some consistency to both urban centres to help tie the overall area together.

Urban. Urban street environment with wide sidewalks, street trees, and active ground-level uses that are located immediately adjacent to the sidewalk, forming a strong and vibrant edge to the street.

Green. Landscaped environment with wide sidewalks with residential at the ground level that is designed to engage with the public realm.

Transition. Transitional street environment with park and abundant landscaping at the street edge, and wide sidewalk connecting between the two urban centres.

The following pages outline a strategy for the Marine Drive streetscape. Within each of the classification areas, streetscape ideas are presented to help guide the evolving character of Marine Drive. While a complete public realm plan is necessary to fully explore the integration of the public realm with the existing and future context for Marine Drive, the framework presented below could form the basis of a future public realm plan.

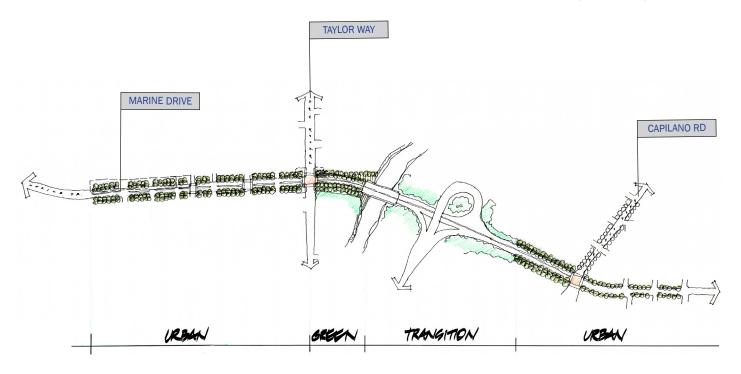


Figure 3.17 - Conceptual framework for the Marine Drive streetscape illustrating a possible approach to the street

Streetscape Guidelines: West Sub-area



Reflect an urban street condition (i.e. in the use of materials, design)

Improve street environment for pedestrians and support transit and cycling infrastructure

Create pedestrian nodes (with seating, public art, landscape features) along Marine Drive to encourage social interaction

Maintain and enhance crosswalks to encourage pedestrian mobility

Incorporate public art into public space design

Encourage ground-floor retail that engages with pedestrian realm of Marine Drive (i.e. front doors, transparent shop fronts)

Continuous weather protection

Pedestrian-scaled building blocks that encourage pedestrian movement

Introduce public space with new development where possible

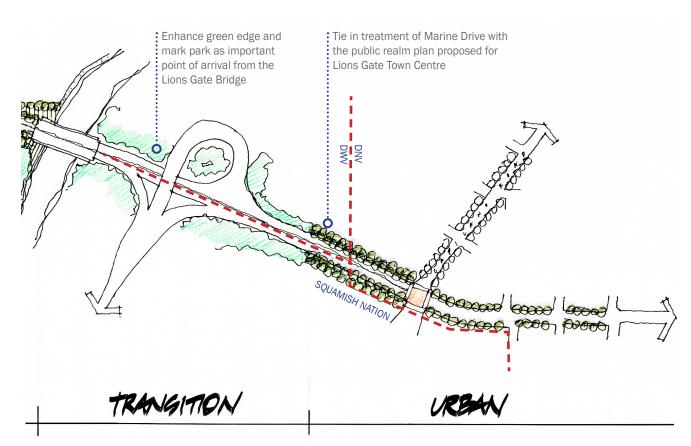
Wayfinding and signage to reflect proximity to river and provide access points

Improve street environment for pedestrians and support transit and cycling infrastructure

Residential uses at-grade to help animate the street with front doors and porches addressing the sidewalk

Introduce public space at corner of Taylor Way and Marine Drive, connected to a riverfront walk

Streetscape Guidelines: West Sub-area



Improve street environment for pedestrians and support transit and cycling infrastructure

Connect to and celebrate Klahanie Park through public art, signage, pedestrian connections

Encourage a continued 'green edge' to Marine Drive to contrast with urban nodes

Reflect an urban street condition (i.e. in the use of materials, design)

Improve street environment for pedestrians and support transit and cycling infrastructure $\,$

Public realm treatment to reflect the public realm plan for Lions Gate Town Centre to ensure coordination of area pedestrian, cycling, and transit infrastructure

Residential uses at-grade to help animate the street with consideration for transparent materials and landscape design that supports a pedestrian environment

Introduce public space with new development where possible

