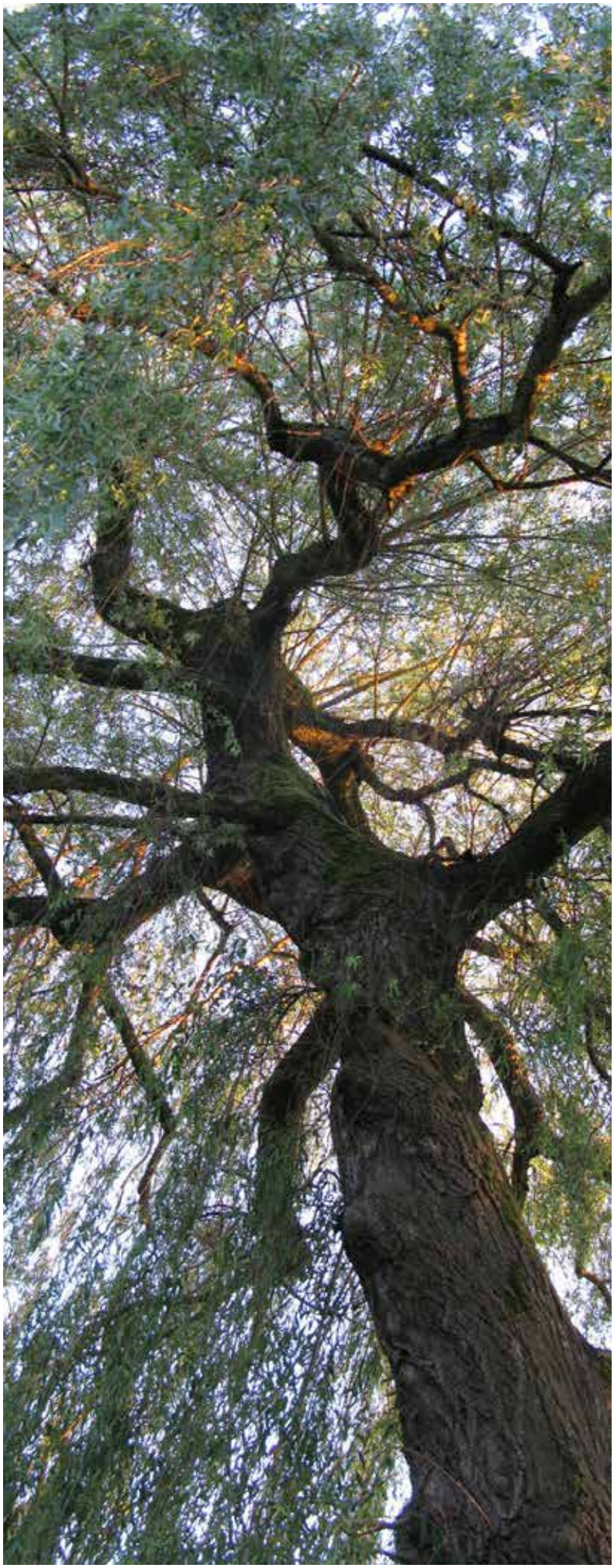


Queensborough Community Plan

Our Community.
Our Vision.
Our Plan.

Acknowledgements

MAYOR AND COUNCIL

Wayne Wright	*Mayor*
Betty McIntosh	*Councillor*
Bill Harper	*Councillor*
Chuck Puchmayr	*Councillor*
Jaimie McEvoy	*Councillor*
Jonathan Cote	*Councillor*
Lorrie Williams	*Councillor*

SPECIAL STUDY CONSULTANTS

Delcan	*(Flood Management)*
Donald Luxton & Associates	*(Heritage Inventory)*
Raincoast Applied Ecology & KS Biological Services	*(Ecological Inventory)*
Urban Forum Associates & G P Rollo & Associates	*(Study Area)*

ADOPTED BY BYLAW No. 7643, 2013

First and Second Reading	*December 9, 2013*
Third Reading	
Adoption	

CITY STAFF

Lisa Spitale	*Chief Administrative Officer*
Beverly Grieve	*Director of Development Services*
Barry Waitt	*Senior Planner*
Carolyn Armanini	*Planning Analyst*
Catalin Dobrescu	*Utilities & Special Project Engineer*
Claude Ledoux	*Parks Horticulture Manager*
David Guiney	*Senior Planning Analyst*
Dean Gibson	*Director of Parks, Culture and Recreation*
Eric Westberg	*Planning Analyst*
Eugene Wat	*Manager of Infrastructure Planning*
Fan Jin	*Transportation Technologist*
George Otieno	*Assistant Project Engineer*
Jackie Teed	*Senior Planner*
Jennifer Lukianchuk	*Environmental Coordinator*
Jerry Behl	*Transportation Engineer*
Jim Hurst	*Planner*
Jim Lowrie	*Director of Engineering*
John Stark	*Social Planner*
Julia Dykstra	*Planning Assistant*
Julie Schueck	*Heritage Planner*
Kathleen Stevens	*Planning Assistant*
Kathryn Beardsley	*Planning Clerk*
Lynn Roxburgh	*Planning Analyst*
Mark Allison	*Senior Planner*
Michael Watson	*Planning Technician*
Nick Hardy	*Planning Assistant*
Norm Connolly	*Community Energy Manager*
Renee Chadwick	*Manager, Queensborough Community Centre*
Tristan Johnson	*Planning Analyst*

Message from Mayor and Council

Queensborough is a distinctive neighbourhood where a rich history with the Fraser River has created a diverse community for residents and business alike.

The Queensborough Community Plan sets out a new sustainable vision for the neighbourhood; one that reflects its ongoing relationship with the river and unique environment, promotes the area's industrial past and future, and provides a range of services and amenities for both current and future residents and visitors.

New Westminster City Council would like to thank everyone that participated throughout the planning process and helped shape this important plan. The Queensborough Community Plan is a document that everyone should feel proud of and one that took an entire community to make - **This Plan is Your Plan!**

Table of Contents

FIGURES

MAPS

Plan Organization

This Plan is organized into four sections. Each section is described briefly below.

1. **Introduction and Planning Process (pages 1-6):** This section generally describes the role of this Plan within overall City policy, how this Plan was produced, and how it will be implemented.

2. **The Queensborough Context (pages 7-24):** This section outlines a baseline understanding of existing conditions and future projections. This establishes a starting point from which to build on toward achieving the Queensborough Community Vision.

3. **The Queensborough Community Vision (pages 25-40):** This section describes with words and pictures the aspirational vision of Queensborough in 2041. This vision is what the policies, land use designations and design guidelines of this Plan are meant to realize. This section also summarizes the community members' aspirations for Queensborough to which the vision responds. The vision is summarized in a vision statement, in a description of the vision components, and in the goals of this Plan.

4. **Policies (pages 41-232):** This section embodies this Plan's policy framework for achieving the community vision. This includes ten policy area chapters with specific policies and related City actions (pages 41-134), the Future Land Designations and Map (pages 135-138), and Development Permit Areas with related design guidelines (pages 140-232). Each policy area chapter includes a range of information related to that policy area, as illustrated on the facing page.

Additional related policies are included in the Appendices (pages 233-279) followed by this Plan's schedules (pages 280-286).

Information in the Policy Area Chapters

Sidebar

Provides additional information about topics related to the policy area.

Chapter Tab

Each policy area chapter has a uniquely coloured tab to help navigate between chapters.

4.0 Environment & Natural Areas

RARE ECOLOGICAL SPECIES

Ecological Communities –
- Longhi's Sedge
- Tufted hairgrass – Douglas' Aster
- Black cottonwood – red alder/ salmonberry forest

Rare Plants –
- Vancouver Island Beggarticks
- Henderson's Checkmallow

Rare Animals –
- Great Blue Heron
- Green Heron
- Western Screech Owl
- Barn Swallow
- Barn Owl
- White Sturgeon

Municipalities play an important role in maintaining a healthy environment. Efforts made in land use, transportation, infrastructure, buildings, park space, and community and economic development programs can all affect ecological health and environmental system performance. The City is committed to this role, as reflected in the Envision New Westminster 2032 document Queensborough, with its mix of urban and rural neighbourhoods and economic sectors in a riverfront location, presents unique environmental conditions and sustainability opportunities.

The Ecological Inventory of Queensborough (2010) identified the Fraser River foreshore, freshwater watercourses, and woodlots (forest patches) as Queensborough's three most important ecological features. The inventory revealed that the area supports, or could support, several rare ecological communities, plants and wildlife species. It also identified approximately 25% of the total land area in Queensborough as natural and semi-natural green space scattered throughout the community. However, extensive development, particularly within the past fifteen years, has meant a loss in biodiversity and habitat, particularly through the loss of woodlots. This puts significant pressure on remaining species and ecological communities.

Map 2.
Semi-Natural and Natural Vegetation
Source: Ecological Inventory of Queensborough, 2010

KEY:
- Forest
- Herbaceous
- Shrub
- Sparsely Vegetated
- River Edge

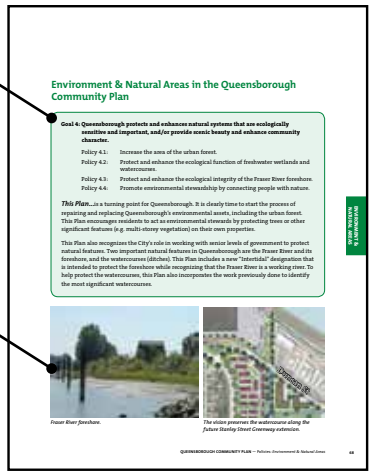
QUEENSBOROUGH COMMUNITY PLAN — Policies: Environment & Natural Areas

Goal and Policies

States the goal and lists all the policies for this policy area, and generally summarizes how this Plan achieves this goal.

Drawings and Photos

Pictures from Queensborough and vignettes from the Queensborough Community Vision that help to illustrate the policy area.



Environment & Natural Areas in the Queensborough Community Plan

Goal 4: Queensborough protects and enhances natural systems that are ecologically sensitive and important, and/or provide scenic beauty and enhance community character.

Policy 4.1: Increase the area of the urban forest.
Policy 4.2: Protect and enhance the ecological function of freshwater wetlands and watercourses.
Policy 4.3: Protect and enhance the ecological integrity of the Fraser River foreshore.
Policy 4.4: Promote environmental stewardship by connecting people with nature.

This Plan... is a turning point for Queensborough. It is clearly time to start the process of repairing and replacing Queensborough's environmental assets, including the urban forest. This Plan encourages residents to act as environmental stewards by protecting trees or other significant features (e.g. multi-storey vegetation) on their own properties.

This Plan also recognizes the City's role in working with senior levels of government to protect natural features. Two important natural features in Queensborough are the Fraser River and its foreshore, and the watercourses (ditches). This Plan includes a new "Intertidal" designation that is intended to protect the foreshore while recognizing that the Fraser River is a working river. To help protect the watercourses, this Plan also incorporates the work previously done to identify the most significant watercourses.

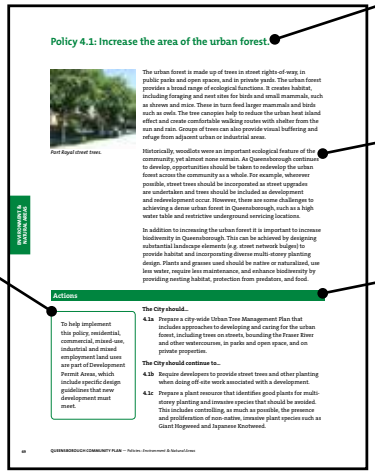
Fraser River foreshore.

The vision preserves the watercourse along the future Stanley Street Greenway extension.

QUEENSBOROUGH COMMUNITY PLAN — Policies: Environment & Natural Areas

Design Guideline Prompt

Notes when there are Development Permit Areas and associated design guidelines that are meant to help implement the policy.



Policy 4.1: Increase the area of the urban forest

Fort Royal street trees.

The urban forest is made up of trees in street rights-of-way, in public parks and open spaces, and in private yards. The urban forest provides a broad range of ecological functions. It creates habitat, including foraging and nest sites for birds and small mammals, such as shrews and mice. These in turn feed larger mammals and birds such as owls. The tree canopies help to reduce the urban heat island effect and create comfortable walking routes with shelter from the sun and rain. Groups of trees can also provide visual buffering and refuge from adjacent urban or industrial areas.

Historically, woodlots were an important ecological feature of the community, yet almost none remain. As Queensborough continues to develop, opportunities should be taken to redevelop the urban forest across the community as a whole. For example, wherever possible, street trees should be incorporated as street upgrades are undertaken and trees should be included as development and redevelopment occur. However, there are some challenges to achieving a dense urban forest in Queensborough, such as a high water table and restrictive underground servicing locations.

In addition to increasing the urban forest it is important to increase biodiversity in Queensborough. This can be achieved by designing substantial landscape elements (e.g. street network bulges) to provide habitat and incorporating diverse multi-storey planting design. Plants and grasses used should be native or naturalized, use less water, require less maintenance, and enhance biodiversity by providing nesting habitat, protection from predators, and food.

Actions

To help implement this policy, residential, commercial, mixed-use, industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

The City should...

4.1a Prepare a city-wide Urban Tree Management Plan that includes approaches to developing and caring for the urban forest, including trees on streets, bounding the Fraser River and other watercourses, in parks and open space, and on private properties.

The City should continue to...

4.1b Require developers to provide street trees and other planting when doing off-site work associated with a development.

4.1c Prepare a plant resource that identifies good plants for multi-storey planting and invasive species that should be avoided. This includes controlling, as much as possible, the presence and proliferation of non-native, invasive plant species such as Giant Hogweed and Japanese Knotweed.

QUEENSBOROUGH COMMUNITY PLAN — Policies: Environment & Natural Areas

Policy Area

States which of the ten policy areas this section covers.

Policy Area Description

Outlines the purpose of this policy area and why it is important within the context of this Plan.

Maps, Tables and Charts

Illustrate key data or the location of community elements related to the policy area.

Policy

States which of the policies this subsection covers.

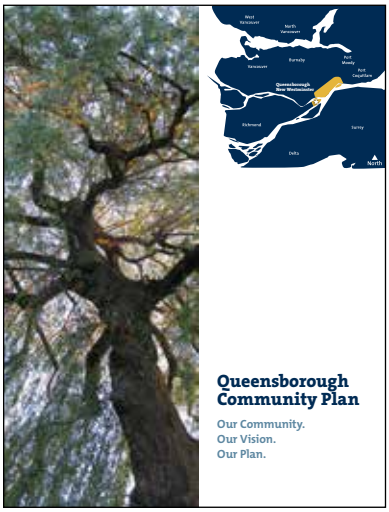
Policy Statement

Elaborates on and describes the intent of the policy.

Actions

Lists actions that the City needs to undertake or continue to do over time to achieve this policy.

Introduction and Planning Process



Purpose of this Plan

The purpose of this Plan is to provide a policy framework for achieving the Queensborough Community Vision. This vision (pages 25-40) provides an aspirational story of Queensborough to the year 2041. It describes how the community wants to develop into the future. It ensures that the growth and development of Queensborough is well-targeted and constructive, based on a common understanding of Queensborough's strategic opportunities.

To achieve this, this Plan outlines a baseline understanding of existing conditions and future projections (The Queensborough Context pages 7-24). This establishes a starting point from which to build on toward achieving the vision. This Plan also incorporates specific policies and City actions (pages 41-134), the Land Use Designations and Map (pages 135-138), and Development Permit Areas and design guidelines (pages 140-232) as tools for implementation. These regulatory tools give clear direction regarding land use, the form and character of development, future decision making, and implementation of engineering, transportation and servicing over time.

Together each of these facets of this Plan will guide the development of an environmentally, economically and socially sustainable Queensborough community.

Relationship to the Official Community Plan and Other City Policies

The growth and development of New Westminster is guided by the New Westminster Official Community Plan (OCP). The OCP is a municipal bylaw adopted by City Council. It is a statement of goals and policies which guide decisions on planning and land use management.

The Queensborough Community Plan is a schedule to and guided by the OCP. Community plans are generally undertaken for specific neighbourhoods where a more fine grained approach is appropriate due to the complex characteristics of that neighbourhood. Queensborough warrants a community plan because it is geographically separated from the rest of the City and is located in the floodplain, which creates unique challenges.

The Queensborough Community Plan builds on existing plans (e.g. 2008 Parks and Recreation Comprehensive Plan, 2011 Community Energy and Emissions Plan) as well as studies (e.g. Queensborough's Historic Context Statements, Ecological Inventory of Queensborough). This Plan also builds on the knowledge and decisions reflected in the past Queensborough Community Plan (1995).

Port Metro Vancouver is a key landowner in Queensborough.

Richmond's Hamilton neighbourhood is located just across Boundary Road.

Relationship with Other Agencies

While this Plan applies to all of Queensborough, other agencies own property in the area. Port Metro Vancouver, a federal agency and one of the key land owners in Queensborough, has a degree of planning jurisdiction along the waterfront. Port Metro Vancouver owns a substantial amount of water lots and waterfront property, including an approximately 50 acre former mill site. Port Metro Vancouver is interested in cooperating with the City.

Other prominent landowners include: Southern Railway, the Province of British Columbia (highway lands, bridgehead), and the School District.

RELATIONSHIP WITH METRO VANCOUVER

New Westminster is a member municipality in the Greater Vancouver Regional District (known as Metro Vancouver) and as such the City's land use, transportation and infrastructure planning policies must be generally consistent with Metro Vancouver's Regional Growth Strategy (2011). The Regional Growth Strategy identifies goals, strategies and actions that work toward the purpose of promoting "human settlement that is socially, economically and environmentally healthy and makes efficient use of public facilities and services, land and other resources."[1]

As a City policy document, the Queensborough Community Plan is one way in which the intent of the Regional Growth Strategy is integrated into the development of the community. To do this, each of the vision, goals, policies, actions and design guidelines in this Plan is generally consistent with and helps to achieve the Regional Growth Strategy goals.

RELATIONSHIP WITH RICHMOND

Queensborough shares its western border with the City of Richmond. The two areas are connected via Boundary Road. Hamilton, the abutting Richmond neighbourhood, has several similarities to Queensborough. Both are small areas, which are physically isolated from the remainder of the municipality. Both neighbourhoods face similar issues related to building in a floodplain and having limited access to local serving commercial uses. Given the proximity and similarity between the two there is an opportunity to work collaboratively with the City of Richmond to ensure that the development of each community benefits the other.

[1] Metro Vancouver. Regional Growth Strategy; 2011. p. 3.

Public Participation

This Plan is the product of a five year relationship with Queensborough community members and stakeholders structured around issue identification, vision and goal setting, policy development, and synthesis.

Different consultation methods were used during the planning process, recognizing the need for multiple methods of community engagement. The process included several community open houses with information boards and staff available to answer questions. A number of workshops were held where presentations combined with facilitator-led discussions engaged the public on more complex issues. Smaller focus group meetings were held with community groups (e.g. Friday night youth group, 50+ Social Club), businesses owners, and other relevant agencies (e.g. Fraser Health, Urban Development Institute). A HotShots! photo contest was also held where participants submitted photographs of Queensborough. Many of the submissions are incorporated in this Plan. To help build on the existing volunteer expertise in the community, many of City Council's committees and commissions participated in the development of this Plan.

Broad public input was obtained through these consultation methods. Queensborough residents, business owners, employees, property owners, as well as representatives of advocacy groups and the surrounding neighbourhoods, engaged in discussion on issues and provided recommendations. As a result, the Queensborough Community Plan comprehensively responds to the needs and desires of a range of Queensborough community members and investors.

Queensborough Community Plan Workshop.

MEASURING PROGRESS

Measuring progress is an important component of implementation. Plan monitoring should be done at regular intervals (i.e. every 2 to 5 years) to track and measure the performance of this Plan.

Indicators and performance measures are tools that provide a picture of how well the community is achieving its goals and policies. They provide a way of measuring and evaluating whether the community is doing better, worse or not changing at all. Indicators and performance measures provide a way to evaluate current realities against past trends and future directions in order to aid decision making.

The City is working on developing city-wide performance measures that will be applied to all New Westminster neighbourhoods. Once these are developed, they will be used to help track the implementation of this Plan.

Implementation

Realizing the Queensborough Community Vision will be achieved through implementing the policies contained in this Plan. The Land Use Designation Map, actions and design guidelines are components of this Plan that assist with implementation.

The Land Use Designation Map illustrates City Council's intentions for the use of lands use in Queensborough. The location of each land use was additionally informed by the policies contained within this Plan. The Map and land use designations guide future development, redevelopment, or potential rezoning of property within this Plan. Development guidelines are included in this Plan to ensure that new development incorporates specific features that help to achieve this Plan's policies. The land use policies in this Plan are further implemented through other tools outside of this Plan, including zoning regulations and heritage revitalization agreements.

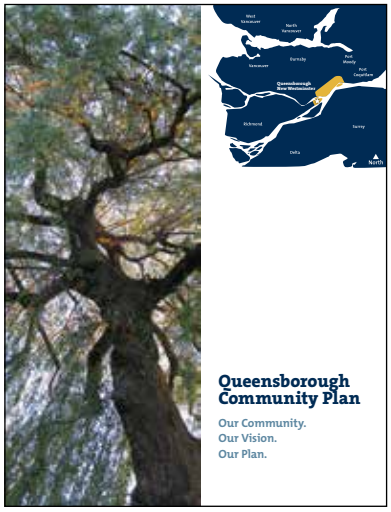
This Plan also identifies actions to be undertaken by the City. These highlight areas where further work is needed to assist with the implementation of a policy. In some cases, the actions emphasize relationships with other agencies that should be fostered and existing actions taken by the City that should be continued. Future decisions made by the City should be consistent with this Plan.

FINANCING COMMUNITY GROWTH & MAINTENANCE

As Queensborough grows additional infrastructure, amenities and services are often needed to support the additional population and employment. As the existing infrastructure ages, it also needs to be replaced. The City uses a number of sources to pay for the capital costs and ongoing operating costs (including maintenance) related to serving the community:

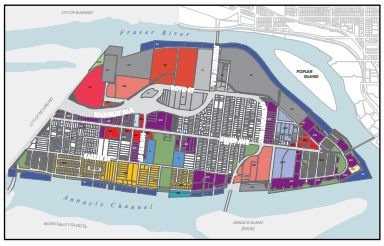
- The City obtains contributions from urban development projects to help pay for the infrastructure and amenities needed to support a growing population (e.g. development cost charges, works and services agreements, parkland dedication).
- Certain other municipal projects (e.g. decorative lighting, parks development, greenway street improvements) are funded from developer contributions, government grants, reserve funds and general revenues.
- Ongoing operating costs related to infrastructure and amenities are borne by user fees, general revenues, and the increase to the tax base resulting from development.

The Official Community Plan for the City of New Westminster

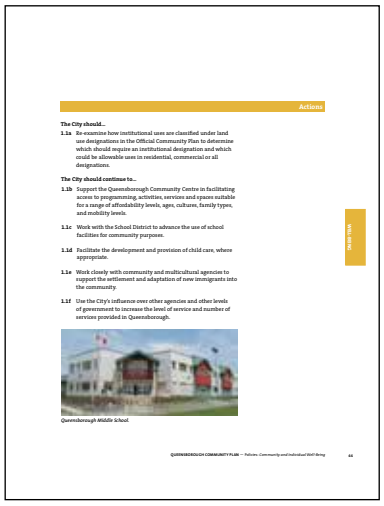


Queensborough Community Plan

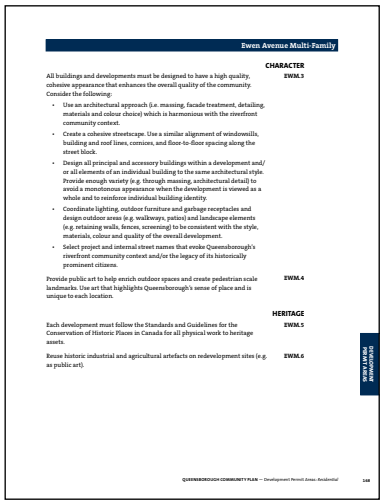
implementation tools



Land Use Designations, pages 135-137.
Land Use Designation Map, page 138.



City Actions, pages 41-134.



Development Permit Area Design Guidelines, pages 140-232.

The Queensborough Context

Queensborough is one of the five larger geographic areas which make up the City of New Westminster. Queensborough is 303 hectares (778 acres) in size and is located on the westernmost tip of Lulu Island, bounded by Annacis Channel and the North Arm of the Fraser River. It is located in the Fraser River floodplain.

The area's flat topography, fertile soils, high water table and distinct vegetation make Queensborough different from mainland New Westminster, with its bedrock geology and steep slopes.

It is unclear exactly when the area was named Queensborough. Records first refer to the area by that name when the first Queensborough Post Office was officially opened December 1, 1908. Queensborough was the name originally chosen by Colonel Moody for New Westminster until Queen Victoria decided on the present name.

Map 1.
Queensborough's Location Within the Region

Background

CULTURAL DIVERSITY

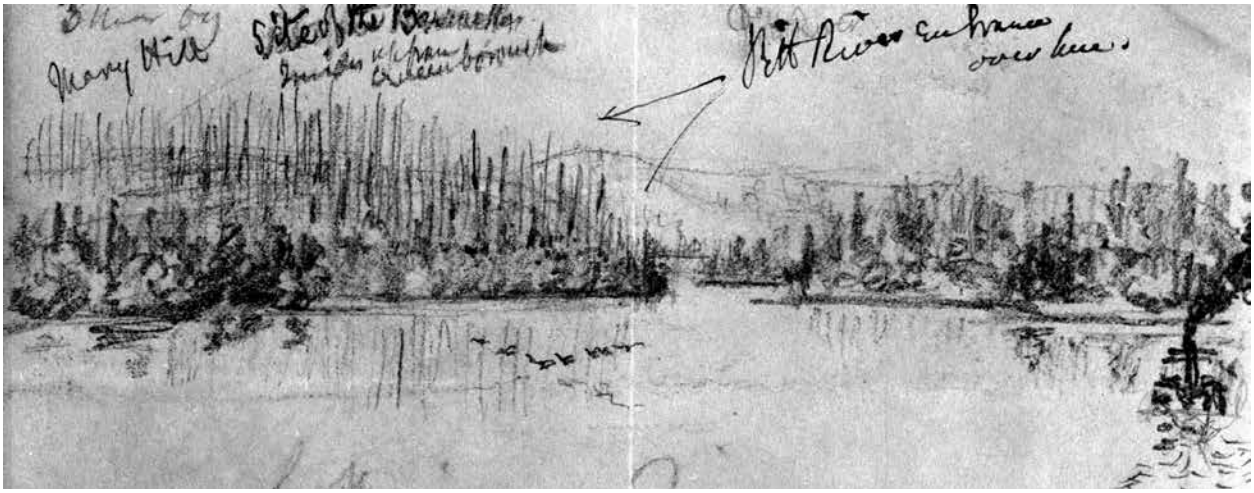
From its earliest settlement, Queensborough has been characterized by its cultural diversity. Many groups of immigrants were attracted to the exceptional resources, agricultural lands, riverfront and industries. The small population of this community shared the common bonds of a unique location and separation from the rest of the city.

The canneries of Queensborough brought many Chinese workers to the island for employment, c. 1900. (NWPL 790)

For many, Queensborough offered them their first possibility of land ownership in a rural setting close to the amenities of the city. Affordable parcels of richly fertile and easily cleared land offered families with limited resources the ability to be self-sustaining and to generate income with small home farms and businesses.

From the beginning, cultures came together in Queensborough's elementary school in ways that were remarkable for the time and place and which infused the community with pride of place and mutual respect, and created many shared memories for generations of residents. The school's unique and harmonious atmosphere led the school principal, Art Sweet, to often remark that it was New Westminster's "Little United Nations."

Queensborough continues to be a culturally diverse and close-knit community.



Looking up the Fraser River from Queensborough. (Royal BC Museum, BC Archives, PDP05084)

Queensborough had its own Italian Mutual Aid Society founded by Anthony Sprice and built on Ewen Avenue in 1932. It would later grow to become Roma Hall. (NWMA IHP 8014)

Members of Italian families who were early residents. (NWMA IHP 6463)

Coast Salish – Queensborough was first used thousands of years ago by the Lower Fraser Coast Salish people who moved seasonally to gather foods from the land and river. This particular area provided fertile bog lands that supported important foods, such as cranberries.

The establishment of the first non-Aboriginal settlement displaced local Aboriginal groups. The Aboriginal population was devastated by the unintentional introduction of diseases. In 1879, Aboriginals residing within City limits were given Reserve lands that included Poplar Island. It was there that an isolation hospital was established during a smallpox epidemic in the 1870s and 1880s.

Chinese – The first immigrant group to make their mark was the Chinese, who were associated with the cannery industry and lived in nearby company houses. This housing became an extension of the pioneer Chinatown established on the mainland. Kwong On Wo Company, a wealthy merchant firm, established one of the Westminster Canneries and a number of vegetable farms. By the 1920s, Queensborough's markets were supplying all of the successful Chinese produce stores on Columbia Street. The Chinese community declined in the years following the establishment of the Chinese Exclusion Act. Many Chinese families continued to establish market gardens and greenhouse operations. These were gradually replaced by urban development.

Italian – Anthony Sprice, a founding resident, was an Italian entrepreneur who opened the area's first real estate business, general store, post office, and gas station. He also established the Queensborough Rate Payers Association in 1911.

Sprice was a fervent supporter of the neighbourhood. His dedication to community activity extended to supporting his fellow Italians through the Italian Mutual Aid Society and serving as its first president in 1929. The Society built the first "Sala Roma" (Italian Hall) on Ewen Avenue in 1932. World War II was a dark period as many Italian nationals were sent to camps in the interior of BC. Following the war, with the new immigration, the Italian community began to flourish again. Today the Italian community continues to prosper with the Italian Mutual Aid society operating the successful Roma Hall which has expanded and is now a local landmark.

Japanese – New Westminster was one of the first pioneer Japanese settlements in Canada, which began with the arrival of the first Japanese immigrant in 1877. Early Japanese residents of Queensborough were land investors and those who came to establish market gardens on their own lands.

Later, many Japanese residents worked in the lumber and canning industries. Other Japanese immigrants worked to establish their own fishing companies and purchase their own fishing boats. A small enclave of fishermen had their own "stilt" houses built on the banks of the Annacis Channel, where they could moor their boats.

By the 1920's, the Japanese settlement had grown to become one of the largest ethnic groups. During World War II, the Federal Government ordered all Canadians with Japanese ancestry to be interned. Practically overnight the Japanese of Queensborough were relocated to internment camps and their homes seized and sold. Following the war, a few Japanese did return to Queensborough to begin building businesses and homes again.

The Indo-Canadian community poses proudly at the Sikh Temple on Boyne Street at its annual gathering on September 4, 1932. (NWPL 2109)

Ethnically diverse Queen Elizabeth School children. (NWMA IHP 6506)

Scandinavian – Many new immigrants to BC during the early years were Scandinavians who were attracted to communities in the Fraser River area, including Queensborough. The low lying land and access to fishing were reminiscent of their former home. A large group of Scandinavians lived side by side on Wood Street between Ewen Avenue and Salter Street. The Hanson and the Ingleson families were two of the earliest Scandinavian immigrants. Although not a large cultural enclave, they were a strong presence and regularly supported each other by sharing homegrown fruit and vegetables, as well as extra fish from that day's catch.

South Asian – Queensborough has one of the oldest Sikh communities in Canada. Most Sikhs who arrived in BC prior to 1920 were men who found employment in the many lumber sawmills on the Fraser River. Isolated by their own language, culture and religion, these men gathered together to live in mill site bunkhouses. By 1912 several bunkhouses were owned by Sikhs. One of these men was Bhai Bisan Singh, a devout Sikh who held meetings in his home and formed the Gurdwara Sahib Sukh Sagar in 1913. The New Westminster Khalsa Diwan Society formed when Singh donated the lot next to his house on Boyne Street in 1919 so that the congregation could construct its first Gurdwara (temple). The temple was replaced in 1975 and is now a city landmark.

Slovakian – Slovak immigration began in the aftermath of World War I when many found ready employment in the lumber industry. In the 1920s, Queensborough's Slovak population grew to become a dominant cultural group which established two community halls. Despite new immigration following World War II, the community dispersed and all but disappeared in the 1980s.

One of the early Japanese settlers who built his own home was George Ssake who died in 1942. The young helper is Tojiro Suto. (NWMA IHP 6421)

EARLY DEVELOPMENT

The City was granted the eastern portion of Lulu Island from the Province in 1889 with the proviso that the land be protected with dykes and that it be connected to the rest of the City by bridge. At the same time, Alexander Ewen purchased the neighbouring 56.7 hectares (140 acres). One year after the City was granted the land, it agreed to transfer 212.5 hectares (525 acres) of its land to Donald McGillivray, a foundry owner who agreed to build the bridge. The bridge to Queensborough was officially opened on November 30, 1891. This bridge was later replaced by a timber trestle bridge which opened in 1909.

Donald McGillivray, along with Alexander Ewen, also agreed to build a dyke system. The dyke system, completed in 1892, was overtopped by the 1894 flood which caused extensive damage.

Development on the island during the 1890s and the first decade of the Twentieth Century was primarily agricultural, fishing, and industrial. These early industries were attracted to the shores of the Fraser River for water dependant activities such as timber processing, shipping and manufacturing. These labour intensive industries provided the draw for workers across the world to settle within the neighbourhood and surrounding area. At first, there was a limited amount of housing as the City wanted the area used for industrial purposes.

After Mr. Ewen died in 1907, much of his property was subdivided and sold for new housing. The anticipation of the BC Electric railway line, which was completed in 1912, and the immigration boom to Canada, spurred on residential development from 1911 to 1913. However, World War I and the Depression limited further growth. The population stayed relatively stable, at about 200 people, until the mid-1920s.

GROWING PAINS

A number of homes were constructed between 1929 and 1931, the earliest years of the Great Depression. It is likely that the reasonable prices for land and the possibility of local sawmill lumber, in combination with helpful neighbours, encouraged people to build in Queensborough when they could not build anywhere else.

Westminster Shook Mill. (NWMA IHP 6195)

Queensborough continued to experience this period of housing development through the 1930s and the population increased to about 1,000 people, necessitating the construction of a larger Queen Elizabeth Elementary School in 1938. Local residents expressed increasing concern regarding their lack of sewers and other infrastructure.[2] The location of housing followed earlier survey patterns, emerging in blocks branching from Ewen Avenue, the primary street, and the route of the BC Electric railway line.

World War II boosted industry in Queensborough, with the Canadian Pacific Airplane plant, Heaps Engineering, and Mercer's Star Shipyards receiving military contracts. Heaps Engineering employed nearly nine hundred people in armament manufacturing.

The 1950s was a period of growth for the City, especially in residential construction, shipping and industry. Record tonnages were recorded for the 1950s, and lumber exports also grew 150 percent. Of the 8,500 industrial workers in the city, 6,000 were employed by the lumber manufacturing sector.[3] New industries locating to Queensborough and the opening of the Annacis Island industrial and business park resulted in an increase in heavy industrial traffic and its accompanying noise, vibration, pollution and street congestion. These factors presented challenges to the improvement of neighbourhood quality.

As the city approached its centennial in 1960, Queensborough benefited from the city's prosperity. The new Queensborough Bridge was opened and provided the impression that the future would be filled with growth and prosperity.[4] Local residents viewed it as an important initiative that connected Queensborough with the rest of the region.

In 1966, a City report highlighted that floodproofing, poor foundations and drainage were major constraints to development. The investment that would be required by the City to bring the services up to standard could not be justified, and all residential construction was halted. In 1968, the community overwhelmingly demanded the formulation and implementation of a sewage and drainage plan. A moratorium on residential construction was formally established by City Council in 1969.

[2] Wolf, Jim. Royal City. Heritage House Publishing Company Ltd, Surrey, BC; 2005. p. 154.

[3] Wolf, Jim. Royal City. Heritage House Publishing Company Ltd, Surrey, BC; 2005. p. 168.

[4] Wolf, Jim. Royal City. Heritage House Publishing Company Ltd, Surrey, BC; 2005. p. 180.

The opening of the Queensborough Community Centre in 1978. (NWMA IHP6668)

The Queensborough dyke.

The Queensborough Middle School.

KEEPING UP WITH GROWTH

By 1970, the population of Queensborough had grown to 2,500. In the two decades that followed, there was significant investment in different services and creation of policy that improved the livability of Queensborough. These investments included:

Dykes, Ditches and Sewers – The mid-1970s saw the reconstruction and improvement of part of the dyke system, improved pumping stations, and the addition of new floodboxes and ditches. With the construction of the Annacis Island treatment centre in 1975, it was possible to install sewers in Queensborough. The residential sewage and drainage system for the traditional residential area was completed in 1979.

Community Centre – In 1974, the City began to acquire land for a community centre. An architectural competition was held in 1975 and was won by Carlberg Jackson Architects. The Queensborough Community Centre opened in 1978.

Highway and Bridge – The 1980s were marked by the construction of the Annacis Highway and the Alex Fraser Bridge, which opened in 1986. This resulted in the need to relocate the Queensborough loop road and railway line. These changes more clearly separated the industrial area from the residential area.

Schools – There are two schools in the community: Queen Elizabeth Elementary School and Queensborough Middle School. Queen Elizabeth Elementary School was constructed in 1988, replacing the elementary school located at what is now Old Schoolhouse Park. The school has Kindergarten through Grade 4. Queensborough Middle School opened in 2003 and has Grades 5 through 8.

LONG-RANGE PLANNING IN QUEENSBOROUGH

A long-range development plan was adopted by Council in 1971. The projected population within the timeframe of that plan was 7,000 people. It proposed a neighbourhood centre, with park and school facilities (although not in the current location at Ryall Park).

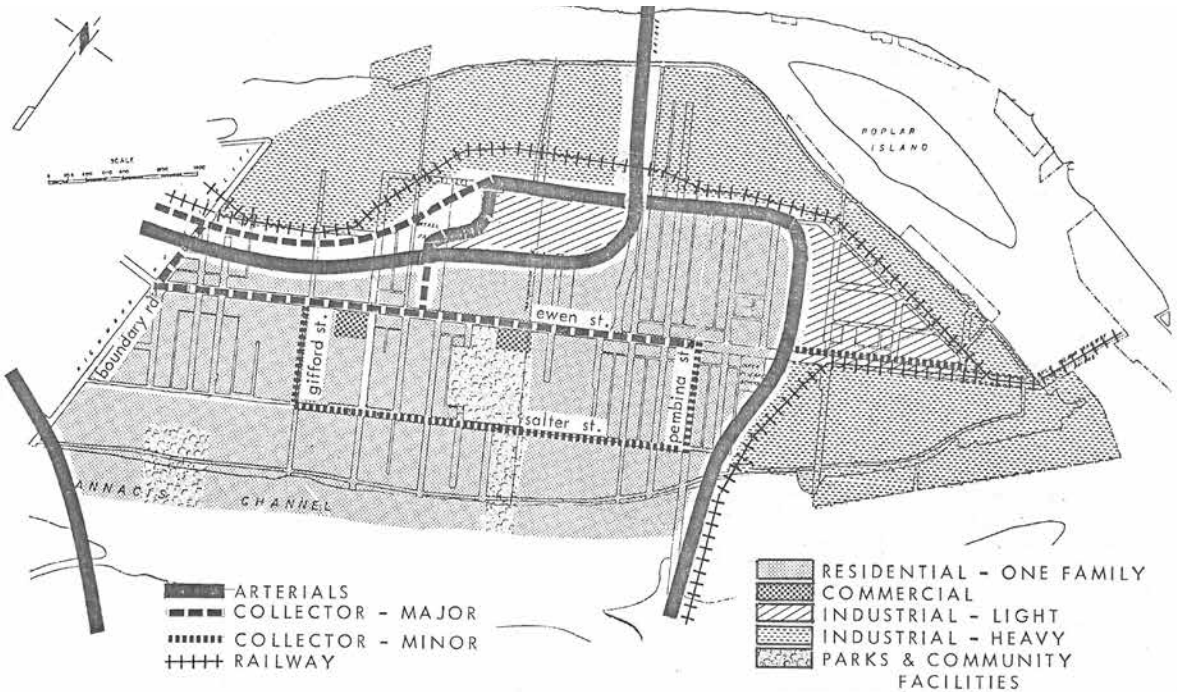
To achieve a clear separation between industrial and residential uses, it was proposed to rezone the heavy industry area south of Salter Street to a single detached housing district and to rezone another residential area east of Johnston Street to a light industrial district. An industrial ring road would act as a barrier. Another recommendation was to relocate the railway tracks from Ewen Avenue to north of Boyd Street.

The process to update the Queensborough Community Plan started in the early 1980s. It was clear that major projects such as the Annacis Freeway System and the railway relocation, were going to have a significant impact in shaping the land use patterns. Development strategies for residential, commercial, industrial, and institutional land uses were included in the Plan, adopted in 1983.

The 1983 Plan was amended in 1990 to create a Development Permit area for Port Royal which would allow the area's land use to change from industrial to residential in accordance with design guidelines.

In 1995, the City adopted the Queensborough Official Community Plan. This Plan established policies to ensure a high development standard, retain historical and environmental character, and maximize economic opportunities.

Figure 1.
Development Concept from the 1983 Queensborough Community Plan



Queensborough's Transformation: The Last 20 Years

POPULATION AND HOUSING IN RECENT YEARS

The population of Queensborough began to increase steadily in 1991. Between 2006 and 2011 the growth rate of Queensborough (29.5%) was higher than that of the city (12.7%), accounting for more than one quarter of the city's total population increase. In 2011, approximately 7,125 people (11% of the city's population) lived in Queensborough in 2,265 dwelling units. This was an increase of 500 units since the 2006 Census. Figure 3 and Figure 4 illustrate this population growth.

A DRAMATIC SHIFT IN LAND USES

Over the last 20 years, major shifts in land use have been instrumental in shaping the type of growth that has occurred in Queensborough. In 1991, residential uses accounted for less than half of all the floorspace in the community. By 2011, 65% of all floorspace was residential. Despite an increase in the total amount of industrial floorspace, the proportion of industrial floorspace decreased substantially (from 44% to 18%). Commercial floorspace also experienced a dramatic increase between 1991 and 2011, with its share of floorspace more than doubling. Figure 2 and Figure 5 illustrate the two different snapshots of the land use composition in Queensborough.

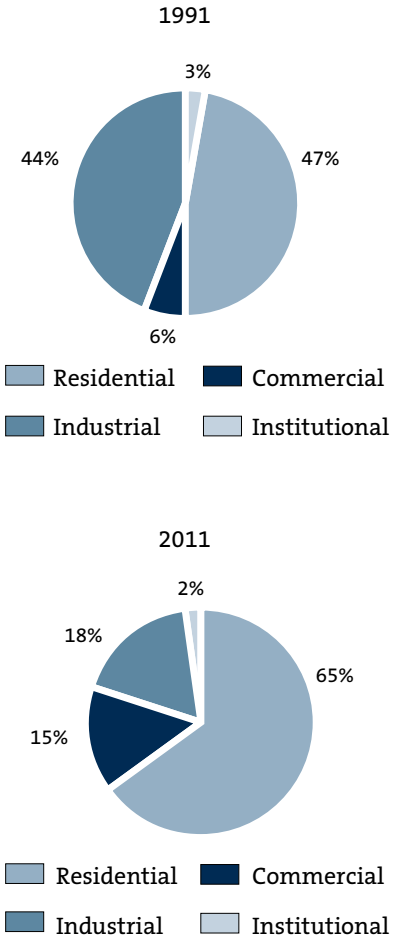


Figure 2.
Type of Developed Floor Space in Queensborough
Source: City of New Westminster

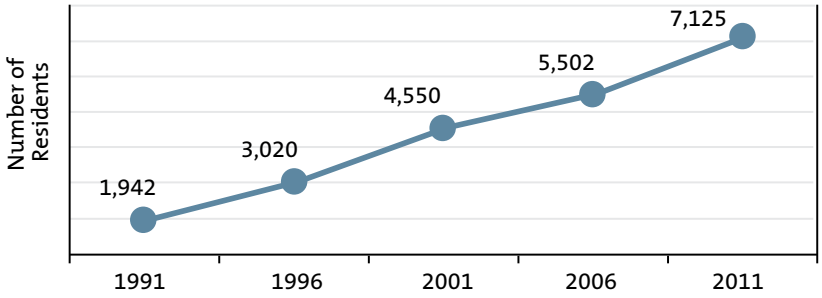


Figure 3.
Queensborough Population Growth
Source: Statistics Canada, 1991, 1996, 2001, 2006 and 2011 Census

	2001		2006		2011	
	City	Queensborough	City	Queensborough	City	Queensborough
Total Population	54,655	4,550	58,550	5,502	65,976	7,125
% of City		8.3%		9.3%		10.7%

Figure 4.
Total Queensborough and City Population
Source: Statistics Canada, 2001, 2006 and 2011 Census

Year	Residential	Commercial	Industrial	Institutional	Total
1991	101,627	12,554	94,146	7,449	215,777
2011	354,121	79,763	101,409	12,472	547,792
Gain/Loss 1991-2011	252,494	67,209	7,263	5,023	332,015
% Change	248%	535%	8%	67%	154%

Figure 5.
Amount and Type of Floorspace in Queensborough Over The Past 20 Years (Square Metres)
Source: City of New Westminster

Residential Land Uses – The increase in residential floorspace, starting in 1991, was the result of new large developments such as Port Royal, a subdivision on the old MacMillan Bloedel site. When complete, Port Royal will provide a total of approximately 1,000 housing units and an expected population of about 3,000 people. The increase in residential floorspace was also the result of an amendment to the Zoning Bylaw which reduced the minimum lot size required in the Queensborough Neighbourhood Residential Dwelling Districts (RQ-1) zone from 557 square metres (6,000 square feet) to 372 square metres (4,000 square feet), resulting in an increase in the number of residential subdivisions that occurred. The type of residential floor space also changed as development began to include multi-family buildings. Figure 6 illustrates this residential growth.

Commercial Land Uses – A dramatic increase in Queensborough commercial floorspace has also occurred over the past 20 years. The most significant reasons for this increase were the development of Queensborough Landing, starting in 2003, and the Starlight Casino, in 2007. Although there was some loss of commercial floorspace along Ewen Avenue, in the traditional neighbourhood, the latter portion of the 2000s saw the beginning of an expansion of new local serving commercial floorspace. Figure 7 illustrates this commercial growth.

Industrial Land Uses – Traditional industrial sites in Queensborough have evolved over the last 20 years. Many industrial sites have been redeveloped into newer forms of industrial, commercial or residential uses which has reshaped the Queensborough community. The evolution of industrial land included both the Western Forest Products and International Forest Products (Interfor) sites. Operations on these sites closed in 2007, resulting in a sharp decline in the amount of industrial floorspace in Queensborough. The amount of floor space recovered in the early 2010s with the redevelopment and intensification of the Western Forest Products site. Figure 8 illustrates this evolution of industrial growth. The amount of industrial floorspace will continue to increase as the Interfor site and other industrial properties in Queensborough are redeveloped.

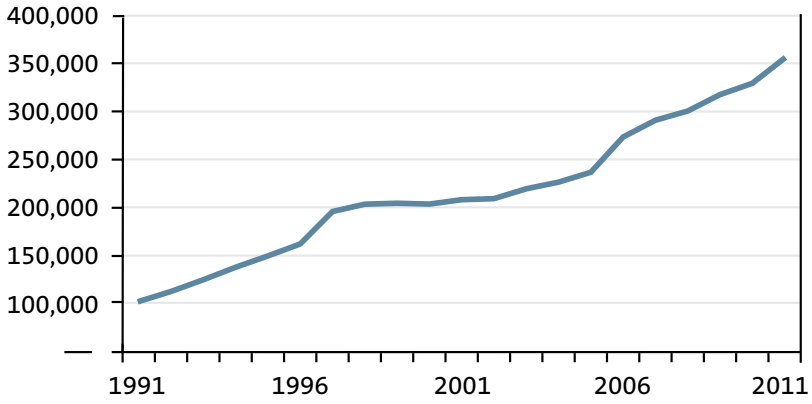


Figure 6.
Residential Growth in Queensborough (Square Feet)
Source: City of New Westminster

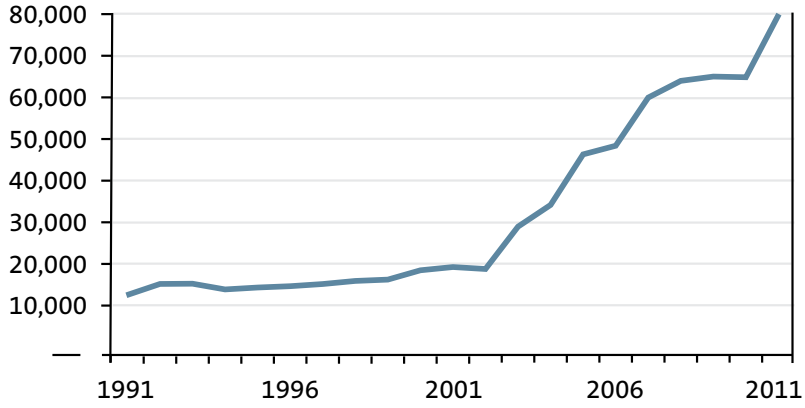


Figure 7.
Commercial Growth in Queensborough (Square Feet)
Source: City of New Westminster

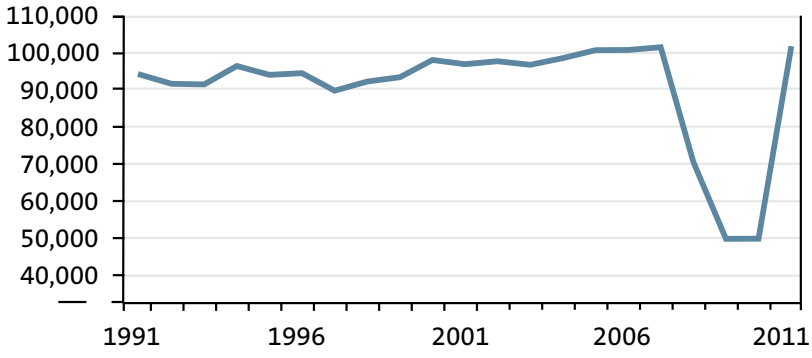


Figure 8.
Industrial Growth in Queensborough (Square Feet)
Source: City of New Westminster

Queensborough Today: Demographic Profile in 2011

Queensborough had a population of approximately 7,125 in 2011. The largest demographic group living in Queensborough was adults aged 35-49. The largest demographic group for the City was adults aged 50-69.

Compared to New Westminster as a whole, Queensborough had a:

- Higher share of children under the age of 15.
- Higher share of mid-range adults aged 35-49.
- Lower share of adults aged 50-64.
- Lower share of seniors over age 65.
- Similar share of youth (15-24) and of young adults (25-34).

There were minor changes in the age profile of Queensborough as compared to the city between 2006 and 2011. In Queensborough, the share of the younger population (under 50) decreased and the share of the older population (over 50) increased during this period. This is different from the city as a whole where the greatest decrease was the share of children (0-14) and the greatest increase was the share of adults aged 50-64. Figure 9 illustrates this population profile.

HOUSEHOLD CHARACTERISTICS

In 2011, the average household size in Queensborough was larger than that of both the city and the region. The average household size was 3.1 people in Queensborough, 2.1 in the city and 2.6 in the region. Multi-family households were much more common and accounted for 9% of all Queensborough households, compared to a city-wide average of 2%. Overall, the most common type of household in Queensborough consisted of couples with children. This contrasts with the city as a whole, for which it was most common for people to live alone. Figure 10 illustrates a breakdown of household types for Queensborough.

INCOME

Based on 2011 Census Data, households in New Westminster had a lower median income ($54,700) than in Metro Vancouver ($64,300). However, the median household income in Queensborough ($84,200) was significantly higher than the city as a whole. Figure 11 illustrates household income.

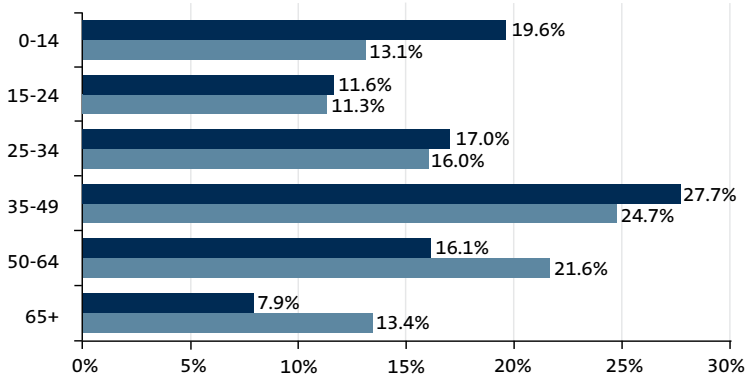


Figure 9.
Population by Age Group
Source: Statistics Canada, 2011 Census

Queensborough
New Westminster

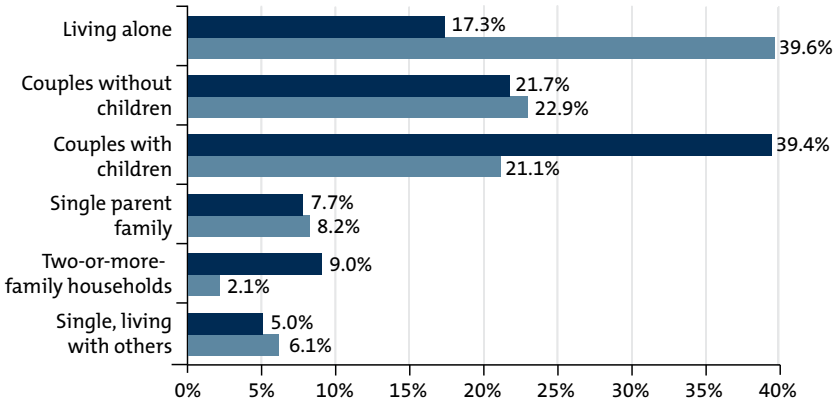


Figure 10.
Population by Household Type
Source: Statistics Canada, 2011 Census

Queensborough
New Westminster

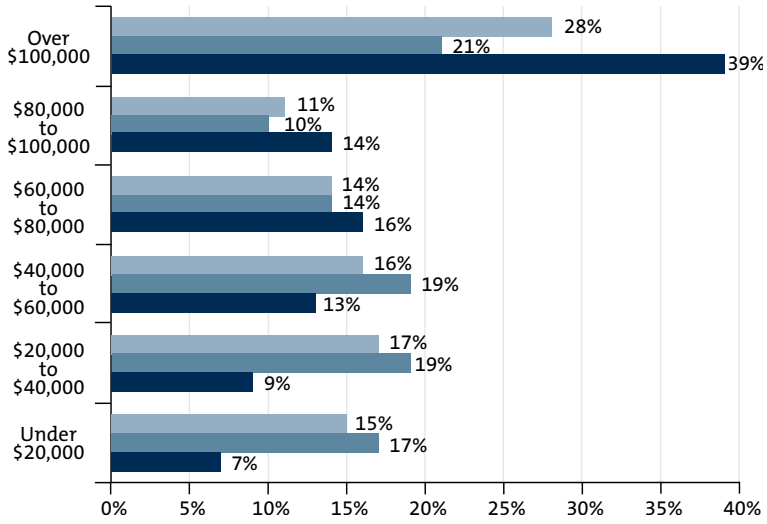


Figure 11.
Household Income by Selected Income Groups
Source: Statistics Canada, 2011 National Household Survey

Queensborough
New Westminster
Metro Vancouver

CULTURAL DIVERSITY

Home language is an important indicator of a community's cultural diversity. It reveals which language a person speaks the most within their household on a day-to-day basis. In some cases, a person may speak two languages to an equal extent: these persons are counted in the Census as "multiple."

A moderate majority of Queensborough residents (58%) spoke English, 16% spoke Punjabi, 3% spoke Tagalog and 2% spoke Cantonese. This differs significantly from the city as a whole, wherein a much greater majority spoke English and 16% spoke Punjabi. Figure 12 illustrates this language profile.

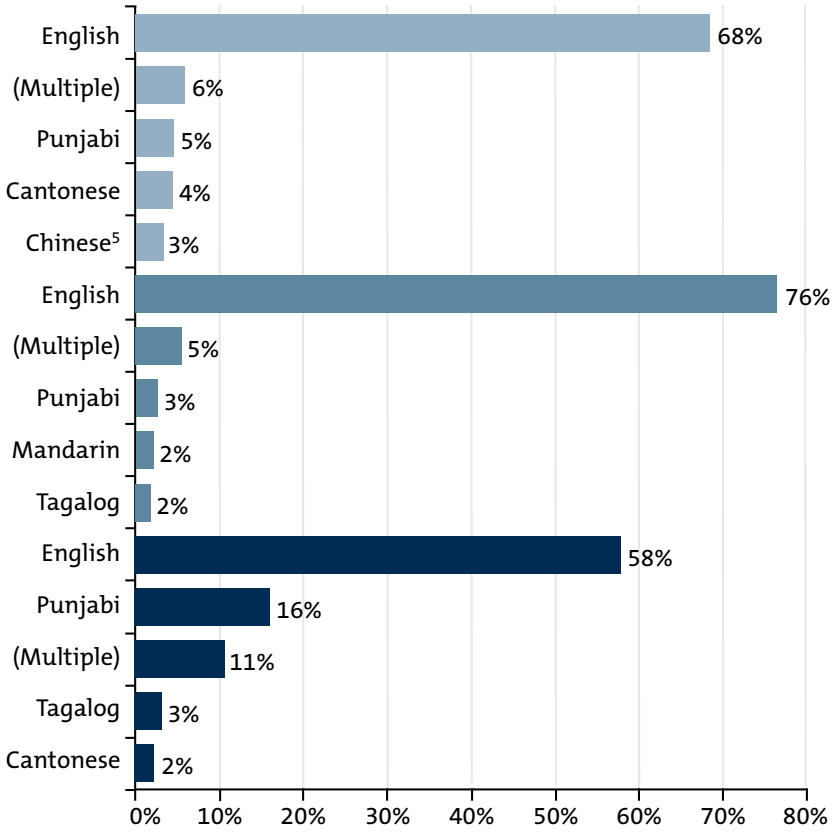


Figure 12.
Most Common Language Spoken at Home
Source: Statistics Canada, 2011 Census

Metro Vancouver
New Westminster
Queensborough

[5] Note: The category entitled Chinese reflects the census category "Chinese, n.o.s" (not otherwise specified).

Growth Management: The Next 30 Years

QUEENSBOROUGH GROWTH IN THE CONTEXT OF REGION AND CITY-WIDE GROWTH

The Metro Vancouver region continues to experience population growth and, as a member municipality, New Westminster must accommodate its share of this growth toward developing a region that is socially, culturally, economically and environmentally sustainable. Population forecasts and projections are tools for estimating the magnitude of that growth based on past trends and assumptions for the future. They are used to estimate how much growth is expected in the region and how that growth will likely distribute itself into the region's municipalities.

In 2008, the City completed a population forecast to 2031. This forecast anticipated that the city's population could increase to 96,645 residents in total by 2031. This forecast is generally consistent with the population projections of Metro Vancouver's Regional Growth Strategy (2010). The City's forecast indicated that, of the total expected population growth, only 23% will be in Queensborough with 36% in Downtown and 41% throughout the rest of the city. A population increase of 23% in Queensborough would mean an increase to a total of 13,083 residents in 2031.

As part of the Queensborough Community Plan review, a residential development capacity analysis was completed. This analysis took into account the area available for residential growth based on the Land Use Designation Map, recent development trends, and assumptions regarding the future redevelopment of sites. This analysis confirms that the Land Use Designation Map embodies enough capacity to provide homes for up to 14,825 residents in Queensborough by 2041. This would also be generally consistent with Regional Growth Strategy projections.

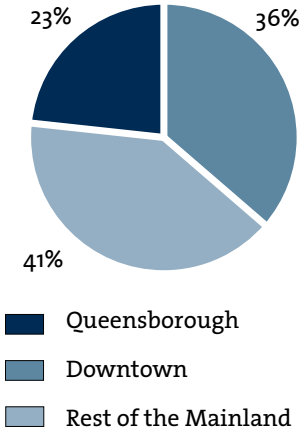


Figure 13.
Share of Population Growth (2008-2031)
Source: City of New Westminster and Coriolis Consulting Corp

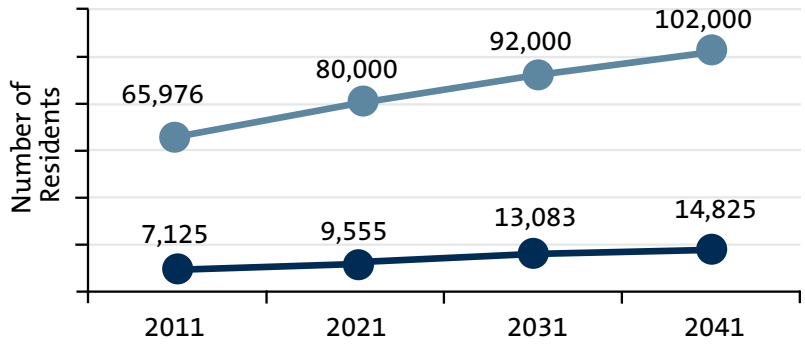


Figure 14.
New Westminster and Queensborough Projected Growth in Population
Source for 2011 Population: Statistics Canada, 2011 Census; Source for New Westminster Projection: Metro Vancouver; Source for 2021 and 2031 Queensborough Projection: Coriolis Consulting Corp Source for 2041 Queensborough Projection: City of New Westminster and GP Rollo and Associates

New Westminster
Queensborough

WHAT DO POPULATION PROJECTIONS & FORECASTS MEAN?

Population forecasts and projections are tools that assist in the management of community growth. They help to determine how many people are expected to live in the community by a certain date. Determining this helps identify the community's needs for housing, services and amenities through the lifespan of a community plan. Population forecasts and projections do not set a cap for community population growth.

PROJECTION & FORECAST ACCURACY

As tools for managing growth, it is important that population projections and forecasts are reliable. The population forecast in the previous Queensborough Community Plan (1995) has proven to be relatively accurate. The 1995 plan forecast that the Queensborough population would reach 7,500 total residents by 2014, including completion of the Port Royal development. In 2011, Statistics Canada placed Queensborough's total population at 7,125, with a portion of Port Royal still remaining to be completed.

GROWTH MANAGEMENT IN QUEENSBOROUGH

The residential development capacity analysis also indicated that the total area designated for residential development in the 1995 plan would be sufficient to accommodate the projected population for Queensborough through 2041. As a result, this Plan holds overall residential development capacity at the same level as the 1995 plan. The Land Use Designation Map strategically relocates some residential density to the most appropriate places, such as to:

- Support sustainability through locating residential density in proximity to commercial, services and amenities.
- More accurately reflect the feasibility of certain parcels developing over time (e.g. small lots may not redevelop).
- Use unique attributes of higher density forms to achieve other Plan goals, such as to support the dyke and mitigate noise.
- Accurately reflect development that occurred since the 1995 plan or was already in process at the start of this Plan review.

HOUSING TYPE GROWTH

Housing growth in Queensborough is expected to be largely multi-family development, including the development capacity of Port Royal and the construction of townhouse developments that are already in-stream. If the current trends continue, 59% of new construction between now and 2041 is projected to produce townhouses. Apartments would account for 23% of new development.

Single detached dwellings will also increase (18%). The increase in single detached dwellings is a characteristic unique to Queensborough, as there will be few additional single detached dwellings constructed on the mainland. Figure 15, Figure 16 and Figure 17 illustrate the growth in Queensborough's housing.

EMPLOYMENT GROWTH

With a population of 14,825 residents in 2041, Queensborough could support up to 28,521 square metres (307,000 square feet) of local serving commercial. The existing commercial along Ewen Avenue and the local serving commercial that is part of Queensborough Landing makes up approximately 11,613 square metres (125,000 square feet). This leaves an opportunity to develop an estimated additional 16,908 square metres (182,000 square feet) of local serving commercial in Queensborough by 2041. The full amount of commercial floor space has not been accommodated in the Land Use Designation Map in order to prevent an over supply. As the population increases enough to support additional commercial floor space a new commercial node will develop along the east end of Ewen Avenue. There will also be an increase in the amount of industrial floor space as vacant or underutilized sites are developed.

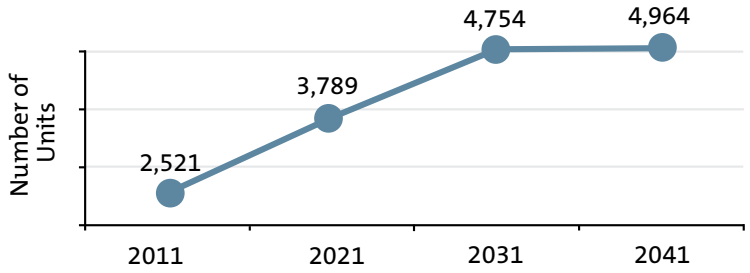


Figure 15.
Queensborough Growth in Housing Units
Source: City of New Westminster and GP Rollo and Associates

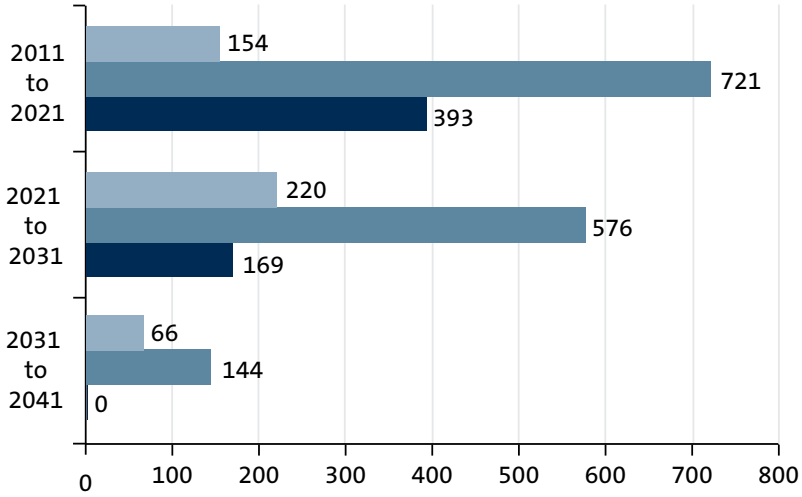


Figure 16.
Net Housing Unit Growth by Type
Source: City of New Westminster and GP Rollo and Associates

Single Detached Dwellings
Townhouse
Apartment

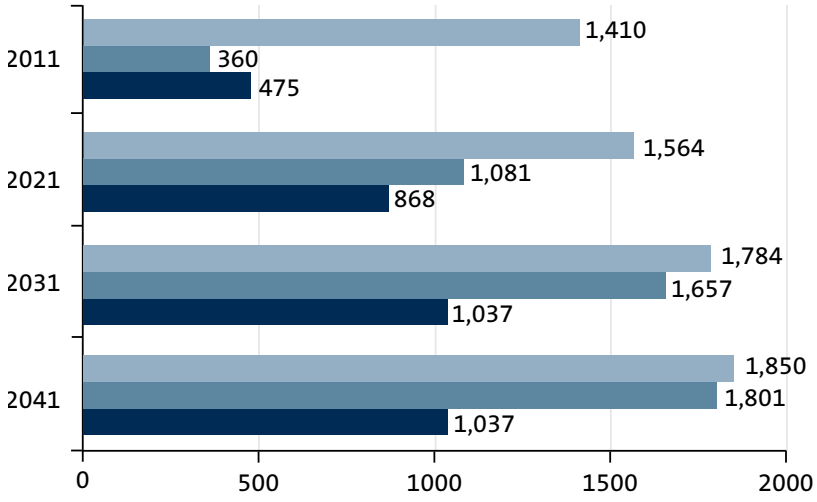


Figure 17.
Total Housing Unit Distribution by Type
Source: City of New Westminster and GP Rollo and Associates

Single Detached Dwellings
Townhouse
Apartment

The Queensborough Community Vision

Queensborough is a distinctive and historic community that reflects its enduring relationship with the Fraser River in its character and economy. The culturally diverse and complete community offers a range of housing options, and an array of locally focused services and amenities to meet the daily needs of residents. Queensborough capitalizes on its proximity to transportation routes to provide city-wide and regional economic destinations. Queensborough celebrates its natural and heritage features, and balances the needs of the community by conserving and enhancing key economic and environmental assets, including retaining the waterfront as an industrial, ecological and public resource. The community is pedestrian friendly and well connected by an enhanced Ewen Avenue and a network of parks, open spaces, trails and greenway streets.

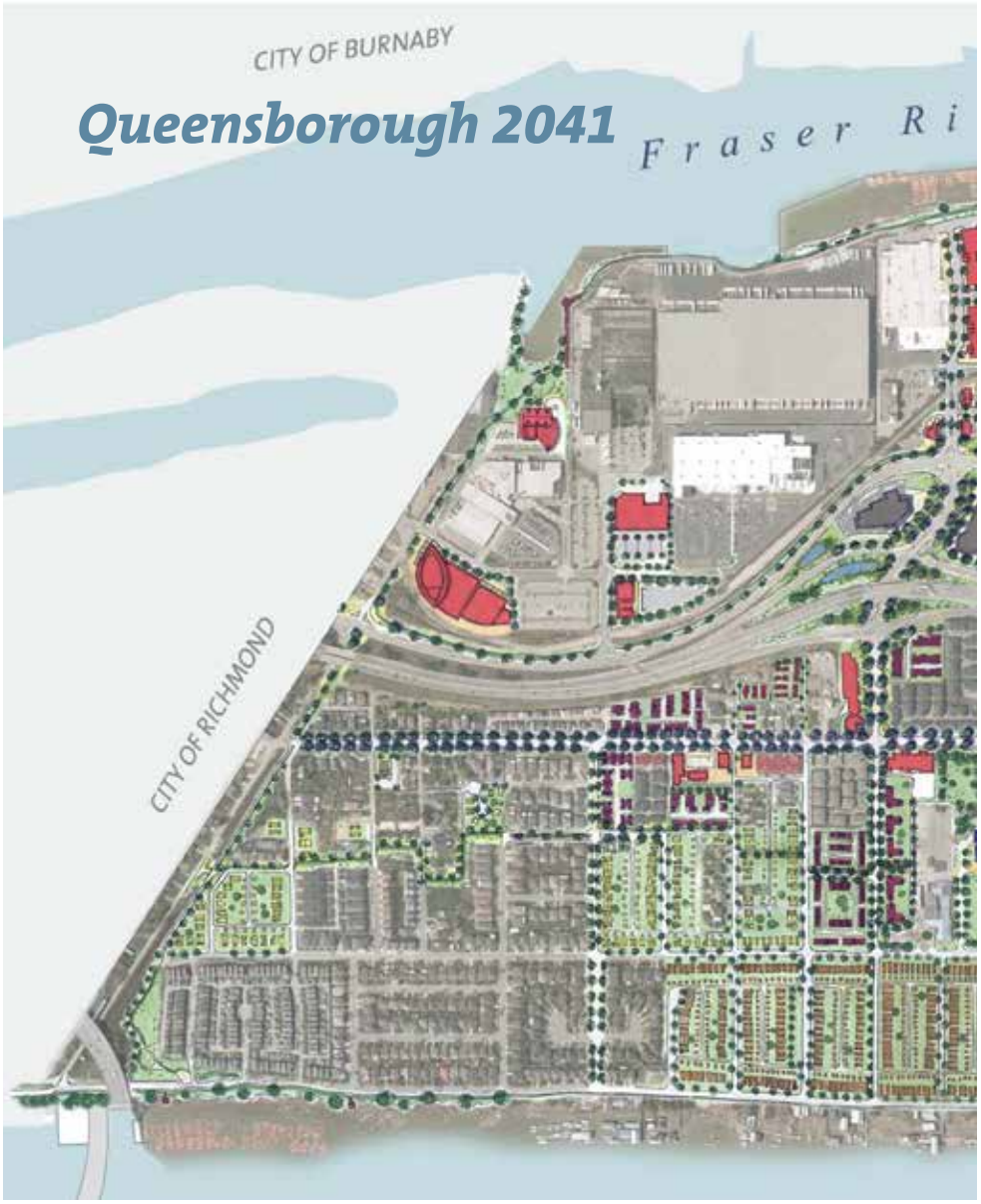


Figure 18.
The Queensborough Community Vision

The vision illustrates what the neighbourhood might look like in 2041 through the application of the policies of this Plan. It is not meant to be an exact rendering of Queensborough in the future.

Why We Need A Queensborough Community Vision

Boats in Annacis Channel. (Dennis Sylvester Hurd)

Queensborough's former wood farm. (HotShots! Photo by Olga Semina)

Watercourses also play a key role in storing stormwater.

The Queensborough Community Vision is the heart of this Plan. It describes an aspirational story in words and pictures of Queensborough in 2041. It provides a picture of where the community wants to be in the future. It is what the policies, land use designations and design guidelines of this Plan are meant to work toward. The community vision incorporates the things that make Queensborough a great place to live, work, learn and play. It identifies solutions for the things that make it more difficult to do those activities in Queensborough. The community vision describes the future of Queensborough as a reconnected and whole community.

COMMUNITY ASPIRATIONS

The community vision responds to the community members' aspirations for their neighbourhood. These objectives are described below and in Figure 19.

Queensborough is a unique riverfront community. Sitting at the tip of Lulu Island in the Fraser River, Queensborough is shaped by its physical context perhaps more than any other New Westminster neighbourhood. Queensborough is decidedly a riverfront community, where shipyards, fisheries and log booms for local lumber mills have all found a home, and frog-filled ditches, weeping willows and "hobby-farm" yards are a common sight. The regional transportation routes have made Queensborough a successful shopping and entertainment destination, and support the community's industrial land uses which are important to the City's economic livelihood. Together, these elements make Queensborough a complete community that its residents are proud to call home.

At the same time, these elements physically divide the neighbourhood. The Fraser River separates Queensborough from the mainland, the commuter and heavy truck traffic of the highway and Derwent Way (the truck route) divide the community into two halves, and industrial land uses segregate eastern and western residential neighbourhoods. Queensborough residents, who have a closely knit, multicultural community, aspire to a future where these divides are addressed and the community is physically united.

Queensborough has a good start with Ewen Avenue, the community's spine. A strong community heart is located in the blocks around Ewen and Howes Street, the main entry point to the residential area, where civic uses and local shops are clustered. The east end of Ewen has the seeds of a second neighbourhood centre. Howes continues north across the highways where it acts as the

main entry point into the business area. These important locations help to create an identifiable structure which should be built on and reinforced.

Most of the residential part of Queensborough is located around Ewen Avenue, south and east of the highways and truck route, with the majority of the industrial, commercial and entertainment areas located to the north. The exception to this logical division of land uses is a portion of industrial land just east of Derwent Way which segregates the Port Royal neighbourhood. Creating good edges is key to creating good neighbours in Queensborough which embraces a range of land uses more often found across different neighbourhoods. At the same time, better connection between these areas is important to unifying the community. Community members aspire to comfortably walking and biking between neighbourhoods and to the shops and services north of the highways and truck route.

Queensborough is well-served by parks and open space, schools, and a renovated community centre which offers diverse programming, a satellite library and police sub-office. These destinations are connected by trails and greenway streets which the City continues to develop toward making Queensborough the most walkable and bikable New Westminster neighbourhood. Residents must access some services outside Queensborough, highlighting the need for better connections to Richmond and the mainland part of the city.

As a historic riverfront community, Queensborough faces other specific challenges. The rural atmosphere is reflected in the lush open spaces and watercourses, and historic homes and industrial buildings. These elements provide important habitat and community character and should be protected against development pressure. Community members aspire to maintaining the rural character while improving the aesthetic quality of neighbourhoods and streets.

The high watertable, soft soils and flooding potential mean homes must be built to a Flood Construction Level. This makes building more expensive and providing accessible housing more challenging. It also often results in houses built to different elevations and a "higgledy-piggledy" appearance of these streetscapes. Residents aspire to ageing in place in their safe and attractive community.

The City has historically sought to use the Queensborough Community Plan to balance the complex needs of the community. As expressed in the Queensborough Community Vision, this Plan aims to learn from the mis-steps of the past and build on Queensborough's many assets and opportunities into the future.

Potential industrial heritage asset in Queensborough.

Live and play in Queensborough.

Fraser River foreshore habitat.

Community Aspirations Diagram

1 Celebrate the intersection of Ewen and Howes as the main entry point to the community.

2 Upgrade Ewen to connect the eastern and western residential neighbourhoods.

3 Strengthen pedestrian and bike connections across the highways and truck route.

4 Create a secondary sense of arrival at other key entry points to Queensborough.

5 Enhance local serving shopping south of Ewen in both the eastern and western neighbourhoods.

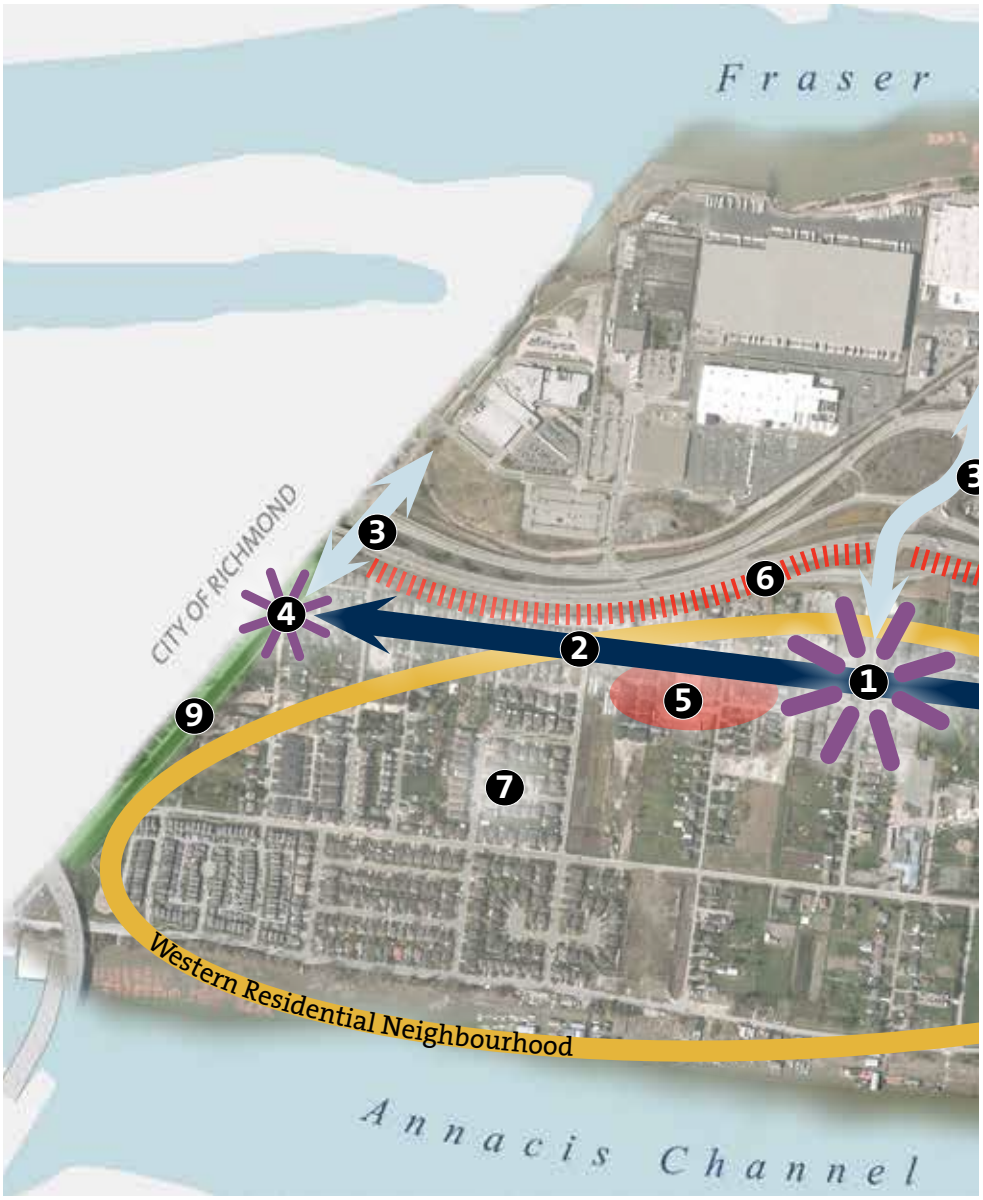
6 Create thick edges that help make good neighbours between residential areas and more intensive uses.

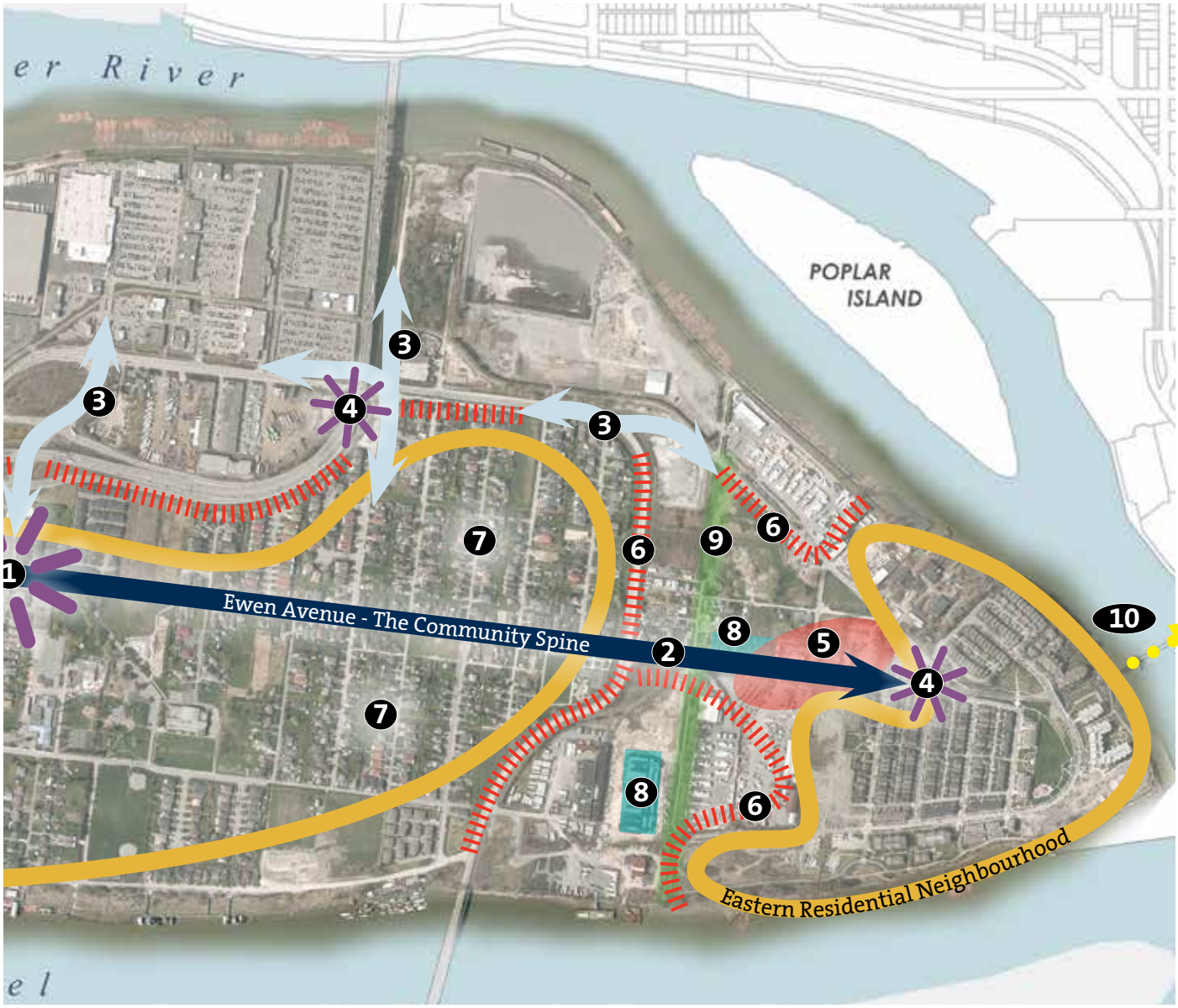
7 Enhance streets in residential neighbourhoods with improved pedestrian and bike amenities, and a consistent and attractive streetscape appearance.

8 Protect heritage assets like historic residential and industrial buildings.

9 Protect and enhance key watercourses, like along Stanley and Boundary.

10 Connect Queensborough to the city's mainland areas.




er River
POPLAR
ISLAND
Ewen Avenue - The Community Spine
Eastern Residential Neighbourhood
el

Components of the Queensborough Community Vision

Figure 20.
Components of the Queensborough Community Vision

Components of the Queensborough Community Vision

The vision is a picture of what Queensborough might look like in 2041. It responds to community members' aspirations for their neighbourhood. While it is not meant to be an exact rendering of the future, it shows how the community could develop through the application of this Plan's policies. The components of the vision are described below and in Figure 20.

THE COMMUNITY HEART

The centre of Queensborough is its historic heart (right, top) located in the area that was originally settled when the BC Electric railway line was established in 1912. This area, along Ewen Avenue roughly between Gifford Street and Lawrence Street, is the civic hub of Queensborough, including the community centre (1), Fire Hall (2), Queen Elizabeth School (elementary) and Queensborough Middle School (3), and supported by shops on Ewen and Howes (4). The corner of Ewen and Howes Street (5), the main entry to Queensborough's residential neighbourhood. Community uses, such as Roma Hall (6) continue to locate at this corner, potentially in new buildings with small sunny plazas for public use. Pedestrian oriented streets lined with street trees, flowering baskets and artistic banners all help to create an attractive and lively community heart.

THE EASTERN NEIGHBOURHOOD NODE

A second local shopping node is located on Ewen Avenue in the eastern residential neighbourhood (right, bottom). Shops (7) front onto Ewen, Mercer Street and Furness Street where a small public plaza provides a sunny gathering place. This is also the entry point to Queensborough from the new pedestrian and bike bridge connecting to the Quayside neighbourhood. This lively and attractive neighbourhood node is supported by additional residential units above the street oriented commercial and along Ewen Avenue, where some of Queensborough's historic homes are preserved (8).

EWEN AVENUE - THE COMMUNITY SPINE

Ewen Avenue is the east to west spine of the community. It is Queensborough's original and historic main street, linking the two neighbourhood nodes. In the eastern node, pedestrians strolling along the sidewalk fronting the Ewen Street stores are protected from the railway by fences and landscaping, with crossings at Mercer Street, Furness Street and Stanley Street. The south side of Ewen features a multi-use pathway and landscaping to connect the eastern and western residential neighbourhoods across Derwent Way. West of Derwent, Ewen is improved with a sidewalk or multiuse path, bike lanes, tree-lined boulevards and attractive transit stops on each side of the street.

Queensborough's historic heart.

Eastern commercial node.

Entertainment node.

THE BUSINESS AND ENTERTAINMENT NODES

Howes Street north of Highway 91 is the main entry point into Queensborough's business centre (right, top). Howes (9) is improved with sidewalks and street trees from Ewen Avenue to Boyd Street, and signature light industrial buildings (10) frame the street. These features all help to create a welcoming entrance to this part of the community and a better connection to residential neighbourhoods.

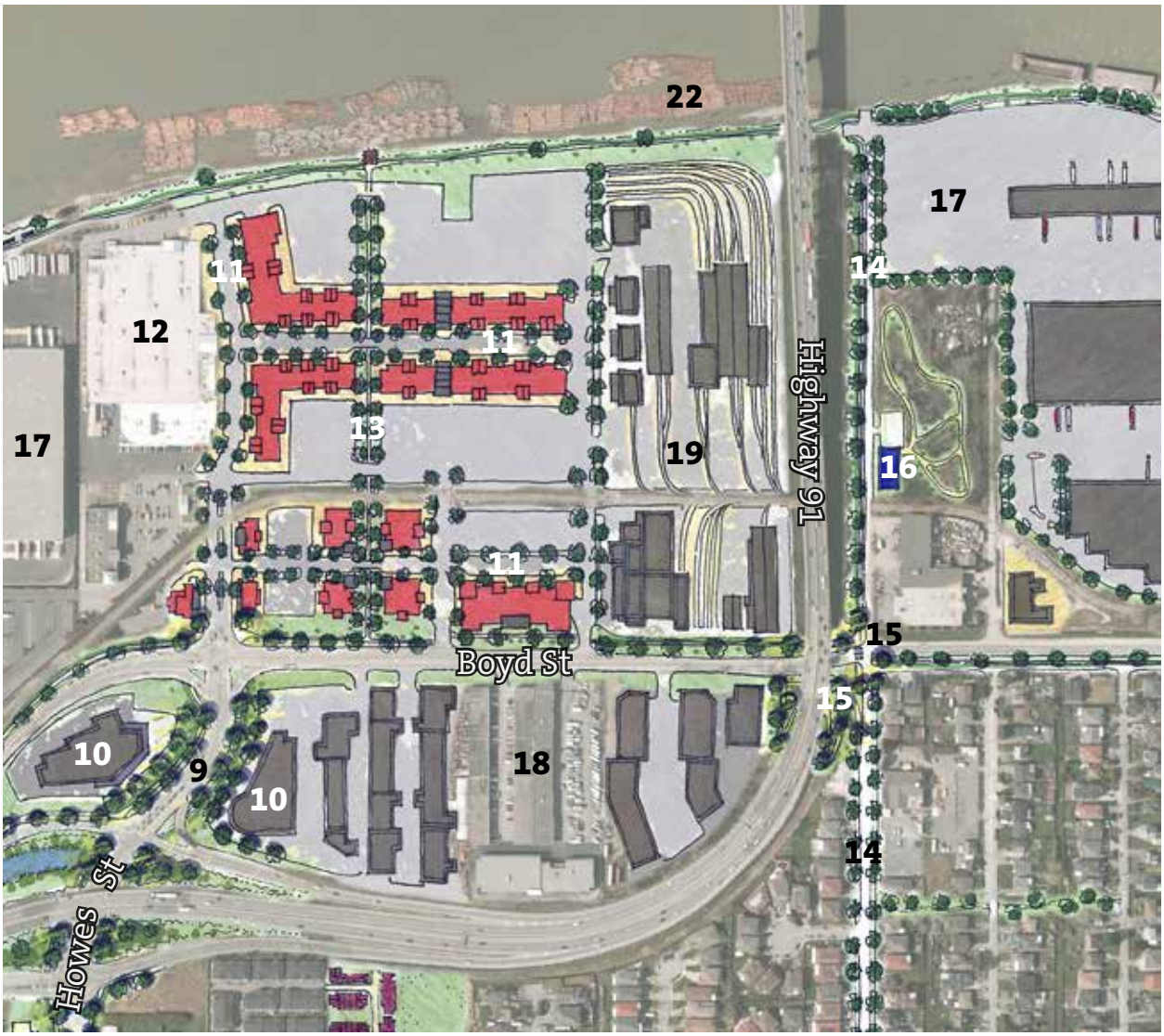
Queensborough Landing includes more stores which are reoriented onto shopping streets (11) that make it appealing to stroll from shop to shop, yet with plenty of parking to serve these and the anchor stores (12). This area provides for both local and destination shoppers and a link to the Queensborough Perimeter Trail (13).

Pedestrians and cyclists are also connected to this area by the Woods Street greenway (14), one of the greenway streets that links Queensborough from the North Arm of the Fraser to the Annacis Channel. At the Woods and Boyd Street intersection (15), a signalized pedestrian crossing connects across the truck route, and attractive landscaping around the access trails to the Queensborough Bridge help to enhance this entry to the community. The City's new animal shelter (16) finds a home along the Woods Street greenway, nestled into a wooded area that provides walking trails for sheltered dogs.

Existing businesses continue to flourish in Queensborough, with protected heavy industrial lands (17) located along the Fraser River, truck route and highways which connect to regional destinations. Light industrial lands allow intensification, increasing opportunities for these businesses. Light industrial uses are located on industrial lands less suited to heavy industry, such as areas near the arrival into the community (18) or adjacent to less intensive uses such as shopping (19). Mixed Employment lands which allow light industrial uses while limiting and containing activities that have negative impacts on neighbours are located to create a transition between industrial lands and residential areas (20). In two other areas, comprehensive development districts (21) would allow a master planned development of mixed-uses, including employment generating uses. This land use would allow flexibility to develop viable light industrial uses transitioning to residential uses.

The foreshore of the Fraser River(22) continues to have a working river character, with water dependent industries continuing to find a home on the riverfront alongside float home neighbourhoods, The Queensborough Perimeter Trail and areas of foreshore habitat.

In the entertainment node at the northeast corner of Queensborough (left), the Starlight Casino (23) is joined by new entertainment related businesses (24), potentially including a hotel.



Part of Queensborough's business node.

Employment generating uses east of Derwent Way, north of Ewen (left) and south of Ewen (right).

The Stanley Street Greenway.

RESIDENTIAL NEIGHBOURHOODS

The traditional neighbourhoods of Queensborough maintain their character and most of their existing single detached houses (25). All new residential buildings, including new single detached houses (26), are built to protect from floods and new design guidelines reduce the impacts to neighbours. This includes an attractive streetscape that becomes less "higgledy-piggledy" over time. Townhouses, fee-simple rowhouses and apartments (27) cluster around the two neighbourhood nodes close to transit and other daily needs. Apartment buildings are encouraged as they can better accommodate residents with different abilities. Multiple family housing is also located at the edges of lower density single detached neighbourhoods (28) to help transition to higher intensity land use and goods transportation routes, as new multi-family buildings must meet guidelines that reduce adjacency impacts. Compact lot single detached houses (29) locate along the Annacis Channel. These neighbourhoods are built by consolidating land and filling so they help to reinforce the dyke and can more easily fit into the slope from South Dyke Road down to Salter Street.

PARKS AND TRAILS

Queensborough's trail network is a community jewel. The Queensborough Perimeter Trail (30) traces the edge of the Fraser River. It meanders past float homes, eclectic river industries, foreshore habitat and special spots such as lookouts (31), a boat launch (32), and a beach (33), immersing users in the Fraser River experience. At the east end of Queensborough, the Perimeter Trail links to the Quayside neighbourhood via a pedestrian and bike bridge (34) and at the west end of Queensborough it continues into Richmond. These routes connect Queensborough to more services and amenities outside the community. The Mid-Island Trail (35) provides an east/west walking route south of Ewen Avenue and connects residential neighbourhoods to the schools and community centre. A second walking route (not shown) connects east/west across the residential neighbourhood north of Ewen.

Parks and open space with activities for all ages are found across the community. In addition to parks (36), community gardens (37) scatter across Queensborough, providing plenty of opportunities for residents to grow fresh vegetables. Larger canals and watercourses are enhanced as community amenities, such as along the Stanley Greenway (38). The flourishing gardens of residents' yards help to complete the distinctive look and feel of Queensborough.

Queensborough is a complete and sustainable community, where a range of housing types, schools, recreation facilities, social programs, local and destination retail, and employment, make it possible for residents to live, work, shop and play.


27
27
35
35
36
35
26
35
27
35
25
27
27
Salter St
Gifford St
29
30
South Dyke Rd


31
27
33
30
34
37
Ewen Ave
26
27
35
36
27
South Dyke Rd
32
30

Goals for Achieving the Queensborough Community Vision

The Queensborough Community Plan has ten goals that will implement the community vision. The goals are broad statements describing the results that this Plan seeks to achieve. Each is further supported with accompanying policies and actions (pages 41-134) as well as land use designations (pages 135-138) and design guidelines (pages 139-230) that will help the City meet these goals.

The goals have been shaped by input from community members and stakeholders, research and analysis on specific issues, and enduring historical and cultural attributes of Queensborough. The goals are:

1. Queensborough is a connected, equitable, inclusive and safe community.
2. Queensborough has diverse and adaptive economic uses that respond to regional, city-wide and local community needs.
3. Queensborough has reduced community energy use and the related impacts on climate change.
4. Queensborough protects and enhances natural systems that are ecologically sensitive and important, and/or provide scenic beauty and enhance community character.
5. Queensborough effectively protects against and manages incidents of flooding.
6. Queensborough respects community heritage assets.
7. Queensborough has a diverse housing stock that meets the needs of the community.
8. Queensborough's comprehensive system of parks, open spaces and recreational facilities serve the diverse needs of the community.
9. Queensborough as safe, comfortable and convenient routes for the movement of people and goods to and within the community.
10. Queensborough has servicing that efficiently and effectively meets the community's servicing needs in a sustainable manner.

COMMUNITY SUSTAINABILITY

Achieving a community that is environmentally, socially, culturally and economically sustainable is an overarching goal of this Plan. Moving towards sustainability requires taking a cohesive approach in which all policy areas contribute to reaching that goal. The framework guiding the implementation of sustainability throughout the City is Envision New Westminster 2032 (2013).

Envision 2032 identifies four action areas, or pillars, in its Sustainability Lens (Figure 21), wherein the City advances sustainability through catalyst projects and initiatives. It further outlines a set of guiding sustainability principles and descriptions of success which illustrate the sustainable and successful future the city and its community partners are working towards. The role of Envision 2032 is to apply this lens to City plans, policies, projects and practices.

As a City policy document, the Queensborough Community Plan is a tool for translating the intent of Envision 2032 into the development of the community. To do this, each of the vision, goals, policies, actions and design guidelines contained in this Plan integrates the theme of sustainability and aligns with the Envision 2032 descriptions of success.

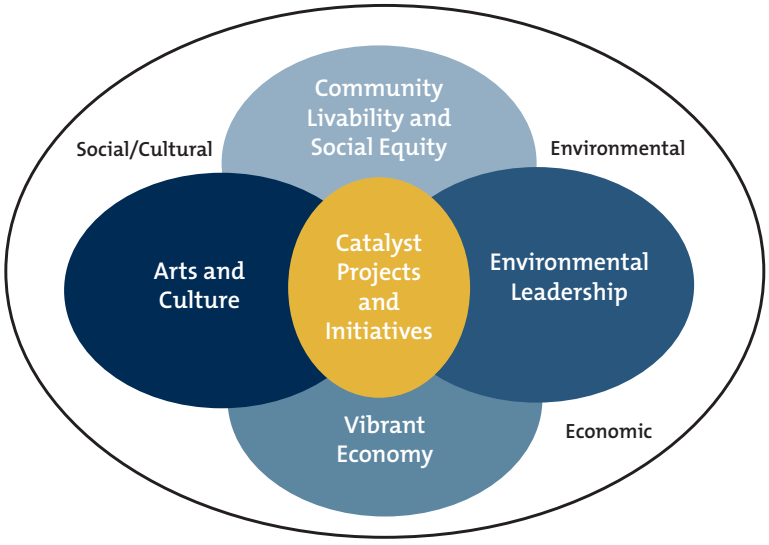


Figure 21.
The Sustainability Lens
Source: Envision New Westminster 2032.

1.0 Community and Individual Well-Being

POPULATION CHARACTERISTICS

Queensborough population characteristics that make the community unique:

- The population increased by 30% between 2006 and 2011.
- 42% of households are comprised of couples with children (23% for city as a whole).
- 21% of population are aged 0 to 14 years (15% for city as a whole).
- 43% of population are immigrants[6] (32% for city as a whole).
- 40% of population report a home language other than English (21% for city as a whole).
- 75% of households own their place of residence (54% for city as a whole).

[6] 40% of immigrants derive from India.

Community and individual well-being may mean different things to different people. Well-being is sometimes referred to as livability or quality of life and includes such principles as belonging, caring, connectedness, equity, inclusion, participation, safety, and security.

Fostering well-being is important to creating a sustainable community. A community should provide opportunities for residents to fully participate in a safe and supportive environment where vulnerable members are cared for and diversity is celebrated. Such a community fosters a sense of belonging and empowerment; it facilitates social connections that bridge differences in ability, age, income and lifestyle.

Social and physical accessibility to civic resources and services are key to achieving community and individual well-being. This includes taking full advantage of public transportation infrastructure and co-locating community services with housing, jobs, parks and recreational facilities, schools, and other amenities.

Access to fresh, locally grown food also has a role in achieving well-being. Ensuring community members have the opportunity to participate in urban agriculture contributes to an engaged and self-reliant community, increases physical activity, and facilitates greater availability of healthy, fresh foods.

When asked about what they like about Queensborough, many residents cite aspects that relate to and/or support well-being, including good neighbours, small-town feel, and a strong sense of community. In planning for the future, the challenge will be building on these strengths while addressing identified needs and continuing to create opportunities for residents, both established and new, to get involved all aspects of community life.

Community and Individual Well-Being in the Queensborough Community Plan

Goal 1: Queensborough is a connected, equitable, inclusive and safe community.

Policy 1.1:	Provide social services and community space to support people of diverse abilities, ages, cultures, incomes and lifestyles.
Policy 1.2:	Ensure that residents, employees and visitors have a strong sense of personal safety and property security.
Policy 1.3:	Support more local food production and consumption.

This Plan...reinforces an already strong level of community and individual well-being. A key to achieving the goal of this policy area is ensuring that the Queensborough neighbourhood continues to offer services, amenities and programs that meet the needs of the community as it evolves over time. This includes ensuring that programs offered by the Queensborough Community Centre continue to develop with the changing community. It also includes identifying and implementing new initiatives that will build on the past successes of programs such as the Safe Harbour Program, and the Community Schools Partners Committee which reduce resident vulnerability and increase mutual respect within the community.

The vision recognizes that the community centre will continue to provide amenities and programs for all.

Policy 1.1: Provide social services and community space to support people of diverse abilities, ages, cultures, incomes and lifestyles.

Community event at the Queensborough Community Centre.

Child working on an art project during Queensborough Day.

Queensborough Day.

As increasing numbers of people move to Queensborough, it will be important to continue to create welcoming spaces and inclusive environments that encourage belonging, interaction, involvement and neighbourliness. In this way, newcomers can connect with more established residents, learn about the customs, history and traditions that define Queensborough, and make a meaningful contribution to the community.

The Queensborough Community Centre acts as an important hub in the community, and along with the park and trail network, facilitates community-building, neighbourliness and social interaction, including opportunities for inter-cultural and inter-generational mixing. The community center enables community members to access a range of information, services and supports related to their diverse needs. The flex office and multi-purpose spaces enable community and social service agencies, many of which are located in other parts of New Westminster, to better serve community members.

Queensborough is home to numerous cultural events that celebrate its diversity and contribute to its sense of community. Examples include Fusion Dinners, whereby families gather to share food from one culture and entertainment from another, and the annual Queensborough Day and Urban Fall Fair. Events such as these provide opportunities for residents to gather and share cultural experiences which add to the rich fabric of the community.

The City's ongoing role will be to facilitate and support activities, services, programs and spaces that make Queensborough an inclusive community in which people of all abilities, ages, cultures, incomes and lifestyles feel welcome and can make a contribution. This includes identifying and responding to needs and gaps.

Private development will also be encouraged to make a valuable contribution. The addition of common spaces and urban gardens in multi-family housing projects, front porches on single detached houses, outdoor patios and seating areas as part of restaurants, and plazas integrated into commercial areas can encourage social interaction and neighbourliness.

Actions

The City should...

1.1a Re-examine how institutional uses are classified under land use designations in the Official Community Plan to determine which should require an institutional designation and which could be allowable uses in residential, commercial or all designations.

The City should continue to...

1.1b Support the Queensborough Community Centre in facilitating access to programming, activities, services and spaces suitable for a range of affordability levels, ages, cultures, family types, and mobility levels.

1.1c Work with the School District to advance the use of school facilities for community purposes.

1.1d Facilitate the development and provision of child care, where appropriate.

1.1e Work closely with community and multicultural agencies to support the settlement and adaptation of new immigrants into the community.

1.1f Use the City's influence over other agencies and other levels of government to increase the level of service and number of services provided in Queensborough.

Queensborough Middle School.

Policy 1.2: Ensure that residents, employees and visitors have a strong sense of personal safety and property security.

QUEENSBOROUGH FIRE HALL

The Fire Hall in Queensborough is one of three fire halls in the City. It has fire fighters on duty 24 hours a day and serves as the City's main training facility. This facility contributes to the sense of safety of the community.

Children meet a police dog at Queensborough Day.

Community well-being and livability is enhanced with an increased sense of safety and a decrease in property crime. The City of New Westminster is committed to overall reductions in crime and improvements to the sense of personal safety. The City operates a number of crime prevention programs, seminars, seasonal campaigns, and initiatives to combat crime. The addition of a police sub-office at the Queensborough Community Centre increases the police presence in Queensborough and further enhances the real and perceived safety of the community.

The City uses Crime Prevention Through Environmental Design (CPTED) principles. These principles have been developed to reduce crime by designing and using the environment in a way that naturally deters offenders. CPTED relies on three strategies: improving natural surveillance, controlling access, and reinforcing territory (e.g. encouraging a sense of ownership of space through physical design). All new City and private developments must demonstrate how CPTED principles have been incorporated into the design. These and other innovative urban design tools can be used to increase the feeling of personal safety in Queensborough.

Actions

To help implement this policy, residential, commercial and mixed-use, and industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

The City should continue to...

1.2a Ensure that all parks and recreation facilities incorporate Crime Prevention Through Environmental Design (CPTED) strategies.

1.2b Support community policing, crime prevention and community education programs as a proactive step in reducing crime and improving communication and coordination between police and the community.

1.2c Develop innovative approaches to combating nuisance behaviour in the community (e.g. poorly maintained properties, noise violations, public intoxication). The City will also continue to actively enforce City bylaws relating to these behaviours.

Policy 1.3: Support more local food production and consumption.

Fostering urban agriculture in Queensborough is a way to build community cohesion through residents sharing and understanding the multitude of cultures represented in their neighbourhood. Benefits of local food production include increased food security, an engaged and self-reliant community, increased physical activity, and greater availability of healthy, fresh foods. It also encourages residents to become stewards of the environment and connects them to the agricultural history of Queensborough.

There are a number of approaches to urban agriculture that could be suitable to Queensborough. Residents with yards are already able to grow a range of crops and fruit trees, and can extend their growing season and range of production by using greenhouses. An emerging trend is "sharing backyards," where residents who do not want to garden donate the use of their yard space to people who are interested in farming but do not have a yard. The City prohibits the use of pesticides and regulates the size and location of greenhouses to mitigate the impact of backyard farming on neighbours.

Community gardens provide a plot of public or semi-private land to residents living in an urban setting who may not have their own yard space. Queensborough already has one successful public example, the Port Royal Community Garden. Multi-family residential developments are also more frequently allowing gardens in common open space or on roof tops, where appropriate.

Urban agriculture can go beyond fruit and vegetable production. The City allows beekeeping and has a Bylaw to Regulate Beekeeping in place, ensuring residents use best management practices and avoid impacting neighbours. The City's Public Health Bylaw allows for the keeping of poultry, including laying hens, on lots that are greater than 557 square metres (6,000 square feet). Fishing was once a common activity in Queensborough, and rejuvenating it would mean residents have the opportunity to learn a new skill and to connect to the river, and to the history of the community.

The community already has a successful Urban Farmers' Fall Fair and Community Garden. The City will continue to promote and expand opportunities for urban agriculture in Queensborough.

FARMING HISTORY

As late as 1974, orchards and market gardens still existed in the community. Agricultural development occurred on acreages and small farm holdings. However, as development pressure increased, most agricultural land was converted to other land uses, mainly residential. In 2013 only one property was zoned for commercial agriculture.

The fertile river delta soil can support highly productive agriculture, which means that Queensborough is rich with opportunities for increasing local food production.

Fishing is also a source of local food. A story from the community tells of the river being fished for bullheads, chubs, catfish, suckers, squafish and trout. Sturgeon could be caught from the log booms on the North Arm. Some people who caught more than they needed would sell fish to local farmers.[6]

[6] Gatensbury, Stephen. Queensborough: A Few Sketches from Memory. Sedge Publishing, Delta, BC; 1978. p. 44.

Garden plot at the Port Royal Community Garden.

Fluffy chicken at the Urban Farmers' Fall Fair.

Urban Farmers' Fall Fair.

Multi-family residential next to Yin Leong (Suzy's) Farm.

[7] Port Royal Community Garden. About. www.portroyalgardens.ca

BENEFITS OF URBAN AGRICULTURE

- Port Royal's community garden was the first in New Westminster. The garden is run by the Port Royal Community Garden Society, a non-profit organization. The goal of the garden is "to empower residents to be advocates for sustainable communities by enabling community members to transform Port Royal into an environmentally friendly and sustainable community through their personal participation and leadership."[7] The garden includes plots dedicated to producing food for the local food bank. The garden hosts an English Tea Party each summer in support of other local community groups.
- Beekeeping offers a double benefit to residents, both producing honey and facilitating pollination. The pollination provided by bees would also benefit other urban agriculture activities in Queensborough and help mitigate the decline of pollinators.
- Backyard Farms provide a number of ways for residents to participate in urban agriculture. A single urban farmer may work their own or a network of backyards to grow produce for sale in farmers' markets or through a Community Shared Agriculture program. Residents may also donate extra crops to charitable food organizations, similar to the Richmond Tree Fruit Project.
- Farmers' Markets offer vibrant, community oriented venues for buying and selling locally produced food. A weekly farmers market in Queensborough would build on the already successful Fall Fair and could develop through partnership with the Royal City Farmers' Market and other relevant organizations. A Queensborough farmers' market could also facilitate participation in a Community Shared Agriculture program. Through this system, residents purchase a share in a season's harvest from a farm or group of farms and receive a weekly package of locally grown food, often available for pick-up at the local farmers' market.

Actions

The City should...

1.3a Explore development of a city-wide food strategy.

1.3b Explore potential locations on public land for and support parties interested in developing a new community garden in Queensborough.

1.3c Review and update relevant City policy (e.g. Sign Bylaw and Zoning Bylaw), and create new policy where necessary to enable backyard farming (including the use of greenhouses). This policy should ensure that backyard farms do not negatively impact neighbours (e.g. restrictions on size of machinery permitted) and should facilitate the ability of local food producers to grow and sell food from home. Consider developing policy, through community consultation, that creates incentives for residents to convert their backyard to a farm.

1.3d Review and update the Public Health Bylaw regarding animal husbandry in the city.

1.3e Support the creation of a Queensborough farmers' market.

Autumn harvest.
(Dennis Sylvester Hurd)

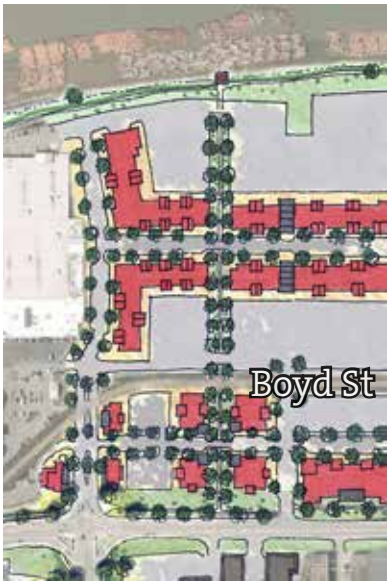
Bee hive at the Urban Farmers' Fall Fair.

To help implement this policy, residential land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

2.0 Economy and Employment

Log booms. (Dennis Sylvester Hurd)

Queensborough restaurant.



The vision encourages an enhanced Queensborough Landing.

Queensborough has historically played an important role in the economy of New Westminster and the Metro Vancouver region. The community's location on the Fraser River gives easy access to this important transportation route. For many years a large part of the City's economic base, including the non-residential tax base and a number of well-paid industrial sector jobs, was provided by water dependent heavy industries. Many of these industries were in the forest products sector, such as saw mills and paper mills.

Resource-based heavy industry is generally on the decline in Metro Vancouver and many long-standing industries are closing or relocating. Vacated sites are not often being re-occupied with heavy manufacturing uses but instead replaced with light industry, business parks or residential areas. This transition has also been evident in Queensborough.

To help counteract this trend, Queensborough's existing heavy industrial businesses need to be retained and supported. Waterfront industrial land, in particular, should be retained for heavy industrial uses as there is limited supply in the region. The demand for these lands will increase over time, especially for port or other activities dependent on water access. One aspect of continuing to support these industries will be to find ways to minimize conflicts between heavy industrial uses and commercial and residential uses.

Industrial lands that are less suited for heavy industry (e.g. smaller parcels, parcels adjacent to lower intensity land uses) will be retained and supported as Light Industrial and Mixed Employment. Over time, these lands could convert to light industrial uses which have the potential for significant growth in jobs. Strategically locating these land uses between heavy industrial areas and lower intensity land uses (e.g. commercial, residential) provides one means of minimizing adjacency conflicts.

As Queensborough develops, demand for retail and service businesses will increase. Residents have already noted the need for a second commercial node on Ewen Avenue to serve the community's east side, in addition to the existing node near Howes Street. This Plan supports accommodating new local serving retail and service space on Ewen Avenue and in Queensborough Landing.

Generally, this Plan supports retaining existing businesses while encouraging new commercial and industrial uses that may evolve in the future to locate in Queensborough.

Economy and Employment in the Queensborough Community Plan

Goal 2: Queensborough has diverse and adaptive economic uses that respond to regional, city-wide and local community needs.

Policy 2.1: Provide for a mix of pedestrian friendly retail shops and services that fulfill the range of Queensborough residents' daily needs.

Policy 2.2: Encourage the intensification of existing region-serving commercial and entertainment uses and land.

Policy 2.3: Support the continued operation and intensification of existing industrial businesses and land.

Policy 2.4: Reduce conflict between industrial uses, goods movement corridors and adjacent land uses.

This Plan...takes an aggressive step towards protecting employment land in Queensborough. Compared to the previous Queensborough Community Plan, there is more land designated Light Industrial, Heavy Industrial and Mixed Employment. The City, along with Metro Vancouver, recognizes that industrial land is an important component of the city's and the region's economic base. This Plan clearly indicates the strong intent of the City to protect industrial land against residential and other non-industrial development pressure.

To increase the flexibility of industrial land use, this Plan designates land "Heavy Industrial" or "Light Industrial" that was designated "Water Dependent Industry" in the previous plan. The new Heavy Industrial designation includes water dependent industry as a permitted use (i.e. water dependent industry is now a permitted use, rather than a required use).

This Plan also introduces two new land use designations – "Mixed Employment" and "Queensborough Comprehensive Development." The intent of these designations is to protect employment lands and support intensification of use while also creating a transition between industrial and residential uses. These designation allows only employment generating uses that minimize negative externalities, recognizing that industrial uses with fewer externalities make better neighbours for residential uses. The comprehensive development designation requires that a master plan be created for the whole area prior to any development. The master plan would need to meet the City development principles and relevant design guidelines for the land use designation and would be subject to a public review process.

There is also a larger amount of commercial space permitted in this Plan. The most notable increase is the new commercial node included on the Land Use Designation Map at Mercer Street and Ewen Avenue. The inclusion of this node responds to the community's need for a commercial area that serves residents living east of Derwent Way.

Policy 2.1: Provide for a mix of pedestrian friendly retail shops and services that fulfill the range of Queensborough residents' daily needs.

HOME OCCUPATIONS

A home occupation allows a business owner to work from home (e.g. consultants) or travel to provide services to clients (e.g. contractors). Encouraging home occupations is an important part of growing a healthy business environment. Many entrepreneurs start their new business from home to save on lease costs while the company is small and in the start up phase. Once successfully operating, the business may move into formal commercial space. Others choose to work from home because it fits their family life or lifestyle. The City supports and encourages home occupations in residential and mixed-use residential districts.

Queensborough residents generally must travel to Queensborough Landing or outside the community to access shops and services. While Queensborough Landing has a number of businesses that serve the daily needs of Queensborough residents, it also has a destination-shopping focus. As Queensborough grows, it will develop the population necessary to make more local serving businesses viable. Providing retail and services close to residents benefits both by making it easy for residents to access their daily needs and by providing customers to help support those businesses.

Ewen Avenue has a history as the neighbourhood's commercial main street, being centrally located and within easy walking distance from most homes. This Plan reinforces Ewen Avenue's main street role by designating two local serving commercial nodes in the Land Use Designation Map: one near Howes Street, building on existing shopping in this area and serving the western part of the community, and one around Furness Street serving the community to the east. The Howes Street node is also the civic heart of the community, anchored by the Queensborough Community Centre, the schools and the Fire Hall. The node around Furness Street will be the arrival point for people using the proposed pedestrian and bike bridge linking the mainland part of New Westminster to shops and services in Queensborough. Both nodes are envisioned as places where people can easily meet their daily needs, such as walking or biking to meet for coffee, or stopping on their way home to buy a few grocery items. These nodes are surrounded by increased residential development that supports the businesses' viability by putting residents withing easy walking distance.

Shops on Ewen Avenue.

Building and site design will play a key role making these two nodes attractive and lively shopping areas within the community. Building height and massing (i.e. the overall shape of the building created by the relationship between the building's various parts) help to shape the streetscape and to create a pedestrian scale. Building details, colours and textures help to make an attractive streetscape. Storefronts at street-level with large display windows and sidewalk cafes serve to animate the street, making it an inviting place to shop and socialize. Providing sufficient parking at the rear of buildings, in addition to on-street parking restrictions to ensure a turnover of spaces, supports businesses without impacting the streetscape.

The viability of shops in these areas depends on there being enough population to support two nodes. It is expected that, approaching 2041 and beyond, there will be sufficient demand to sustain Ewen Avenue shops as well as local serving commercial space in Queensborough Landing. Queensborough Landing will continue to be a shopping destination for the community, as it provides a general mix of shops and services that surpass the selection found in many other New Westminster neighbourhoods. The City will continue to work with the necessary organizations and government agencies to improve pedestrian and cycling connections between Queensborough Landing and the rest of the community.

With a development capacity of 14,825 people, a total of 28,521 square metres (307,000 square feet) of local serving commercial could be supported in Queensborough. The Land Use Designation Map does not allow for this much commercial space. A more conservative amount has been incorporated into the land use map to prevent an oversaturation of the commercial market before the population has increased enough to support a larger amount of commercial development.

QUEENSBOROUGH BUSINESS IMPROVEMENT

The City encourages businesses in Queensborough to work together to represent their interests. By working together on an on-going basis Queensborough businesses can assist in the revitalization and promotion of the community.

Actions

The City should...

2.1a Include Queensborough commercial businesses in outreach activities undertaken by the City's Economic Development Office to learn more about challenges and opportunities, and to gather input on how the City can assist in their success.

2.1b Identify gaps in essential shops and services and in the desired retail mix, and promote these opportunities where possible.

2.1c Promote vibrant streetscapes in commercial areas including sidewalk patios and other on-street commercial activity consistent with economic development objectives. Explore reviewing and updating the Zoning Bylaw to require a "build-to" line.

2.1d Update requirements for Development Permit applications to include all proposed signage (size and location) in development permit drawings.

2.1e Review on-street parking regulations in front of businesses along Ewen Avenue.

To help implement this policy, commercial and mixed-use land uses are part of Development Permit Areas, which include specific design guidelines that new commercial development must meet.

Policy 2.2: Encourage the intensification of existing regional commercial and entertainment uses and land.

Starlight Casino.
(Dennis Sylvester Hurd)

Queensborough Landing.

Since the early 2000s, Queensborough has been a destination for shopping and entertainment. The stores at Queensborough Landing and the Starlight Casino both serve the region, city, and neighbourhood.

There is potential to use both sites more intensively. At the Starlight Casino, there is room to add buildings that could provide services, such as a hotel or other businesses related to entertainment use. The Casino could also host temporary special events such as concerts and festivals on their property and draw participants from across the region.

Further expansion at Queensborough Landing would be possible on an incremental basis through building on the existing parking area, as well as adding second storeys to the existing buildings for office or other commercial use. Alternatively, should Queensborough Landing undertake a larger scale regeneration, the site could redevelop as a "lifestyle" destination mall with a more pedestrian and bike friendly layout. This approach could see more stores oriented onto shopping streets that make it appealing to stroll from shop to shop. Plenty of parking would continue to be provided behind the buildings to serve these and the large anchor stores. In all cases, the connection to the Queensborough Perimeter Trail would continue to be an important community amenity passing through this site.

Actions

To help implement this policy, commercial land uses are part of Development Permit Areas, which include specific design guidelines that new commercial development must meet.

The City should...

2.2a Work with local businesses to develop and implement a Queensborough branding and directional signage program.

The City should continue to...

2.2b Encourage and support the Casino in appropriate expansion plans for a hotel and other entertainment related uses.

2.2c Promote tourism opportunities that build upon the waterfront and entertainments uses associated with the casino.

2.2d Work with Port Metro Vancouver and the railways to create a connection (e.g. pedestrian and bike bridge) between the mainland and shops and services in Queensborough.

Policy 2.3: Support the continued operation and intensification of existing industrial businesses and land.

Queensborough has strong historical ties to industrial uses, particularly marine based activity such as ship repair, fish processing, and commercial moorage. Many of the large scale heavy industries that historically located in Queensborough also had a relationship to the river, such as mills which required access to timber supplies. Reduced fibre supply for forest based manufacturing, a drop in the importance of rail and river transportation, and rising land values have resulted in the loss of many of these long-standing industries in Queensborough and across the region.

New Westminster's employment base shrank with the closure of the City's three sawmills in 2007, two of which were in Queensborough. The loss of these businesses prompted the City to assess how to support employment land use in New Westminster in order to ensure a diverse economy, preserve jobs and protect City tax revenues which support the provision of services and amenities to the community. The findings of this work emphasized the importance of supporting the continuation of existing businesses for as long as possible. Allowing the intensification of industrial properties could also have considerable benefits such as increasing employment and tax revenues as well as improving the viability of existing businesses.

HEAVY INDUSTRIAL LANDS

Many heavy industrial properties in Queensborough are generally larger parcels that have water access which supports marine related uses. They are also located adjacent to the highways, truck route and railway line. Their central location in the region and access to multi-modal transportation routes, especially with the re-emergence of rail and marine transport, gives the lands a competitive advantage.

Waterfront industrial land is scarce across Metro Vancouver and Queensborough's remaining marine based industrial businesses will continue to desire a place in the community. Although new growth in the heavy industry sector is not generally anticipated, it continues to be an important contributor to the City's economic base. The City will encourage heavy industrial businesses to make use of their strategic riverfront location and will promote the inclusion of niche water based industry on sites designated Heavy Industry.

THE NEW "INTERTIDAL" LAND USE DESIGNATION

The foreshore of Queensborough is designated "Intertidal" to protect the ecology and natural state of the intertidal area and also allow working river uses associated with industrial land. The Intertidal land use designation is designed to align with Port Metro Vancouver's Land Use Plan. The Port's land use plan includes policy directions and land use designations that apply to the lands under its jurisdiction.

Queensborough fishing boat. (HotShots! Photo by Lisa Egan)

Former Canadian Pacific aircraft plant.

QUEENSBOROUGH COMPREHENSIVE DEVELOPMENT LAND USE DESIGNATION

This area will include a mix of residential and mixed employment land uses. The development of this area would require the parcels to be consolidated and for a master plan to be created. The master plan must adhere to criteria (e.g. requiring a certain amount of employment generating uses in the land use mix) and design guidelines (e.g. creating sensitive transitions between uses). Within the context of these requirements, a developer would have the flexibility to let the market determine what employment generating uses are most viable and to determine the location of the mix of uses.

LIGHT INDUSTRIAL LANDS

Queensborough has had challenges in attracting high quality light industrial. Many of these businesses, such as high technology manufacturers, prefer to be located near frequent transit and good amenities. Despite Queensborough's many benefits, including regional access routes, trails, shops and services, the community has yet to achieve the needed synergy to draw these highly desirable businesses. As a result, much of Queensborough's light industrial land is used for outdoor storage which yields few jobs.

As Queensborough develops into the future, the increased population should support more shops and services and improved transit connections, likely providing the density of amenities and frequency of transit needed to draw more attractive light industrial uses. Queensborough's light industrial lands should become more attractive and the intensity of their use should increase as vacant and underutilized light industrial land is developed. Queensborough can also be competitive in attracting distribution oriented uses as it is strategically located within the region and is well-served by Highway 91A and other truck routes. More intensive use of the land, such as transhipment facilities, would help increase employment.

This Plan strategically locates Light Industrial uses on industrial lands less suited to heavy industry, such as smaller parcels, and areas near less intensive uses or the arrival into the community.

MIXED EMPLOYMENT LANDS

As a complete community, Queensborough will continue to have a mix of employment and residential land uses. A new designation has been created to provide an area of light industrial land use as a transition between heavy industrial areas and residential areas. The designation permits light industrial, office and other related employment uses and will support new business and employment opportunities. The only residential or retail development permitted will be that which is ancillary to businesses on these properties.

The City envisions the mixed employment areas to have low impact, "clean" uses, such as build-to-suit, multi-tenant strata units. These uses generally have higher densities and job generation rates (employees per square foot) compared with heavier industrial uses. The new designation will also allow for a more diversified employment base that accommodates a greater variety of businesses employing skilled workers. Start-up businesses in their early stages can also benefit by having access to smaller, more affordable spaces that are tailored to their business needs. Having several of these grouped together would help establish an incubation network or hub where similar businesses could find support.

Actions

The City should...

2.3a Include Queensborough industrial businesses in outreach activities undertaken by the City's Economic Development Office to learn more about challenges and opportunities facing them, as well as to gather input on how the City can assist in their success.

2.3b Promote Queensborough as an attractive industrial and mixed employment area to the region's leasing agents and developers.

2.3c Revise the light industrial district to require permitted uses be contained within a fully enclosed building.

2.3d Develop a new high technology and business park district as part of the Zoning Bylaw update.

2.3e Protect industrial and mixed employment designated sites by providing clear direction to landowners, the real estate community and potential purchasers that conversion to non-employment generating uses (e.g. residential) will not be supported.

To help implement this policy, industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new industrial development must meet.

Industry and the Fraser River foreshore.

Policy 2.4: Reduce conflict between industrial uses and adjacent non-industrial uses.

A fishing boat next to a residential neighbourhood.

Heritage homes along the railway on Ewen Avenue.

Since the establishment of industrial lands, the community's residential population has grown significantly. Industrial properties are now in close proximity to residential properties, creating the potential for impacts on livability, such as noise, vibration and light intrusion. Goods movement routes can also create a barrier to pedestrian and bike connectivity through the community. In the eastern part of Queensborough, past land use choices have further increased the instances of these negative impacts. This Plan supports the use of good planning and design to create a transition between adjacent uses and mitigate the negative impacts.

INDUSTRIAL AND ADJACENT LAND USES

In Queensborough, where industrial, commercial, recreational and residential uses are located close to each other, the design of industrial buildings and sites has an important role in reducing conflict. The goal is to mitigate any adverse environmental, noise, safety, aesthetic and other operational impacts. Design guidelines that encourage screening, landscaped buffers and traffic mitigation will make industrial uses better neighbours. As the intensification of industrial lands occurs, this will become increasingly important.

The character of industrial buildings (e.g. as created by the architectural style, articulation of building facades, choice of materials) should be attractive and in keeping with the community context. The treatment of the edges of sites should contribute to a safe and comfortable streetscape. For industrial businesses with commercial customers, sites should be safe and pedestrian and bike friendly. Building and site design is also important to reducing off-site impacts, such as by considerate location of driveways and light fixtures to reduce glare from headlights and site lighting into homes.

In Queensborough, the adjacency of industrial uses to the Fraser River also means balancing business viability with other community objectives, such as restoring the Fraser River foreshore. The coding system developed by the Fraser River Estuary Management Plan (FREMP) recognizes the role of the Fraser River as a working river that must achieve both a healthy ecosystem and economic development opportunities. The City also works closely with riverside businesses to find ways to complete the Queensborough Perimeter Trail.

GOODS MOVEMENT CORRIDORS

Goods movement corridors remain a significant component of the transportation network in Queensborough and contribute to the success and viability of industrial lands. To reduce conflicts between these corridors and adjacent uses, the City has defined and will maintain specific goods movement corridors to support commercial and industrial activity. Streets will be designed to encourage the separation of local commercial and industrial traffic from general purpose traffic. The use of collectors, arterials and local streets for non-local goods movement will be discouraged. Where goods movement corridors are near conflicting land uses, impacts will be mitigated to the extent possible. Goods movement routes are illustrated on Map 10.

Actions

The City should continue to...

2.4a Work with the Province, TransLink and Port Metro Vancouver to minimize visual, noise and general mobility impacts on the community from goods transportation routes and related activities.

2.4b Work with Port Metro Vancouver, industrial land owners and tenants to identify ways to implement the Perimeter Trail such that it provides access without compromising trail users safety or the businesses' viability.

A train travelling in front of homes on Ewen Avenue.

To help implement this policy, industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new industrial development must meet.

3.0 Energy and Emissions

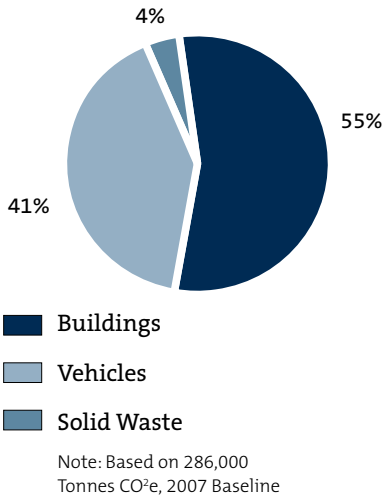


Figure 22.
Where Are We Now: City-wide GHG Inventory
Source: Community Energy and Emissions Plan, 2011

As part of ongoing efforts to improve energy efficiency and reduce the community's impact on climate change, the City developed a Community Energy and Emissions Plan (CEEP, 2011). In May 2011 Council approved a target of reducing community-wide greenhouse gas (GHG) emissions by 15% by 2030, relative to 2007 levels.

Building on input from local organizations, residents and City staff, the CEEP sets out a strategy to conserve energy in transportation, buildings and solid waste. It specifies policies and actions for diversifying energy supply, creating energy efficient buildings and supporting a pattern of community development that maximizes sustainable transportation and minimizes waste.

Without implementing the CEEP policies, GHG emissions would rise 8% by 2030 over current levels. However, with the CEEP in place and identified actions being carried out, community emissions could be reduced by 43,000 tonnes by 2030. This means that while New Westminster's population would increase by 20,000 by 2030, the community's total GHG emissions would fall by 15% and total electrical consumption would level off.

To achieve these goals, all members of the community will need to be more efficient in their use of energy.

Figure 23.
Projected Change in GHG Emissions and Electrical Consumption Through Implementation of the CEEP
Source: Community Energy and Emissions Plan, 2011

New Westminster	2007	2030
Population	61,700	82,000 (est.)
GHG Emission (tCO^2e)	286,000	243,000 (-15%)
Per capita (tCO^2e)	4.8	2.9
Electrical Consumption (GJ)	1,592,331	1,618,039 (+2%)
Per Capita (GJ)	26	19

Solar panels on a residential roof.

Energy and Emissions in the Queensborough Community Plan

Goal 3: Queensborough has reduced community energy use and the related impacts on climate change.

Policy 3.1: Reduce transportation energy use and related greenhouse gas emissions.

Policy 3.2: Reduce building energy use and related greenhouse gas emissions.

Policy 3.3: Reduce the loss of embodied energy through waste production and use of energy in waste management.

This Plan... assists Queensborough in doing its part to help the City meet the ambitious greenhouse gas emissions reduction target set out in the New Westminster Community Energy and Emissions Plan (CEEP, 2011). Achieving this target requires reducing vehicle trips, building more efficient buildings, and reducing waste. The placement of density on the Land Use Designation Map helps to encourage walking and biking by locating a higher number of residents near amenities. Locating density on Ewen Avenue also helps support provision of more frequent transit in the community. Design Guidelines have been included in this Plan to help reduce building energy use. The City should pave the way by being a leader in reducing emissions. Builders and residents are also encouraged to take the initiative to make changes to their homes, transportation modes and waste management practices above and beyond what is laid out in this Plan.

The vision locates more residences close to amenities and transit at Ewen Avenue and Howes Street.

Policy 3.1: Reduce transportation energy use and related greenhouse gas emissions.

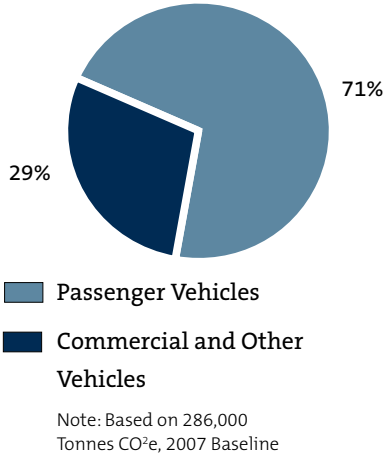


Figure 24. City-wide Vehicle GHG Emissions
Source: Community Energy and Emissions Plan, 2011

New Westminster's Community Energy and Emissions Plan (CEEP) seeks to improve transportation choice for local residents while reducing the community's transportation-related greenhouse gas (GHG) emissions. It recognizes that there are three primary ways through which the community may effect this change:

1. Build neighbourhoods where residents can live, work and play in close proximity.
2. Foster walking, cycling and taking transit as preferred ways of getting around.
3. Support use of efficient and low carbon mobility.

The design of communities has a major impact in facilitating a wider range of transportation choices within neighbourhoods. Communities where it is easy to walk, cycle or take transit inherently have an improved range of options for getting around which can lead to reduced transportation-related GHG emissions.

Because of the flat topography, Queensborough has an opportunity to increase its share of walking and bicycle trips. Completing the community's internal pedestrian and bicycle network is necessary to achieve this goal. It is equally important to improve pedestrian and bicycle links to mainland New Westminster. This includes easy access to and from the Queensborough Bridge, as well as a future pedestrian and bike bridge. Creating new bicycle parking stalls, safe crosswalks and promoting the Best Walking Routes to School program will also help maximize use of this network by making active forms of transportation safe, comfortable and convenient.

Vehicles will remain an important mobility option for local residents. Recognizing this, the City will promote the use of clean energy vehicles through strategic City actions and also by supporting initiatives on private property. For example, public charging stations may appear throughout the city over time as they are installed by local businesses and homeowners. The participation of local residents and businesses in this program is important, as most electric vehicle owners will recharge either at home or at work.

Actions

The City should continue to...

3.1a Pursue opportunities to install additional public charging stations in strategic civic locations.

3.1b Implement the actions and policies of the Community Energy and Emissions Plan (2011) related to improving transportation choice while reducing the community's transportation-related GHG emissions.

3.1c Work with the Province, Metro Vancouver, regional and local partners to access funding available and to advance programs that promote the use of clean energy vehicles (e.g. Plug in BC).

To help implement this policy, residential, commercial, mixed-use, industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

Queensborough cyclist.

Electric vehicle charging station.

Queensborough community shuttle.

Policy 3.2: Reduce building energy use and related greenhouse gas emissions.

BC BUILDING CODE

The latest version of the BC Building Code (BCBC 2012) references incrementally higher energy efficiency standards that affect the performance of new buildings. A subsequent release of Part 10 – Division B of BCBC 2012 will include higher energy and water efficiency standards (due in late 2013/2014). These changes are part of a longer process by the Province of BC to "green" the Building Code, and move towards net zero energy ready homes as the standard for new residential construction by 2020.

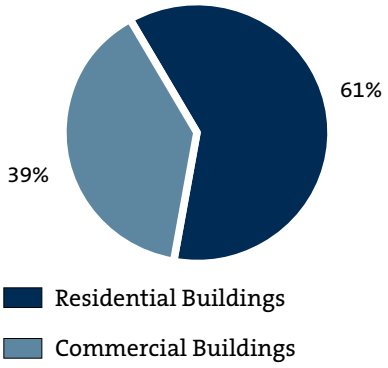


Figure 25.
City-wide Building GHG Emissions
Source: Community Energy and Emissions Plan, 2011

New Westminster's Community Energy and Emissions Plan (CEEP) recognizes three primary ways for the community to reduce energy use and emissions in buildings:

1. Increase the energy efficiency of older buildings.
2. Promote the most energy efficient new buildings.
3. Encourage use of renewable, local energy sources in buildings.

Energy use in buildings is the second largest source of community-wide greenhouse gas (GHG) emissions in New Westminster, with residential buildings accounting for a significant proportion of overall electricity and natural gas use. Projected residential growth in Queensborough suggests that targeting the highest energy efficiency in new homes is a key strategy for reducing building-related emissions.

New buildings present opportunities to encourage higher standards of energy efficiency, decrease the environmental impact of new construction, and reduce pressure on energy supply and infrastructure. To support these efforts design guidelines have been created that encourage new buildings to achieve higher levels of energy conservation, as well as a reduction of GHG emissions.

The City will also promote programs for homeowners, commercial property owners and businesses to improve the energy efficiency of their existing buildings. As part of the CEEP implementation, the City has developed Energy Save New West, a voluntary, community-wide energy retrofit program for existing homes. This program bundles rebates offered by the Province, BC Hydro and FortisBC. Similar programs may be offered in the future after these conclude.

The CEEP also encourages developers and homebuilders to take advantage of opportunities to generate and use on-site renewable energy. The topography and low-rise development form of Queensborough make it well-positioned for adopting solar hot water (i.e. solar-thermal) systems in both new and existing single detached dwellings. The high water table and even temperature land profile in Queensborough also make it suited to closed-loop, ground-source geo-exchange energy systems.

The City aims to reduce GHG emissions from civic facilities and operations by 15% by 2017 (relative to 2007 levels).

– Corporate GHG Reduction Plan

Actions

The City should...

3.2a Explore opportunities for community energy projects (e.g. closed-loop, ground-source geo-exchange energy systems).

3.2b Work with the Province, Metro Vancouver, regional and local partners to access funding available and to advance programs that increase the energy efficiency of new and older buildings.

The City should continue to...

3.2c Implement the actions and policies of the Community Energy and Emissions Plan (2011) related to reducing energy use in buildings and related GHG emissions.

3.2d Pursue amending the Zoning Bylaw and/or Building Bylaw to implement a requirement for all new single-detached dwellings to be "solar hot water ready." This policy should require roughed-in features to enable a homeowner to install a solar hot water system at a later date.

Window shades minimize unwanted heat gain in summer months.

To help implement this policy, residential, commercial, mixed-use, industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

ENERGY MODELING AND INCENTIVE PROGRAMS

The City strongly encourages the use of building energy modeling software during architectural design. Some of these models use a whole building approach to derive an overall energy "picture" for a building. This allows the design team to see the potential energy reduction related to siting and building form, passive solar design strategies, materials and construction, ventilation, and the use of renewable energy systems. Other tools are suitable for deriving effective R-values for specific wall and window assemblies, using two-dimensional thermal imaging to model heat transfer.

The City also strongly encourages homebuilders and developers to take advantage of programs such as the New Home Incentive Program which is jointly offered by BC Hydro Power Smart and FortisBC. Cash rebates apply to new single detached dwellings, duplexes, rowhomes and townhomes. Qualifying homes must meet minimum EnerGuide 80 performance levels, and install an Energy Star® appliance package, high efficiency gas water heater, space heat condensing boiler and/or high efficiency gas fireplaces.

Policy 3.3: Reduce the loss of embodied energy through waste production and use of energy in waste management.

Curbside pick up in Queensborough.

As a member municipality of Metro Vancouver, New Westminster's waste is managed in accordance with the regional Integrated Solid Waste Resource Management Plan (ISWRMP). This Plan sets a target of diverting 70% of potential materials from the waste stream by 2015. To keep waste out of the landfill requires a number of strategies and initiatives that divert waste to other uses (e.g. recycling, reuse and material recovery) as well as minimizing the amount of waste generated in the first place by reducing the overall amount of materials used.

While waste does not directly consume energy, the management of waste (i.e. transportation) and decomposition of waste in landfills (i.e. production of methane) does produce greenhouse gas (GHG) emissions. The production and distribution of new goods and materials to replace those entering the waste stream also requires energy.

With respect to material waste, one of the most significant reduction measures is to retain and adapt existing buildings rather than demolish them. City policy encourages the conservation of Queensborough's heritage buildings. These buildings represent significant embodied energy and their retention minimizes construction and demolition waste, as well as the energy inputs necessary to create new building materials and construct new buildings. Use of the City's heritage tools, such as Heritage Revitalization Agreements, can lessen financial barriers for the adaptive reuse of heritage buildings. New buildings should use long-lasting, durable materials to minimize waste produced over the life cycle of buildings.

In relation to household waste, residents can achieve reductions by participating in the City's single-stream recycling program (for single detached dwellings) or multi-family recycling collection, and by taking materials to the City Recycling Depot. Residents can also reduce their waste generation by participating in the City's multi-family food scraps program or participating in backyard composting. In addition to reducing the amount of waste transported to landfills composting helps improve regional air quality and produces excellent garden compost.

Actions

The City should...

3.3a Explore developing City policy to enable and incentivize building deconstruction which sees the dismantlement of buildings into their component materials for reuse and recycling.

3.3b Explore adding Zoning Bylaw requirements for size and design of residential recycling facilities.

Countertop compost container.

The City should continue to...

3.3c Implement the actions and policies of the Community Energy and Emissions Plan (2011) related to reducing energy use and GHG emissions resulting from waste production, storage and management.

3.3d Actively promote city-wide programs which encourage residents and businesses to reduce, reuse and recycle solid waste products, particularly as more products and materials are captured by new recycling programs.

Back yard composter.

4.0 Environment & Natural Areas

RARE ECOLOGICAL SPECIES

Ecological Communities –

- Lungby's Sedge
- Tufted hairgrass – Douglas' Aster
- Black cottonwood – red alder/ salmonberry forest

Rare Plants –

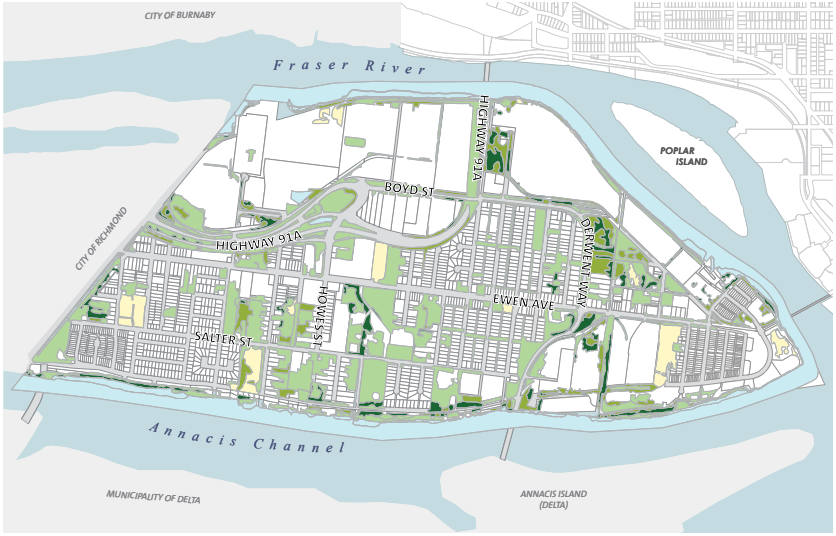
- Vancouver Island Beggarticks
- Henderson's Checkmallow

Rare Animals –

- Great Blue Heron
- Green Heron
- Western Screech Owl
- Barn Swallow
- Barn Owl
- White Sturgeon

Municipalities play an important role in maintaining a healthy environment. Efforts made in land use, transportation, infrastructure, buildings, park space, and community and economic development programs can all affect ecological health and environmental system performance. The City is committed to this role, as reflected in the Envision New Westminster 2032 document Queensborough, with its mix of urban and rural neighbourhoods and economic sectors in a riverfront location, presents unique environmental conditions and sustainability opportunities.

The Ecological Inventory of Queensborough (2010) identified the Fraser River foreshore, freshwater watercourses, and woodlots (forest patches) as Queensborough's three most important ecological features. The inventory revealed that the area supports, or could support, several rare ecological communities, plants and wildlife species. It also identified approximately 25% of the total land area in Queensborough as natural and semi-natural green space scattered throughout the community. However, extensive development, particularly within the past fifteen years, has meant a loss in biodiversity and habitat, particularly through the loss of woodlots. This puts significant pressure on remaining species and ecological communities.



Map 2.
Semi-Natural and Natural Vegetation
Source: Ecological Inventory of Queensborough, 2010

KEY:
- Forest
- Herbaceous
- Shrub
- Sparsely Vegetated
- River Edge

Environment & Natural Areas in the Queensborough Community Plan

Goal 4: Queensborough protects and enhances natural systems that are ecologically sensitive and important, and/or provide scenic beauty and enhance community character.

Policy 4.1: Increase the area of the urban forest.

Policy 4.2: Protect and enhance the ecological function of freshwater wetlands and watercourses.

Policy 4.3: Protect and enhance the ecological integrity of the Fraser River foreshore.

Policy 4.4: Promote environmental stewardship by connecting people with nature.

This Plan...is a turning point for Queensborough. It is clearly time to start the process of repairing and replacing Queensborough's environmental assets, including the urban forest. This Plan encourages residents to act as environmental stewards by protecting trees or other significant features (e.g. multi-storey vegetation) on their own properties.

This Plan also recognizes the City's role in working with senior levels of government to protect natural features. Two important natural features in Queensborough are the Fraser River and its foreshore, and the watercourses (ditches). This Plan includes a new "Intertidal" designation that is intended to protect the foreshore while recognizing that the Fraser River is a working river. To help protect the watercourses, this Plan also incorporates the work previously done to identify the most significant watercourses.

Fraser River foreshore.

The vision preserves the watercourse along the future Stanley Street Greenway extension.

Policy 4.1: Increase the area of the urban forest.

Port Royal street trees.

The urban forest is made up of trees in street rights-of-way, in public parks and open spaces, and in private yards. The urban forest provides a broad range of ecological functions. It creates habitat, including foraging and nest sites for birds and small mammals, such as shrews and mice. These in turn feed larger mammals and birds such as owls. The tree canopies help to reduce the urban heat island effect and create comfortable walking routes with shelter from the sun and rain. Groups of trees can also provide visual buffering and refuge from adjacent urban or industrial areas.

Historically, woodlots were an important ecological feature of the community, yet almost none remain. As Queensborough continues to develop, opportunities should be taken to redevelop the urban forest across the community as a whole. For example, wherever possible, street trees should be incorporated as street upgrades are undertaken and trees should be included as development and redevelopment occur. However, there are some challenges to achieving a dense urban forest in Queensborough, such as a high water table and restrictive underground servicing locations.

In addition to increasing the urban forest it is important to increase biodiversity in Queensborough. This can be achieved by designing substantial landscape elements (e.g. street network bulges) to provide habitat and incorporating diverse multi-storey planting design. Plants and grasses used should be native or naturalized, use less water, require less maintenance, and enhance biodiversity by providing nesting habitat, protection from predators, and food.

Actions

To help implement this policy, residential, commercial, mixed-use, industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

The City should...

4.1a Prepare a city-wide Urban Tree Management Plan that includes approaches to developing and caring for the urban forest, including trees on streets, bounding the Fraser River and other watercourses, in parks and open space, and on private properties.

The City should continue to...

4.1b Require developers to provide street trees and other planting when doing off-site work associated with a development.

4.1c Prepare a plant resource that identifies good plants for multi-storey planting and invasive species that should be avoided. This includes controlling, as much as possible, the presence and proliferation of non-native, invasive plant species such as Giant Hogweed and Japanese Knotweed.

Policy 4.2: Protect and enhance the ecological function of freshwater wetlands and watercourses.

Queensborough has many watercourses, often called "ditches," that have been heavily modified for drainage and flood management. Most of Queensborough's watercourses have limited riparian vegetation, resulting in low value fish habitat. Despite these limitations, these watercourses contribute food and nutrients to fish habitat along the Fraser River foreshore and provide habitat for birds, mammals, amphibians and invertebrates such as dragonflies.

Queensborough also contains a few small freshwater wetlands. Most are short, linear cattail marshes along watercourses. The previous Queensborough Community Plan (1995) also identified "inland marshes" that have since been lost through development. Although small, the remaining wetlands provide overall biodiversity, plant richness and critical habitat similar to the Fraser River foreshore.

Maintaining and enhancing the ecological value of these wetlands and watercourses poses challenges. There is community pressure to close them for improved safety and aesthetics. There is also community desire to maintain them to support rural neighbourhood character, stormwater management and habitat. Some of Queensborough's watercourses are protected by the provincial Riparian Areas Regulation (2005). The RAR protects riparian areas and the features and functions that support fish life processes. The City has adopted the Riparian Areas Bylaw and has classified Queensborough's watercourses and wetlands accordingly. The watercourse classification and associated RAR implications are outlined in Figure 26.

Family of ducks. (Dennis Sylvester Hurd)

DEFINING RIPARIAN AREA REGULATIONS

Stream – a ditch or wetland that is connected by surface flow to a river that provides fish habitat.

Streamside Protection and Enhancement Area (SPEA) – an area adjacent to a stream that links aquatic and terrestrial ecosystems and includes existing and future adjacent upland vegetation that asserts an influence on the stream. The size of the SPEA is determined according to the RAR on the basis of an assessment report provided by a Qualified Environmental Professional in respect of a development proposal.

Development – includes any of the following associated with or resulting from or ancillary to residential, commercial, or industrial activities:

a. Any alteration of vegetation or soils.

b. Construction of structures or impervious surfaces.

c. Construction of transportation corridors.

d. Maintenance of City services.

e. Flood protection works.

f. Subdivision.

Actions

The City should continue to...

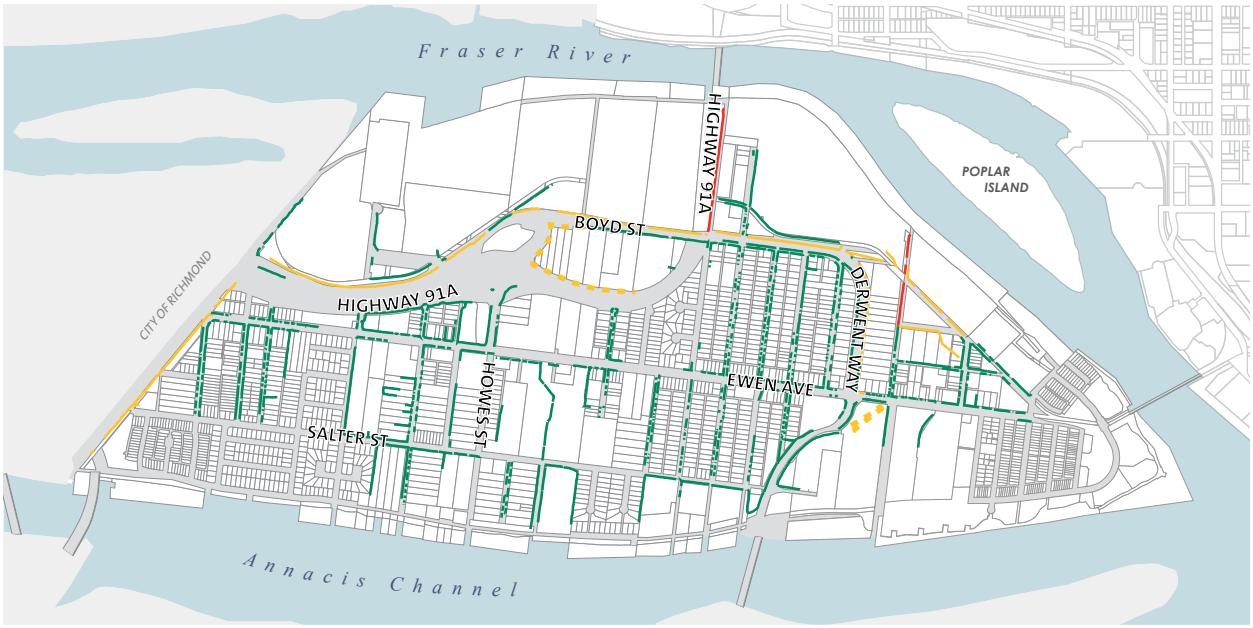
4.2a Advance opportunities for protecting and/or enhancing the ecological value of watercourses and wetlands (e.g. improve riparian vegetation) on public and private land, as such occasions arise. This includes applying the Riparian Areas Regulation in the City's evaluation of all development applications for lands including and/or adjacent to a watercourse.

4.2b Keep all existing canals (e.g. those along Boundary Road, Carter Street, Wood Street north of Boyd Street) as open channels. The City supports keeping all other watercourses (ditches) as open channels.

Queensborough's ditches are watercourses that provide habitat functions.

Figure 26.
Watercourse Classification and Associated RAR Implications

Source: City of New Westminster



Type of Work	Class A	Class B	Class B2* (property not City owned)	Class C
	Rearing habitat that is accessible (or potentially accessible to fish)	In accessible fish habitat (i.e. food and nutrient source only)	In accessible fish habitat (i.e. food and nutrient source only)	No fish habitat
Development (e.g. subdivision, building permit, rezoning, development permit) within 30 m (98 ft) of the ditch system.	RAR requirements apply (QEP assessment required	RAR requirements apply (QEP assessment required)	RAR requirements and QEP assessment apply but not to the City	RAR requirements do not apply (QEP assessment not required)
	SPEA (i.e. required setback) determined by QEP in accordance with RAR	SPEA (i.e. required setback) determined by QEP in accordance with RAR		
	QEP to submit Assessment Report to senior governments	QEP to submit Assessment Report to senior governments		
	Unavoidable impacts are to be offset by enhancement on a Class A or Class B watercourse	Unavoidable impacts are to be offset by enhancement on a Class A or Class B watercourse		
Small scale new works within the ditch system (e.g. culvert installation)	City to notify senior governments prior to starting work	City to notify senior governments prior to starting work	Not applicable	No contact required

Note: Senior governments must authorize the Harmful Alteration, Disruption or Destruction (HADD) of fish habitat.

Policy 4.3: Protect and enhance the ecological integrity of the Fraser River foreshore.

SHORELINE SENSITIVITY CODE

Red Coded

High productivity habitats that support critical fish and wildlife functions and/or areas of previous habitat compensation. Development in these areas is restricted but may occur provided that mitigation is applied through site location and/or design to avoid impacts on habitat features and functions of the area.

Yellow Coded

Moderate productivity habitats that support fish and wildlife functions. Development may occur provided that mitigation and/or compensation measures are incorporated into the project design.

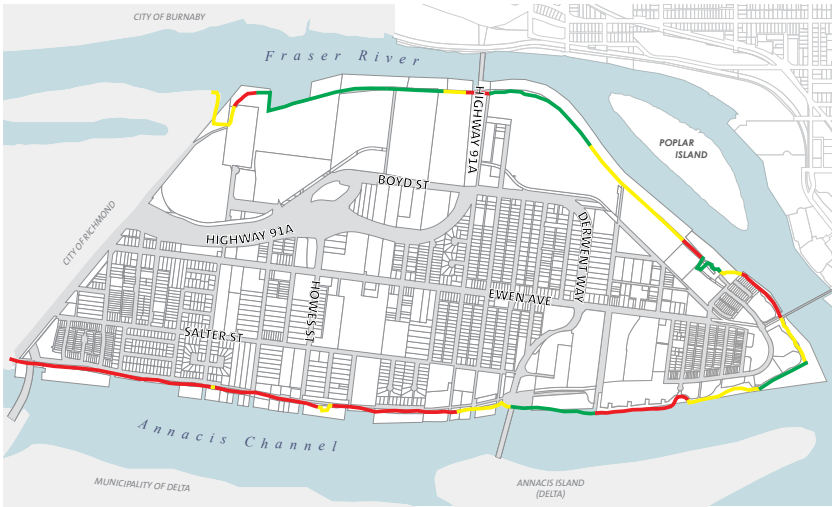
Green Coded

Low productivity habitats. Development may occur provided that environmental impacts are mitigated.

The Fraser River estuary is considered a globally significant ecological area. It is home to Canada's largest population of wintering waterfowl and the world's largest salmon run. The river and estuary provide important spawning, feeding, rearing, holding and resting habitat for fish. Some fish species, such as salmon and trout, pass through the estuary as they move between their spawning areas and the ocean.

The Fraser River foreshore is Queensborough's most important ecological feature. It could contain rare ecological communities and plant species, provides ecological functions such as shoreline stabilization and shading, and supports productive fish and wildlife habitat, including linear movement corridors. The largest and least disturbed of Queensborough's foreshore areas is the length of the southwest shoreline, which includes a narrow area of black cottonwood forest adjacent to intertidal marshes and mudflats.

The Fraser River Estuary Management Program (FREMP) developed a fish and wildlife habitat coding system, which has been applied to the Queensborough foreshore. This colour coded system classifies the overall habitat value of river shoreline. The coding system specifies requirements for future human use and development based on federal and provincial policies and legislation protecting aquatic and riparian habitat. Environmental review of Fraser River shoreline is undertaken by relevant agencies depending on the location and scope of the project. In most cases, Port Metro Vancouver has the ultimate authority over projects proposed on the foreshore. The City and the Port work together to achieve mutually beneficial results in these areas.



Map 3.
Shoreline Sensitivity Coding for Queensborough
Source: Fraser River Estuary Management Program

Actions

The City should...

4.3a Explore creating design guidelines in addition to those of FREMP for inclusion in relevant Development Permit Areas.

The City should continue to...

4.3b Advance opportunities for protecting and/or enhancing the ecological value of the Fraser River on public and private land, as such occasions arise. Port Metro Vancouver, or another relevant agency, will oversee the environmental review of all development applications along the Fraser River shoreline.

Fraser River foreshore.

Policy 4.4: Promote environmental stewardship by connecting people with nature.

Queensborough owl box.

One of many fence frogs made as part of Queensweep Earth Day.

Children learning about the environment during Queensweep.

Environmental stewardship can be defined as shared commitment and caring for the natural world. It is key in helping to preserve or improve natural features of our environment and to achieve sustainable outcomes for a community. The potential benefit can be great, either through action that is taken individually or by group effort.

Promoting environmental stewardship can take many forms such as by encouraging active participation in environmentally related initiatives or by raising awareness or fostering appreciation of the natural environment. Being situated by the Fraser River offers a unique setting for Queensborough residents to engage in stewardship activities. The City can play a role in encouraging or helping to facilitate stewardship opportunities. These efforts can also benefit a community by creating a sense of place and offering social interaction to help knit community members and groups together.

Actions

The City should...

4.4a Explore opportunities to create a pilot project to showcase habitat restoration. For example, the restoration of a yellow or red coded watercourse (e.g. along the Stanley Greenway). Community involvement should be encouraged. If successful, additional habitat restoration projects could be identified.

4.4b Develop a park stewardship program which will involve volunteers in helping to improve the health and function of park ecosystems through participating in environmental monitoring and basic maintenance (e.g. weeding invasive species, collecting litter, planting, creating habitat structures like bird boxes).

Kids playing on a beach in Queensborough.

5.0 Flood Management

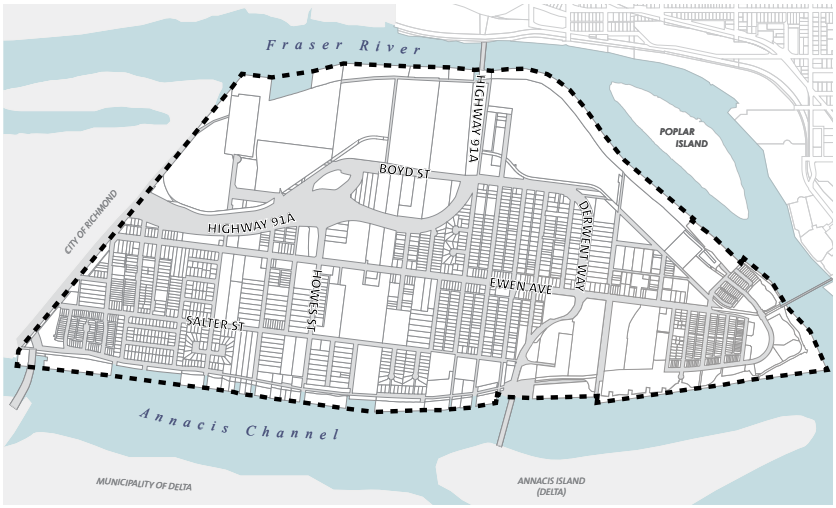
THE 1948 FLOOD THREAT

The success of the dykes against the 1948 flood was due to the diligent work of hundreds of volunteers and City workers who tirelessly built up the dykes with sand bags and gravel. Mainly under the direction of a peg-legged squatter named Scotty McKenzie, local residents set up a sandbagging brigade and were able to keep the dyke high enough to keep out the flood waters. There was extensive damage in other areas of the of the Fraser River floodplain.

Queensborough is located within the natural floodplain boundary of the Fraser River. Considered a "world class" river in terms of its size, the Fraser River drains more than one quarter of the entire land area of the province of British Columbia. The river experiences an annual increase in water levels called a "freshet." A freshet is a result of the melting of snow which has accumulated in the mountains contributing runoff to the river's natural flow. The level of rise is predicted by closely monitoring the amount of snow accumulation in the mountains and spring weather patterns, and by applying a computer model. The river rise is confirmed by river gauges at locations along the Fraser River including Hope, Mission and the New Westminster Quay. During a freshet event there is the possibility that the river may overtop the dykes and flood the community. High water has occurred in 1950, 1964, 1967, 1972, 1999 and 2007. The largest flood on record occurred in 1894 and the dykes were tested against flooding again in 1948.

Flooding in Queensborough can also be the result of a dyke breach which is caused by a structural failure. Ideally, a dyke structural failure is identified when the water level is low and fixed before flooding can occur.

The community's primary defence against flood events is the perimeter dyke around Lulu Island which is shared with the City of Richmond. A Flood Construction Level (FCL) is the secondary defence. A FCL is a regulation that is applied to new development requiring construction of habitable space at or above a specified elevation. The purpose of a FCL is to increase life safety and minimize property damage in the event that a dyke is overtopped or breached.



Map 4.
Area of Queensborough Subject to Flooding

- - - Queensborough Floodplain Boundary

Flood Management in the Queensborough Community Plan

Goal 5: Queensborough effectively protects against and manages incidents of flooding.

Policy 5.1:	Manage the dykes so that they continue to be the primary defence against flood events.
Policy 5.2:	Apply the Flood Construction Level (FCL) regulation to new development as a secondary flood protection measure.
Policy 5.3:	Minimize the impacts of the Flood Construction Level (FCL) regulation on the aesthetics and functionality of buildings.
Policy 5.4:	Use emergency management processes to help minimize impacts to the community from a flood event.

This Plan...takes a candid approach to flood management. It requires all new residential and institutional development and all industrial development abutting the dyke to comply with City policies related to a specified Flood Construction Level (FCL). This approach has been taken in light of the Province, in 2003, delegating responsibility for flood management to municipalities. This Plan establishes consistent flood management regulations which consider the BC Ministry of Environment "Flood Hazard Area Land Use Management Guidelines."

Prior to the policy established in this Plan, the City applied two different building standards to development in Queensborough. The community has been concerned about the impacts of applying these different building standards, including off-site drainage, neighbourhood appearance and inequitable flood protection. An action coming out of this Plan is that the City create design guidelines to help address these issues as the new FCL policy is implemented.

The management of the dykes is also a priority since the dykes will continue to be the primary defence against floods. This Plan recognizes that flooding could occur, despite the dykes, and includes a stronger role for emergency management than did the previous plan.

The vision locates compact lot development where it helps to reinforce the dyke.

Men sandbagging, 1948. (NWPL 3092)

Policy 5.1: Manage the dykes so that they continue to be the primary defence against flood events.

UNDERSTANDING FLOOD "LINGO"

Flood Construction Level (FCL) – is a regulation that is applied to new development requiring construction of habitable space and storage of goods damageable by flood water at or above a specified elevation.

A 1 In 500 Year Flood – means that in any given year the probability of a flood producing the type of water levels experienced in the 1894 flood of record is 1 in 500. The 1894 flood through statistical analysis has been estimated at occurring every 500 years. An individual has an approximately 40% chance of experiencing a major overtopping flood event over a 70 year period.

Geodetic Survey of Canada – is a reference point from which elevation is measured and corresponds roughly to mean sea level. The further you go up the Fraser River the higher you are above sea level. This is why the east end of Queensborough has a higher Flood Construction Level elevation than the west end of Queensborough.

The City, as the Provincially-regulated Dyke Authority, is responsible for the management of the dyke system in Queensborough. The perimeter dykes were constructed or upgraded during the Fraser River Flood Control Program which ran between 1968 and 1994. In 2013, the dykes in Queensborough typically had crest levels between 3.8 and 4.2 meters (12.5 feet and 13.8 feet) relative to the Geodetic Survey of Canada (GSC) datum. This height was designed to protect against a one in 500 year flood event.

The City has developed a Floodplain Management Strategy based on the Fraser River flood level analysis (2006) which indicated that some sections of existing dykes should be raised modestly by about 0.3 metres (0.98 feet). The Floodplain Management Strategy is divided into two phases:

1. The Conceptual Phase which was concluded in 2009 identified flood prone areas, constraints and opportunities, and potential flood protection alignments. It also included a cost/benefit analysis and established a preferred floodplain management strategy.
2. The Feasibility Phase which was concluded in 2011:
    a. Planned and prioritized future flood protection projects.
    b. Provided feasibility level design drawings and cost estimates for funding applications.
    c. Established perimeter flood protection requirements for development permit applications and approvals.
    d. Identified land requirements for flood protection works for long-term planning purposes.

The City is responsible for inspections, performance monitoring, operation, repairs, maintenance, contingency emergency planning, and emergency response. The City is required to undertake inspections and necessary maintenance well in advance of potential high water periods. Knowledge of the maintenance status of flood protection works is an integral part of flood preparedness planning at both the local and provincial levels. Dyking authorities must complete an annual inspection of each dyke and submit the inspection report(s) to the Inspector of Dykes.

Actions

The City should...

5.1a Work with the Province and other partners to access funding available to assist with the implementation of future dyke improvement works.

The City should continue to...

5.1b Implement the recommendations of the Floodplain Management Strategy Feasibility Plan.

5.1c Communicate and coordinate with Richmond and the Province regarding dyke maintenance.

SEA LEVEL RISE

The debate on Sea Level Rise is not *if* it is happening but *how* rapid the rate of increase will be. In 2013, Provincial guidelines recommended municipalities to plan for 1 metre (3.3 feet) of sea level rise by 2100. They also recommended an increase of 0.5 metres (1.6 feet) be considered for 2050. Sea Level Rise is a major factor in flood management in Queensborough since the depth of inundation and the risk of overtopping increases as sea level rises. This means floods will be more frequent and cause more property damage and risk to life. Risk can be offset by increasing the Flood Construction Level and dyke improvements.

Queensborough Perimeter Trail built on the crest of the dyke.

Policy 5.2: Apply the Flood Construction Level (FCL) regulation to new development as a secondary flood protection measure.

THE CITY'S FLOOD CONSTRUCTION LEVEL POLICY

All new residential and institutional construction must comply with a FCL of 3.53 metres (11.6 feet) GSC or 4.20 meters (13.8 feet) GSC depending on location. Industrial development abutting the dyke is also required to comply with FCL requirements as a means of reinforcing the dyke. Industrial development that is not adjacent to the dyke is encouraged to comply with the FCL requirement. Commercial and heritage buildings are exempt.

The requirements are now included in a hazard area development permit area. All new construction that is not identified as exempt is required to obtain a Development Permit prior to construction.

The dykes are the primary defence against a flood event. A Flood Construction Level (FCL), provides a second tier of defence against flooding in the event that a perimeter dyke is overtopped or breached. A Flood Construction Level (FCL) is a regulation that is applied to new development requiring habitable space, equipment and storage rooms be constructed at or above a specified elevation. Parking and a lobby are the only uses permitted below the FCL.

FCL requirements and other flood hazard management policies were first established in the late 1970s by the BC Ministry of Environment to reduce the impact of floods on life safety and property. In 2003, Bill 56 removed the involvement of the Province in regulating floodplain development. The Local Government Act now provides the legal framework for local governments to regulate development on land subject to flooding, including establishing a FCL. Though local governments can now establish their own regulation, legislation requires them to consider the BC Ministry of Environment "Flood Hazard Area Land Use Management Guidelines."

In setting FCL policy, the City seeks to ensure public safety and respond to provincial guidelines while maintaining economic vigour and ecological health, and supporting good urban design.

Actions

The City should...

5.2a Ensure new development meets the requirements of the City's Flood Construction Level policy.

Policy 5.3: Minimize the impacts of the Flood Construction Level (FCL) regulation on the aesthetics and functionality of buildings.

Since the establishment of the provincial Flood Construction Level (FCL) in the late 1970s, buildings in Queensborough have been constructed to different finished floor elevations. The FCL only applied to buildings constructed on land that was subdivided after the provincial policy was put in place. On properties where the FCL did not apply (i.e. properties that existed prior to the establishment of provincial policy) a new house could be built in compliance with the minimum building elevation in the Building Bylaw.

The impacts of applying two building standards (the FCL and minimum building elevation) are particularly evident in the traditional single detached residential area of Queensborough. Streetscapes in this neighbourhood often have an unusual and excessive undulation where both elevated single detached dwellings built to the FCL and lower dwellings built to the minimum building elevation occur. This impacts the aesthetic quality of the street and results in overlook and shadowing issues between neighbours.

Issues related to drainage and settlement have also arisen at the interface between single detached dwellings constructed to different finished floor elevations. Many of these issues are a result of placing a large amount of fill on the property in order to build up the site to achieve the FCL elevation. For example houses built on piles with driveways built on fill often lose the functionality of their garage. Over time, as the fill settles away from the finished grade of the garage, the gap between the driveway and the floor of the garage become too great to drive over, unless more fill is added. Fill settlement can also cause issues for City infrastructure including sidewalks, roads and pipes in the ground.

An alternative to the use of fill to achieve the FCL is to locate habitable areas on top of building structure, such as a garage and/or crawl space. This approach can also cause issues when the garage or crawl space, which is not meant to be used for habitation or storage, may be converted for one of these purposes.

Housing built to meet the 3.5 metre Flood Construction Level.

Actions

The City should...

5.3a Undertake a study to develop design guidelines for residential development that mitigate the collateral impacts of implementing the FCL, including aesthetic, settlement and drainage issues.

Policy 5.4: Use emergency management processes to help minimize impacts to the community from a flood event.

CHNW NEW WESTMINSTER PUBLIC SAFETY RADIO 88.7FM

The City of New Westminster is committed to providing its citizens with timely, on demand and effective information. In November 2007, the City of New Westminster was the first municipality in Canada to use an FM radio station for emergency broadcasting. This radio station's primary role is to relay vital information and instructions during an emergency or disaster. A secondary and equally important role is to relay public safety messaging.

Queensborough Shake It Out BC drill 2011.

The City's Emergency Management function seeks to promote a safe, well-prepared community with the capacity to cope with hazards and disasters, including flooding. There are four pillars of emergency management which rely on regionally, provincially and municipally based processes.

PLANNING AND MITIGATION

Through advanced planning the City can reduce the effects of an emergency. Regular updates to the City's Hazard Risk and Vulnerability Analysis, which identifies the types of emergencies that are more likely to occur and to have an impact on the community, is an important component of planning for potential future emergencies. Mapping critical infrastructure (e.g. transportation) and prioritizing which should be restored first in the event of an emergency is a key tool for managing the impacts that might result. Pre-identification of potentially critical points of failure in these systems could also provide the City with the opportunity to make necessary improvements prior to an emergency event.

PREPAREDNESS

Preparedness includes monitoring, community education, training staff, purchasing equipment (e.g. the City's mobile command unit) and coordinating with other agencies and levels of government. The City's website actively promotes business continuity and personal preparedness to the community. Business continuity is a system allowing businesses to operate even after an emergency of any magnitude. Personal preparedness involves knowing the risks, having a plan and owning an emergency kit.

RESPONSE

In the event that increased river levels are expected to result in flooding the City relies on the Major Emergency Plan (2006) which identifies a response framework including a strategy for evacuation. If there is a flood threat, the City will issue an evacuation alert so that community members can begin an orderly preparation to leave the area. If necessary, this would be followed by an order to evacuate.

RECOVERY

Effective recovery after an event includes assessing the impacts, understanding community needs and resources, and re-establishing services and critical infrastructure. Adequate planning, preparedness and response all help to ensure that recovery from an emergency such as a flood is achieved as quickly as possible.

Actions

The City should...

5.4a Develop a new Emergency Plan and a new Recovery Plan for the City, including a critical infrastructure protection program, and ensure all related policy is revised to reflect the recommendations.

5.4b Update the City's Business Continuity Plan which will ensure the City can continue to operate following an emergency of any magnitude.

New Westminster Fire Department hall tour.

6.0 Heritage Management

HERITAGE CONSERVATION PRINCIPLES

The conservation of a place's heritage value is best done by appropriately protecting and maintaining the entire building and its character-defining elements.

Rather than be replaced, deteriorated elements should be repaired using recognized conservation methods.

Any repairs to an historic place should be physically and visually compatible with the historic place, and identifiable as new upon close inspection.

The building should not be moved from its original location, nor should it be added to unsympathetically. It is understood that sometimes a building must be relocated in order to protect it from demolition.

At no time should a false sense of historical development be created.

The City of New Westminster is the oldest incorporated city in British Columbia. There is a strong sense of pride and commitment to the conservation of heritage resources which makes New Westminster a distinctive community. The community and Council value the City's heritage resources and have consistently supported numerous measures for the protection and conservation of those resources.

Heritage resources are the tangible elements of the past that help make each community unique. Historic buildings, sites and landscapes reflect the forces that shape a community and help people understand the area's development. The City has adopted the "Standards and Guidelines for the Conservation of Historic Places in Canada,"[8] which defines the "heritage value" of these resources as their aesthetic, historic, scientific, cultural, social or spiritual importance to past, present or future generations.

The heritage value of historic places is embodied in their character-defining materials, forms, locations, spatial configurations, uses and meanings. Each building, site and landscape is unique and will have its own distinct set of character-defining elements. These will range from the tangible features (e.g. massing, materials, construction, decorative details, siting, relation to surroundings) to the intangible features (e.g. memories, stories, associated people or events, sense of time and place).

The vision supports retaining and reusing heritage buildings like the former Canadian Pacific Aircraft Plant (1).

[8] "Standards and Guidelines for the Conservation of Historic Places in Canada", Parks Canada, 2003. The primary purpose of this document is to offer Canadian heritage conservation projects guidance for decision making when planning for, intervening in and using a historic place. Council adopted the "Standards and Guidelines" in 2008 for assessing heritage projects.

Heritage conservation involves the management of elements of the past for the benefit of future generations and it is a continuous activity that relies on community participation and support. In 1993 the City adopted the New Westminster Heritage Management Plan which set out to:

- Provide the City with a set of policies, standards, procedures, and tools to guide decision-making regarding the ongoing management of the City's heritage resources.
- Involve the community in a manner that would help raise awareness of the value of heritage resources and contribute to a strong base of support for the Heritage Management Plan.

There are a number of tools available to municipalities to help protect and regulate heritage resources. Part 27 of the Local Government Act includes provisions for legal protection bylaws, formal recognition, impact assessments and temporary protection orders that together form the basis of the City's heritage management approach.

HERITAGE CONSERVATION PRINCIPLES CONTINUED

Alterations to an historic place should be physically and visually compatible with, subordinate to and distinguishable from that place.

Where possible, new work should be documented and reversible, meaning the essential form and integrity of an historic place will not be impaired if any new work is removed in the future.

Heritage Management in the Queensborough Community Plan

Goal 6: Queensborough respects community heritage assets.

Policy 6.1: Protect and enhance built and natural heritage assets.

Policy 6.2: Celebrate Queensborough's historic sense of place.

This Plan... draws attention to the richness and complexity of Queensborough's history. There has been success in documenting some of the verbal history of Queensborough through a number of residents who have recorded their histories and stories. The New Westminster Museum and Archives lacks physical artefacts from Queensborough and, despite having a rich heritage, no physical heritage assets had been protected in situ in Queensborough, as of 2013. Queensborough has many heritage assets that should be protected, as identified in the heritage inventory conducted as part of developing this Plan and there are a number tools available for implementing protection. The use of street names, public art and interpretive signage that reflect the history of Queensborough also help to tell the story of Queensborough and emphasize the riverfront community sense of place.

Heritage Tools

The changes to heritage legislation and local municipal acts have given local governments a variety of heritage tools and the ability to better integrate those tools into the mainstream of development and community planning. These tools can be divided into planning or protection categories. Which tools are used will depend on the individual municipality.[9] New Westminster uses the following tools:

PLANNING TOOLS

Community Heritage Commission (CHC) – The CHC was established by City Council to advise on heritage matters and to review building and demolition applications for identified heritage buildings. The CHC generally meets once per month and is composed of seven community members and two City Councillors.

Heritage Register – The City's Heritage Register is an official list of significant heritage properties identified by the community and Council. It is a living document to which properties are added over time. The Register gives notice to prospective buyers that a property is important to the community and it enables staff to monitor proposed changes to those properties through licensing and the development review process. Properties listed on the Heritage Register are eligible for special provisions under the BC Building Code (i.e. modified building standards) and under the Homeowner Protection Act.

To be eligible for inclusion on the Heritage Register, a building or site must have heritage significance. The heritage value of an historic place is embodied in its character-defining materials, forms, location, spatial configurations, uses and cultural associations or meanings. Each candidate property is assessed by the City and the Community Heritage Commission. If the property is found to have heritage significance, it is eligible for inclusion on the Heritage Register.

Most properties listed on the Heritage Register have a Statement of Significance (SOS) describing the heritage value. The SOS identifies the heritage character-defining elements of a building or site that need to remain if the heritage value is to be retained. In 2013, there were no properties in Queensborough listed on the City's Heritage Register, although numerous properties are eligible based on age and cultural significance.

[9] For a full list of heritage conservation tools that are enabled by Part 27 of the Local Government Act, refer to: http://www.tca.gov.bc.ca/heritage/docs/pdf/HC_guide.pdf

PROTECTION TOOLS

Heritage Revitalization Agreements (HRA) – An HRA is a flexible and powerful bylaw that is negotiated between a property owner and the City in order to provide long-term legal protection of a site in exchange for agreed-upon variations to the Zoning Bylaw, including use and density. It strives to balance private versus public interests, heritage conservation versus development, and livability versus densification. A Council-approved Heritage Alteration Permit is required before any alterations to the exterior are carried out.

Heritage Designation Bylaws – A Heritage Designation Bylaw can be placed on a property to give it long-term legal protection, either with or without owner consent. It allows the City to prohibit demolition and require that any alterations to the exterior must first receive Council approval through a Heritage Alteration Permit.

Heritage Alteration Permits – A Heritage Alteration Permit is an authorization by City Council or its delegate that allows specific changes to be made to protected heritage property. This is the only legal way that a protected heritage building may be altered. Every Heritage Alteration Permit application is reviewed by the Community Heritage Commission and by Council or its delegate.

Heritage Conservation Area – A heritage conservation area is a distinct district with special heritage value and/or heritage character, identified for heritage conservation purposes in an Official Community Plan, and established by a bylaw. A heritage conservation area may establish design controls and may create a list (schedule) of specific properties within the area which receive formal protection. Demolition or exterior alteration of scheduled properties must first receive Council approval through a Heritage Alteration Permit.

Heritage Sites Maintenance Standards – The City has a set of Heritage Site Maintenance Standards, which establishes the minimum requirements for the care and maintenance of protected heritage property. This includes both structures and landscape and ensures that protected properties are not allowed to deteriorate by neglect. It also allows the City to apply to the Provincial Court for a maintenance order in the event that protected property is allowed to deteriorate.

Policy 6.1: Protect and enhance built and natural heritage assets.

1950s INDUSTRIES

In the 1950s , industries that were located in Queensborough included:

- Martin Paper Products
- Westminster Shook Mills Ltd.
- Pacific Pine Ltd.
- Westminster Mills Ltd.
- Imperial Oil Ltd.
- Mercer's Star Shipyards
- American Fabricators
- BC Manufacturing Co. Ltd.

Queensborough's heritage resources are varied. They include historic industrial buildings, residential dwellings, community halls, infrastructure, and historically important natural elements.

INDUSTRIAL HERITAGE

From its earliest settlement days, Queensborough has had a rich industrial history that has positively impacted the development of the Lower Mainland region. From the early 1900s, the industries in Queensborough were significant contributors to the city's economy. Some of the region's most important shipyards and shipbuilders operated in Queensborough, as well as a number of significant lumber mills, fish canneries, a foundry and a box factory.

During both World Wars, Queensborough was a major contributor to the war effort and saw the creation of new industries for the manufacturing of ships and weapons. During World War I, Vulcan Iron Works, Heaps Engineering and Schaake Machine Works provided nearly half a million shells for the Imperial Munitions Board. Mercer's Star Shipyards was constructed in 1940 and the Canadian Pacific Airplane plant was constructed in 1942 to provide ships and airplanes in World War II.

Only a few historic industrial buildings remain in Queensborough as a testament to the area's marine and manufacturing-centred history. Many are deteriorating from lack of use and are at risk of demolition. In some instances, important industrial artefacts remain on site that have the potential to be used in new development, perhaps as public art or as part of on-site interpretation.

Fresh Salmon, Ewen and Co. c. 1900. (BC Archives 1-61369)

RESIDENTIAL HERITAGE

Most of the historic houses left in Queensborough are two or 2½ storey structures with gable roofs and wood siding, although some have been covered with stucco. Many houses were designed to reduce flooding damage by locating storage on the first floor and living space on the second floor. Open front porches were typical, although some have been filled in over time.

As in other communities, housing starts spiked at different periods, usually in keeping with world economic booms. The Queensborough community has indicated that houses from each time period should be retained and either restored or rehabilitated. Some residential assets that stand out as representative of important times in Queensborough's history include:

- The oldest remaining houses in Queensborough, which date from 1911.
- Houses that remain from 1929 to 1931, the earliest years of the Great Depression.
- Large groups of houses that date from the pre- and post-World War II eras.
- Houses constructed between 1953 and 1958.

Wood Street in the 1930s. (NWMA IHP4086)

Heritage Homes Tour 2009, 325 Ewen Avenue, constructed 1911.

NATURAL HERITAGE

The natural heritage of Queensborough is highly valued by its residents and forms an integral part of the overall heritage value of the area. The natural heritage of Queensborough includes such aspects as:

- The Boundary Road canal.
- Watercourses (ditches).
- Connections to the river.
- Small beaches.
- Remnants of historic orchards, pastures and gardens.
- Individual and collections of trees.
- Natural and adapted habitats which allow the continuing presence of wildlife such as barn owls, hawks, eagles, ducks, herons, and beavers.

The InterUrban Car.
(NWMA IHP 6178)

Line-up of cars on the swing Bridge.
(NWMA IHP 7950)

"We explored little paths down the sides of the dyke, through the shady trees by moss covered logs where luxuriant ferns grew. Birds were everywhere, also very busy, as they too went about their daily lives."

- "Queensborough Reflections"
Edna Anderson, 1991

INFRASTRUCTURE HERITAGE

Queensborough's roads, bridges, dykes, and rail lines have helped to shape the area into the community it is today. These pieces of landscape are character-defining elements.

Dyke System – An integral infrastructure of Queensborough is the dyke system. It was first constructed in 1889/90 by Alexander Ewen and Donald McGillivray to reclaim and protect land for industry, agriculture and settlement. Maintenance of the dyke system was taken over by the City in 1909, two years after Mr. Ewen died.

The dykes have always had a walking path along their top and typically had grassy banks with trees growing on both the inside and outside edges. People have traditionally enjoyed walking on the paths and children have enjoyed opportunities to play there. The dykes now form part of the Queensborough Perimeter Trail.

Railway and Trams – The BC Electric Railway Company (BCER) operated streetcar systems in Vancouver, North Vancouver, Victoria and in New Westminster beginning in the mid-1890s.

In 1910, the BCER expanded to provide transportation for people, freight and mail between Vancouver and the Fraser Valley. By 1913, it had lines that connected from Chilliwack to Richmond and Vancouver, including stations in New Westminster. Promised in an 1892 auction brochure for newly subdivided land in Queensborough, the BCER constructed its tram line along Ewen Avenue in 1911. The old rails still exist in parts of the road bed.

Bridges – There are three bridges connecting to Queensborough, each of which has influenced the community's growth and settlement and represents its history:

- The timber trestle bridge was constructed 1909. In 1911 the track for the BC Electric Railway tram line was laid on the bridge.
- The Derwent Way Bridge was constructed in 1954. This low level swing bridge continues to function and has two auto lanes, a separate rail track and an elevated station house.
- The "new" Queensborough Bridge was officially opened in 1960 to provide new access between Queensborough and mainland New Westminster.

Roads – The first road was constructed by Donald McGillivray and ran east-west, linking Queensborough and New Westminster with Richmond. First known as McGillivray's Road, it later became Ewen's Road and is known today as Ewen Avenue.

Additional roads were constructed over time, using a grid system with the main roads running parallel to Ewen Avenue. Those roads with elements of heritage value are:

- South Dyke Road, named for its location on the dyke.
- Boyd Street, named for Hugh Boyd, the "Father of Richmond." It first appeared on local maps in 1909.
- Howes Street, named for William Howes, local boat builder. It first appeared in 1927.
- Salter Street, named for Harvey Salter, an early settler in Queensborough. It first appeared in 1909.

Queensborough Bridge c. 1960. (NWMA IHP 7544)

CHALLENGES OF PROTECTING HERITAGE ASSETS

There are challenges to protecting and enhancing the built and natural heritage assets that have been identified by the community. Many buildings, for example, have deteriorated physically over time which makes the retention and rehabilitation of them difficult and costly.

Development pressures, created when a property is zoned or designated for a higher density, increase the likelihood of a heritage asset (including built, natural and intangible aspects) being lost. In cases where development pressure cannot be avoided the City will consider incentives to promote heritage conservation. The City uses tools that respond to the financial and practical difficulties related to maintaining and upgrading heritage resources. For example, with Heritage Revitalization Agreements, zoning provisions (e.g. density allocation) may be amended or waived in exchange for heritage retention and restoration.

Another challenge is ensuring that new and other jurisdictional policies are not putting undue pressure on heritage assets. For example, modern flood protection policy requires building new construction at a higher level than existing buildings which has had aesthetic and drainage impacts on heritage buildings. As part of the flood management policy the City will develop Flood Construction Level design guidelines to help mitigate these impacts and preserve Queensborough's heritage resources.

Actions

The City should...

6.1a Build on the 2010 inventories of historic housing and industrial buildings, by seeking community recommendations of suitable buildings (individual and areas), sites (e.g. dykes, roads, bridges, railways, views) and natural features (e.g. mature trees) to be listed on the City's Heritage Register.

6.1b Support the use of Development Variance Permits, where necessary and appropriate, to allow alterations to the massing of buildings in order to facilitate the retention of natural features.

Making Munitions. (NWMA IHP 6399)

WHAT TO EXPECT

An applicant for a development project is expected to carry out due diligence with regard to identifying the existence of heritage elements on the site, including buildings, artefacts above or in the ground, or other less tangible elements. Redevelopment of a site with heritage elements will require a heritage assessment conducted by a qualified heritage professional. The City and the applicant will explore retention options and protection tools, if applicable.

The City requests the opportunity to examine and photograph any artefacts discovered during redevelopment. The New Westminster Museum and Archives would appreciate discussing the possible donation or borrowing of the items for display and educational purposes.

A first principle of heritage conservation is that heritage buildings should remain in their current location (in situ). However, if it can be shown that the building cannot remain in situ, the City will consider relocation to another, available location instead of demolition. If an identified heritage building is being considered for demolition, the City may require a heritage assessment to determine the structural viability of retaining the building. If the building cannot be retained or relocated, the applicant will be expected to provide documentation of the building and the site before demolition occurs. This documentation will be submitted to the City and will reside with the New Westminster Museum and Archives.

Actions

The City should continue to...

6.1c Work collaboratively with property owners to retain and restore historic properties deemed significant by the community through Heritage Revitalization Agreements (HRAs). Potential incentives through an HRA include:

- Relaxing certain zoning requirements, such as setbacks, on-site parking and/or density.
- Using BC Building Code equivalencies wherever possible to ease the financial outlay and extra construction work that may be required for the upgrading of a heritage structure.
- Considering, on a case-by-case basis, the waiving of Flood Construction Level requirements.

To help implement this policy, residential, commercial, mixed-use, industrial land and mixed employment uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

Former Canadian Pacific Aircraft Plant, 400 Ewen Avenue.

Policy 6.2: Celebrate Queensborough's historic sense of place.

RECORDING HISTORY

A number of Queensborough residents have taken the initiative to write down their memories and publish them. Edna Anderson has published books about her experiences living in Queensborough, complete with many photographs. Ruth Gatensbury, Stephen Gatensbury, and Hellen Pullem have also published their memoirs. All of these provide a valuable collection of information and images that would otherwise have been lost. The City's Museum and Archives will continue to document personal stories and recollections.

Edna and Clarence Anderson c. 1950. (Anderson, Edna. A Biography, New Westminster, BC; 2010)

A community's history is part of what makes it unique. Recognizing and celebrating that history helps to build community identity and pride. Queensborough is strong in cultural diversity, traditions and stories. These intangibles are key to a community's identity, but are difficult to conserve when compared to physical objects. However, they can be celebrated and shared with new members of the community in the following ways:

1. The continuation of traditions and the telling of stories by each family and cultural group.
2. The recording of traditions and stories through electronic, paper and other appropriate mediums.

Queensborough has a number of groups and clubs that encourage cultural traditions and the sharing of stories. For example, the Queensborough Community Centre partners with and supports the Special Programs Committee, a committee that coordinates community events such as the Urban Farmers Fall Fair. The Special Programs Committee also strives to preserve local history as seen through collages, family plaques and murals in the community centre. Dedicated volunteers, including those on the Special Programs Committee, make Queensborough a better place to live.

The City's Museum and Archives maintains a collection of artefacts that directly relate to Queensborough's history and celebrates its traditions, such as a sandbag from the 1948 flood threat. The Queensborough collection is limited, so the Museum and Archives continues to seek out historic objects, photographs and stories to add to the collection. When a site is redeveloped, the applicant is requested to salvage unearthed objects and notify the Museum and Archives. Of particular interest is artefacts related to farming, residential construction, transportation infrastructure, and the industries that existed in Queensborough. Residents are also encouraged to contribute artefacts.

Public art, interpretive signage, and relevant historic Queensborough names for roads, civic and open spaces are another way to celebrate a community's history, and will continue to be used to depict historical themes. The City has an interpretive signage program and has placed a series of them along the Queensborough Greenway. Incorporating "riverfront community character" in new developments will also help depict historic themes.

Actions

The City should...

6.2a Explore opportunities for additional interpretive signage.

The City should continue to...

6.2b Implement the Public Art Policy and New Westminster Arts Strategy. This should include finding appropriate opportunities to locate public art inside and outside community facilities, in parks and on streets.

6.2c Support the recording of traditions and stories through the New Westminster Museum and Archives, the community centre and community groups.

Interpretive Panel on the Perimeter Trail.

To help implement this policy, residential, commercial, mixed-use, industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

7.0 Housing

Compact lot house in Port Royal.

Access to safe, adequate and affordable housing is fundamental to the physical, economic and social well-being of individuals, families and communities. The homes and neighbourhoods in which we live play a central role in our overall quality of life. Our homes form the heart of our neighbourhoods, and are filled with a diverse mix of residents, such as singles, couples, families, young adults, seniors, and people with special needs. Sustainable communities include a range of housing choices.

The City has a number of city-wide policies that address housing in New Westminster, including the Affordable Housing Strategy (2010), the Secured Market Rental Housing Strategy (2013), and provisions in the Zoning Bylaw for adaptable housing.

Over the last few years, Queensborough has experienced significant growth in housing. About two-thirds of the current housing stock in Queensborough is relatively new, having been built since 1990. Queensborough will continue to see housing growth in the following ways:

- Intensification within the single detached housing areas.
- Compact lot development south of Salter Street.
- Completion of the Port Royal development.
- Townhouse and mixed-use development in the Ewen Avenue development nodes (e.g. around the Queens Hotel).
- Townhouse development near Wood Street and South Dyke Road.
- Multi-family development between Derwent Way and Stanley Street.

Figure 27.
Queensborough Housing Characteristics
Source: Statistics Canada, 2011 Census; Metro Vancouver, City of New Westminster; GP Rollo and Associates

	2011	2021[12]	2031[12]	2041[12]
Queensborough Population	7,125	10,958	14,091	14,825
Share of the City's Population[10]	10.8%	13.7%	15.3%	14.5%
Type[11]				
Single detached dwelling	1,410	1,564	1,784	1,850
Townhouse	360	1,081	1,657	1,801
Apartment	475	868	1,037	1,037
Total	2,245	3,513	4,478	4,708

[10] Note: Metro Vancouver's Regional Growth Strategy was used for the city's population.

[11] Note: The Census uses different categories for type of dwelling. Apartment buildings fewer than five storeys and greater than five storeys make up the Apartment total; rowhouses make up the Townhouse total; Single detached house and apartment/ duplex make up the Single Detached Dwelling total. Movable Dwellings have not been included.

[12] Note: Forecast population is based on the development capacity analysis completed by GP Rollo and Associates and the City of New Westminster.

Housing in the Queensborough Community Plan

Goal 7: Queensborough has a diverse housing stock that meets the needs of the community.

Policy 7.1: Facilitate the provision of affordable housing options.

Policy 7.2: Provide a range of residential tenures.

Policy 7.3: Provide accessible and adaptable housing within the community.

Policy 7.4: Design housing to be attractive and livable.

Policy 7.5: Ensure a diversity of unit types are available within the community.

This Plan... supports overarching City policies, specifically the provision of affordable housing, rental housing, accessible housing, and diversity of housing, including types and unit sizes. The trend in Queensborough's multi-family areas has been to build townhouses resulting in an overabundance of that housing type. To enhance diversity, building other forms of housing in multi-family areas is encouraged.

This Plan retains most of the existing homes. It strategically locates more residential density around the community's shopping, services and amenities nodes making it easier for residents to access their daily needs, as well as transit, on foot within their own neighbourhood.

Design guidelines are included in this Plan which support the development of a livable community that is an attractive, safe and characteristically Queensborough place to live.

The vision includes a wide range of housing forms to enable provision of a range of housing choices.

Policy 7.1: Facilitate the provision of affordable housing options.

THE CITY'S ROLE IN ACHIEVING AFFORDABLE/ ATTAINABLE HOUSING

Setting Policy — Clear, consistently applied policies express the City's commitment.

Establishing Regulations — Effective use of regulatory authority creates housing choice for residents.

Using Resources — Strategic use of City resources can leverage an increased supply.

Entering into Partnerships — Collaboration with the business and non-profit communities and Provincial agencies to develop creative solutions to issues.

Advocating — Providing ongoing leadership.

Promoting Quality Design and Innovation — Focus on sustainable and attractive design and development of new and conventional housing forms that will reduce maintenance costs and increase neighbourhood acceptability.

Housing affordability is an important issue in the city and the region. Access to safe, livable and affordable housing is fundamental to the physical, economic and social well-being of individuals, families and communities. However, residents continue to be challenged in finding affordable housing that is suitable for their needs.

The City seeks to facilitate and promote affordable housing and has identified strategic directions and priorities for implementation in the Affordable Housing Strategy (2010). This Strategy enables the City to develop policies and tools that will promote housing affordability to meet the full range of New Westminster residents' incomes. The Strategy focuses primarily on permanent housing (i.e. not emergency shelters or transitional housing), placing a greater emphasis on the City of New Westminster's role as a facilitator in the development of affordable housing through the private market.

Older single detached housing and newer multi-family units in Queensborough are more affordable than elsewhere in New Westminster and many other communities in Metro Vancouver. This has made Queensborough an attractive neighbourhood for first time homebuyers who do not have equity already invested in the real estate market, and to young families drawn to the ground oriented forms of housing that are characteristic of much of Queensborough's housing stock.

"Homeownership and rental housing for low and moderate income households (i.e. at or below the median income) that does not cost a household more than 30% of its before tax income."

- Definition of affordable housing from City of New Westminster Affordable Housing Strategy

Actions

The City should continue to...

7.1a Implement the strategic directions of the City's Affordable Housing Strategy (2010).

Policy 7.2: Provide a range of residential tenures.

Rental housing serves an important role in a community. It provides a flexible housing option for workers who need or wish to live closer to their places of employment and for those who do not want or cannot afford to own housing. The City's Affordable Housing Strategy (2010) has strategic directions and priorities for facilitating rental housing.

In 2011, about 25% of Queensborough households were renters (compared to 44% in New Westminster). In 2013 there was one purpose-built rental housing building in Queensborough. This lack of purpose-built rental housing represents a gap in housing choice. The City and the development community will need to work together on innovative ways to increase the supply of purpose-built rental housing to address this need in the growing community. The City's Secured Market Rental Housing Policy (2013) contains strategies and actions aimed at enhancing the supply of secured rental housing stock developed by the private sector.

Secondary suites help satisfy some of the demand for rental housing. They are an allowed use in single detached dwellings except for in compact lot developments. A suite is permitted if a dwelling satisfies all requirements.

The Queensborough community has many legal suites that were built in accordance with the City's guidelines and regulations which ensure that suites are healthy, safe and compatible with their surrounding neighbours.

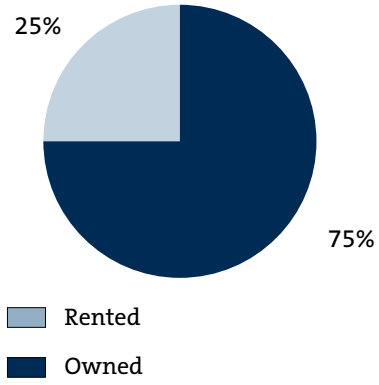


Figure 28.
Tenure in Queensborough
Source: Statistics Canada, 2011 National Household Survey

The provision of rental housing is supported by the City.

Actions

The City should continue to...

7.2a Implement the strategies of the City's Secured Market Rental Housing Strategy (2013) to encourage the development of rental housing.

Policy 7.3: Provide accessible and adaptable housing within the community.

Multi-family housing with an elevator in Port Royal.

A sustainable community includes housing that meets the needs of seniors and individuals with health and mobility challenges. In addition to providing housing for different ability levels, accessible and adaptable housing benefits the community by allowing people to "age in place" or downsize their home within Queensborough.

While Queensborough includes a variety of housing forms, few of these readily provide accessible housing. Floodplain construction requirements often preclude at-grade housing, as living space must generally be located above parking or other non-habitable flood space. Even in cases where houses are developed on lots filled to the Flood Construction Level, most are oriented toward families with all bedrooms on the upper level. Buildings with an elevator can support accessibility and Queensborough has a number of these, which are mostly concentrated in the east end of the community. The City encourages creative solutions that address accessibility while meeting the intentions of livability and community character policies.

Adaptable housing is designed to benefit anyone whose mobility is limited due to age, disability or illness. This form of housing is designed and built so that accessibility features can be added more easily and inexpensively after construction. Adaptable housing also includes built-in features that do not affect the function of the unit when it is built (e.g. wider doorways, lowered light switches) but add considerable utility to a person with health or mobility challenges. It provides options for those with differing abilities and makes it easier for those whose abilities become more limited over time to continue to remain in their own home.

Actions

The City should continue to...

7.3a Apply the City's Zoning Bylaw regulation for the provision of adaptable housing in all new development that includes single-storey dwelling units in multi-family residential buildings.

Policy 7.4: Design housing to be attractive and liveable.

Housing design has an important role in creating an attractive and livable community. The architectural style, building materials and colours of residential buildings all contribute to lively, textured neighbourhoods. The height of residential buildings and the depth and landscaping of their front yards help to shape the streetscape as well as the experience of pedestrians, cyclists and drivers using the street. Where multiple families share open space, it provides opportunities for residents to be neighbourly, for children to play together, and for people of different ages and abilities to interact. Together, these elements combine to help build a community with an identifiable character and sense of pride.

Multi-family housing in Port Royal.

Multi-family housing will have a particularly key role to play in shaping the Queensborough community into the future. Multi-family housing is projected to have the greatest increase of all housing types through 2041. The form and character of multi-family developments is governed by a Development Permit Area and related design guidelines. This ensures that future multi-family development continues to contribute positively to the community.

The health and livability of Queensborough is partially dependant on creating sensitive transitions between different uses. This includes reducing and mitigating the impacts from noise, vibration and air pollution related to transportation and goods movement.

Actions

The City should...

7.4a Update the requirements for Development Permit applications to include information for all proposed signage (e.g. size and location) in Development Permit drawings.

7.4b Explore reviewing and updating the Zoning Bylaw to ensure single detached dwellings provide enough private open space and contribute to an attractive, pedestrian scale streetscape.

7.4c Create a city-wide Noise Attenuation Program that includes design guidelines for mitigating noise in residential units to help new development meet CMHC noise reduction targets.

The City should continue to...

7.4d Work with Southern Railway to achieve whistle cessation.

To help implement this policy, residential land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

Policy 7.5: Ensure a diversity of unit types are available within the community.

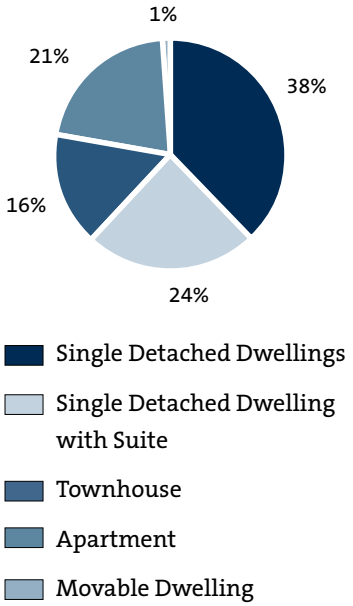


Figure 29.
Mix of Housing Type
Source: Statistics Canada, 2011 Census

Front door of ground oriented housing in Queensborough.

A community with a variety of housing forms can better meet the needs of different types of families and individuals. The Queensborough community includes people from diverse ethnic backgrounds and a full range of household needs. Some groups wish to live in extended families while others prioritize independent housing for seniors. Some people are forming new families and want small houses or townhouses. Others are downsizing and are looking for maintenance-free apartment living. As Queensborough's residential housing continues to evolve, it should be designed to include features that benefit a variety of family types, such as ground oriented units and units with two and three-bedrooms, as well as adaptable and accessible housing.

Queensborough has a far lower percentage of adults (50-64) and seniors (over 64) than for the city as a whole. There are many factors that are likely responsible for the lower percentages of older adults and elderly in Queensborough. These factors include availability of appropriate housing; access to health, retail and social services; convenience of public transit; location of leisure, recreation and social opportunities; and proximity to family and friends. Over the past ten years, there has been an increase in options for older adults and elderly who are looking to live independently in Queensborough (e.g. multi-family housing that is serviced by an elevator).

As Queensborough has a higher share of mid-range adults (aged 35-49) and children under the age of fifteen than the City as a whole, the provision of family oriented housing will continue to be important. Over 75% of the housing stock in Queensborough is ground oriented. A greater diversity of ground oriented housing has been achieved through allowing some housing types in Queensborough that are not found elsewhere in New Westminster. The Port Royal development, for example, is a showcase of novel housing forms, with compact lots, cluster housing and fee simple rowhouses. The community also includes more typical multi-family forms such as townhouses and three and four-storey apartments and, in the future, Queensborough's only high-rise building.

Queensborough is the only community in New Westminster that is expected to have an increase in the number of single detached dwellings. In other neighbourhoods almost every new single detached house replaces a demolished older unit. Single detached neighbourhoods are important to maintaining housing choice and community residential character. In Queensborough, such neighbourhoods make up the core of the community.

Infill (e.g. duplexes, triplexes) of single detached residential areas generally works best by taking a sympathetic approach where the infill mimics existing housing forms. This increases housing choice while maintaining neighbourhood character. Infill in Queensborough's single detached neighbourhoods was a key issue in the planning process and one that reflected conflicting community values.

Infill housing is an identified priority city-wide, playing a role in the City's affordable housing continuum. However, challenges remain that must be properly understood and addressed prior to the implementation of policy or guidelines. The challenge in Queensborough is centred on multiple suites (i.e. more than the one legally permitted) and the addition of these suites after final inspection. There are several issues that result from illegal multiple suites and there is concern that these would increase if infill housing was permitted.

SUPPORTED HOUSING

Queensborough has no licensed community care facilities or residences, or assisted living residences. These facilities and residences can be privately or publicly funded and are usually centrally located. They are typically large in order to capitalize on economies of scale related to care and amenities. Given the small size of the older adult and elderly population in Queensborough, and the limited access to care in the community, it is uncertain as to the financial viability of such a facility or residence in Queensborough in the short to medium term.

Actions

The City should...

7.5a Undertake a city-wide study to explore opportunities for sympathetic infill (e.g. duplexes, laneway houses) which would increase the diversity of unit types in Queensborough.

7.5b Establish guidelines for unit size distribution in new developments (e.g. number of one, two and three-bedroom).

The City should continue to...

7.5c Support independent living for seniors and advance opportunities for developing "aging in place" housing choices as these occasions arise.

7.5d Encourage supported housing as opportunities arise in appropriate locations.

8.0 Parks, Culture and Recreation

A bench in Queensborough.

Adequate green space and access to a range of community and recreational facilities is important for fostering healthy lifestyles, encouraging social interaction and enhancing livability. As Queensborough's population grows and as the community undergoes more intensive residential development, providing recreational amenities, arts and cultural activities, and ensuring quality connections between parks and open space systems will become increasingly important.

Parks and community facilities provide significant benefits to the community, including:

- Fostering community spirit and social interaction.
- Stimulating participation in community life and volunteerism.
- Enhancing overall health and physical well-being.
- Encouraging motor and social skills in children through play.
- Prolonging independent living for older adults.
- Reducing crime and costs associated with social dysfunction.
- Building understanding between different cultures.

Figure 30.
Queensborough Parks and Open Space
Source: City of New Westminster

Note: Park sizes reflect those shown in the Parks and Recreation Comprehensive Plan. The size of parks built since that plan was published (i.e. Sukh Sagar Park, Old Schoolhouse Park) were taken from the City GIS database.

Queensborough Parks and Open Space	
Community Parks	Size
Ryall Park	9.50 ha (23.5 acres)
Neighbourhood Parks	
Duncan Street Dog Park	0.72 ha (1.8 acres)
Old Schoolhouse Park	1.25 ha (3.1 acres)
Perimeter Trail Sections and Dyke Land	8.91 ha (22.0 acres)
Port Royal Community Garden	0.56 ha (1.4 acres)
Port Royal Park	1.72 ha (4.3 acres)
Red Boat Park	0.20 ha (0.5 acres)
Sukh Sagar Park	0.09 ha (0.2 acres)
Thompson's Landing Park	1.22 ha (3.0 acres)
Total	**24.17 ha (59.7 acres)**

Parks, Culture and Recreation in the Queensborough Community Plan

Goal 8: Queensborough's comprehensive system of parks, open spaces and recreational facilities serve the diverse needs of the community.

Policy 8.1: Provide a sufficient number and diversity of parks and recreation amenities to meet the needs of the current and future population.

Policy 8.2: Develop a network of trails and greenway streets that ensures seamless connectivity for bikes and pedestrians to and through the community.

Policy 8.3: Use public art to reinforce Queensborough's sense of place.

This Plan...recognizes that completing the missing pieces of the trail and greenway network, including the Perimeter Trail, continues to be a very high priority for community members and the City. It identifies key alternative routes around industrial lands to link portions of the Perimeter Trail, acknowledging that some trail sections will not be built in the medium term.

Much has been achieved in Queensborough in terms of public art, parks and the amenities offered at the community centre, but there is still more to be done. For example, there are areas where residents are more than a five minute walk from a park. Existing amenities will also need to be reviewed regularly to ensure they meet the needs of the evolving community.

The vision reinforces the existing parks (1) with more community gardens (2) and a network of greenways and trails (3).

Policy 8.1: Provide a sufficient number and diversity of parks and recreation amenities to meet the needs of the current and future population.

FUNDING PARK ACQUISITION

New park land and open space can be paid for, in part, by the City's financing growth tools, including parkland dedication and New Westminster development cost charges (DCCs). When the City is not able to fully fund the facilities, it is anticipated that they may be provided through innovative developments or partnerships with the private sector or other agencies. The parks, waterfront trail and boat dock at Port Royal are excellent examples of such funding models.

Compared to many of the other neighbourhoods in New Westminster, Queensborough has an appropriate supply of parks and open space. These include a diversity of community and recreational amenities that serve the needs of current residents, including those of different abilities, ages, incomes and interests. The provision of sufficient amenities in Queensborough is significant since the community is geographically separated from mainland New Westminster which is accessible only by limited public transportation and the Queensborough Bridge. Figure 31 illustrates Queensborough's park supply.

PARKS AND OPEN SPACE

Access to parks and open space provides residents with a number of health, social and ecological benefits. Communities which provide safe and attractive places to exercise, walk, and cycle have healthier residents. Physical activity leads to reduced incidences of chronic disease and helps people maintain a healthy weight. Green space also has restorative effects that improve mental health. Specifically, children who are physically active are also healthier and happier, have increased self-confidence and a greater ability to focus, and are better at making friends. Parks are also a social facility where families and people informally meet, greet and interact.

Queensborough Parks	Size (in 2013)	Proposed Target (ha/1,000 pop)	Existing (ha/1,000 pop)	2013 Surplus/ Deficiency (ha/1000 pop)	2013 Surplus/ Deficiency (ha)
City Parks	0.0	0.72	0.0	(0.72)	(5.13)
Community Parks	9.50 ha (23.5 acres)	0.90	1.33	0.43	3.09
Neighbourhood Parks	14.67 ha (36.3 acres)	0.60	2.06	1.46	10.40
Total	**24.17 ha (59.7 acres)**	**2.22**	**3.39**	**1.17**	**8.36**

Figure 31. Queensborough Park Space Inventory
Source: City of New Westminster and Statistics Canada, 2011 Census

The Parks and Recreation Comprehensive Plan (2008) recommends the City acquire land for Neighbourhood Parks within a five minute walk of all homes. Since 1996, Queensborough has experienced a significant increase in population and the amount of park land has grown accordingly. New parks include Sukh Sagar Park, Port Royal Park, and Old Schoolhouse Park. In 2013 Queensborough had a total of approximately 21 hectares (52 acres) of park land distributed throughout the community. As a result, virtually all residents in Queensborough are within a five minute walk to a park. The two exceptions are a small pocket at the north end of Fenton Street and Pembina Street and a larger pocket roughly defined by Gifford Street, Hume Street, South Dyke Road and Highway 91A.

A challenge for the future will be to maintain an appropriate ratio of park land to population as density in Queensborough increases. The City monitors the function of the parks and recreation facilities to ensure that they continue to meet the needs of the community. Maintaining an adequate supply of park space as the population increases will require acquisition of additional park land when the opportunity arises.

The park space ratio targeted by the City is 2.22 hectares (5.49 acres) per 1,000 people. In 2013 there were 3.39 hectares (8.38 acres) per 1,000 people. If the community's population increases in the way it is projected to in this Plan, and no new parks are developed, there will be a deficiency of park space by 2021. The acquisition and development of new park space will be required in order for Queensborough to achieve the target park space ratio through the life of this Plan.

Queensborough kite flyer.

COMMUNITY CENTRE EXPANSION

Multi-use Space –

- Meets the needs of children, youth, adults and seniors.
- Enables new or expanded programs and services, meetings and social functions.
- Serves as a rental venue for community groups, cultural organizations and private businesses.

Expanded Fitness Centre –

- Helps the community stay healthy and active.
- Addresses the challenges residents face trying to access fitness facilities at the Canada Games Pool.

Branch Library –

- Provides services directly to Queensborough residents.

Police Sub-Office –

- Provides members of the police force office space in Queensborough.

Community Living Room –

- Provides a place to informally gather, exchange information and interact with neighbours.

QUEENSBOROUGH COMMUNITY CENTRE

Queensborough Community Centre, built in 1978, is a focal point of the community. It offers a range of recreational and social programs and provides the opportunity for community members to host special events. Its role within the community takes on added importance because Queensborough is set apart from the mainland by the river.

The community centre operates under a community development philosophy that embraces and facilitates the involvement of the community in the delivery of programs and services. This approach not only allows the City to gain a better understanding of community needs, it also empowers the community as it provides for a diversity of perspectives which contribute to a stronger and healthier community.

The expansion of the community centre in 2012 added new amenities which better serve residents and will meet the future needs of the neighbourhood. The expansion also created the first Community Hub in the city which includes licensed group child care with 25 three to five spaces and an expanded play-based preschool program.

The relatively small population of Queensborough presents challenges in justifying the creation of a more comprehensive slate of recreation facilities such as swimming pools and ice arenas which tend to have a broad city-wide service area. In working cooperatively with the City of Richmond in planning for the future, continued efforts should be made to provide services that compliment each other between Queensborough and Hamilton in order to enhance livability in both neighbourhoods.

Queensborough Community Centre.

Actions

The City should...

8.1a Establish a comprehensive city-wide park development and land acquisition strategy. This strategy should address short-term and long-term needs of the community as it continues to grow and evolve. This should include offering a variety of equipment and spaces which are suitable for seniors, youth and families.

8.1b Seek new opportunities for park development partnerships with other levels of government, funding agencies and developers.

8.1c Create a new neighbourhood park located in the residential area bounded by Ewen Avenue and South Dyke Road, and Hume Street and Gifford Street to ensure all residents are within a five minute walking distance of a park.

The City should continue to...

8.1d Implement the recommended actions in the New Westminster Parks and Recreation Comprehensive Plan. This should include regularly monitoring and upgrading park facilities to ensure that the park system continues to reflect the needs of the community as it grows and changes.

Queensborough all wheel event.

Official opening at Old Schoolhouse Park.

Policy 8.2: Develop a network of trails and greenway streets that ensures seamless connectivity for bikes and pedestrians to and through the community.

PRIORITY CONNECTIONS IDENTIFIED BY RESIDENTS

Queensborough Landing– currently inadequate pedestrian routes access this shopping area.

New Westminster Quay – a pedestrian and bike bridge would connect residents on both sides of the Fraser River.

Port Royal – a connection to the western part of the community has been created through the reconstruction of Ewen Avenue, which now includes a multi-use trail.

River Access – the Perimeter Trail should be completed where possible. Where the trail cannot be completed in the short to medium timeframe, lookout points should be provided as an interim link to the Fraser River. Additional docks, wharves and beach access points are encouraged along the length of the trail.

North/South Routes – routes such as Wood Street, Stanley Street and Gifford Street should be finished with trails or sidewalks and street trees.

An interconnected trail network makes walking and cycling more safe and enjoyable, makes accessing amenities, services and transit easier, and helps decrease vehicle use. A trail network provides the added benefit of increasing the number of Best Walking Routes to School for children. Although trails, greenway streets and bike routes are officially part of the City's transportation network, they also play an important role in providing open space for the community.

Creating seamless connectivity for cyclists and pedestrians in Queensborough will require development of the proposed trails, including connections to Richmond and mainland New Westminster. Enhancing the trail network will also require the development of City rights-of-way. These rights-of-way are generally open green spaces that, with basic construction, could easily accommodate trails. Completion of the overall trail network will take place as opportunities arise.

The flat topography of Queensborough creates an opportunity to encourage cycling as a healthy and convenient transportation choice. Whenever possible, trails should be designed to accommodate pedestrians and cyclists or dedicated bike routes should be created.

STANLEY GREENWAY

The Stanley Greenway is a unique Queensborough amenity. The greenway will be a linear open space that has the opportunity to be environmentally significant because of the existing riparian habitat. When it is fully constructed the Stanley Greenway will connect the north and south sections of the Perimeter Trail, further enhancing the overall trail network. The majority of the greenway will be developed as a dedicated cyclist and pedestrian route. Only when necessary will the greenway be developed as a greenway street (i.e. a greenway on the side of the street).

Stanley Street Greenway.

QUEENSBOROUGH PERIMETER TRAIL

The Queensborough Perimeter Trail is among the community's most popular and valued outdoor recreation resources. The trail not only is a facility for walking, running and cycling, but also connects residents to the waterfront. As part of improvements to the Annacis Channel segment of the trail, interpretive panels have been introduced to tell the stories of the evolution of the community, its people, industry, and geographic and ecological characteristics. This helps connect the community to Queensborough's heritage.

Once completed, the trail will be approximately 7.5 kilometres (4.7 miles) long. In 2013, over 50% of the trail had been completed. The construction of a pedestrian and bike bridge between Queensborough and Downtown would further extend this trail system and would provide a vital connection between residents on both sides of the Fraser River. The Perimeter Trail will also play an integral part in the evolving regional trail network, including the planned Experience the Fraser trail that will run from the Salish Sea to Hope.

A challenge to developing the remaining segments of the Perimeter Trail is the inherent conflict between providing waterfront trails and supporting river based industrial uses. The objective is to safely complete the missing links without unduly hindering the viability of the industrial lands, the users of which support the City's economy. The City will continue to aim to complete the Perimeter Trail but some segments may not be completed in the medium-term. When opportunities arise the City will explore interim connections around the industrial land, and the potential for safe access through these lands to lookout points on the river.

Providing opportunities to directly and safely interact with the Fraser River is an important role of the Perimeter Trail. Docks, wharves, accessible beaches and other features that allow people to interact with the river should be included along the length of the trail.

Queensborough Perimeter Trail.

Bikeway sign in Port Royal.

Maritime influenced details on the Perimeter Trail.
(Dennis Sylvester Hurd)

Actions

To help implement this policy, residential, commercial, mixed-use, industrial and mixed employment land uses are part of Development Permit Areas, which includes specific design guidelines that new development must meet.

The City should...

8.2a Develop a wayfinding plan to identify locations and implementation opportunities for pedestrian and bicycle route directional signage.

8.2b Develop design guidelines for greenways and trails.

The City should continue to...

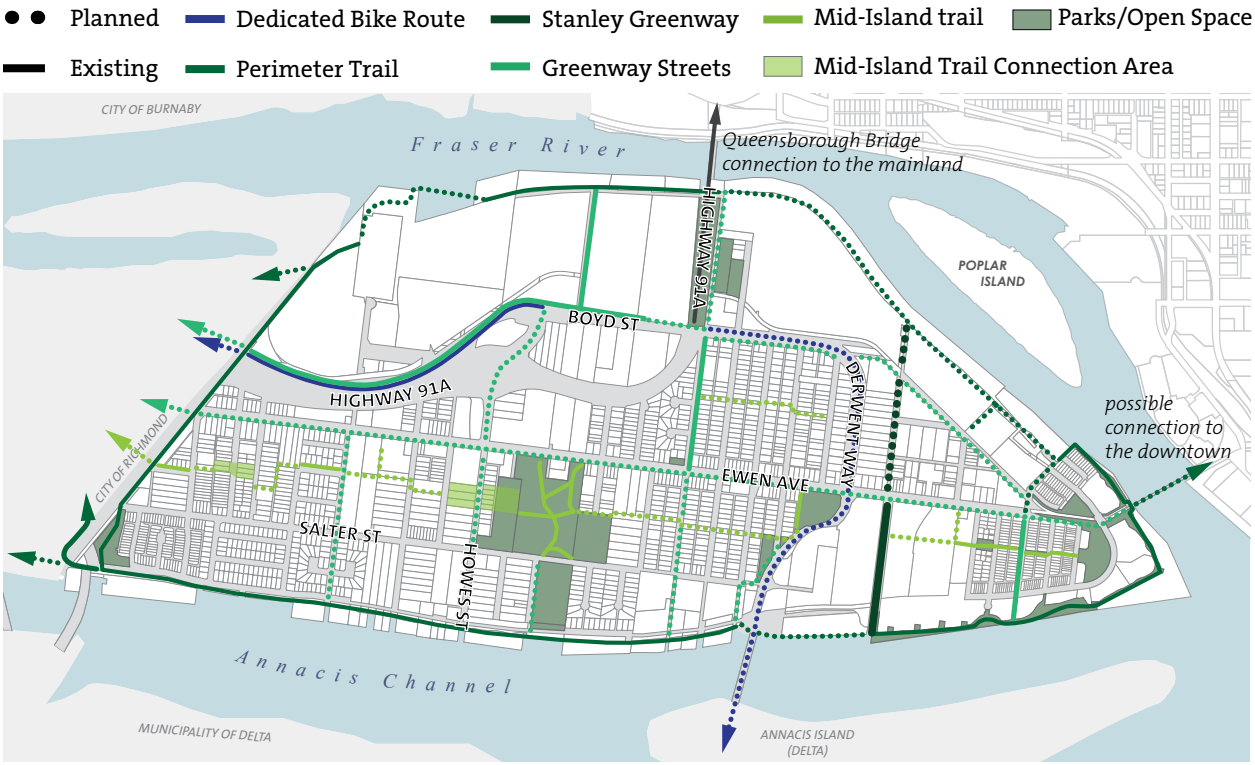
8.2c Complete the network of trails and greenway streets identified in the Parks, Trails and Greenway Streets Map. Acquire and/or establish public access to lands required to complete segments of these routes.

8.2d Aim to complete the Perimeter Trail, while supporting river based industrial uses. Advance opportunities to develop interim connections around industrial land and provide safe, accessible waterfront lookout points, as such occasions arise. In addition, identify and support opportunities to access the Fraser River along the length of the trail, such as with docks, wharves and/or beach access.

8.2e Develop options for a pedestrian and cyclist connection to Downtown.

Map 5.
Parks, Trails and Greenway Streets Map

Note: Parts of the Perimeter Trail (currently not built) may be relocated to avoid industrial operations.



Policy 8.3: Use public art to reinforce Queensborough's sense of place.

Public art contributes to creating community identity and pride, and promotes cultural and economic growth. It can create a sense of place by evoking some aspect of the locale, such as celebrating a community's heritage and diverse culture. Public art can also help to foster dialog and make neighbourhoods lively and successful.

Building on the New Westminster Arts Strategy (2008) objective to develop public art, the Public Art Advisory Committee drafted the Public Art Policy (2012). This policy creates opportunities to acquire public art and develop a collection of public art within municipally owned public spaces throughout New Westminster in addition to encouraging the inclusion of art in privately owned outdoor spaces.

A group called "Artists in the Boro" provides local artists living in Queensborough with a supportive network of residents. Areas have been designated to display works of art in the community centre. The Artists in the Boro also engages in other art forums and initiatives throughout the city such as Culture Crawl and Artists on the River.

As the community continues to develop there will be more opportunities to explore public art initiatives in the neighbourhood that reflect the community and can pay tribute to the river, the people and the history of Queensborough.

Whimsical public art in Sukh Sagar Park.

Actions

The City should continue to...

8.3a Implement the Public Art Policy and New Westminster Arts Strategy. This should include finding appropriate opportunities to locate public art inside and outside community facilities, in parks and on streets.

To help implement this policy, residential, commercial, mixed-use, industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

9.0 Transportation and Accessibility

Pedestrians on Ewen Avenue after the train has passed.

Queensborough cyclist. (HotShots! Photo by John Heringer).

Queensborough Bridge.

Transportation is an important element of community livability. It facilitates access by residents, businesses and visitors to homes, employment, goods and services, and community amenities. While development and a growing local population can support better sidewalks, pedestrian/bicycle trails and transit service, transportation systems can also have a significant negative impact on community livability and become unsustainable if they are not properly implemented and managed.

Regional growth, over which the community has little control, has created transportation related issues in Queensborough. Development in the community (e.g. residential, retail, entertainment, industrial) and the establishment of major highways has generated increased parking demands and more traffic, including truck traffic.

Queensborough's demographics are also an important factor in planning for the community's transportation future. Compared to the city as a whole, Queensborough's population is made up of a higher percentage of children, who often rely on walking and biking. The youth of Queensborough have noted that a lack of good transit and pedestrian and bicycle routes make it difficult to access certain destinations, both within the community and on the mainland. Queensborough also has a lower percentage of seniors than the city as a whole which is likely due, in part, to a lack of suitable services and amenities. It is important that transportation systems be designed to serve the needs of both younger and older populations.

Queensborough is a flat, compact community with short distances between destinations. A comprehensive network of streets, greenway streets and trails provide opportunities to make the community one of the most walkable and bikable in Metro Vancouver. Queensborough is also highly central to the region and well connected to road networks, making it an attractive location for residential, commercial and industrial uses. With increasing population, Queensborough could become a more attractive place for regional transit investment, creating better access to homes, businesses and services, both within the community and on the mainland portion of New Westminster.

Transportation and Accessibility in the Queensborough Community Plan

Goal 9: Queensborough has safe, comfortable and convenient routes for the movement of people and goods to and within the community.

Policy 9.1:	Recognize Ewen Avenue as the "main street."
Policy 9.2:	Design key intersections to create a sense of arrival in the community.
Policy 9.3:	Tailor the street network to accommodate priority modes according to the role of each street.
Policy 9.4:	Enhance the street, trail and greenway streets network to ensure seamless connectivity for bikes and pedestrians to and throughout the community.
Policy 9.5:	Create a community that is accessible and barrier-free.
Policy 9.6:	Facilitate the provision of frequent, efficient and attractive transit service.
Policy 9.7:	Maintain accessibility and connectivity for goods movement.

This Plan... aims to make Queensborough the walkable and bikable community that it should be given the flat topography. Encouraging walking and biking means providing safe and attractive routes that connect community members to the places they want to go. This Plan emphasizes pedestrian and bicycle connectivity in the community through the Parks, Trails and Greenway Streets Map (Map 8), which identifies both on-street and off-street routes. This Plan also highlights key issues that impede walking and biking between important destinations within the community, as identified by residents (Map 7). Together, these illustrate community priorities for future network improvements.

This Plan also recognizes the importance of Ewen Avenue as Queensborough's "main street" and the intersection of Howes Street and Ewen Avenue as the primary community entry point which should evoke a strong sense of arrival. Ewen Avenue is envisioned as a complete street, with provisions for all modes along its tree-lined corridor.

Transportation and accessibility pose a number of difficult issues in Queensborough. Functional goods movement routes contribute to the viability of Queensborough's employment lands but heavy truck traffic impacts pedestrians, cyclists and residential areas. The Queensborough Bridge and Highway 91A enable support of Queensborough's destination retail and entertainment areas, but commuter and other through traffic often makes it frustrating for residents trying to drive in their community and to the mainland.

Policy 9.1: Recognize Ewen as the "Main Street."

Ewen Avenue has had a long history as Queensborough's "main street." Ewen Avenue was originally called Lulu Island Road and was identified as the main street by Colonel Moody who first surveyed the community. This survey imposed a grid system that was centered on what is now Ewen Avenue. The street's prominence was further reinforced when it became the route of the BC Electric Railway tramline, which started operation in 1912. As the community developed local serving shops have naturally located along Ewen Avenue.

Ewen Avenue is still the central spine of Queensborough, connecting residents to shopping nodes, the schools and community centre. However, residents have highlighted deficiencies with the street that make residents less likely to use Ewen Avenue as a pedestrian route. These deficiencies have added to residents' perception that east and west neighbourhoods within the community are divided.

The City is pursuing redevelopment of the entire length of Ewen Avenue. It is envisioned as a complete street that comfortably accommodates pedestrians, bikes, transit and vehicles. Its character will transition as it passes through different areas. In the western neighbourhood node, Ewen Avenue will feature a more commercial appearance (e.g. wider sidewalks with street trees in tree grates). In residential areas, Ewen Avenue will have a softer appearance (e.g. grass boulevards with street trees and more standard sidewalk widths). These improvements will celebrate Ewen Avenue as Queensborough's historic main street.

Actions

The City should continue to...

9.1a Implement the renewal of Ewen Avenue as a complete street.

The vision for Ewen Avenue as a complete street with sidewalks on both sides. In the community heart, Ewen Avenue also features flowering cherries, banners and flower baskets, and sunny corner plazas.

Policy 9.2: Design key intersections to create a sense of arrival in the community.

Creating a sense of arrival is important way of signaling entrance into the community. Creating clear arrival points in the community can contribute significantly to a sense of place and community pride. There are many features that can contribute to creating a sense of arrival, such as public seating, unique street trees, special lighting or pavement treatments and hanging baskets. Architectural elements of surrounding buildings and their relationship to the street can also be used to frame and identify an intersection as a special, pedestrian oriented place.

Hanging baskets will line Queensborough's key arrival points.

The intersection of Ewen Avenue at Howes Street is the main arrival point into the residential neighbourhood of Queensborough and will be celebrated as the primary community entrance. It is additionally important as one of the community's two commercial nodes.

Howes Street between Highway 91A and Westminster Highway is the main entry point to the business area of Queensborough and should provide an equally attractive community entrance. It is equally important to ensure the character of the major regional routes that provide access into the Queensborough community are attractive and inviting.

A sense of arrival should also be created at the Boundary Road intersection with Ewen Avenue which is an important secondary entry point to the community, and at the intersection of Furness Street and Ewen Avenue in the eastern commercial node. Additional pedestrian and cyclist community entry points should be enhanced, such as at the Queensborough Bridge access at Boyd Street.

Actions

The City should...

9.2a Create a strong sense of arrival at the intersection of Ewen Avenue and Howes Street. Create secondary arrival points at Ewen Avenue and Boundary Road and at Ewen Avenue and Furness Street. Work with adjacent property owners to establish special features at these intersections, such as plazas and gardens for public use and enjoyment.

9.2b Work with the Ministry of Transportation and Highways to create a sense of arrival on Howes Street for both the residential and business entry points, including improving the appearance of the provincial highway where it provides access to Howes Street.

To help implement this policy, commercial, mixed-use, industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

Policy 9.3: Tailor the street network to accommodate priority modes according to the role of each street.

LOCAL ROAD STREETSCAPE IMPROVEMENT STANDARDS

Local Road Streetscape Improvement Standards are identified for local streets. In most cases the City supports standards that keep existing watercourses as open channels. Improvements may be undertaken as part of the Local Area Service Program. Under this program, owners representing 50% of the total property value on a block must petition the City to initiate improvements to their street. The final streetscape design would be determined through public consultation. Improvements are carried out at the existing owners' cost, but may include City cost sharing subject to Council approval. The Local Road Streetscape Improvement Standards are included in Appendix 1.

ADVANCE STREET PLANS

Parts of Queensborough are covered by an Advance Street Plan. This plan guides future development to ensure these areas evolve in the way best suited to accessing and servicing the neighbourhood. The Advance Street Plan is included in Appendix 2.

To serve the community, the street network has a hierarchy of streets each with a clearly defined role. Street design should be tailored to suit these roles, addressing traffic flow, speed and safety, livability and attractiveness for walking, cycling, transit and vehicles.

The City generally prefers to prioritize transportation modes to facilitate the movement of people and goods as opposed to the movement of vehicles. Ideally, people with mobility or perceptual challenges have the highest priority. As healthy and low impact modes, pedestrians and cyclists have the next highest priority, followed by transit, goods movement vehicles, high occupancy private vehicles and lastly, single occupant private vehicles.

Queensborough's street hierarchy is illustrated on Map 6. There are four main street types plus lanes:

MAJOR REGIONAL ROUTES

These include the highway and the major road network route. Goods movement is directed to these routes.

MAJOR COLLECTOR

Queensborough's major collector street is Ewen Avenue, which has an attractive "main street" character. It comfortably accommodates pedestrians and cyclists, frequent transit, general purpose traffic, on-street parking and local commercial vehicles but has minimal or no driveway connections. Where it passes through the community nodes it has an urban character with wide sidewalks and street trees in tree grates. Where it passes through residential areas Ewen has a "softer" character with street trees in grass boulevards.

COLLECTOR STREETS

These provide a primary connection for traffic between higher order streets and local streets and their surrounding neighbourhoods. In Queensborough, a number of these play a dual role as collector and greenway street.

LOCAL STREETS

These provide access to local destinations, such as homes and sometimes local shops and have the lowest traffic volumes. In Queensborough, many of these have watercourses (ditches).

LANES

Rear lanes provide access to parking for individual units. Lanes should be provided at the time of development and access to parking should be taken from these.

Actions

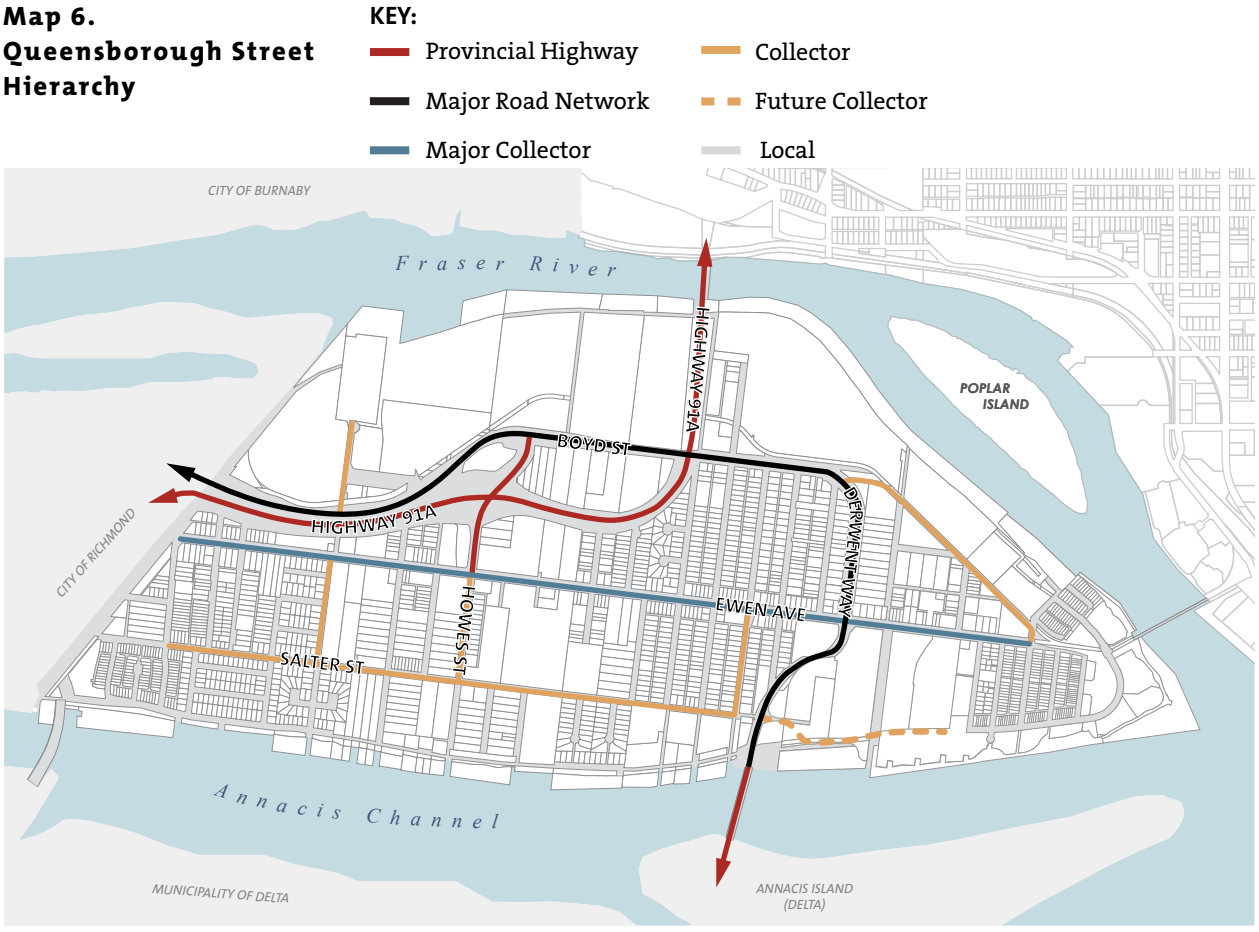
The City should...

9.3a Create streetscape design guidelines that support the defined roles of the street hierarchy types, and provide for safe, accessible, attractive and effective streets for all users.

9.3b For those areas included in the Advance Street Plan for Queensborough, ensure new developments meet the requirements of the development principles and street maps.

9.3c Explore street calming elements that would discourage regional traffic from using Ewen Avenue to access Highway 91A.

Map 6. Queensborough Street Hierarchy



Policy 9.4: Enhance the street, trail and greenway street network to ensure seamless connectivity for bikes and pedestrians to and throughout the community.

FUNDING PEDESTRIAN IMPROVEMENTS

There are a number of ways that improvements to pedestrian amenities are achieved on public streets, trails and greenway streets:

- Properties under redevelopment must provide streetscape improvements on their frontage.
- There is a limited budget for general city-wide sidewalk improvements and accessibility projects in addition to ongoing maintenance.
- Improvements on Development Cost Charge (DCC) streets are achieved through DCC funds. DCC streets are collector and arterial streets that serve the entire community. DCC funds are contributed by new development projects according to a fee schedule set by bylaw. This means improvements on DCC streets can only be implemented once enough development occurs within the community to provide sufficient funds.

Walking and cycling are healthy and low cost forms of transportation that can greatly reduce traffic congestion and environmental impacts. Human powered, or active, transportation also contributes to a healthy community. A good walking and cycling environment helps support increased transit use, as every transit trip begins and ends on foot or on a bicycle.

Queensborough is fortunate for being flat and having a regular street grid and an extensive network of trails and greenway streets. Many of the community's rear yard utility rights-of-way also serve as informal walking routes. However, there is the need to improve pedestrian and bicycle facilities in many locations in the community. Proposed trails and greenway streets are illustrated on Map 8.

Improved connectivity to the mainland portion of New Westminster is also important to encouraging walking and cycling. Given that Queensborough is surrounded by water, river connections cannot be overlooked, including potential public ferry and private boat launching facilities. A fixed pedestrian and bicycle link to the Quayside neighbourhood on the north shore of the Fraser River will provide an attractive alternative for reaching destinations such as the Downtown, the River Market, Pier Park and New Westminster SkyTrain station.

KEY COMMUNITY LINKAGES

Queensborough is physically divided by major roads (i.e. Highway 91A, Westminster Highway and Derwent Way). These segregate the eastern and western residential neighbourhoods and separate residents from businesses located north of the highway, including the local serving businesses in Queensborough Landing. Five key intersections have been identified as priorities for improvement as opportunities arise. Making the use of these intersections safer and more comfortable for pedestrians and cyclists will better knit the neighbourhood together allowing Queensborough to become a united and complete community. These intersections are illustrated on these pages and on Map 7.

The vision for the intersection of Ewen Avenue and Derwent Way.

The vision for a new pedestrian signal at the intersection of the Woods Street greenway and Boyd Street (1), also connecting with ramps to the Queensborough Bridge.

The vision for a pedestrian friendly Howes Street from Ewen Avenue to Westminster Highway.

The vision for an enhanced pedestrian realm linking the Perimeter Trail on Boundary Road across Westminster Highway.

The vision for a new signalized intersection connecting a new pedestrian route along Duncan Street and "lower" Boyd Street to Queensborough Landing. Another option would be to continue the pedestrian route along the north side of Boyd Street.

The bike route.

PRIORITY IMPROVEMENTS IDENTIFIED BY RESIDENTS

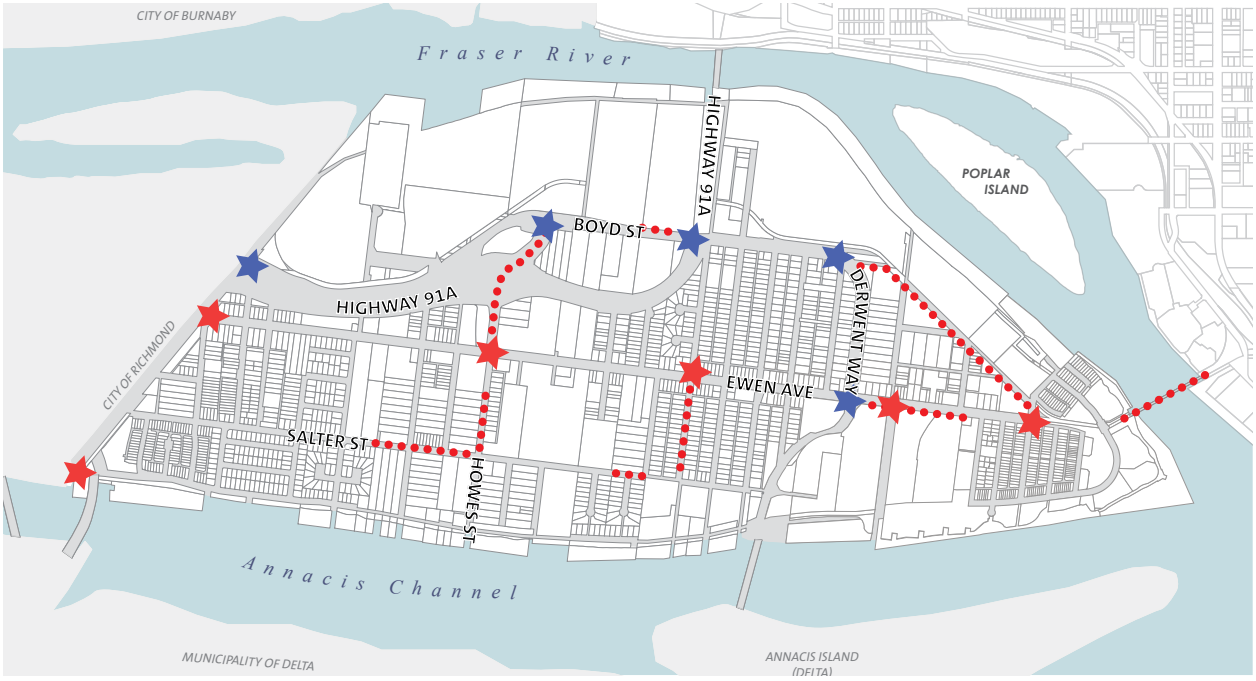
Residents have identified a number of priority street network improvements as illustrated on Map 7. These improvements address deficiencies in the existing network such as a lack of pedestrian amenities (e.g. missing sidewalks on frequently used routes). Improvements to the street network will prioritize pedestrians and cyclists over other modes of transportation in order to improve safety and the frequency of use of the overall trail and greenway street network. Improvements to intersections should also create a sense of arrival, either to Queensborough itself (e.g. Boundary Road and Ewen Avenue) or to a neighbourhood node within the community (e.g. Furness Street and Ewen Avenue). These improvements will be pursued as opportunities arise.

The number of streets in Queensborough that are built to a rural standard and do not have sidewalks strengthens the need to develop a dedicated off-street and on-street network that allows for seamless connectively for pedestrians and cyclists.

Map 7.
Priority Street Network Improvements Identified by Residents

KEY:

- Route Improvements
- Intersection Improvements
- Key Community Linkages



Actions

The City should...

9.4a Create streetscape design guidelines that enhance the role of Ewen Avenue as the "main street," create a sense of arrival at key intersections, support the defined roles of the street hierarchy types, and provide for safe, accessible, attractive and effective streets for all users.

The City should continue to...

9.4b Work with TransLink and the Ministry of Transportation and Infrastructure to create a complete network of high quality pedestrian and bicycle facilities.

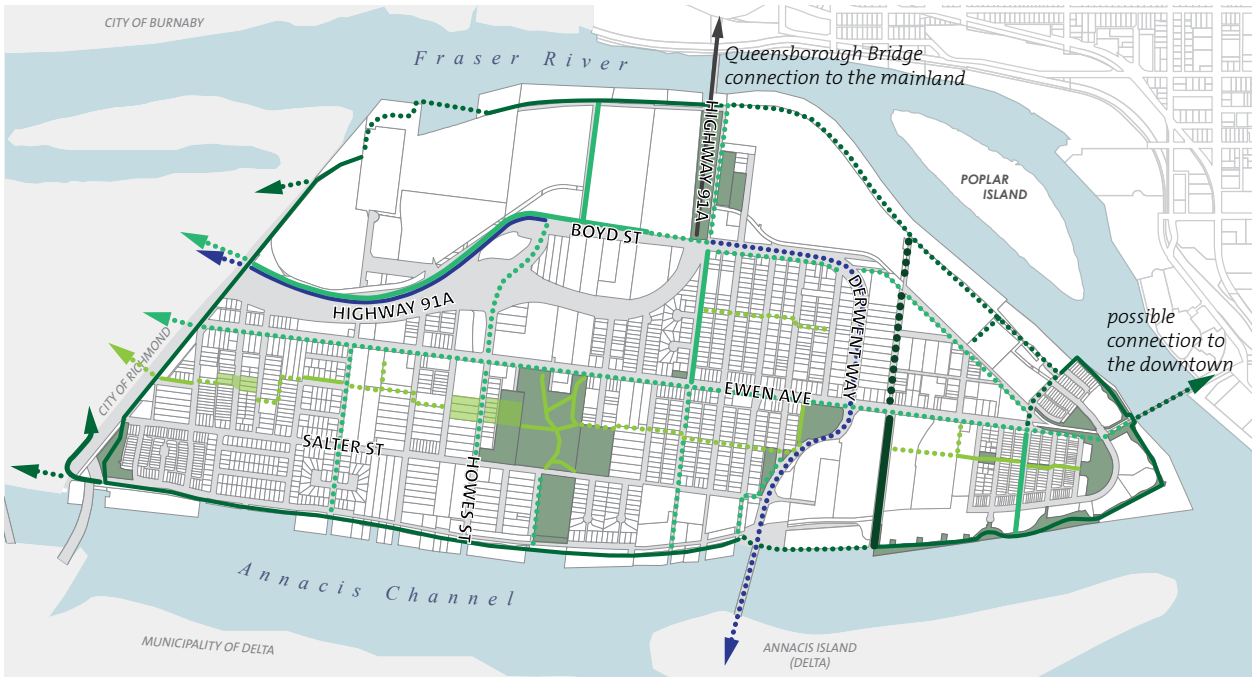
9.4c Work with neighbouring municipalities to enhance road, bridge and water connections to other cities.

9.4d Implement the development of trails and greenway streets and the priority street network improvements identified in this Plan as opportunities arise.

To help implement this policy, residential, commercial, mixed-use, industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

Map 8.
Parks, Trails and Greenway Streets Map

Note: Parts of the Perimeter Trail (currently not built) may be rerouted in the medium-term to avoid industrial operations.



Policy 9.5: Create a community that is accessible and barrier-free.

Queensborough should be accessible to people of varying ability.

Accessibility considerations relate to all places where people of various abilities want to be, including buildings, sites and the public realm (i.e. sidewalks, greenway streets, trails and parks). Accessible design affects a person's ability to remain in the community when mobility changes over time or through other circumstances. Accessibility is directly linked to individual and community well-being.

There are a number of issues that impact accessibility and create barriers in the community. Historically, Queensborough residential streets were developed to rural standards with few sidewalks, gravel shoulders and limited accessibility. Improvements have been provided through a number of mechanisms over time, resulting in an incomplete network of sidewalks, greenway streets and trails with various widths and qualities. This creates barriers for those requiring mobility devices. Strategic City investments that are coordinated with development will be required to complete an accessible sidewalk, greenway streets and trail network that links major destinations and transit facilities.

Safety regulations can also impact accessibility. Residential construction in Queensborough is subject to Flood Construction Level (FCL) regulations which restrict the construction of habitable space below the FCL. This necessitates additional accessibility measures such as elevators or ramps.

Actions

To help implement this policy, residential, commercial, mixed-use, industrial and mixed employment land uses are part of Development Permit Areas, which include specific design guidelines that new development must meet.

The City should...

9.5a Conduct a pedestrian and accessibility audit of streets that identifies priorities for new and upgraded pedestrian and bicycle facilities.

Policy 9.6: Facilitate the provision of frequent, efficient and attractive transit service.

After walking and cycling, transit is the lowest impact transportation mode. A single standard bus can carry the equivalent of 40 motor vehicle drivers, greatly reducing traffic congestion and pollution. Transit also provides mobility for those who cannot drive and good transit service can provide an attractive option to driving. Good transit means the bus comes often throughout the day at predicable times and there will usually be a seat available.

The level of transit service provided is generally dependent on ridership. Ridership depends on transit efficiency and accessibility and local population density. Most Queensborough residents are within walking distance of a bus stop, although transit passenger facilities are modest. To make transit a good transportation option in Queensborough, this Plan focuses development within a short walk of transit routes. As Queensborough continues to develop and has an increase in population, it will likely merit increased transit service. Queensborough's bus routes are illustrated on Map 9.

THE CITY'S ROLE IN TRANSIT

While the City does not provide transit service, it coordinates with TransLink on service planning, is responsible for most roadways on which buses run and provides some passenger facilities. Transit service levels are related to ridership (the number of potential riders), which is related to the location and density of land uses.

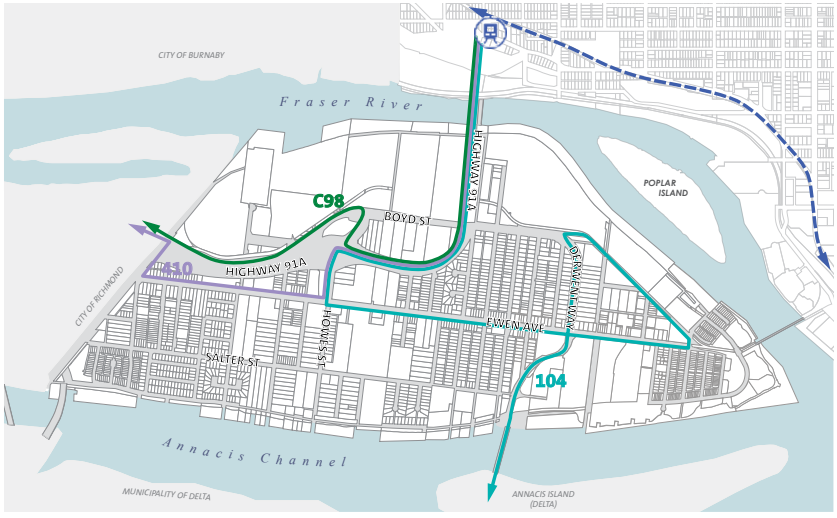
Actions

The City should...

9.6a Secure the necessary rights-of-way for bus shelters, wherever possible, through the development application process, particularly at Queensborough's busiest bus stops.

The City should continue to...

9.6b Work with TransLink and other partners to provide high quality, accessible passenger shelters at all stops.



Map 9. Queensborough Bus Routes

Policy 9.7: Maintain accessibility and connectivity for goods movement.

TRAINS, TUGS AND TRUCKS

While heavy truck traffic is increasingly important, trains and cargo vessels (frequently guided by tugboats) can often carry bulk goods significantly cheaper over longer distances and with fewer overall impacts on the environment and the community than trucks.

Queensborough is ideally situated for waterborne goods movement.

Queensborough is central to the region and located at the crossroads of major regional transportation networks, including provincial highways, TransLink's Major Roads Network, railways and waterborne shipping routes. Access is a key requirement for large industrial and commercial businesses, which provide local employment and support the City's tax base. Goods movement is also important to support smaller businesses, including those local businesses within the residential areas of the community, as well as deliveries to residences. Primary goods movement routes must be designed to accommodate the needs of these users. These goods movement routes, which connect to the regional transportation networks, are illustrated on Map 10.

With direct and efficient connections to regional networks for goods movement, businesses continue to find Queensborough an attractive place to locate. The success of Queensborough as a business locale brings increased truck traffic and can lead to congestion and negative impacts on residential areas. Similarly, if railway lines are used more frequently, they can impose impacts on the community, such as blocking access to local roads.

To maintain accessibility and connectivity for goods movement in Queensborough the City will encourage segregating transportation networks for goods movement from those for general mobility. Optimization of the goods movement routes would include making improvements to key access points. These improvements benefit the overall street network since the improved intersections could more efficiently move large trucks off of the streets that are dedicated to prioritizing pedestrians, cyclists and passenger vehicles. For example, improving the intersection of Duncan Street and Derwent Way would make it easier for trucks leaving the Port Metro Vancouver site to access the goods movement route. As a Major Road Network road, Derwent Way would be designed in a way that meets the needs of goods movement vehicles while ensuring the safety of other street users, including pedestrians and cyclists.

Actions

The City should continue to...

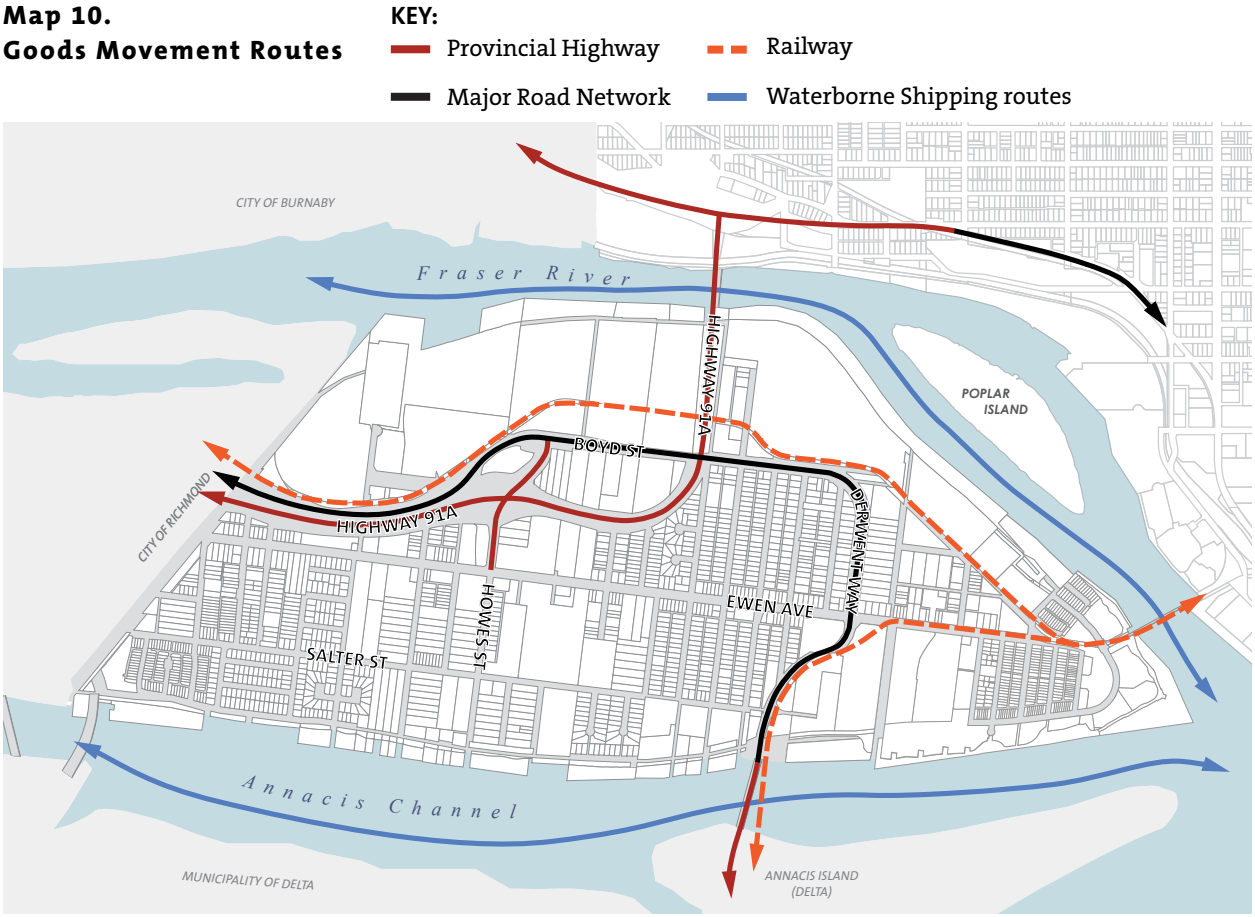
2.4a Work with the Province, TransLink and Port Metro Vancouver to minimize visual, noise and general mobility impacts on the community from goods transportation routes and related activities.

The City should...

9.7a Encourage increased use of rail and marine transportation routes over trucks and truck routes for goods movement.

9.7b Ensure truck access to industrial sites is taken from streets designated for goods movement.

Map 10.
Goods Movement Routes



10.0 Utilities and Services Infrastructure

SERVICES OFFERED AT THE QUEENSBOROUGH COMMUNITY CENTRE

The Queensborough Community Centre plays an important role in delivering services to residents. Queensborough residents can pay their property taxes, utility bills and parking tickets at the community centre instead of having to visit City Hall. Residents can also apply for their Dog Licences at the community centre.

In New Westminster, basic City services include water distribution, stormwater drainage, sanitary sewers, solid waste collection, and electricity, as well as roads and streets (discussed on pages 115-128), and flood protection (discussed on pages 77-84). As Queensborough continues to grow, the demand on the City's services and utilities will increase. To help offset the costs of these upgrades, the City collects development cost charges (DCCs) from new development.

Being an older municipality means the City has aging infrastructure that needs to be replaced or rehabilitated. The City is developing an Asset Management Strategy in order to systematically address the challenges related to New Westminster's aging infrastructure. Opportunities to coordinate the rehabilitation of existing infrastructure with new development will be sought wherever feasible.

A continuing challenge is the physical provision of services. City utilities (water, sanitary and storm sewers, and electrical) and utilities provided by external agencies (e.g. gas and telecom) must share limited space under the streets, lanes and other rights-of-way. This requires coordination to locate utilities in a manner that does not create interruptions in service or an increase in costs. The soft compressible soils of Queensborough create challenges for the longevity of the infrastructure. In addition, there are many overhead utility lines (i.e. electrical, telephone, cable) that run throughout Queensborough, which need to be relocated underground as redevelopment occurs as outlined in the Subdivision and Development Control Bylaw and City Electrical Bylaw.

Utilities and Services Infrastructure in the Queensborough Community Plan

Goal 10: Queensborough has servicing that efficiently and effectively meet the community's needs in a sustainable manner.

Policy 10.1: Plan, construct and operate City services in the manner that best serves the community.

Policy 10.2: Integrate stormwater management and potable water conservation into the planning and design of the community and buildings.

This Plan...is realistic about the existing challenges in service provision in Queensborough. The most significant challenges relate to the age of infrastructure and placing infrastructure underground in limited space and in poor soils. As the community develops, excessive pressure is placed on the existing ageing service systems. However, the cost of improvements is higher in Queensborough than in the rest of the city, and cannot be provided by development alone.

This Plan also recognizes the opportunity for innovation in stormwater management and water consumption. There are also challenges, as many sustainable stormwater best management practices (BMPs) are more difficult to apply in Queensborough. For example, infiltration BMPs that function by storing rainwater on site and letting it gradually seep into the soil work much more slowly. This is one of the reasons that the open watercourses (ditches) are important to stormwater management in Queensborough, as they provide the capacity to store large volumes of rainwater.

This Plan lays out the first steps towards implementing new and more sustainable servicing in Queensborough, but relies on the City to take the next step in exploring how the City, residents, and developers can work to realize this goal.

Electric Utility vehicles.

Policy 10.1: Plan, construct and operate City services in the manner that best serves the community.

RESIDENTIAL STREETSCAPE

In 2008, an analysis and community consultation was undertaken to review options for modifying the streetscape standard to address community concerns. Options for enclosing or enhancing the watercourses (ditches) were presented. Due to the high anticipated costs, residents overwhelmingly decided to retain the current open ditch standard. As a result, the existing ditches are expected to remain, which the City strongly supports. Residents may apply to a City Local Improvement Program to close select ditches in conjunction with improving the streetscape. The Local Road Streetscape Improvement Standards are included in Appendix 1.

Watercourse (ditch) on Stanley Street.

DRINKING WATER

Queensborough is well served with clean water. Water is supplied to the City from the Seymour and Coquitlam reservoirs via large transmission pipes operated and maintained by Metro Vancouver. The Master Water Servicing Study (2008) found that there are very few deficiencies in the current supply system and that it should support future anticipated growth through to 2021. Some specific upgrades to the system will be required to meet anticipated growth east of Derwent Way which will be done as redevelopment occurs.

SANITARY SEWER

Queensborough sewers were built in phases starting in the 1970s. Before then, most sanitary sewage disposal was through septic systems which often malfunctioned because of the high groundwater. In 2013, the majority of the community was connected to the City sanitary sewer collection system. There are 24 municipally-operated sanitary pump stations. The sewage is conveyed to the Annacis Island Treatment Plant. According to the modeling work done, upgrades are required to address capacity issues to 2021.

STORMWATER DRAINAGE

The existing storm drainage system in Queensborough has both closed sewers and open watercourses (ditches) that discharge through four pump stations to the Fraser River. The transition to more urban land uses in Queensborough has brought an increased preference by some for an urban streetscape including enclosed drainage, sidewalks, curbs and street trees. However, the capacity of the overall system (e.g. ditches, pumps) that conveys stormwater into the Fraser River is limited and the ditches play an important role in slowing down runoff rates and providing stormwater storage. In addition, open ditches filter runoff pollutants and enhance stormwater quality. The City supports maintaining open ditches as a part of the stormwater management system.

ELECTRIC UTILITY

New Westminster Electric Utility is a municipally-owned electric distribution utility whose purpose is to provide reliable electrical power and related services to residents and businesses. The utility strives to enhance quality of life, support sustainable development and protect the environment. It achieves its mission through the utilization of a governance structure and business model that are intended to make the enterprise appropriately businesslike, industry-aware and accountable to the citizens of New Westminster.

Actions

The City should continue to...

10.1a Coordinate service and utility upgrades to coincide with private development construction.

10.1b Work with developers to enable the removal or "undergrounding" of redundant overhead BC Hydro and/or City electrical lines as opportunities arise.

Certain utilities will remain above ground, such as portions of the BC Hydro electrical lines. (Dennis Sylvester Hurd)

Policy 10.2: Integrate stormwater management and potable water conservation into the planning and design of the community and buildings.

XERISCAPING

Xeriscaping is another opportunity for residents to reduce water consumption. Xeriscaping is a landscaping approach that reduces the need for irrigation. It includes strategies such as grouping plants with similar water needs (i.e. thirsty plants together and drought tolerant plants together), using plant species that are naturally suited to the local climate and level of rainfall, reduction in turf, and soil improvements. It has been shown that xeriscaping can reduce irrigation water use by 50% to 75%.

Reducing water consumption and source reduction of storm runoff are regional objectives the City is pursuing through existing and new developments.

INTEGRATED STORMWATER MANAGEMENT

Managing stormwater is an important part of protecting the health of the Fraser River. Stormwater runoff is generated when precipitation from rain and snowmelt events flows over land or impervious surfaces (paved streets, parking lots, and building rooftops) and does not percolate into the ground. As the runoff flows over the land into watercourses (ditches), it accumulates debris, chemicals, sediment or other pollutants that could adversely affect water quality. Stormwater runoff accumulates in ditches and canals and is eventually pumped into the River. Drainage pumping is energy intensive and produces greenhouse gases.

Stormwater runoff can be reduced by decreasing impermeable surfaces, which can be challenging in urban environments. Maintaining open watercourses (ditches) and maximizing the use of landscaping, rain gardens, and rain barrels, among other strategies can help minimize stormwater runoff, decrease negative impacts on water quality and reduce the demand placed on pump stations. However, opportunities for managing stormwater through infiltration may be more limited in Queensborough, where the water table is very near to the surface. On City owned land, improvements can be made by incorporating more landscaped areas in streets and rights-of-way. Stormwater can also be improved by reducing garbage and pollutants that enter the ditch system.

Boundary Street Canal.

WATER CONSUMPTION

As more water is consumed, more energy and infrastructure is needed to collect, treat, and deliver it to the City's homes and businesses. Once it goes down the drain, additional infrastructure is required to carry it to and treat it in wastewater treatment facilities. This entire process is energy intensive and costly.

Once water enters the City's system, an average of 10% is lost to system leakage, a result of aging infrastructure. This will take time to address as the City's infrastructure is gradually updated.

On average New Westminster homes use approximately 178 litres of water per person per day. Most of this is not consumed for drinking but is used for toilets, showering, washing clothes, laundry, watering lawns and washing cars. Recent improvements in the BC Building Code mandate installation of water efficient interior fixtures. Lawn and garden watering accounts for the largest portion of residential water use in the summer – water demand can be up to 60% higher in the summer than in the winter. Design guidelines for multi-family development encourage drought-tolerant landscaping to promote water conservation.

Single detached dwellings make up the largest proportion of units in Queensborough which creates different opportunities for water conservation. Residents can play their part in water conservation by complying with the City's Lawn Sprinkling Regulations which aim to reduce the amount of water used for sprinkling lawns. Residents could further reduce water use by using a rain barrel to capture and store rain water to use for watering plants and gardens.

Efforts made to reduce water consumption helps to ensure a sufficient water supply in the summer and can defer the need for system upgrades to the water supply infrastructure.

A rain barrel.

Actions

The City should...

10.2a Develop an Integrated Stormwater Management Plan (ISMP) which includes Low Impact Design strategies that ensure separation and treatment of unclean water, as well as the directed use of clean water.

11.0 Land Use Designations

Map 11: Land Use Designation Map illustrates the proposed land use concept. The land use concept illustrates future land uses which the City may encourage over time.

The land use map is parcel based. Though not shown on the map, the land use designation on each site extends to the centre line of any abutting roads.

The land uses shown on the Land Use Designation Map are:

(CE) Commercial Entertainment – this area will include assembly and entertainment uses such as casinos, theatres, places of public assembly and hotels and may also include supporting uses such as retail, personal service establishments, places of worship, recreational uses, neighbourhood pubs or nightclubs. This area may also include limited business and professional offices.

(HI) Heavy Industrial – this area will include heavy industrial uses including those industrial uses that are dependent on waterfront access.

(H/N) Habitat Natural Area – this area will be a natural conservation area which may also be used for natural exploration and log boom storage.

(IN) Intertidal – this area will predominantly remain in a natural state in order to preserve the intertidal area of the Fraser River foreshore. Uses such as lookouts, trails, docks, and marine commercial and working river uses such as wharfs, are permitted as long as the surrounding natural habitat is enhanced. Approval from other agencies (e.g. Port Metro Vancouver) may also be required.

(LI) Light Industrial – this area will include light industrial uses.

(ME) Mixed Employment – this area will include light industrial, office, high tech and business park uses. The residential uses permitted must be ancillary to the business on these properties (i.e. caretaker units).

(MS) Queensborough Main Street – this area will include commercial, office and residential uses. Facing Ewen Avenue and Furness Street, commercial uses are required at grade. Densities may range from low to medium.

(P) Major Institutional – this area will include major institutional uses such as City Hall, hospitals, libraries, the Justice Institute, community theatres, non-market independent and institutional care housing.

Parks/Community Facilities – this area will be used as a park, or as open space that is landscaped or has decorative pavers, and may include community facilities such as recreational uses or community centres. This area may accommodate retail stores and restaurants, such as in a "Farmers' Market" concept, transportation facilities, and similar activities and uses if these enhance the unique character of a site or increase social activity and interest.

(QC) Queensborough Commercial – this area will include commercial uses at the street level and may include commercial or office above the ground level. Densities may range from low to medium.

(QCD) Queensborough Comprehensive Development – This area will include mixed commercial and light industrial employment uses which complement and are compatible with the surrounding existing and designated land uses. This area will also include residential uses which range in densities from low to medium. Depending on the provision of employment generating uses, additional density for residential uses may be considered. In principle, two-thirds of the contiguous areas of the designation will be developed for employment generating uses. The remaining one-third will be developed as residential (the maximum floor space ratio shall not exceed a factor of 0.9). Prior to any rezoning in this area a master plan, including design guidelines, must be created for the area as a whole. This master plan is subject to a public review process and must be in accordance with the principles listed in the Queensborough Comprehensive Development Development Permit Area.

(RH) Residential – High Density – this area will include high density multi-family residential uses including rowhouses, townhouses, low-rises and high-rises. Depending on the provision of public amenities, a density bonus may be provided in order to reach the upper limits of density in this area.

(RL) Residential – Low Density – this area will include low density residential uses including single detached houses, houses with a secondary suite, duplexes, detached townhouses, low density multi-family uses, places of worship, and may contain small scale local commercial uses such as home occupations and corner stores.

(RLC) Residential – Compact Lot – this area will include low density residential uses including single detached houses, single detached houses on a compact lot, houses with a secondary suite, cluster houses, places of worship, and home occupations.

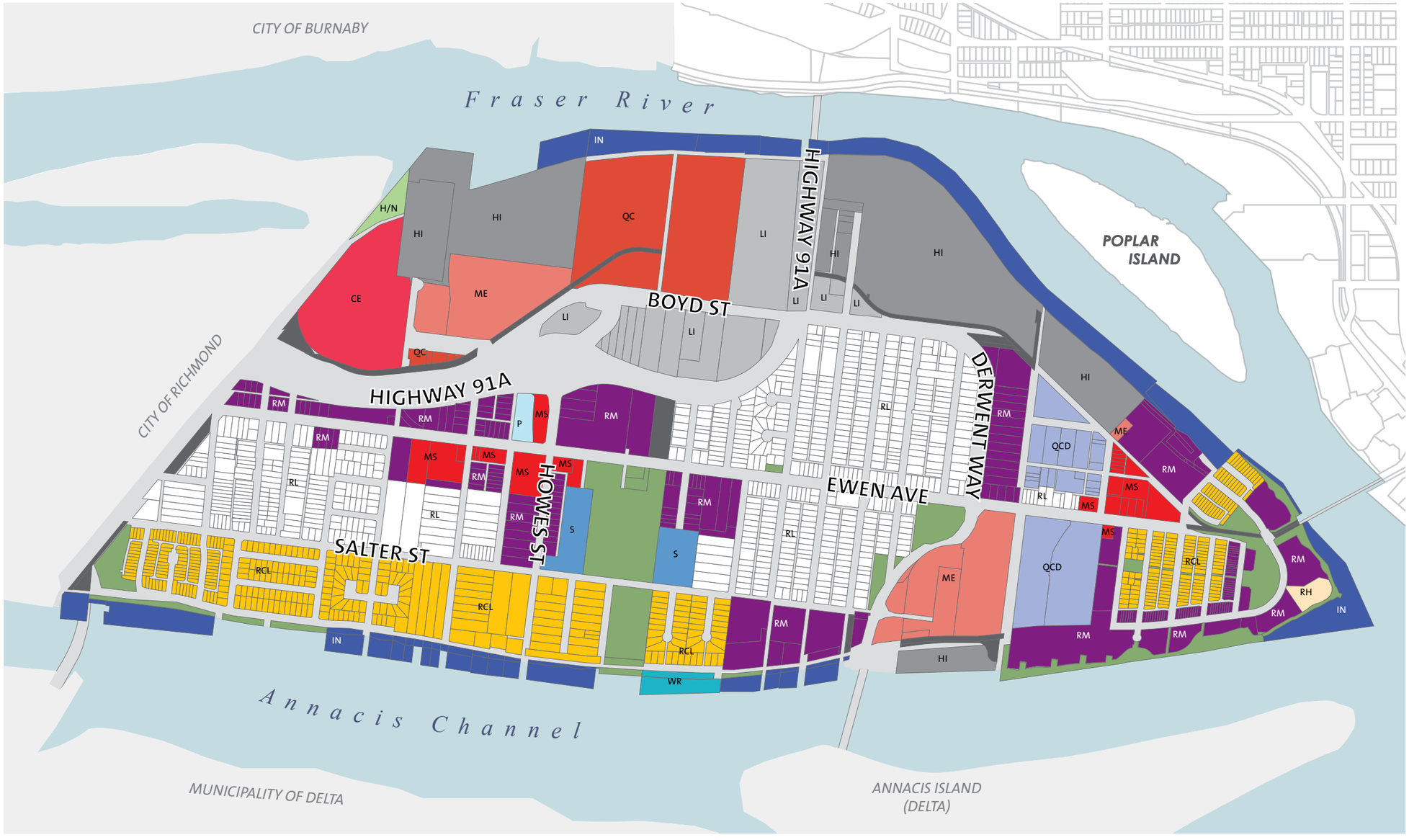
(RM) Residential – Medium Density – this area will include medium density multi-family residential uses such as rowhouses, townhouses, and low-rises. Depending on the provision of public amenities, a density bonus may be provided in order to reach the upper limits of density in this area.

(S) Schools – this area will include public, private and post-secondary schools.

Utilities – this area will include utilities such as rail and road corridors, electrical stations or water reserves.

(WR) Waterfront Residential – this area will include float homes. Approval from other agencies (e.g. Port Metro Vancouver) may also be required.

SCHEDULE C
Land Use Designation Map



KEY:

- (RL) Residential - Low Density
- (RCL) Residential - Compact Lot
- (RM) Residential - Medium Density
- (RH) Residential - High Density
- (MS) Queensborough Main Street
- (QC) Queensborough Commercial
- (CE) Commercial Entertainment
- (ME) Mixed Employment
- (LI) Light Industrial
- (HI) Heavy Industrial
- (IN) Intertidal
- (WR) Waterfront Residential
- (P) Major Institutional
- (S) School
- Parks/Community Facilities
- (H/N) Habitat/Natural
- Utilities
- (QCD) Queensborough Comprehensive Development

12.0 Development Permit Areas

Six categories of Development Permit Areas are identified in the Queensborough Community Plan. They are: Commercial and Mixed-Use Development Permit Areas; Residential Development Permit Areas; Industrial and Mixed Employment Development Permit Areas; Natural Features Development Permit Areas; Natural Hazard Development Permit Areas; and Comprehensive Development Development Permit Areas. Development Permit Areas are identified in this Plan to provide guidance to potential investors and outline the City's expectations regarding future growth and development. By conforming to the guidelines new development helps to achieve the goals included in this plan and to implement the Queensborough Vision.

Where a parcel falls within more than one Development Permit Area, one Development Permit may be issued if the guidelines for each Development Permit Area are addressed in the Development Permit.

Single detached dwellings constructed on lots equal to or greater than 371.6 square metres (4,000 square feet) are not required to comply with the guidelines below, with the exception of the guidelines in the Flood Hazard Development Permit Area.

A. Commercial and Mixed-Use

1. Queensborough Main Street
2. Queensborough Commercial
3. Queensborough Casino

B. Residential

1. Ewen Avenue Multi-Family
2. Compact Lot
3. East Queensborough
4. Port Royal

C. Industrial and Mixed Employment

1. Queensborough Heavy Industrial
2. Queensborough Light Industrial and Mixed Employment
3. Queensborough Industrial Park
4. Intertidal

D. Natural Features

1. North Arm - Bay Area

E. Natural Hazard

1. Flood Hazard

F. Comprehensive Development

1. Queensborough Comprehensive Development

A. Commercial and Mixed-Use Development Permit Areas

INTENT

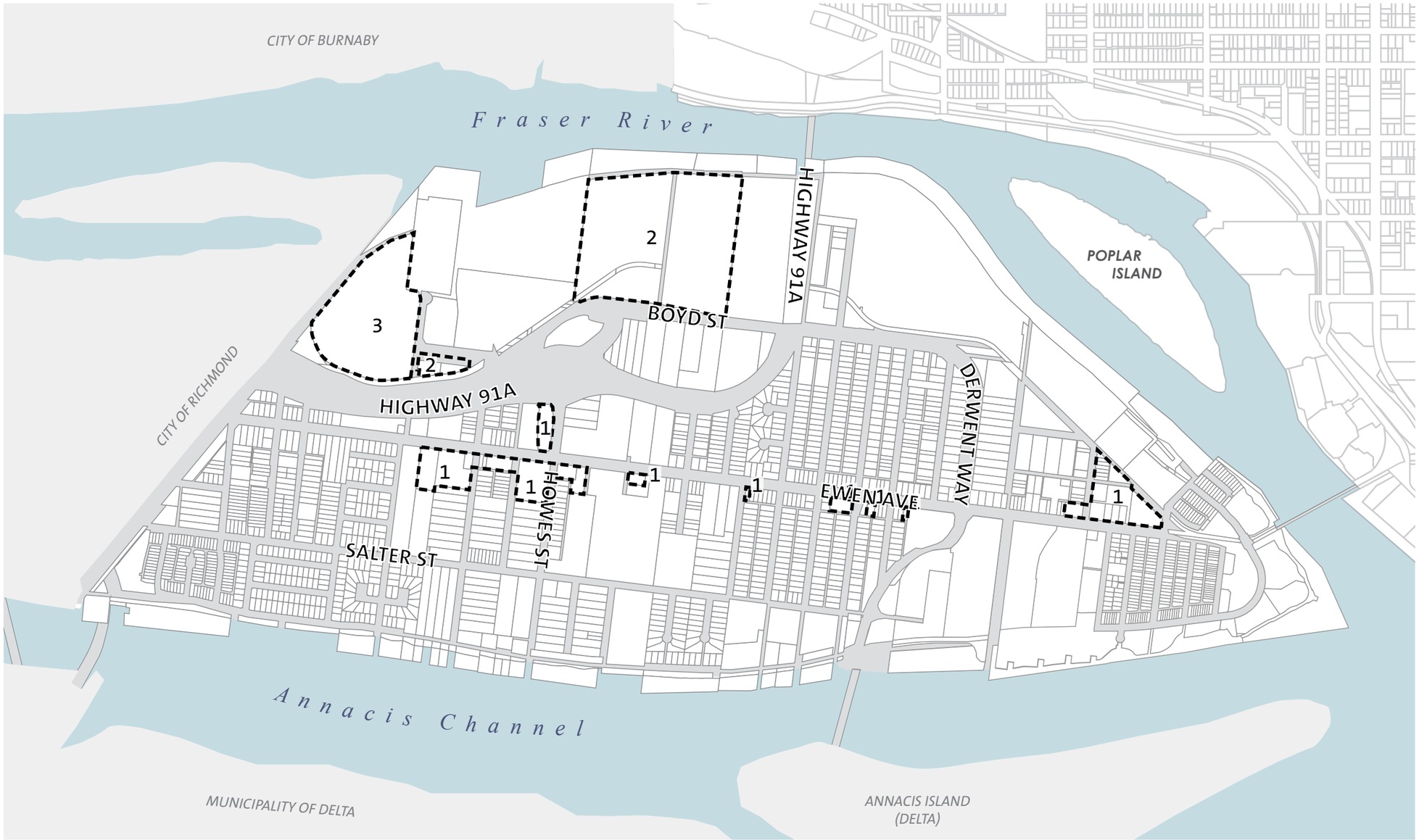
Guidelines in these Development Permit Areas will focus on actions that animate and enliven the streetscape, promote shopping and walking, contribute to the economic base of each commercial area, and the interrelationships between commercial and residential uses.

[Discussion of this area is also contained in Chapter 2: Economy and Employment and the Livable City Strategy.]

Commercial and Mixed-Use Development Permit Areas

1. Queensborough Main Street
2. Queensborough Commercial
3. Queensborough Casino

Map A
Commercial and Mixed-Use Development Permit Areas



Commercial and Mixed-Use Development Permit Areas

1. Queensborough Main Street
2. Queensborough Commercial
3. Queensborough Casino

#1 Queensborough Main Street

The areas designated Commercial Main Street (Ewen Avenue), identified as Development Permit Area #1 [see Map A], are designated to create a "main street" feel on Ewen Avenue and to provide a neighbourhood focus with a riverfront community character. This Development Permit Area encourages best practices for promoting water and energy conservation and reducing greenhouse gas emissions. It also establishes guidelines for the form and character of commercial and multi-family residential development.

Properties located within this Development Permit Area that are zoned Light Industrial Districts (M-1) that develop industrial uses in accordance with the zone must instead comply with the guidelines included in the Mixed Employment Development Permit Area.

DESIGN GUIDELINES

ARRIVAL POINTS

QMS.1

The intersection of Howes Street and Ewen Avenue is the main arrival point to the residential area of Queensborough. It is of utmost importance that building siting and massing help to create a sense of arrival and an attractive pedestrian scale environment on Howes Street and around the intersection of Howes and Ewen. Properties within this development permit area that have at least one property line along Howes Street between Highway 91A and the Howes Street/ Ewen Avenue intersection, including those abutting the south side of the intersection, in addition to complying with the other guideline sections of this Development Permit Area, must comply with the following guidelines:

- Between the highway and Ewen Avenue, front buildings onto Howes Street , although vehicle access will likely be taken from an alternative street. Consider providing pedestrian access into buildings from Howes.
- Site and design buildings forming the north side of the Howes/Ewen intersection to have equally prominent frontage on both streets.
- Site and design buildings forming the south side of the Howes/Ewen intersection to front primarily onto Ewen while addressing Howes (i.e. help to create an attractive, pedestrian scale street).
- Enhance the sense of arrival with other special features (e.g. publicly accessible plazas at the corner, special roof shapes and/or other architectural features).

ARRIVAL POINTS CONTINUED

QMS.2 The intersection of Ewen Avenue and Furness Street is the heart of the eastern commercial node and will become an arrival point from the future pedestrian and bike bridge between the Queensborough and Quayside neighbourhoods. Properties within this development permit area that have at least one property line along Furness Street between Ewen Avenue and Duncan Street, and/or along the north side of Ewen between Furness and Mercer Street, including that abutting the west side of the Mercer/Ewen intersection, in addition to complying with the other guideline sections of this Development Permit Area, must comply with the following guidelines:

- Between Ewen Avenue and Duncan Street, front buildings primarily onto Furness Street while also addressing Ewen.
- Site and design buildings along the north side of Ewen to address Ewen (i.e. help to create an attractive, pedestrian scale street) while directing primary frontage, vehicle and pedestrian access to an alternative street.
- Provide a publicly accessible plaza on Furness between Ewen and Duncan. Activate the plaza by locating restaurant patios or other interesting activities on or adjacent to the plaza.
- Enhance the sense of arrival with other special features (e.g. special roof shapes and/or other architectural features).
- Use a building-height that is proportionate with the combined width of the plaza and street right-of-way to help create a pedestrian scale streetscape on Furness.
- Preserve and integrate the existing trees into the site design, particularly the Giant Redwood tree at the northwest corner of Ewen and Furness.
- Provide a publicly accessible sidewalk or multiuse pathway within the private properties along Ewen, connecting from Furness to Stanley Street. Separate the sidewalk from the railway line with an attractive fence and a landscaped boulevard, including trees wherever possible. Consider providing pedestrian access into sites and/or buildings from this sidewalk.

SITING

Building siting must contribute to a pedestrian scale neighbourhood character. Consider the following: **QMS.3**

- Orient commercial and/or residential units to front all streets, and/or city trails and greenways immediately adjacent to or within the development, except where the adjacent street is a highway or truck route, except for Howes Street.
- Build to the front and side property lines.
- For all corner lots and/or corner units, locate and design buildings to address all frontages, including public and internal streets, city trails and greenways.

Building siting must respect the existing neighbourhood and site context. Consider the following: **QMS.4**

- Consider existing buildings and outdoor spaces when siting new buildings, including the location of windows and entrances, overlook of outdoor space, impacts to air circulation and light penetration, etc.
- Site buildings to retain and enhance heritage assets by incorporating them into the development of the site, wherever possible, including buildings, engineering works and/or cultural landscapes, as well as significant landscape features (e.g. mature vegetation and trees, distinctive landforms).
- Design new buildings in proximity to heritage assets to be compatible with their historical context without literally imitating older building styles. In these cases, new buildings should provide an original interpretation of the traditional building style (i.e. draw inspiration from fundamental design characteristics) while continuing to reinforce traditional development patterns and rhythms.
- Minimize the impacts of noise and exhaust to pedestrians and neighbours. Locate service areas and mechanical equipment (e.g. utilities, HVAC, meters) at the rear of buildings and away from neighbouring residential uses. Minimize visibility of service areas and mechanical equipment from streets, open spaces and neighbours (e.g. screen, reduce service and garage opening size, use shared service areas).

Queensborough Main Street

CHARACTER

QMS.5 All buildings and developments must be designed to have a high quality, cohesive appearance that enhances the overall quality of the community. Consider the following:

- Use an architectural approach (i.e. massing, facade treatment, detailing, materials and colour choice) which is harmonious with the riverfront community context.
- Create a cohesive streetscape. Use a similar alignment of windowsills, building and roof lines, cornices, and floor-to-floor spacing along the street block.
- Design all principal and accessory buildings within a development and/or all elements of an individual building, to the same architectural style. Provide enough variety (e.g. through massing, architectural detail) to avoid a monotonous appearance when the development is viewed as a whole and to reinforce individual building identity.
- Coordinate lighting, outdoor furniture and garbage receptacles and design outdoor areas (e.g. walkways, patios) and landscape elements (e.g. retaining walls, fences, screening) to be consistent with the style, materials, colour and quality of the overall development.
- Select project names that evoke Queensborough's riverfront community context and/or the legacy of its historically prominent citizens.

QMS.6 Provide public art to help enrich outdoor spaces and create pedestrian scale landmarks, particularly in commercial areas. Use art that highlights Queensborough's sense of place and is unique to each location.

HERITAGE

QMS.7 Each development must follow the Standards and Guidelines for the Conservation of Historic Places in Canada for all physical work to heritage assets.

QMS.8 Reuse historic industrial and agricultural artefacts on redevelopment sites (e.g. as public art).

MASSING

Building massing must contribute to a pedestrian scale neighbourhood character. Consider the following: **QMS.9**

- Use a building height to right-of-way width proportion that reinforces a pedestrian scale streetscape.
- Use substantial vertical architectural features (e.g. changes in building height, bays, high voids) to break the massing of multiple unit buildings into smaller modules of similar scale.
- Relate the modules to the organization of interior space such that the expression of individual units is reflected in the overall form of the building.
- Configure storefronts to be, or have the appearance of being, a maximum of 9 metres (30 feet) in width. Achieve this with large format retail units by setting most of the floor area at the rear of the building and behind other smaller retail units that front onto the street.
- Use horizontal architectural elements to define floor-to-floor transitions, roofs and cornice lines.
- Design the roof to minimize the overall building mass, incorporating articulation and variations in roof planes (e.g. dormers, gables, crenelated parapets) to break up roof mass and reduce building scale.
- Reinforce the pedestrian scale massing by designing all buildings to have a heavier "base" and lighter "top" that are visibly differentiated by use of material (e.g. masonry on the base and wood siding on the top) and details (e.g. cornice treatments at the top).

Building massing must maximize natural light and ventilation to apartment and condominium units. Consider the following: **QMS.10**

- Mass buildings to promote as many residential units as possible having exterior walls with windows on two sides.
- Configure internal units using a wide window-wall to shallow room depth ratio that ensures ample daylight penetrates to the rear of the unit.
- Organize the interior space of residential dwellings and/or units such that, wherever possible, a majority of primary living spaces (e.g. living room, family room, kitchen) have exterior walls with windows on two sides. As a minimum, ensure all primary living spaces and secondary living spaces (e.g. bedroom, den, office) have at least one exterior wall with a window.

Queensborough Main Street

FACADES

QMS.11 The facades of all building walls that face public or internal streets, pedestrian pathways, parks or open space must provide visual interest. Consider the following:

- Use architectural elements (e.g. fenestration, vertical and/or horizontal design elements, secondary roof elements) and/or material or colour change.
- Ensure blank walls do not occupy over 50% of the frontage, and a section of blank wall does not exceed six linear metres (20 linear feet) without being interrupted by a window or entry.

ENTRANCES

QMS.12 Primary pedestrian entrances into buildings must be integrated into the design of the building, yet be clearly expressed. Consider the following:

- Articulate massing to identify building entrances (e.g. tall voids, central mass, recessed entry).
- Frame with a secondary roof element (e.g. fabric awnings, fixed metal canopies, overhangs, but internally illuminated awnings should not be used) to identify building entrances and protect from weather. Continue the sheltering element along the length of the ground floor to provide continuous weather protection and visual interest.
- Establish a hierarchy of entrances, giving grouped pedestrian entrances visual priority, individual pedestrian entrances the next highest visual priority, and vehicle entrances the lowest visual priority.

QMS.13 Building entrances must be located and designed to have a strong relationship with the street. Consider the following:

- Provide each commercial unit with its own entry directly on and at-grade with the street, except for an entry to a commercial unit voluntarily complying with the Flood Construction Level.
- Provide a separate entrance for offices, for residential uses, and for commercial uses where these are in the same building, whether within the same or different storeys. Design residential entrances to have a visibly different character from commercial and office entrances.

WINDOWS

Windows must contribute to an interesting, pedestrian scale environment. Street level windows must be display windows that allow visual penetration into the main commercial area of the store. Consider the following: **QMS.14**

- Use windows which are of clear glass (e.g. not tinted, reflective or opaque).
- Design display windows to encompass a minimum of 40% and a maximum of 80% of the storefront linear frontage.
- Use windows which are rectangular or square in proportion, except for accent windows which may have a unique shape.

Use strategies to facilitate passive heating in cooler months and reduce unwanted heat gain in summer months. Consider the following: **QMS.15**

- Ensure a solar heat gain coefficient of 50% or better for south facing windows to maximize solar gain during winter.
- Use exterior shading devices (e.g. awnings, canopies, overhangs, light shelves, louvers) which provide shade from the high summer sun, but provide solar access to the low winter sun. Use these devices particularly on south facing windows.
- Provide operable windows in each residential dwelling and/or unit. Locate operable windows to take advantage of Queensborough's prevailing easterly winds (i.e. winds from the east to the west) to provide cross ventilation.

ROOFS

Rooftops must appear clean and attractive and in keeping with the architectural style of the building. Consider the following: **QMS.16**

- Locate and screen mechanical and service equipment such that it appears as an integral part of the building when viewed from any angle.
- Finish the surface of roofs with a material that is attractive and easy to maintain to a high level of neatness.
- Design roofs to reduce the urban heat island effect.

MATERIALS & COLOURS

QMS.17 All principal and accessory buildings within a development must use a cohesive palette of materials and colours that is consistently applied and contributes to the overall quality of the community. Consider the following:

- Use a natural palette of wood, stone or brick and muted paint colour tones (e.g. Benjamin Moore's Historical Vancouver True Colours).
- Consistently apply materials to all sides of a building (i.e. do not emphasize the principal facade with lesser treatment on the other facades).
- Change building materials and/or colours at interior or "reverse" corners of a building, not at exterior corners or at changes in a facade plane.
- Use an accent colour which is harmonious with the main colours of the materials and colours palette to unify the overall palette and to highlight architectural details (e.g. eaves, window and door trim, railings).
- Use matte finishes or finishes with a low level of reflectivity. Reflective materials (e.g. mirrored glass, polished stone) should be avoided.

QMS.18 Each development must use building and hardscape materials that are durable and appropriate to their use, the local climate, and the urban environment. Consider the following:

- Use high quality building materials (e.g. wood, stone, brick, or acceptable alternative) rather than materials that are visibly simulated (e.g. vinyl siding) or are inappropriate for an urban area (e.g. untreated or rough-sawn wood).

SIGNS

QMS.19 Signs must be designed to be consistent with the architectural style, scale and materials of the development and/or building and its surrounding context. Consider the following:

- Integrate signs into the detailing of the building (i.e. not applied as an afterthought) but subordinate to the overall building composition.
- Make signs visible from the street without being visually obtrusive. Design the size, location and information to be oriented to pedestrians.
- Use indirect lighting from fixtures that are integrated into the overall design and character of the development and/or building.

LIGHTING

QMS.20

All public and semi-private sidewalks and open spaces must be equipped with lighting. Consider the following:

- Use unobtrusive fixtures which are consistent with the architecture of the building and its surrounding context.
- Use shielded down lighting that provides for security, ambient lighting and enhances architectural and landscape details but minimizes light pollution.
- Minimize energy used in exterior lighting by using energy efficient lighting (e.g. LED, solar-powered) and timer, motion or photo-activated lighting for all exterior areas, including walkways and driveways and for security lighting.

OUTDOOR SPACE

QMS.21

All mixed-use developments with residential units must provide directly accessible private outdoor space for all units. Step buildings back from the street at the second storey and above to provide patios and/or balconies.

ACCESSIBILITY

QMS.22

Endeavour to make all pathways, building entrances and amenities of a site accessible by people of varying ability. Consider the following:

- Build sidewalks and pathways a minimum 1.8 metres (5.9 feet) wide with non-skid, uniform walking surfaces.
- Locate entrance ramps and lifts in areas that are highly visible, easy to use and connected to the sidewalk.
- Where steps or high thresholds (e.g. related to FCL requirements) create a barrier, provide an alternative route that is easily accessible to everyone.
- Locate site furnishings (e.g. lighting, bollards, signage, guardrails, seating) where they will not impede easy passage for those using a mobility device (e.g. wheelchair, scooter) or people who are visually impaired.
- Locate parking for those with ability challenges close to accessible building entrances.
- Use light fixtures that emit white light (i.e. not orange light) in all outdoor areas. White light facilitates better visibility.

SAFETY

QMS.23

Each development must provide a Crime Prevention Through Environmental Design (CPTED) report outlining the use of CPTED strategies in the design of developments and buildings, including open space.

TRAILS & GREENWAYS

QMS.24 Each development which is identified on the Parks, Trails and Greenway Streets Map as accommodating a portion of any trail or greenway must provide the trail or greenway route (e.g. dedicate or gift land, provide a right-of-way or easement) and construct the walkway for use by the general public.

QMS.25 Each development adjacent to any trail, as identified on the Parks, Trails and Greenway Streets Map, must set buildings and other structures well back from the walkway. Ensure the separation between private and public space is visually and physically well-defined (e.g. planting, low fences, hedges). Ensure there are no barriers to public access to the walkway.

PARKING AND ACCESS

QMS.26 All parking associated with a development must be located and designed to reinforce a pedestrian oriented neighbourhood character and scale. Consider the following:

- Integrate structured parking with the building design and have usable building space (e.g. shallow commercial retail units) facing public streets, parks and open spaces.
- Provide additional off-street surface parking behind the buildings (i.e. at the rear of the lot), as required.
- Take access to parking, including garages, from a lane wherever possible or from the side street where no lane exists.
- Visibly and physically separate pedestrian walkways from parking areas for commercial uses (e.g. distinguish through grade separation, bollards, trees in tree guards, distinct paving).
- Minimize the number of times driveways and/or internal streets cross sidewalks. Provide lanes, wherever appropriate, to give parking access that minimizes disruption to sidewalks, bike routes and on-street parking.

QMS.27 New development must not result in an increase in the number of rail line crossings which would result in an increase in train whistles. Remove or consolidate existing driveways, wherever possible, to reduce the need for trains to whistle.

QMS.28 Provide wiring within parking areas for electric vehicles to meet Electric Vehicle Ready requirements (i.e. Level 1 wiring for low-rise residential and small commercial buildings, and Level 2 wiring for mid-rise residential and large commercial buildings).

TREES & PLANTING

Each development must use the BC Society of Landscape Architects' and BC Landscape and Nursery Association's "BC Landscape Standard Guidelines (Latest Edition)" in specifying, selection, site preparation, installation and maintenance of all trees and other plant materials. **QMS.29**

Each development must integrate trees, including shade trees. Consider the following: **QMS.30**

- Retain existing mature trees wherever possible. Where tree removal is unavoidable, replace with a number, species and size of trees that creates equal value.
- Plant new trees in all parking areas and pathways to parking areas.
- Locate deciduous trees on the south and west side of buildings to provide shade and minimize unwanted heat gain during summer and provide solar access and passive solar gain during winter.

Tree species and other plant materials must be of high quality, suited to their purpose and contribute to the overall quality of the community. Consider the following: **QMS.31**

- Choose species that are successful in the urban environment, easy to maintain, are non-invasive and suited to Queensborough's high water table. Selected tree species should also have less aggressive rooting habits.
- Use broadleaf deciduous tree species, wherever possible, for all shade trees including trees in parking areas. Select species that have a minimum mature height of 15 metres (49 feet).

All trees must be planted so that they will successfully become established and develop a full canopy over time. Consider the following: **QMS.32**

- In parking areas, plant shade trees at an approximate ratio of one tree for every five spaces. Plant trees in a minimum 3 metres (9.8 feet) wide continuous trench and protect with bollards or tree guards.

Develop and/or enhance areas of understorey vegetation using diverse, multi-storey planting which will support habitat for smaller wildlife, songbirds and important pollinators such as bees, butterflies and dragonflies. **QMS.33**

#2 Queensborough Commercial

The Queensborough Commercial areas, identified as Development Permit Area #2 [see Map A], are designated to provide a framework for commercial development without a residential component. This Development Permit Area encourages best practices for promoting water and energy conservation and reducing greenhouse gas emissions. It also establishes guidelines for the form and character of commercial development.

Properties located within this Development Permit Area that are zoned Light Industrial Districts (M-1) that develop industrial uses in accordance with the zone must instead comply with the guidelines included in the Mixed Employment Development Permit Area.

DESIGN GUIDELINES

MASSING

QC.1 Building massing must contribute to a pedestrian scale neighbourhood character. Consider the following:

- Use a building height to street and/or parking area width proportion that reinforces a pedestrian scale streetscape.
- Use substantial vertical architectural features (e.g. changes in building height, bays, high voids) to break the massing of multiple unit buildings into smaller modules of similar scale.
- Relate the modules to the organization of interior space such that the expression of individual units is reflected in the overall form of the building.
- Configure storefronts to be, or have the appearance of being, a maximum of 9 metres (30 feet) in width. Achieve this with large format retail units by setting most of the floor area at the rear of the building and behind other smaller retail units that front onto the street.
- Use horizontal architectural elements to define floor-to-floor transitions, roofs and cornice lines.
- Design the roof to minimize the overall building mass, incorporating articulation and variations in roof planes (e.g. dormers, gables, crenelated parapets) to break up roof mass and reduce building scale.
- Reinforce the pedestrian scale massing by designing all buildings to have a heavier "base" and lighter "top" that are visibly differentiated by use of material (e.g. masonry on the base and wood siding on the top) and details (e.g. cornice treatments at the top).

SITING

Building siting must contribute to a pedestrian scale neighbourhood character. Consider the following: **QC.2**

- Orient commercial units to front all streets, drive aisles and/or city trails and greenways immediately adjacent to or within the development, except where the adjacent street is a highway or truck route.
- For all corner lots and/or corner units, locate and design buildings to address all frontages, including public and internal streets, city greenways and/or drive aisles except service driveways.

Building siting must respect the existing neighbourhood and site context by minimizing the impacts of noise and exhaust to pedestrians and neighbours. Locate service areas and mechanical equipment (e.g. utilities, HVAC, meters) at the rear of buildings and away from neighbouring uses. Minimize visibility of service areas and mechanical equipment from streets, open spaces and neighbours (e.g. screen, reduce service and garage opening size, use shared service areas). **QC.3**

CHARACTER

All buildings and developments must be designed to have a high quality, cohesive appearance that enhances the overall quality of the community. Consider the following: **QC.4**

- Use an architectural approach (i.e. massing, facade treatment, detailing, materials and colour choice) which is harmonious with the riverfront community context.
- Create a cohesive streetscape. Use a similar alignment of windowsills, building and roof lines, cornices, and floor-to-floor spacing along the street block.
- Design all buildings within a development and/or all elements of an individual building, to the same architectural style. Provide enough variety (e.g. through massing, architectural detail) to avoid a monotonous appearance when the development is viewed as a whole and to reinforce individual building identity.
- Coordinate lighting, outdoor furniture and garbage receptacles and design outdoor areas (e.g. walkways, patios) and landscape elements (e.g. retaining walls, fences, screening) to be consistent with the style, materials, colour and quality of the overall development.

Provide public art to help enrich outdoor spaces and create pedestrian scale landmarks, particularly in commercial areas. Use art that highlights Queensborough's sense of place and is unique to each location. **QC.5**

ENTRANCES

QC.6 Primary pedestrian entrances into buildings must be integrated into the design of the building, yet be clearly expressed. Consider the following:

- Articulate massing to identify building entrances (e.g. tall voids, central mass, recessed entry).
- Frame with a secondary roof element (e.g. fabric awnings, fixed metal canopies, overhangs, but internally illuminated awnings should not be used) to identify building entrances and protect from weather. Continue the sheltering element along the length of the building to provide continuous weather protection and visual interest.
- Highlight pedestrian entrances to the buildings more than vehicle entrances.

QC.7 Building entrances must be located and designed to have a strong relationship with the street, parking area and/or drive aisle. Consider the following:

- Provide each commercial unit with its own entry directly on and at-grade with the street, except for an entry to a commercial unit voluntarily complying with the Flood Construction Level.
- Provide a separate entrance for offices and for commercial uses where these are in the same building, whether within the same or different storeys.

WINDOWS

QC.8 Windows must contribute to an interesting, pedestrian scale environment. Street level windows must be display windows that allow visual penetration into the main commercial area of the store. Consider the following:

- Use windows which are of clear glass (e.g. not tinted, reflective or opaque).
- Design display windows to encompass a minimum of 40% and a maximum of 80% of the storefront linear frontage.
- Use windows which are rectangular or square in proportion, except for accent windows which may have a unique shape.

QC.9 Use strategies to facilitate passive heating in cooler months and reduce unwanted heat gain in summer months. Consider the following:

- Ensure a solar heat gain coefficient of 50% or better for south facing windows to maximize solar gain during winter.
- Use exterior shading devices (e.g. awnings, canopies, overhangs, light shelves, louvers) which provide shade from the high summer sun, but provide solar access to the low winter sun. Use these devices particularly on south facing windows.

ROOFS

Rooftops must appear clean and attractive and in keeping with the architectural style of the building. Consider the following: **QC.10**

- Locate and screen mechanical and service equipment such that it appears as an integral part of the building when viewed from any angle.
- Finish the surface of roofs with a material that is attractive and easy to maintain to a high level of neatness.
- Design roofs to reduce the urban heat island effect.

MATERIALS & COLOURS

All principal and accessory buildings within a development must use a cohesive palette of materials and colours that is consistently applied and contributes to the overall quality of the community. Consider the following: **QC.11**

- Use a natural palette of wood, stone or brick and muted paint colour tones (e.g. Benjamin Moore's Historical Vancouver True Colours).
- Consistently apply materials to all sides of a building (i.e. do not emphasize the principal facade with lesser treatment on the other facades).
- Change building materials and/or colours at interior or "reverse" corners of a building, not at exterior corners or at changes in a facade plane.
- Use an accent colour which is harmonious with the main colours of the materials and colours palette to unify the overall palette and to highlight architectural details (e.g. eaves, window and door trim, railings).
- Use matte finishes or finishes with a low level of reflectivity. Reflective materials (e.g. mirrored glass, polished stone) should be avoided.

Each development must use building and hardscape materials that are durable and appropriate to their use, the local climate, and the urban environment. Consider the following: **QC.12**

- Use high quality building materials (e.g. wood, stone, brick, or acceptable alternative) rather than materials that are visibly simulated (e.g. vinyl siding) or are inappropriate for an urban area (e.g. untreated or rough-sawn wood).

FACADES

QC.13 The facades of all building walls that face public or internal streets, drive aisles, pedestrian pathways, parks or open space must provide visual interest. Consider the following:

- Use architectural elements (e.g. fenestration, vertical and/or horizontal design elements, secondary roof elements) and/or material or colour change.
- Ensure blank walls do not occupy over 50% of the frontage, and a section of blank wall does not exceed six linear metres (20 linear feet) without being interrupted by a window or entry, except for facades facing the service driveway.

SIGNS

QC.14 Signs must be designed to be consistent with the architectural style, scale and materials of the development/building and its surrounding context. Consider the following:

- Integrate signs into the detailing of the building (i.e. not applied as an afterthought) but subordinate to the overall building composition.
- Make signs visible from the street without being visually obtrusive. Design the size, location and information to be oriented to pedestrians.
- Use indirect lighting from fixtures integrated into the overall design and character of the development and/or building.

LIGHTING

QC.15 All public and semi-private sidewalks and open spaces must be equipped with lighting. Consider the following:

- Use unobtrusive fixtures which are consistent with the architecture of the building and its surrounding context.
- Use shielded down lighting that provides for security, ambient lighting and enhances architectural and landscape details but minimizes light pollution.
- Minimize energy used in exterior lighting by using energy efficient lighting (e.g. LED, solar-powered) and timer, motion or photo-activated lighting for all exterior areas, including walkways and driveways and for security lighting.

TRAILS & GREENWAYS

QC.16

All waterfront properties must provide public access to the river. Consider the following:

- Provide public features at key points, such as waterfront lookout points, rest spots and entry gateway elements.
- Design all elements of the Perimeter Trail to have a high quality, cohesive appearance that harmonizes with the riverfront community context.
- Use a cohesive palette of durable, high quality materials which are appropriate to the use and the local climate. Maximize the use of environmentally responsible materials.

Each development adjacent to any trail, as identified on the Parks, Trails and Greenway Streets Map, must set buildings and other structures well back from the walkway. Ensure the separation between private and public space is visually and physically well-defined (e.g. planting, low fences, hedges). Ensure there are no barriers to public access to the walkway.

ACCESSIBILITY

QC.17

Endeavour to make all pathways, building entrances and amenities of a site accessible by people of varying ability. Consider the following:

- Build sidewalks and pathways a minimum 1.8 metres (5.9 feet) wide with non-skid, uniform walking surfaces.
- Locate entrance ramps and lifts in areas that are highly visible, easy to use and connected to the sidewalk.
- Where steps or high thresholds (e.g. related to FCL requirements) create a barrier, provide an alternative route that is easily accessible to everyone.
- Locate site furnishings (e.g. lighting, bollards, signage, guardrails, seating) where they will not impede easy passage for those using a mobility device (e.g. wheelchair, scooter) or people who are visually impaired.
- Locate parking for those with ability challenges close to accessible building entrances.
- Use light fixtures that emit white light (i.e. not orange light) in all outdoor areas. White light facilitates better visibility.

SAFETY

QC.18

Each development must provide a Crime Prevention Through Environmental Design (CPTED) report outlining the use of CPTED strategies in the design of developments and buildings, including open space.

TREES & PLANTING

QC.19 Each development must use the BC Society of Landscape Architects' and BC Landscape and Nursery Association's "BC Landscape Standard Guidelines (Latest Edition)" in specifying, selection, site preparation, installation and maintenance of all trees and other plant materials.

QC.20 Each development must integrate trees, including shade trees. Consider the following:

- Retain existing mature trees wherever possible. Where tree removal is unavoidable, replace with a number, species and size of trees that creates equal value.
- Plant new trees in all parking areas and along internal streets and pathways.
- Locate deciduous trees on the south and west side of buildings to provide shade and minimize unwanted heat gain during summer and provide solar access and passive solar gain during winter.

QC.21 Tree species and other plant materials must be of high quality, suited to their purpose and contribute to the overall quality of the community. Consider the following:

- Choose species that are successful in the urban environment, easy to maintain, are non-invasive and suited to Queensborough's high water table. Selected tree species should also have less aggressive rooting habits.
- Use broadleaf deciduous tree species, wherever possible, for all shade trees including trees in parking areas. Select species that have a minimum mature height of 15 meters (49 feet).

QC.22 All trees must be planted so that they will successfully become established and develop a full canopy over time. Consider the following:

- Plant street trees on internal streets in a minimum 3 metres (9.8 feet) soil boulevard. For internal streets where the boulevard is paved, plant street trees in a continuous trench finished with a tree grate around each tree.
- Space internal street trees consistently and so that their canopies touch at maturity, generally one tree every 6 to 8 metres (20 to 26 feet), depending on species.
- In parking areas, plant shade trees at an approximate ratio of one tree for every five spaces. Plant trees in a minimum 3 metres (9.8 feet) wide continuous trench and protect trees with bollards or tree guards.

PARKING & ACCESS

All parking associated with a development must be located and designed to reinforce a pedestrian oriented neighbourhood character and scale. Consider the following: **QC.23**

- Integrate structured parking with the building design and have usable building space (e.g. shallow commercial retail units) facing public streets, parks and open spaces.
- Provide off-street surface parking behind the buildings, as required.
- Reduce visual scale and glare of large expanses of pavement by creating smaller parking areas divided by landscaped sections which provide semi-transparent screening.
- Visibly and physically separate pedestrian walkways from parking areas (e.g. distinguish through grade separation, bollards, trees in tree guards, distinct paving).
- Minimize the number of times driveways and/or internal streets cross sidewalks.

New development must not result in an increase in the number of rail line crossings which would result in an increase in train whistles. Remove or consolidate existing driveways, wherever possible, to reduce the need for trains to whistle. **QC.24**

Provide wiring within parking areas for plug-in electric vehicles to meet Electric Vehicle Ready requirements (i.e. Level 1 wiring small commercial buildings, and Level 2 wiring for large commercial buildings). **QC.25**

#3 Queensborough Casino

The Queensborough Destination Casino area, identified as Development Permit Area #3 [see Map A], is designated in order to provide an opportunity for a regional destination entertainment use including a hotel. This area is designated in order to establish guidelines for the form and character of the mixed-use development.

Development permits issued in this area shall be in accordance with the Development Guidelines prepared for Star of Fortune Gaming Management (B.C.) Corp, Inc. No.537205 by Stantec Architecture dated March 9, 2004 and the following design guidelines for Development Permit Area #2: Queensborough Commercial.

B. Residential Development Permit Areas

INTENT

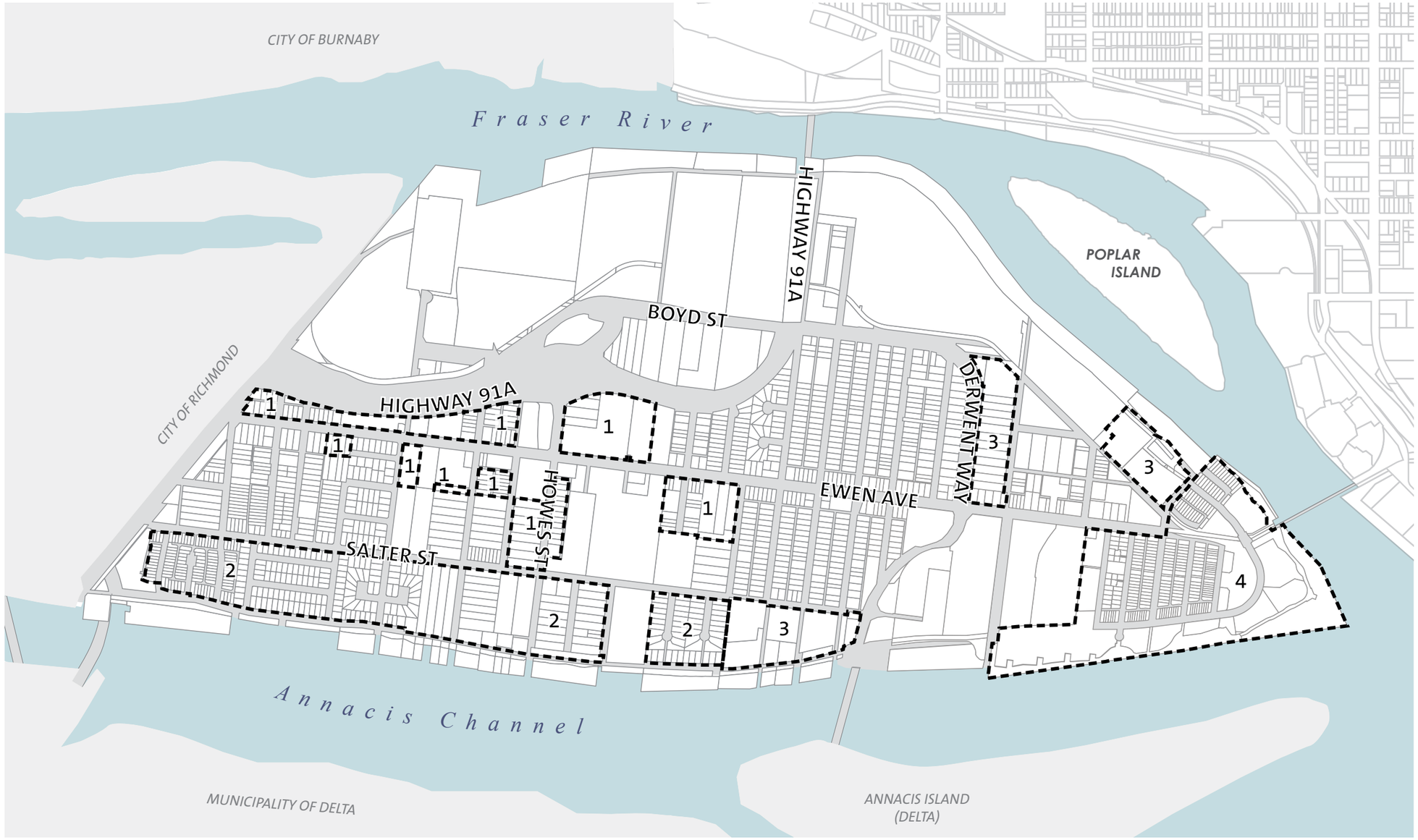
There are four Development Permit Areas in this section. Each Development Permit Area is a residential neighbourhood. Guidelines in these Development Permit Areas will focus on environmental sustainability and on improving the livability of these neighbourhoods through the provision of good quality multi-family housing of high quality design.

[Discussion of this area is also contained in Chapter 7: Housing.]

Residential Development Permit Areas

1. Ewen Avenue Multi-Family
2. Compact Lot
3. East Queensborough
4. Port Royal

Map B
Residential Development Permit Areas



Residential Development Permit Areas

1. Ewen Avenue Multi-family
2. Compact Lot
3. East Queensborough
4. Port Royal

#1 Ewen Avenue Multi-Family

The Ewen Avenue Multi-Family areas, identified as Development Permit Area #1 [see Map B], are designated in order to provide housing in close proximity to the neighbourhood centre and help define the axis streets leading to the centre of the neighbourhood. This area will contain medium density, multi-family residential uses and may include community amenities such as child care or community space (e.g. fire hall). Home occupations facing the street are encouraged. This Development Permit Area encourages best practices for promoting water and energy conservation and reducing greenhouse gas emissions. It also establishes guidelines for the form and character of multi-family residential development.

Properties located within this Development Permit Area that are zoned Ewen Avenue Comprehensive Development Districts (RM-CD-2) that develop commercial uses in accordance with the zone must instead comply with the guidelines included in the Queensborough Main Street Development Permit Area.

DESIGN GUIDELINES

SITING

EMF.1 Building siting must contribute to a pedestrian scale neighbourhood character. Consider the following:

- Orient residential units to front all streets and/or city trails and greenways immediately adjacent to or within the development, except where the adjacent street is a highway or truck route.
- For all corner lots and/or corner units, locate and design buildings to address all frontages, including public and internal streets, and/or city trails and greenways.
- Use building siting to reinforce a sense of arrival at intersections that provide key access points into the community. Enhance this effect with other special features (e.g. publicly accessible plazas at the street corner, special roof shapes and/or other architectural features, street furniture).

EMF.2 Building siting must respect the existing neighbourhood and site context. Consider the following:

- Consider existing buildings and outdoor spaces when siting new buildings, including the location of windows and entrances, overlook of outdoor space, impacts to air circulation and light penetration, etc.
- Site buildings to retain and enhance heritage assets by incorporating them into the development of the site, wherever possible, including buildings, engineering works and/or cultural landscapes, as well as significant landscape features (e.g. mature vegetation and trees, distinctive landforms).
- Design new buildings in proximity to heritage assets to be compatible with their historical context without literally imitating older building styles. In these cases, new buildings should provide an original interpretation of the traditional building style (i.e. draw inspiration from fundamental design characteristics) while continuing to reinforce traditional development patterns and rhythms.
- Minimize the impact of noise and exhaust to pedestrians and neighbours. Locate service areas and mechanical equipment (e.g. utilities, HVAC, meters) at the rear of buildings and away from neighbouring residential uses. Minimize visibility of service areas and mechanical equipment from streets, open spaces and neighbours (e.g. screen, reduce service and garage opening size, use shared service areas).

CHARACTER

All buildings and developments must be designed to have a high quality, cohesive appearance that enhances the overall quality of the community. Consider the following: **EWM.3**

- Use an architectural approach (i.e. massing, facade treatment, detailing, materials and colour choice) which is harmonious with the riverfront community context.
- Create a cohesive streetscape. Use a similar alignment of windowsills, building and roof lines, cornices, and floor-to-floor spacing along the street block.
- Design all principal and accessory buildings within a development and/or all elements of an individual building to the same architectural style. Provide enough variety (e.g. through massing, architectural detail) to avoid a monotonous appearance when the development is viewed as a whole and to reinforce individual building identity.
- Coordinate lighting, outdoor furniture and garbage receptacles and design outdoor areas (e.g. walkways, patios) and landscape elements (e.g. retaining walls, fences, screening) to be consistent with the style, materials, colour and quality of the overall development.
- Select project names that evoke Queensborough's riverfront community context and/or the legacy of its historically prominent citizens.

Provide public art to help enrich outdoor spaces and create pedestrian scale landmarks. Use art that highlights Queensborough's sense of place and is unique to each location. **EWM.4**

HERITAGE

Each development must follow the Standards and Guidelines for the Conservation of Historic Places in Canada for all physical work to heritage assets. **EWM.5**

Reuse historic industrial and agricultural artefacts on redevelopment sites (e.g. as public art). **EWM.6**

MASSING

EMF.7 Building massing must contribute to a pedestrian scale neighbourhood character. Consider the following:

- Use substantial vertical architectural features (e.g. changes in building height, bays, high voids) to break the massing of multiple unit buildings into smaller modules of similar scale.
- Relate the modules to the organization of interior space such that the expression of individual units is reflected in the overall form of the building.
- Use horizontal architectural elements to define floor-to-floor transitions, roofs and cornice lines.
- Design the roof to minimize the overall building mass, incorporating articulation and variations in roof planes (e.g. dormers, gables, crenelated parapets) to break up roof mass and reduce building scale.
- Reinforce the pedestrian scale massing by designing all buildings to have a heavier "base" and lighter "top" that are visibly differentiated by use of material (e.g. masonry on the base and wood siding on the top) and details (e.g. cornice treatments at the top).

EMF.8 Building massing must maximize natural light and ventilation to apartment and condominium units. Consider the following:

- Mass buildings to promote as many units as possible having exterior walls with windows on two sides.
- Configure internal units using a wide window-wall to shallow room depth ratio that ensures ample daylight penetrates to the rear of the unit.
- Organize the interior space such that, wherever possible, a majority of primary living spaces (e.g. living room, family room, kitchen) have exterior walls with windows on two sides. As a minimum, ensure all primary living spaces and secondary living spaces (e.g. bedroom, den, office) have at least one exterior wall with a window.
- Take microclimate into consideration.

FACADES

The facades of all building walls that face public or internal streets, drive aisles, pedestrian pathways, parks or open space must provide visual interest. Use architectural elements (e.g. fenestration, vertical and/or horizontal design elements, secondary roof elements) and/or material or colour change. **EWM.9**

ENTRANCES

Primary pedestrian entrances into buildings must be integrated into the design of the building, yet be clearly expressed. Consider the following: **EWM.10**

- Articulate massing to identify building entrances (e.g. tall voids, central mass, recessed entry).
- Frame with a secondary roof element (e.g. porch) to identify building entrances and protect from weather.
- Establish a hierarchy of entrances, giving grouped pedestrian entrances visual priority, individual pedestrian entrances the next highest visual priority, and vehicle entrances the lowest visual priority.

Building entrances must be located and designed to have a strong relationship with the street. Consider the following: **EWM.11**

- Make entries for residential buildings and ground oriented units, including front porches visible from, oriented toward and directly connected (via a short pathway and/or stairs) to the street (public or internal), city greenway or trail, or semi-private entry courtyard onto which the building fronts. Make any semi-private entry courtyard visible from, oriented toward and directly connected to the public street (via a short pathway and/or stairs).
- Distinguish entrances with an arrival feature (e.g. courtyard, gateway) at the point where the semi-private sidewalk meets the public sidewalk. Incorporate smaller arrival features to visibly differentiate different building entrances within a development. Integrate the design of arrival features with the overall design of the development.

ROOFS

Rooftops must appear clean and attractive and in keeping with the architectural style of the building. Consider the following: **EWM.12**

- Locate and screen mechanical and service equipment such that it appears as an integral part of the building when viewed from any angle.
- Finish the surface of roofs with a material that is attractive and easy to maintain to a high level of neatness.
- Design roofs to reduce the urban heat island effect.

WINDOWS

EMF.13 Windows must contribute to an interesting, pedestrian scale environment. Consider the following:

- Use windows which are of clear glass (e.g. not tinted, reflective or opaque).
- Use windows which are rectangular or square in proportion, except for accent windows which may have a unique shape.
- Locate windows in the garage door of residential parking structures facing onto public or internal streets or walkways, including city trails and greenways.

EMF.14 Use strategies to facilitate passive heating in cooler months and reduce unwanted heat gain in summer months. Consider the following:

- Ensure a solar heat gain coefficient of 50% or better for south facing windows to maximize solar gain during winter.
- Use exterior shading devices (e.g. awnings, canopies, overhangs, light shelves, louvers) which provide shade from the high summer sun, but provide solar access to the low winter sun. Use these devices particularly on south facing windows.
- Provide operable windows in each residential dwelling and/or unit. Locate operable windows to take advantage of Queensborough's prevailing easterly winds (i.e. winds from the east to the west) to provide cross ventilation.
- Use stack vents and light wells to provide additional light and ventilation to primary and secondary living spaces.
- Take microclimate into consideration when locating and sizing windows.

SIGNS

EMF.15 Signs must be designed to be consistent with the architectural style, scale and materials of the development and/or building and its surrounding context. Consider the following:

- Integrate signs into the detailing of the building (i.e. not applied as an afterthought) but subordinate to the overall building composition.
- Make signs visible from the street without being visually obtrusive. Design the size, location and information to be oriented to pedestrians.
- Use indirect lighting from fixtures that are integrated into the overall design and character of the development and/or building.

OPEN SPACE

Each development must provide directly accessible private outdoor space for all units. Consider the following: **EWM.16**

- Include balconies for above grade units and patios for ground oriented units.
- Design roofs to provide usable outdoor space.
- Where units front onto public or internal streets and/or city trails or greenways, use the private outdoor space to create a transition. Design this area to be spatially well-defined and visible from the street or walkway (e.g. elevate slightly, enclose with low hedges or an open-railing fence).

Each development must provide semi-private outdoor common space for all multi-family developments. Use common space to create a transition from private residential areas to the development entry at public streets. Orient private patios and entries around the semi-private common space to facilitate neighbourly interactions and provide overlook for children as they play. **EWM.17**

Common outdoor space must be designed to be of a usable size and configuration. Include a range of activities and generations. Consider the following: **EWM.18**

- Hard and soft landscaped areas such as courtyards, patios, lawns and/or naturalized open space.
- Seating options such as benches, moveable chairs and/or tables. Locate seating options suited to different weather conditions such as areas that capture the sun, are shaded (e.g. by building canopies or trees) and/or are sheltered from wind and rain.
- Common gardens where residents can grow flowers and food together. These should be in addition to private garden spaces.
- Natural play elements (e.g. boulders, stepping stones, grassy slopes) in visible locations.

Each development must provide pedestrian circulation that connects between buildings and shared amenities, as well as directly to public streets and greenways, and other destinations such as schools, parks, and commercial areas. **EWM.19**

NOISE

EMF.20 Developments and buildings must be designed to minimize impacts from adjacent industrial and transportation activities. Consider the following:

- Site buildings to minimize light intrusion from trucks, trains and industrial site lighting into residential units, yards and semi-private open spaces.
- Organize internal unit configuration to locate bedrooms and, where possible, other living areas away from industrial and goods transportation activities (i.e. truck routes, industrial site access points, the rail line). Locate all outdoor spaces away from noise sources.
- Employ leading edge technical approaches to noise abatement in residential building construction (e.g. fresh air ventilation alternatives to open windows, acoustically rated glazing) including on balconies (e.g. sound absorption materials and/or barriers).
- Provide landscape buffers within residential development sites. Use layered plantings of trees and shrubs.

EMF.20 Each application to develop residential dwellings adjacent to industrial and transportation activities must provide a report prepared by persons qualified in acoustics and noise measurement, demonstrating compliance with CMHC noise standards for habitable areas (i.e. max. 35 decibels for bedrooms, max. 40 decibels for living dining and recreation rooms, and max. 45 decibels for kitchen, bathrooms, hallways and utility rooms). This report will be registered as a covenant on title.

LIGHTING

EMF.22 All public and semi-private sidewalks and open spaces must be equipped with lighting. Consider the following:

- Use unobtrusive fixtures which are consistent with the architecture of the building and its surrounding context.
- Use shielded down lighting that provides for security, ambient lighting and enhances architectural and landscape details but minimizes light pollution.
- Minimize energy used in exterior lighting by using energy efficient lighting (e.g. LED, solar-powered) and timer, motion or photo-activated lighting for all exterior areas, including walkways and driveways and for security lighting.

MATERIALS & COLOURS

All principal and accessory buildings within a development must use a cohesive palette of materials and colours that is consistently applied and contributes to the overall quality of the community. Consider the following: **EWM.23**

- Use a natural palette of wood, stone or brick and muted paint colour tones (e.g. Benjamin Moore's Historical Vancouver True Colours).
- Consistently apply materials to all sides of a building (i.e. do not emphasize the principal facade with lesser treatment on the other facades).
- Change building materials and/or colours at interior or "reverse" corners of a building, not at exterior corners or at changes in a facade plane.
- Use an accent colour which is harmonious with the main colours of the materials and colours palette to unify the overall palette and to highlight architectural details (e.g. eaves, window and door trim, railings).
- Use matte finishes or finishes with a low level of reflectivity. Reflective materials (e.g. mirrored glass, polished stone) should be avoided.

Each development must use building and hardscape materials that are durable and appropriate to their use, the local climate, and the urban environment. Consider the following: **EWM.24**

- Use high quality building materials (e.g. wood, stone, brick, or acceptable alternative) rather than materials that are visibly simulated (e.g. vinyl siding) or are inappropriate for an urban area (e.g. untreated or rough-sawn wood).

TRAILS & GREENWAYS

Each development which is identified on the Parks, Trails and Greenway Streets Map as accommodating a portion of any trail or greenway must provide the trail or greenway route (e.g. dedicate or gift land, provide a right-of-way or easement) and construct the walkway for use by the general public. **EWM.25**

Each development adjacent to any trail, as identified on the Parks, Trails and Greenway Streets Map, must set buildings and other structures well back from the walkway. Ensure the separation between private and public space is visually and physically well-defined (e.g. planting, low fences, hedges). Ensure there are no barriers to public access to the walkway. **EWM.26**

ACCESSIBILITY

EMF.27 Endeavour to make all pathways and building entrances, public and semi-public spaces, and special features and amenities of a site accessible by people of varying ability. Consider the following:

- Build sidewalks and pathways a minimum 1.8 metres (5.9 feet) wide with non-skid, uniform walking surfaces.
- Locate entrance ramps and lifts in areas that are highly visible, easy to use and connected to the sidewalk.
- Where steps or high thresholds (e.g. related to FCL requirements) create a barrier, provide an alternative route that is easily accessible to everyone.
- Locate site furnishings (e.g. lighting, bollards, signage, guardrails, seating) where they will not impede easy passage for those using a mobility device (e.g. wheelchair, scooter) or people who are visually impaired.
- Locate parking for those with ability challenges close to accessible building entrances.
- Use light fixtures that emit white light (i.e. not orange light) in all outdoor areas. White light facilitates better visibility.

SAFETY

EMF.28 Each development must provide a Crime Prevention Through Environmental Design (CPTED) report outlining the use of CPTED strategies in the design of developments and buildings, including open space.

TREES & PLANTING

Each development must use the BC Society of Landscape Architects' and BC Landscape and Nursery Association's "BC Landscape Standard Guidelines (Latest Edition)" in specifying, selection, site preparation, installation and maintenance of all trees and other plant materials. **EWM.29**

Each development must integrate trees, including shade trees. Consider the following: **EWM.30**

- Retain existing mature trees wherever possible. Where tree removal is unavoidable, replace with a number, species and size of trees that creates equal value.
- Plant new trees in all public and semi-private open spaces, parking areas, private yards, and along internal streets and pathways.
- Locate deciduous trees on the south and west side of buildings to provide shade and minimize unwanted heat gain during summer and provide solar access and passive solar gain during winter.

Tree species and other plant materials must be of high quality, suited to their purpose and contribute to the overall quality of the community. Consider the following: **EWM.31**

- Choose species that are successful in the urban environment, easy to maintain, are non-invasive and suited to Queensborough's high water table. Selected tree species should also have less aggressive rooting habits.
- Use broadleaf deciduous tree species, wherever possible, for all shade trees including internal street trees and trees in parking areas. Select species that have a minimum mature height of 15 meters (49 feet).

All trees must be planted so that they will successfully become established and develop a full canopy over time. Consider the following: **EWM.32**

- Plant trees on internal streets in a minimum 3 metres (9.8 feet) soil boulevard. Where the boulevard is paved, plant street trees in a continuous trench finished with a tree grate around each tree.
- Space street trees consistently and so that their canopies touch at maturity, generally one tree every 6 to 8 metres (20 to 26 feet), depending on species.
- In parking areas, plant shade trees at an approximate ratio of one tree for every five spaces. Plant trees in a minimum 3 metres (9.8 feet) wide continuous trench and protect trees with bollards or tree guards.

Develop and/or enhance areas of understorey vegetation using diverse, multi-storey planting which will support habitat for smaller wildlife, songbirds and important pollinators such as bees, butterflies and dragonflies. **EWM.33**

PARKING & ACCESS

EMF.34 All parking associated with a development must be located and designed to reinforce a pedestrian oriented neighbourhood character and scale. Consider the following:

- Integrate structured parking for low and mid-rise buildings with the building design and have usable building space (e.g. ground oriented units) facing public streets, parks and open spaces.
- Take access to parking, including garages, from a lane wherever possible or from the side or internal street where no lane exists.
- Visibly and physically separate pedestrian walkways from surface parking areas for low and mid-rise buildings (e.g. distinguish through grade separation, bollards, trees in tree guards, distinct paving).
- Minimize the number of times driveways and/or internal streets cross sidewalks. Provide lanes, wherever appropriate, to give parking access that minimizes disruption to sidewalks, bike routes and on-street parking.

EMF.34 New development must not result in an increase in the number of rail line crossings which would result in an increase in train whistles. Remove or consolidate existing driveways, wherever possible, to reduce the need for trains to whistle.

EMF.36 Provide wiring within parking areas for plug-in electric vehicles to meet Electric Vehicle Ready requirements (i.e. Level 1 wiring for low-rise residential buildings, and Level 2 wiring for mid-rise residential buildings).

#2 Compact Lot

The Compact Lot intensive residential area, identified as Development Permit Area #2 [see Map B], is designated in order to provide an opportunity for an innovative ground oriented housing type. This Development Permit Area encourages best practices for promoting water and energy conservation and reducing greenhouse gas emissions. It also establishes guidelines for the form and character of intensive residential development.

DESIGN GUIDELINES

SITING

Building siting must contribute to a pedestrian scale neighbourhood character. Consider the following: **CL.1**

- Orient residential units to front all streets and/or city trails and greenways immediately adjacent to or within the development.
- For all corner lots and/or corner units, locate and design buildings to address all frontages, including public and internal streets, and/or city trails or greenways.

Building siting must respect the existing neighbourhood and site context. Consider the following: **CL.2**

- Consider existing buildings and outdoor spaces when siting new buildings, including the location of windows and entrances, overlook of outdoor space, impacts to air circulation and light penetration, etc.
- Site buildings to retain and enhance heritage assets by incorporating them into the development of the site, wherever possible, including buildings, engineering works and/or cultural landscapes, as well as significant landscape features (e.g. mature vegetation and trees, distinctive landforms).
- Design new buildings in proximity to heritage assets to be compatible with their historical context without literally imitating older building styles. In these cases, new buildings should provide an original interpretation of the traditional building style (i.e. draw inspiration from fundamental design characteristics) while continuing to reinforce traditional development patterns and rhythms.

Compact Lot

CHARACTER

CL.3 All buildings and developments must be designed to have a high quality, cohesive appearance that enhances the overall quality of the community. Consider the following:

- Use an architectural approach (i.e. massing, facade treatment, detailing, materials and colour choice) which is harmonious with the riverfront community context.
- Create a cohesive streetscape. Use a similar alignment of windowsills, building and roof lines, cornices, and floor-to-floor spacing along the street block.
- Design all principal and accessory buildings within a development and/or all elements of an individual building, to the same architectural style. Provide enough variety (e.g. through massing, architectural detail) to avoid a monotonous appearance when the development is viewed as a whole and to reinforce individual building identity.
- Select project names that evoke Queensborough's riverfront community context and/or the legacy of its historically prominent citizens.

CL.4 Consider providing public art to help enrich outdoor spaces and provide pedestrian scale landmarks. Use art that highlights Queensborough's sense of place and is unique to each location.

HERITAGE

CL.5 Each development must follow the Standards and Guidelines for the Conservation of Historic Places in Canada for all physical work to heritage assets.

CL.6 Reuse historic industrial and agricultural artefacts on redevelopment sites (e.g. as public art).

FACADES

CL.7 The facades of all building walls that face public or internal streets, drive aisles, pedestrian pathways, parks or open space must provide visual interest. Use architectural elements (e.g. fenestration, vertical and/or horizontal design elements, secondary roof elements) and/or material or colour change.

MASSING

Building massing must contribute to a pedestrian scale neighbourhood character. Consider the following: **CL.8**

- Use horizontal architectural elements to define floor-to-floor transitions, roofs and cornice lines.
- Design the roof to minimize the overall building mass, incorporating articulation and variations in roof planes (e.g. dormers, gables, crenelated parapets) to break up roof mass and reduce building scale.
- Reinforce the pedestrian scale massing by designing all buildings to have a heavier "base" and lighter "top" that are visibly differentiated by use of material (e.g. masonry on the base and wood siding on the top) and details (e.g. cornice treatments at the top).

Building massing must maximize natural light and ventilation. Consider the following: **CL.9**

- Organize the interior space of residential dwellings and/or units such that, wherever possible, a majority of primary living spaces (e.g. living room, family room, kitchen) have exterior walls with windows on two sides.
- Ensure all primary secondary living spaces (e.g. bedroom, den, office) have at least one exterior wall with a window.
- Use stack vents and light wells to provide additional light and ventilation to primary and secondary living spaces.
- Take microclimate into consideration.

ENTRANCES

Primary pedestrian entrances into buildings must be integrated into the design of the building, yet be clearly expressed. Consider the following: **CL.10**

- Articulate massing to identify building entrances (e.g. tall voids, central mass, recessed entry).
- Frame with a secondary roof element (e.g. porch) to identify building entrances and protect from weather.

Building entrances must be located and designed to have a strong relationship with the street. Consider the following: **CL.11**

- Make entries, including front porches, visible from, oriented toward and directly connected (via a short pathway and/or stairs) to the street onto which the building fronts.

WINDOWS

CL.12 Windows must contribute to an interesting, pedestrian scale environment. Consider the following:

- Use windows which are of clear glass (e.g. not tinted, reflective or opaque).
- Use windows which are rectangular or square in proportion, except for accent windows which may have a unique shape.
- Use stack vents and light wells to provide additional light and ventilation to primary and secondary living spaces.
- Take microclimate into consideration when locating and sizing windows.

CL.13 Use strategies to facilitate passive heating in cooler months and reduce unwanted heat gain in summer months. Consider the following. Consider the following:

- Ensure a solar heat gain coefficient of 50% or better for south facing windows to maximize solar gain during winter.
- Use exterior shading devices (e.g. awnings, canopies, overhangs, light shelves, louvers) which provide shade from the high summer sun, but provide solar access to the low winter sun. Use these devices particularly on south facing windows.
- Provide operable windows in each residential dwelling and/or unit. Locate operable windows to take advantage of Queensborough's prevailing easterly winds (i.e. winds from the east to the west) to provide cross ventilation.

SAFETY

CL.14 Each development must provide a Crime Prevention Through Environmental Design (CPTED) report outlining the use of CPTED strategies in the design of developments and buildings, including open space.

PARKING & ACCESS

CL.15 All garages must be at the rear of the lot and accessed from a lane.

CL.16 New development must not result in an increase in the number of rail line crossings which would result in an increase in train whistles. Remove or consolidate existing driveways, wherever possible, to reduce the need for trains to whistle.

MATERIALS & COLOURS

All principal and accessory buildings within a development must use a cohesive palette of materials and colours that is consistently applied and contributes to the overall quality of the community. Consider the following: **CL.17**

- Use a natural palette of wood, stone or brick and muted paint colour tones (e.g. Benjamin Moore's Historical Vancouver True Colours).
- Consistently apply materials to all sides of a building (i.e. do not emphasize the principal facade with lesser treatment on the other facades).
- Change building materials and/or colours at interior or "reverse" corners of a building, not at exterior corners or at changes in a facade plane.
- Use an accent colour which is harmonious with the main colours of the materials and colours palette to unify the overall palette and to highlight architectural details (e.g. eaves, window and door trim, railings).
- Use matte finishes or finishes with a low level of reflectivity. Reflective materials (e.g. mirrored glass, polished stone) should be avoided.

Each development must use building and hardscape materials that are durable and appropriate to their use, the local climate, and the urban environment. Consider the following: **CL.18**

- Use high quality building materials (e.g. wood, stone, brick, or acceptable alternative) rather than materials that are visibly simulated (e.g. vinyl siding) or are inappropriate for an urban area (e.g. untreated or rough-sawn wood).

ACCESSIBILITY

Endeavour to make all pathways and building entrances, public and semi-public spaces, and special features and amenities of a site accessible by people of varying ability. Consider the following: **CL.19**

- Build sidewalks and pathways a minimum 1.8 metres (5.9 feet) wide with non-skid, uniform walking surfaces.
- Where steps or high thresholds (e.g. related to FCL requirements) create a barrier, provide an alternative route that is easily accessible to everyone.
- Locate site furnishings (e.g. lighting, bollards, signage, guardrails, seating) where they will not impede easy passage for those using a mobility device (e.g. wheelchair, scooter) or people who are visually impaired.
- Locate parking for those with ability challenges close to accessible building entrances.
- Use light fixtures that emit white light (i.e. not orange light) in all outdoor areas. White light facilitates better visibility.

TREES & PLANTING

CL.20 Each development must use the BC Society of Landscape Architects' and BC Landscape and Nursery Association's "BC Landscape Standard Guidelines (Latest Edition)" in specifying, selection, site preparation, installation and maintenance of all trees and other plant materials.

CL.21 Each development must integrate trees, including shade trees. Consider the following:

- Retain existing mature trees wherever possible. Where tree removal is unavoidable, replace with a number, species and size of trees that creates equal value.
- Plant new trees in all private yards and along pathways.
- Locate deciduous trees on the south and west side of buildings to provide shade and minimize unwanted heat gain during summer and provide solar access and passive solar gain during winter.

CL.22 Tree species and other plant materials must be of high quality, suited to their purpose and contribute to the overall quality of the community:

- Choose species that are successful in the urban environment, easy to maintain, are non-invasive and suited to Queensborough's high water table. Selected tree species should also have less aggressive rooting habits.

CL.23 Develop and/or enhance areas of understorey vegetation using diverse, multi-storey planting which will support habitat for smaller wildlife, songbirds and important pollinators such as bees, butterflies and dragonflies.

#3 East Queensborough

The East Queensborough multi-family areas, identified as Development Permit Area #3 [see Map B], are designated in order to create a transition between industrial uses and adjacent residential neighbourhoods. This area will contain medium density, multi-family residential uses. This Development Permit Area encourages best practices for promoting water and energy conservation and reducing greenhouse gas Emissions. It also establishes guidelines for the form and character of multi-family residential development.

Properties located within this Development Permit Area that are zoned Light Industrial Districts (M-1) that develop industrial uses in accordance with the zone must instead comply with the guidelines included in the Mixed Employment Development Permit Area.

DESIGN GUIDELINES

CHARACTER

All buildings and developments must be designed to have a high quality, cohesive appearance that enhances the overall quality of the community. Consider the following: **EQ.1**

- Use an architectural approach (i.e. massing, facade treatment, detailing, materials and colour choice) which is harmonious with the riverfront community context.
- Create a cohesive streetscape. Use a similar alignment of windowsills, building and roof lines, cornices, and floor-to-floor spacing along the street block.
- Design all principal and accessory buildings within a development and/or all elements of an individual building, to the same architectural style. Provide enough variety (e.g. through massing, architectural detail) to avoid a monotonous appearance when the development is viewed as a whole and to reinforce individual building identity.
- Coordinate lighting, outdoor furniture and garbage receptacles and design outdoor areas (e.g. walkways, patios) and landscape elements (e.g. retaining walls, fences, screening) to be consistent with the style, materials, colour and quality of the overall development.
- Select project names that evoke Queensborough's riverfront community context and/or the legacy of its historically prominent citizens.

Provide public art to help enrich outdoor spaces and create pedestrian scale landmarks. Use art that highlights Queensborough's sense of place and is unique to each location. **EQ.2**

SITING

EQ.3 Building siting must contribute to a pedestrian scale neighbourhood character. Consider the following:

- Orient residential units to front all streets and/or city trails and greenways immediately adjacent to or within the development, except where the adjacent street is a highway or truck route.
- For all corner lots and/or corner units, locate and design buildings to address all frontages, including public and internal streets, and/or city trails and greenways.
- Use building siting to reinforce a sense of arrival at gateway intersections. Enhance this effect with other special features such as publicly accessible plazas at the corner, special roof shapes, and other architectural features.

EQ.4 Building siting must respect the existing neighbourhood and site context. Consider the following:

- Consider existing buildings and outdoor spaces when siting new buildings, including the location of windows and entrances, overlook of outdoor space, impacts to air circulation and light penetration, etc.
- Site buildings to retain and enhance heritage assets by incorporating them into the development of the site, wherever possible, including buildings, engineering works and/or cultural landscapes, as well as significant landscape features (e.g. mature vegetation and trees, distinctive landforms).
- Design new buildings in proximity to heritage assets to be compatible with their historical context without literally imitating older building styles. In these cases, new buildings should provide an original interpretation of the traditional building style (i.e. draw inspiration from fundamental design characteristics) while continuing to reinforce traditional development patterns and rhythms.
- Minimize the impact of noise and exhaust to pedestrians and neighbours. Locate service areas and mechanical equipment (e.g. utilities, HVAC, meters) at the rear of buildings and away from neighbouring residential uses. Minimize visibility of service areas and mechanical equipment from streets, open spaces and neighbours (e.g. screen, reduce service and garage opening size, use shared service areas).

MASSING

Building massing must contribute to a pedestrian scale neighbourhood character. Consider the following: **EQ.5**

- Use substantial vertical architectural features (e.g. changes in building height, bays, high voids) to break the massing of multiple unit buildings into smaller modules of similar scale.
- Relate the modules to the organization of interior space such that the expression of individual units is reflected in the overall form of the building.
- Use horizontal architectural elements to define floor-to-floor transitions, roofs and cornice lines.
- Design the roof to minimize the overall building mass, incorporating articulation and variations in roof planes (e.g. dormers, gables, crenelated parapets) to break up roof mass and reduce building scale.
- Reinforce the pedestrian scale massing by designing all buildings to have a heavier "base" and lighter "top" that are visibly differentiated by use of material (e.g. masonry on the base and wood siding on the top) and details (e.g. cornice treatments at the top).

Building massing must maximize natural light and ventilation to apartment and condominium units. Consider the following: **EQ.6**

- Mass buildings to promote as many units as possible having exterior walls with windows on two sides.
- Configure internal units using a wide window-wall to shallow room depth ratio that ensures ample daylight penetrates to the rear of the unit.
- Organize the interior space such that, wherever possible, a majority of primary living spaces (e.g. living room, family room, kitchen) have exterior walls with windows on two sides. As a minimum, ensure all primary living spaces and secondary living spaces (e.g. bedroom, den, office) have at least one exterior wall with a window.
- Take microclimate into consideration.

HERITAGE

Each development must follow the Standards and Guidelines for the Conservation of Historic Places in Canada for all physical work to heritage assets. **EQ.7**

Reuse historic industrial and agricultural artefacts on redevelopment sites (e.g. as public art). **EQ.8**

FACADES

EQ.9 The facades of all building walls that face public or internal streets, drive aisles, pedestrian pathways, parks or open space must provide visual interest. Use architectural elements (e.g. fenestration, vertical and/or horizontal design elements, secondary roof elements) and/or material or colour change.

ENTRANCES

EQ.10 Primary pedestrian entrances into buildings must be integrated into the design of the building, yet be clearly expressed. Consider the following:

- Articulate massing to identify building entrances (e.g. tall voids, central mass, recessed entry).
- Frame with a secondary roof element (e.g. porch) to identify building entrances and protect from weather.
- Establish a hierarchy of entrances, giving grouped pedestrian entrances visual priority, individual pedestrian entrances the next highest visual priority, and vehicle entrances the lowest visual priority.

EQ.11 Building entrances must be located and designed to have a strong relationship with the street. Consider the following:

- Entries for residential buildings and ground oriented units, including front porches, should be oriented toward, visible from and directly connected (via a short pathway and/or stairs) to the street (public or internal), city greenway, or semi-private entry courtyard onto which the building fronts. A semi-private entry courtyard should be oriented toward, visible from and directly connected to the public street (via a short pathway and/or stairs).
- Distinguish entrances with an arrival feature (e.g. courtyard, gateway) at the point where the semi-private sidewalk meets the public sidewalk. Incorporate smaller arrival features to visibly differentiate different building entrances within a development. Integrate the design of arrival features with the overall design of the development.

ROOFS

EQ.12 Rooftops must appear clean and attractive and in keeping with the architectural style of the building. Consider the following:

- Locate and screen mechanical and service equipment such that it appears as an integral part of the building when viewed from any angle.
- Finish the surface of roofs with a material that is attractive and easy to maintain to a high level of neatness.
- Design roofs to reduce the urban heat island effect.

WINDOWS

Windows must contribute to an interesting, pedestrian scale environment. Consider the following: **EQ.13**

- Use windows which are of clear glass (e.g. not tinted, reflective or opaque).
- Use windows which are rectangular or square in proportion, except for accent windows which may have a unique shape.
- Locate windows in the garage door of residential parking structures facing onto public or internal streets or walkways, including city trails and greenways.

Use strategies to facilitate passive heating in cooler months and reduce unwanted heat gain in summer months. Consider the following: **EQ.14**

- Ensure a solar heat gain coefficient of 50% or better for south facing windows to maximize solar gain during winter.
- Use exterior shading devices (e.g. awnings, canopies, overhangs, light shelves, louvers) which provide shade from the high summer sun, but provide solar access to the low winter sun. Use these devices particularly on south facing windows.
- Provide operable windows in each residential dwelling and/or unit. Locate operable windows to take advantage of Queensborough's prevailing easterly winds (i.e. winds from the east to the west) to provide cross ventilation.
- Use stack vents and light wells to provide additional light and ventilation to primary and secondary living spaces.
- Take microclimate into consideration when locating and sizing windows.

SIGNS

Signs must be designed to be consistent with the architectural style, scale and materials of the development and/or building and its surrounding context. Consider the following: **EQ.15**

- Integrate signs into the detailing of the building (i.e. not applied as an afterthought) but subordinate to the overall building composition.
- Make signs visible from the street without being visually obtrusive. Design the size, location and information to be oriented to pedestrians.
- Use indirect lighting from fixtures that are integrated into the overall design and character of the development and/or building.

OPEN SPACE

EQ.16 Each development must provide directly accessible private outdoor space for all units. Consider the following:

- Include balconies for above grade units and patios for ground oriented units.
- Design roofs to provide usable outdoor space.
- Where units front onto public or internal streets and/or city trails or greenways, use the private outdoor space to create a transition. Design this area to be spatially well-defined and visible from the street or walkway (e.g. elevate slightly, enclose with low hedges or an open-railing fence).

EQ.17 Each development must provide semi-private outdoor common space for all multi-family developments. Use common space to create a transition from private residential areas to the development entry at public streets. Orient private patios and entries around the semi-private common space to facilitate neighbourly interactions and provide overlook for children as they play.

EQ.18 Common outdoor space must be designed to be of a usable size and configuration. Include a range of activities and generations. Consider the following:

- Hard and soft landscaped areas such as courtyards, patios, lawns and/or naturalized open space.
- Seating options such as benches, moveable chairs and/or tables. Locate seating options suited to different weather conditions such as areas that capture the sun, are shaded (e.g. by building canopies or trees) and/or are sheltered from wind and rain.
- Common gardens where residents can grow flowers and food together. These should be in addition to private garden spaces.
- Natural play elements (e.g. boulders, stepping stones, grassy slopes) in visible locations.

EQ.19 Each development must provide pedestrian circulation that connects between buildings and shared amenities, as well as directly to public streets and greenways, and other destinations such as schools, parks, and commercial areas.

SAFETY

EQ.20 Each development must provide a Crime Prevention Through Environmental Design (CPTED) report outlining the use of CPTED strategies in the design of developments and buildings, including open space.

LIGHTING

All public and semi-private sidewalks and open spaces must be equipped with lighting. Consider the following: **EQ.21**

- Use unobtrusive fixtures which are consistent with the architecture of the building and its surrounding context.
- Use shielded down lighting that provides for security, ambient lighting and enhances architectural and landscape details but minimizes light pollution.
- Minimize energy used in exterior lighting by using energy efficient lighting (e.g. LED, solar-powered) and timer, motion or photo-activated lighting for all exterior areas, including walkways and driveways and for security lighting.

NOISE

Developments and buildings must be designed to minimize impacts from adjacent industrial and transportation activities. Consider the following: **EQ.22**

- Site buildings to minimize light intrusion from trucks, trains and industrial site lighting into residential units, yards and semi-private open spaces.
- Organize internal unit configuration to locate bedrooms and, where possible, other living areas away from industrial and goods transportation activities (i.e. truck routes, industrial site access points, the rail line). Locate all outdoor spaces away from noise sources.
- Employ leading edge technical approaches to noise abatement in residential building construction (e.g. fresh air ventilation alternatives to open windows, acoustically rated glazing) including on balconies (e.g. sound absorption materials and/or barriers)
- Provide landscape buffers within residential development sites. Use layered plantings of trees and shrubs.

Each application to develop residential dwellings adjacent to industrial and transportation activities must provide a report prepared by persons qualified in acoustics and noise measurement, demonstrating compliance with CMHC noise standards for habitable areas (i.e. max. 35 decibels for bedrooms, max. 40 decibels for living dining and recreation rooms, and max. 45 decibels for kitchen, bathrooms, hallways and utility rooms). This report will be registered as a covenant on title. **EQ.23**

MATERIALS & COLOURS

EQ.24 All principal and accessory buildings within a development must use a cohesive palette of materials and colours that is consistently applied and contributes to the overall quality of the community. Consider the following:

- Use a natural palette of wood, stone or brick and muted paint colour tones (e.g. Benjamin Moore's Historical Vancouver True Colours).
- Consistently apply materials to all sides of a building (i.e. do not emphasize the principal facade with lesser treatment on the other facades).
- Change building materials and/or colours at interior or "reverse" corners of a building, not at exterior corners or at changes in a facade plane.
- Use an accent colour which is harmonious with the main colours of the materials and colours palette to unify the overall palette and to highlight architectural details (e.g. eaves, window and door trim, railings).
- Use matte finishes or finishes with a low level of reflectivity. Reflective materials (e.g. mirrored glass, polished stone) should be avoided.

EQ.25 Each development must use building and hardscape materials that are durable and appropriate to their use, the local climate, and the urban environment. Consider the following:

- Use high quality building materials (e.g. wood, stone, brick, or acceptable alternative) rather than materials that are visibly simulated (e.g. vinyl siding) or are inappropriate for an urban area (e.g. untreated or rough-sawn wood).

ACCESSIBILITY

EQ.26 Endeavour to make all pathways and building entrances, public and semi-public spaces, and special features and amenities of a site accessible by people of varying ability. Consider the following:

- Build sidewalks and pathways a minimum 1.8 metres (5.9 feet) wide with non-skid, uniform walking surfaces.
- Locate entrance ramps and lifts in areas that are highly visible, easy to use and connected to the sidewalk.
- Where steps or high thresholds (e.g. related to FCL requirements) create a barrier, provide an alternative route that is easily accessible to everyone.
- Locate site furnishings (e.g. lighting, bollards, signage, guardrails, seating) where they will not impede easy passage for those using a mobility device (e.g. wheelchair, scooter) or people who are visually impaired.
- Locate parking for those with ability challenges close to accessible building entrances.
- Use light fixtures that emit white light (i.e. not orange light) in all outdoor areas. White light facilitates better visibility.

PARKING & ACCESS

All parking associated with a development must be located and designed to reinforce a pedestrian oriented neighbourhood character and scale. Consider the following: **EQ.27**

- Integrate structured parking for low and mid-rise buildings with the building design and have usable building space (e.g. ground oriented units) facing public streets, parks and open spaces.
- Provide additional off-street parking for low and/or mid-rise buildings behind the buildings (i.e. at the rear of the lot), as required.
- Take access to parking, including garages, from a lane wherever possible or from the side or internal street where no lane exists.
- For large parking lots, reduce visual scale and glare of large expanses of pavement by creating smaller parking areas divided by landscaped sections which provide semi-transparent screening.
- Visibly and physically separate pedestrian walkways from surface parking areas for low and mid-rise buildings (e.g. distinguish through grade separation, bollards, trees in tree guards, distinct paving).
- Minimize the number of times driveways and/or internal streets cross sidewalks. Provide lanes, wherever appropriate, to give parking access that minimizes disruption to sidewalks, bike routes and on-street parking.

New development must not result in an increase in the number of rail line crossings which would result in an increase in train whistles. Remove or consolidate existing driveways, wherever possible, to reduce the need for trains to whistle. **EQ.28**

Provide wiring within parking areas for plug-in electric vehicles to meet Electric Vehicle Ready requirements (i.e. Level 1 wiring for low-rise residential buildings, and Level 2 wiring for mid-rise residential buildings). **EQ.29**

TREES & PLANTING

EQ.30 Each development must use the BC Society of Landscape Architects' and BC Landscape and Nursery Association's "BC Landscape Standard Guidelines (Latest Edition)" in specifying, selection, site preparation, installation and maintenance of all trees and other plant materials.

EQ.31 Each development must integrate trees, including shade trees. Consider the following:

- Retain existing mature trees wherever possible. Where tree removal is unavoidable, replace with a number, species and size of trees that creates equal value.
- Plant new trees in all semi-private open spaces, parking areas, private yards, and along internal streets and pathways.
- Locate deciduous trees on the south and west side of buildings to provide shade and minimize unwanted heat gain during summer and provide solar access and passive solar gain during winter.

EQ.32 Tree species and other plant materials must be of high quality, suited to their purpose and contribute to the overall quality of the community. Consider the following:

- Choose species that are successful in the urban environment, easy to maintain, are non-invasive and suited to Queensborough's high water table. Selected tree species should also have less aggressive rooting habits.
- Use broadleaf deciduous tree species, wherever possible, for all shade trees including internal street trees and trees in parking areas. Select species that have a minimum mature height of 15 meters (49 feet).

EQ.33 All trees must be planted so that they will successfully become established and develop a full canopy over time. Consider the following:

- Plant trees on internal streets in a minimum 3 metres (9.8 feet) soil boulevard. Where the boulevard is paved, plant street trees in a continuous trench finished with a tree grate around each tree.
- Space street trees consistently and so that their canopies touch at maturity, generally one tree every 6 to 8 metres (20 to 26 feet), depending on species.
- In parking areas, plant shade trees at an approximate ratio of one tree for every five spaces. Plant trees in a minimum 3 metres (9.8 feet) wide continuous trench and protect trees with bollards or tree guards.

EQ.34 Develop and/or enhance areas of understorey vegetation using diverse, multi-storey planting which will support habitat for smaller wildlife, songbirds and important pollinators such as bees, butterflies and dragonflies.

TRAILS & GREENWAYS

All waterfront properties must provide public access to the river. Consider the following: **EQ.35**

- Provide public features at key points, such as waterfront lookout points, rest spots and entry gateway elements.
- Design all elements of the Perimeter Trail to have a high quality, cohesive appearance that harmonizes with the riverfront community context.
- Use a cohesive palette of durable, high quality materials which are appropriate to the use and the local climate. Maximize the use of environmentally responsible materials.

Each development which is identified on the Parks, Trails and Greenway Streets Map as accommodating a portion of any trail or greenway must provide the trail or greenway route (e.g. dedicate or gift land, provide a right-of-way or easement) and construct the walkway for use by the general public. **EQ.36**

Each development adjacent to any trail, as identified on the Parks, Trails and Greenway Streets Map, must set buildings and other structures well back from the walkway. Ensure the separation between private and public space is visually and physically well-defined (e.g. planting, low fences, hedges). Ensure there are no barriers to public access to the walkway. **EQ.37**

#4 Port Royal

The Port Royal area, identified as Development Permit Area #4 [see Map B], is designated in order to provide a framework for the development of the Port Royal community. This Development Permit Area establishes objectives and guidelines for the form and character of multi-family and intensive residential development.

This area of Queensborough has been developed in conformance with Development Guidelines titled Port Royal Phase II Development Guidelines dated December 2000. As the Port Royal area reaches development capacity, development permits issued in this area shall continue to be in accordance with these design guidelines. Future revisions to the Queensborough Community Plan will re-evaluate the design guidelines for this area to ensure that it continues to evolve in the way best suited to the community.

C. Industrial and Mixed Employment Development Permit Areas

INTENT

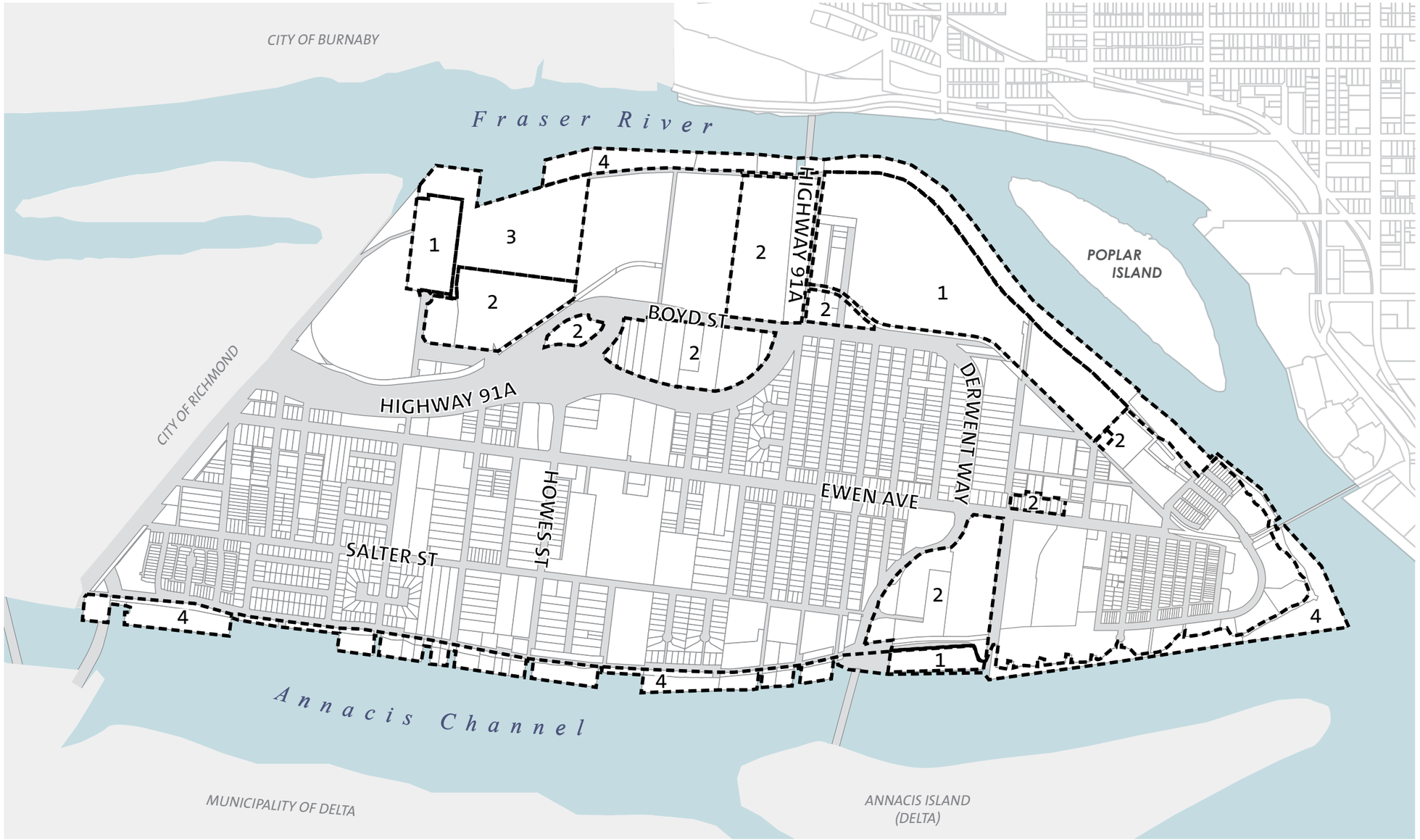
Each Development Permit Area will include employment generating land uses which promote a variety of employment opportunities and contribute to the economic viability of industry in New Westminster. Guidelines in these Development Permit Areas focus on the building and site design of office and industrial land uses, and in limited cases accessory residential uses. Guidelines also focus on the compatibility of permitted uses with adjacent land uses and transportation corridors.

[Discussion of this area is also contained in Chapter 2: Economy and Employment, the Livable City Strategy and the Industrial Strategy.]

Industrial and Mixed Employment Development Permit Areas

1. Queensborough Heavy Industrial
2. Queensborough Light Industrial and Mixed Employment
3. Queensborough Industrial Park
4. Intertidal

Map C
Industrial And Mixed Employment Development Permit Areas



Industrial and Mixed Employment Development Permit Areas

1. Queensborough Heavy Industrial
2. Queensborough Light Industrial and Mixed Employment
3. Queensborough Industrial Park
4. Intertidal

#1 Queensborough Heavy Industrial

The Queensborough Heavy Industrial area, identified as Development Permit Area #1 [see Map C], is designated to provide an opportunity for continued intensive industrial development which, in some cases, could include a waterfront focus. This Development Permit Area encourages best practices for promoting water and energy conservation and reducing greenhouse gas emissions. It also establishes guidelines for the form and character of industrial development.

DESIGN GUIDELINES

SITING

HI.1

The layout of industrial operations, including truck access and egress and open loading areas must be designed to mitigate industrial emissions and noise impacts on adjacent residential land uses. Consider the following:

- Site buildings to facilitate the location of loud industrial activities (e.g. loading and unloading) away from residential areas.
- Ensure outdoor storage containers and/or goods stored in the open are visually unobtrusive.
- Provide landscape buffers at the site edge adjacent to residential land uses. Protect landscape buffers from industrial operations with a fence.

HI.2

Building siting must respect the existing neighbourhood and site context. Consider the following:

- Site buildings to retain and enhance heritage assets by incorporating them into the development of the site, wherever possible, including buildings, engineering works and/or cultural landscapes, as well as significant landscape features (e.g. mature vegetation and trees, distinctive landforms).
- Design new buildings in proximity to heritage assets to be compatible with their historical context without literally imitating older building styles. In these cases, new buildings should provide an original interpretation of the traditional building style (i.e. draw inspiration from fundamental design characteristics) while continuing to reinforce traditional development patterns and rhythms.
- Minimize the impact of noise and exhaust to pedestrians and neighbours. Locate service areas and mechanical equipment (e.g. utilities, HVAC, meters) at the rear of buildings and away from neighbouring residential uses. Minimize visibility of service areas and mechanical equipment from streets, open spaces and neighbours (e.g. screen, reduce service and garage opening size, use shared service areas).

Queensborough Heavy Industrial

CHARACTER

HI.3 All buildings and developments must be designed to have a high quality, cohesive appearance that enhances the overall quality of the community. Consider the following:

- Use an architectural approach (i.e. massing, facade treatment, detailing, materials and colour choice) which is harmonious with the riverfront community context.
- Design all principal and accessory buildings within a development and/or all elements of an individual building, to the same architectural style.

HI.4 Provide public art to help enrich outdoor spaces and create pedestrian scale landmarks. Use art that highlights Queensborough's sense of place and is unique to each location.

FACADES

HI.5 The facades of all building walls that face public or internal streets, drive aisles, pedestrian pathways, parks or open space must provide visual interest. Use architectural elements (e.g. fenestration, vertical and/or horizontal design elements, secondary roof elements) and/or material or colour change.

ENTRANCES

HI.6 Primary pedestrian entrances into buildings must be integrated into the design of the building, yet be clearly expressed. Consider the following:

- Articulate massing to identify building entrances (e.g. tall voids, central mass, recessed entry).
- Frame with a secondary roof element (e.g. porch) to identify building entrances and protect from weather.
- Highlight pedestrian entrances to the buildings more than vehicle entrances.

ROOFS

HI.7 Rooftops must appear clean and attractive and in keeping with the architectural style of the building. Consider the following:

- Locate and screen mechanical and service equipment such that it appears as an integral part of the building when viewed from any angle.
- Finish the surface of roofs with a material that is attractive and easy to maintain to a high level of neatness.
- Design roofs to reduce the urban heat island effect.

WINDOWS

Use strategies to facilitate passive heating in cooler months and reduce unwanted heat gain in summer months. Consider the following: **HI.8**

- Ensure a solar heat gain coefficient of 50% or better for south facing windows to maximize solar gain during winter.
- Use exterior shading devices (e.g. awnings, canopies, overhangs, light shelves, louvers) which provide shade from the high summer sun, but provide solar access to the low winter sun. Use these devices particularly on south facing windows.

HERITAGE

Each development must follow the Standards and Guidelines for the Conservation of Historic Places in Canada for all physical work to heritage assets. **HI.9**

Reuse historic industrial and agricultural artefacts on redevelopment sites (e.g. as public art). **HI.10**

MATERIALS & COLOURS

All principal and accessory buildings within a development must use a cohesive palette of materials and colours that is consistently applied and contributes to the overall quality of the community. Consider the following: **HI.11**

- Use an industrial palette of wood, concrete, metal or brick and muted paint colour tones (e.g. Benjamin Moore's Historical Vancouver True Colours).
- Consistently apply materials to all sides of a building (i.e. do not emphasize the principal facade with lesser treatment on the other facades).
- Change building materials and/or colours at interior or "reverse" corners of a building, not at exterior corners or at changes in a facade plane.
- Use details (e.g. reveals in concrete buildings) and accent colours to highlight architectural elements (e.g. building entry) and provide visual interest. Use an accent colour which is harmonious with the main colours of the materials and colours palette.
- Use matte finishes or finishes with a low level of reflectivity. Reflective materials (e.g. mirrored glass, polished stone) should be avoided.

Each development must use building and hardscape materials that are durable and appropriate to their use, the local climate, and the urban environment. **HI.12**

LIGHTING

HI.13 All public and semi-private walkways, gangways and parking areas must be equipped with lighting. Consider the following:

- Use unobtrusive fixtures which are consistent with the architectural style of the development.
- Use shielded down lighting that provides for security, ambient lighting and enhances architectural and landscape details but minimizes light pollution. Lighting should be shielded so as not to affect navigation.
- Minimize energy used in exterior lighting by using energy efficient lighting (e.g. LED, solar-powered) and timer, motion or photo-activated lighting for all exterior areas, including walkways and driveways and for security lighting.

OPEN SPACE

HI.14 Each development must provide outdoor space for use by employees. Design to be of a usable size and configuration. Consider the following:

- Hard and soft landscaped areas such as courtyards, patios, lawns and/or naturalized open space.
- Seating options such as benches, moveable chairs and/or tables. Provide seating options suited to different weather conditions such as areas that capture the sun, are shaded (e.g. by building canopies or trees) and/or are sheltered from wind and rain.

HI.15 Each development must provide pedestrian circulation that connects between work areas and employee open space.

TRAILS & GREENWAYS

HI.16 All waterfront properties must provide public access to the river. Consider the following:

- Provide public features at key points, such as waterfront lookout points, rest spots and entry gateway elements.
- Design all elements of the Perimeter Trail to have a high quality, cohesive appearance that harmonizes with the riverfront community context.
- Use a cohesive palette of durable, high quality materials which are appropriate to the use and the local climate. Maximize the use of environmentally responsible materials.

HI.17 Each development adjacent to any trail or greenway, as identified on the Parks, Trails and Greenway Streets Map, must set buildings and other structures well back from the walkway. Ensure the separation between private and public space is visually and physically well-defined (e.g. planting, low fences, hedges). Ensure there are no barriers to public access to the walkway.

TREES & PLANTING

Each development must use the BC Society of Landscape Architects' and BC Landscape and Nursery Association's "BC Landscape Standard Guidelines (Latest Edition)" in specifying, selection, site preparation, installation and maintenance of all trees and other plant materials. **HI.18**

Each development must integrate trees, including shade trees. Consider the following: **HI.19**

- Retain existing mature trees wherever possible. Where tree removal is unavoidable, replace with a number, species and size of trees that creates equal value.
- Plant new trees in all employee parking and open space areas.
- Locate deciduous trees on the south and west side of buildings to provide shade and minimize unwanted heat gain during summer and provide solar access and passive solar gain during winter.

Tree species and other plant materials must be of high quality, suited to their purpose and contribute to the overall quality of the community. Consider the following: **HI.20**

- Choose species that are successful in the urban environment, easy to maintain, are non-invasive and suited to Queensborough's high water table. Selected tree species should also have less aggressive rooting habits.
- Use broadleaf deciduous tree species, wherever possible, for all shade trees including trees in parking areas. Select species that have a minimum mature height of 15 meters (49 feet).

Plant all trees so that they will successfully become established and develop a full canopy over time. Consider the following: **HI.21**

- In parking areas, plant shade trees at an approximate ratio of one tree for every five spaces. Plant trees in a minimum 3 metres (9.8 feet) wide continuous trench and protect trees with bollards or tree guards.

Develop and/or enhance areas of understorey vegetation using diverse, multi-storey planting which will support habitat for smaller wildlife, songbirds and important pollinators such as bees, butterflies and dragonflies. **HI.22**

SAFETY

Each development must provide a Crime Prevention Through Environmental Design (CPTED) report outlining the use of CPTED strategies in the design of developments and buildings, including open space. **HI.23**

Queensborough Heavy Industrial

ACCESSIBILITY

HI.24 Endeavour to make all walkways, building entrances and amenities of a site accessible by people of varying ability. Consider the following:

- Build sidewalks and walkways a minimum 1.8 metres (5.9 feet) wide with non-skid, uniform walking surfaces.
- Locate site furnishings (e.g. lighting, bollards, signage, guardrails, seating) where they will not impede easy passage for those using a mobility device (e.g. wheelchair, scooter) or people who are visually impaired.
- Locate parking for those with ability challenges close to building entrances.
- Use light fixtures that emit white light (i.e. not orange light) in all outdoor areas. White light facilitates better visibility.

PARKING & ACCESS

HI.25 All parking associated with a development must be located and designed to reinforce a pedestrian oriented neighbourhood character and scale. Consider the following:

- Visibly and physically separate pedestrian walkways between work areas and employee parking areas (e.g. distinguish through grade separation, bollards, trees in tree guards, distinct paving).
- Minimize the number of times driveways and/or internal streets cross sidewalks.

HI.26 New development must not result in an increase in the number of rail line crossings which would result in an increase in train whistles. Remove or consolidate existing driveways, wherever possible, to reduce the need for trains to whistle.

HI.27 Provide wiring within parking areas for plug-in electric vehicles to meet Electric Vehicle Ready requirements (i.e. Level 1 wiring for low-rise residential buildings, and Level 2 wiring for mid-rise residential buildings).

SIGNS

HI.28 Signs must be designed to be consistent with the architectural style, scale and materials of the development and/or building and its surrounding context. Consider the following:

- Integrate signs into the detailing of the building (i.e. not applied as an afterthought) but subordinate to the overall building composition.
- Make signs visible from the street without being visually obtrusive. Design the size, location and information to be oriented to pedestrians.
- Use indirect lighting from fixtures that are integrated into the overall design and character of the development and/or building.

#2 Queensborough Light Industrial and Mixed Employment

The Queensborough Light Industrial and Mixed Employment industrial areas, identified as Development Permit Area #2 [see Map C], are designated in order to provide areas of light and "ultralight" industrial and commercial land use as a transition between heavier industrial areas and residential areas. Mixed Employment areas will include light industrial, office and other related employment uses. The only residential development permitted is that which is ancillary to businesses (i.e. caretaker suites) on these properties. Retail is not permitted unless it is ancillary to another permitted use. Light Industrial areas will include light industrial uses. This Development Permit Area encourages best practices for promoting water and energy conservation and reducing greenhouse gas emissions. It also establishes guidelines for the form and character of industrial and commercial development.

DESIGN GUIDELINES

ARRIVAL POINTS

LI.1

Howes Street between Highway 91A and Westminster Highway/Boyd Street is the main arrival point to the business area of Queensborough. Properties within this development permit area that have at least one property line along Howes Street must comply with the guidelines in this section, in addition to complying with the other guideline sections of this Development Permit Area.

Building siting and massing must help to create a sense of arrival and a more pedestrian scale environment on Howes Street. Buildings must give the impression of "fronting" onto Howes Street although vehicle and pedestrian access may actually be taken from an alternative street. Consider the following:

- Locate buildings toward the Howes Street property line with off-street surface parking behind the buildings (i.e. on the side of the building facing away from Howes Street).
- Locate and design buildings to address both frontages at the corner of the intersection of Howes Street and Westminster Highway/Boyd Street.
- Use a building-height to right-of-way width proportion that reinforces a pedestrian scale streetscape.
- Create a cohesive streetscape by using a similar alignment of windowsills, building and roof lines, cornices, floor-to-floor spacing along the street block.

ARRIVAL POINTS CONTINUED

LI.2 Design facades and windows to contribute to an interesting, pedestrian friendly environment. Street level windows that provide visual penetration into the building must be integrated into facades fronting onto Howes Street. Consider the following:

- Use architectural elements (e.g. fenestration, vertical and/or horizontal design elements, secondary roof elements) and/or material or colour change to enliven the façade.
- Ensure blank walls do not occupy over 50% of the frontage onto Howes Street, and a section of blank wall does not exceed six linear metres (20 linear feet) without being interrupted by a window or entry (if applicable).
- Design windows to encompass a minimum of 40% and a maximum of 80% of the building front linear frontage.
- Use windows which are of clear glass (e.g. not tinted, reflective or opaque).
- Use windows which are rectangular or square in proportion, except for accent windows which may have a unique shape.
- Locate showrooms or other active uses (e.g. manufacturing activities) where they will provide visual interest for passing pedestrians.

LI.3 Buildings must have a "signature" character. Consider integrating feature architectural elements or other signature elements.

LI.4 Each development must provide within their property along Howes Street a publicly accessible sidewalk or multiuse pathway separated from the street by a landscaped boulevard with street trees.

CHARACTER

LI.5 All buildings and developments must be designed to have a high quality, cohesive appearance that enhances the overall character of Queensborough. Consider the following:

- Use an architectural approach (i.e. massing, facade treatment, detailing, materials and colour choice) which is harmonious with the riverfront community context.
- Design all principal and accessory buildings within a development and/or all elements of an individual building, to the same architectural style.

LI.6 Provide public art to help enrich outdoor spaces and create pedestrian scale landmarks. Use art that highlights Queensborough's sense of place and is unique to each location.

SITING

The layout of industrial operations, including truck access and egress and open loading areas must be designed to mitigate industrial emissions and noise impacts on adjacent residential land uses. Consider the following: **LI.7**

- Site buildings to facilitate the location of loud industrial activities (e.g. loading and unloading) away from residential areas.
- Ensure outdoor storage containers and/or goods stored in the open are visually unobtrusive.
- Provide landscape buffers at the site edge adjacent to residential land uses. Protect landscape buffers from industrial operations with a fence.

Building siting must respect the existing neighbourhood and site context. Consider the following: **LI.8**

- Site buildings to retain and enhance heritage assets by incorporating them into the development of the site, wherever possible, including buildings, engineering works and/or cultural landscapes, as well as significant landscape features (e.g. mature vegetation and trees, distinctive landforms).
- Design new buildings in proximity to heritage assets to be compatible with their historical context without literally imitating older building styles. In these cases, new buildings should provide an original interpretation of the traditional building style (i.e. draw inspiration from fundamental design characteristics) while continuing to reinforce traditional development patterns and rhythms.
- Minimize the impact of noise and exhaust to pedestrians and neighbours. Locate service areas and mechanical equipment (e.g. utilities, HVAC, meters) at the rear of buildings and away from neighbouring residential uses. Minimize visibility of service areas and mechanical equipment from streets, open spaces and neighbours (e.g. screen, reduce service and garage opening size, use shared service areas).

HERITAGE

Each development must follow the Standards and Guidelines for the Conservation of Historic Places in Canada for all physical work to heritage assets. **LI.9**

Reuse historic industrial and agricultural artefacts on redevelopment sites (e.g. as public art). **LI.10**

FACADES

LI.11 The facades of all building walls that face public or internal streets, drive aisles, pedestrian pathways, parks or open space must provide visual interest. Use architectural elements (e.g. fenestration, vertical and/or horizontal design elements, secondary roof elements) and/or material or colour change.

ENTRANCES

LI.12 Primary pedestrian entrances into buildings must be integrated into the design of the building, yet be clearly expressed. Consider the following:

- Articulate massing to identify building entrances (e.g. tall voids, central mass, recessed entry).
- Frame with a secondary roof element (e.g. porch) to identify building entrances and protect from weather.

WINDOWS

LI.13 Use strategies to facilitate passive heating in cooler months and reduce unwanted heat gain in summer months. Consider the following:

- Ensure a solar heat gain coefficient of 50% or better for south facing windows to maximize solar gain during winter.
- Use exterior shading devices (e.g. awnings, canopies, overhangs, light shelves, louvers) which provide shade from the high summer sun, but provide solar access to the low winter sun. Use these devices particularly on south facing windows.

ROOFS

LI.14 Rooftops must appear clean and attractive and in keeping with the architectural style of the building. Consider the following:

- Locate and screen mechanical and service equipment such that it appears as an integral part of the building when viewed from any angle.
- Finish the surface of roofs with a material that is attractive and easy to maintain to a high level of neatness.
- Design roofs to reduce the urban heat island effect.

MATERIALS & COLOURS

All principal and accessory buildings within a development must use a cohesive palette of materials and colours that is consistently applied and contributes to the overall quality of the community. Consider the following: **LI.15**

- Use an industrial palette of wood, concrete, metal or brick and muted paint colour tones (e.g. Benjamin Moore's Historical Vancouver True Colours).
- Consistently apply materials to all sides of a building (i.e. do not emphasize the principal facade with lesser treatment on the other facades).
- Change building materials and/or colours at interior or "reverse" corners of a building, not at exterior corners or at changes in a facade plane.
- Use details (e.g. reveals in concrete buildings) and accent colours to highlight architectural elements (e.g. building entry) and provide visual interest. Use an accent colour which is harmonious with the main colours of the materials and colours palette.
- Use matte finishes or finishes with a low level of reflectivity. Reflective materials (e.g. mirrored glass, polished stone) should be avoided.

Each development must use building and hardscape materials that are durable and appropriate to their use, the local climate, and the urban environment. **LI.16**

OPEN SPACE

Each development must provide outdoor space for use by employees. Design to be of a usable size and configuration. Consider the following: **LI.17**

- Hard and soft landscaped areas such as courtyards, patios, lawns and/or naturalized open space.
- Seating options such as benches, moveable chairs and/or tables. Provide seating options suited to different weather conditions such as areas that capture the sun, are shaded (e.g. by building canopies or trees) and/or are sheltered from wind and rain. **LI.18**

Each development must provide pedestrian circulation that connects between work areas and employee open space. **LI.19**

TREES & PLANTING

LI.20 Each development must use the BC Society of Landscape Architects' and BC Landscape and Nursery Association's "BC Landscape Standard Guidelines (Latest Edition)" in specifying, selection, site preparation, installation and maintenance of all trees and other plant materials.

LI.21 Each development must integrate trees, including shade trees Consider the following:

- Retain existing mature trees wherever possible. Where tree removal is unavoidable, replace with a number, species and size of trees that creates equal value.
- Plant new trees in all employee parking and open space areas.
- Locate deciduous trees on the south and west side of buildings to provide shade and minimize unwanted heat gain during summer and provide solar access and passive solar gain during winter.

LI.22 Tree species and other plant materials must be of high quality, suited to their purpose and contribute to the overall quality of the community. Consider the following:

- Choose species that are successful in the urban environment, easy to maintain, are non-invasive and suited to Queensborough's high water table. Selected tree species should also have less aggressive rooting habits.
- Use broadleaf deciduous tree species, wherever possible, for all shade trees including trees in parking areas. Select species that have a minimum mature height of 15 meters (49 feet).

LI.23 Plant all trees so that they will successfully become established and develop a full canopy over time. Consider the following:

- In parking areas, plant shade trees at an approximate ratio of one tree for every five spaces. Plant trees in a minimum 3 metres (9.8 feet) wide continuous trench and protect trees with bollards or tree guards.

LI.24 Develop and/or enhance areas of understorey vegetation using diverse, multi-storey planting which will support habitat for smaller wildlife, songbirds and important pollinators such as bees, butterflies and dragonflies.

SAFETY

LI.25 Each development must provide a Crime Prevention Through Environmental Design (CPTED) report outlining the use of CPTED strategies in the design of developments and buildings, including open space.

TRAILS & GREENWAYS

All waterfront properties must provide public access to the river. Consider the following: **LI.26**

- Provide public features at key points, such as waterfront lookout points, rest spots and entry gateway elements.
- Design all elements of the Perimeter Trail to have a high quality, cohesive appearance that harmonizes with the riverfront community context.
- Use a cohesive palette of durable, high quality materials which are appropriate to the use and the local climate. Maximize the use of environmentally responsible materials.

Each development adjacent to any trail or greenway, as identified on the Parks, Trails and Greenway Streets Map, must set buildings and other structures well back from the walkway. Ensure the separation between private and public space is visually and physically well-defined (e.g. planting, low fences, hedges). Ensure there are no barriers to public access to the walkway. **LI.27**

LIGHTING

All public and semi-private walkways, gangways and parking areas must be equipped with lighting. Consider the following: **LI.28**

- Use unobtrusive fixtures which are consistent with the architectural style of the development.
- Use shielded down lighting that provides for security, ambient lighting and enhances architectural and landscape details but minimizes light pollution. Lighting should be shielded so as not to affect navigation.
- Minimize energy used in exterior lighting by using energy efficient lighting (e.g. LED, solar-powered) and timer, motion or photo-activated lighting for all exterior areas, including walkways and driveways and for security lighting.

SIGNS

Signs must be designed to be consistent with the architectural style, scale and materials of the development and/or building and its surrounding context. Consider the following: **LI.29**

- Integrate signs into the detailing of the building (i.e. not applied as an afterthought) but subordinate to the overall building composition.
- Make signs visible from the street without being visually obtrusive. Design the size, location and information to be oriented to pedestrians.
- Use indirect lighting from fixtures that are integrated into the overall design and character of the development and/or building.

ACCESSIBILITY

LI.30 Endeavour to make all walkways, building entrances and amenities of a site accessible by people of varying ability. Consider the following:

- Build sidewalks and walkways a minimum 1.8 metres (5.9 feet) wide with non-skid, uniform walking surfaces.
- Locate site furnishings (e.g. lighting, bollards, signage, guardrails, seating) where they will not impede easy passage for those using a mobility device (e.g. wheelchair, scooter) or people who are visually impaired.
- Locate parking for those with ability challenges close to building entrances.
- Use light fixtures that emit white light (i.e. not orange light) in all outdoor areas. White light facilitates better visibility.

PARKING & ACCESS

LI.31 All parking associated with a development must be located and designed to reinforce a pedestrian oriented neighbourhood character and scale. Consider the following:

- Visibly and physically separate pedestrian walkways between work areas and employee parking areas (e.g. distinguish through grade separation, bollards, trees in tree guards, distinct paving).
- Minimize the number of times driveways and/or internal streets cross sidewalks.

LI.32 New development must not result in an increase in the number of rail line crossings which would result in an increase in train whistles. Remove or consolidate existing driveways, wherever possible, to reduce the need for trains to whistle.

LI.33 Provide wiring within parking areas for plug-in electric vehicles to meet Electric Vehicle Ready requirements (i.e. Level 1 wiring for low-rise residential buildings, and Level 2 wiring for mid-rise residential buildings).

#3 Queensborough Industrial Park

The Queensborough Industrial Park area identified as Development Permit Area #3 [see Map C], is designated in order to provide a framework for an industrial park and to provide an opportunity for continued intensive industrial development. This Development Permit Area encourages best practices for promoting water and energy conservation and reducing greenhouse gas emissions. It also establishes guidelines for the form and character of industrial and commercial development.

Development Permits issued in the area shall be in accordance with the guidelines indicated in the Queensborough Industrial Park Design Guidelines attached in Appendix No. 3.

#4 Intertidal

The Intertidal area, identified as Development Permit Area #4 [see Map C], is designated in order to provide a framework for waterfront development associated with the working river and to provide an opportunity for continued commercial and industrial development. This Development Permit Area encourages best practices for protection of the natural environment, its ecosystems and biological diversity. It also establishes guidelines for the form and character of industrial, commercial and intensive residential (e.g. float home) development in this area.

DESIGN GUIDELINES

ENVIRONMENT

IN.1 Wherever possible, increase the shoreline habitat value and connectivity (i.e. improve from green to yellow FREMP coded classification, and improve from yellow to red FREMP coded classification).

IN.2 Obtain the necessary approvals and comply with the requirements of relevant environmental approval agencies such as Environment Canada, Fisheries and Oceans Canada, BC Ministry of Environment or Port Metro Vancouver.

SITING

IN.3 Building siting must respect the existing neighbourhood and site context. Consider the following:

- Consider existing buildings and outdoor spaces when siting new buildings, including the location of windows and entrances, overlook of outdoor space, impacts to air circulation and light penetration, etc.
- Site buildings to retain and enhance heritage assets by incorporating them into the development of the site, wherever possible, including buildings, engineering works and/or cultural landscapes, as well as significant landscape features (e.g. mature vegetation and trees, distinctive landforms).

MATERIALS & COLOURS

IN.4 Each development must use building and hardscape materials that are durable and appropriate to their use, the local climate, and the urban environment. Consider the following:

- Use a marine palette of high quality building materials such as wood and metal, and marina colour tones (e.g. red, blue).
- Use matte finishes or finishes with a low level of reflectivity. Reflective materials (e.g. mirrored glass, polished stone) should be avoided.

CHARACTER

All developments must be designed to have a high quality, cohesive appearance that enhances the overall quality of the community. Consider the following: **IN.5**

- Coordinate lighting, outdoor furniture and garbage receptacles and design outdoor areas (e.g. walkways, gangways) and landscape elements (e.g. retaining walls, fences, screening) to be consistent with the style, materials, colour and quality of the overall marina development.
- Select project names that evoke Queensborough's riverfront community context and/or the legacy of its historically prominent citizens.

Provide public art to help enrich outdoor spaces and create pedestrian scale landmarks. Use art that highlights Queensborough's sense of place and is unique to each location. **IN.6**

HERITAGE

Each development must follow the Standards and Guidelines for the Conservation of Historic Places in Canada for all physical work to heritage assets. **IN.7**

Reuse historic industrial and agricultural artefacts on redevelopment sites (e.g. as public art). **IN.8**

ENTRANCES

Development entrances must be located and designed to have a strong relationship with the street. Consider the following: **IN.9**

- Clearly express primary pedestrian entrances.
- Make entries visible from, oriented toward and directly connected (via a short pathway and/or stairs) to the street.
- Distinguish entrances with an arrival feature (e.g. gateway) at the point where the semi-private sidewalk meets the public sidewalk.

SIGNS

Signs must be designed to be consistent with the architectural style, scale and materials of the development and/or building and its surrounding context. Consider the following: **IN.10**

- Integrate signs into the detailing of the building (i.e. not applied as an afterthought) but subordinate to the overall building composition.
- Make signs visible from the street without being visually obtrusive. Design the size, location and information to be oriented to pedestrians.
- Use indirect lighting from fixtures that are integrated into the overall design and character of the development and/or building.

LIGHTING

IN.11 All walkways, gangways and parking areas must be equipped with lighting. Consider the following:

- Use unobtrusive fixtures which are consistent with the architectural style of the marina.
- Use shielded down lighting that provides for security, ambient lighting and enhances architectural and landscape details but minimizes light pollution. Lighting should be shielded so as not to affect navigation.
- Minimize energy used in exterior lighting by using energy efficient lighting (e.g. LED, solar-powered) and timer, motion or photo-activated lighting for all exterior areas, including walkways and driveways and for security lighting.

TRAILS & GREENWAYS

IN.12 All waterfront properties must provide the Perimeter Trail. Consider the following:

- Provide public features at key points, such as waterfront lookout points, rest spots and entry gateway elements.
- Design all elements of the Perimeter Trail to have a high quality, cohesive appearance that harmonizes with the riverfront community context.
- Use a cohesive palette of durable, high quality materials which are appropriate to the use and the local climate. Maximize the use of environmentally responsible materials.

PARKING & ACCESS

IN.13 All parking associated with a development must be located and designed to reinforce a pedestrian oriented neighbourhood character and scale. Consider the following:

- For parking lots, reduce visual scale and glare of large expanses of pavement by creating smaller parking areas divided by landscaped sections which provide semi-transparent screening.
- Visibly and physically separate pedestrian walkways from surface parking areas (e.g. distinguish through grade separation, bollards, trees in tree guards, distinct paving).
- Minimize the number of times driveways and/or internal streets cross sidewalks.

IN.14 Entrances must be designed to ensure access to the dyke for maintenance.

TREES & PLANTING

Each development must use the BC Society of Landscape Architects' and BC Landscape and Nursery Association's "BC Landscape Standard Guidelines (Latest Edition)" in specifying, selection, site preparation, installation and maintenance of all trees and other plant materials. **IN.15**

Each development must integrate trees, including shade trees. Consider the following: **IN.16**

- Retain existing mature trees wherever possible. Where tree removal is unavoidable, replace with a number, species and size of trees that creates equal value.
- Plant new trees in all parking areas and along pathways, except where they will interfere with the function of the dyke.

Tree species and other plant materials must be of high quality, suited to their purpose and contribute to the overall quality of the community. Consider the following: **IN.17**

- Choose species that are successful in the urban environment, easy to maintain, are non-invasive and suited to Queensborough's high water table. Selected tree species should also have less aggressive rooting habits.
- Use broadleaf deciduous tree species, wherever possible, for all shade trees including trees in parking areas. Select species that have a minimum mature height of 15 metres (49 feet).

Plant all trees so that they will successfully become established and develop a full canopy over time. Consider the following: **IN.18**

- In parking areas, plant shade trees at an approximate ratio of one tree for every five spaces. Plant trees in a minimum 3 metres (9.8 feet) continuous trench and protect trees with bollards or tree guards.

Develop and/or enhance areas of understorey and/or foreshore vegetation using diverse, multi-storey planting which will support habitat for smaller wildlife, songbirds and important pollinators such as bees, butterflies and dragonflies. **IN.19**

SAFETY

Each development must provide a Crime Prevention Through Environmental Design (CPTED) report outlining the use of CPTED strategies in the design of developments and buildings, including open space. **IN.20**

D. Natural Features Development Permit Areas

INTENT

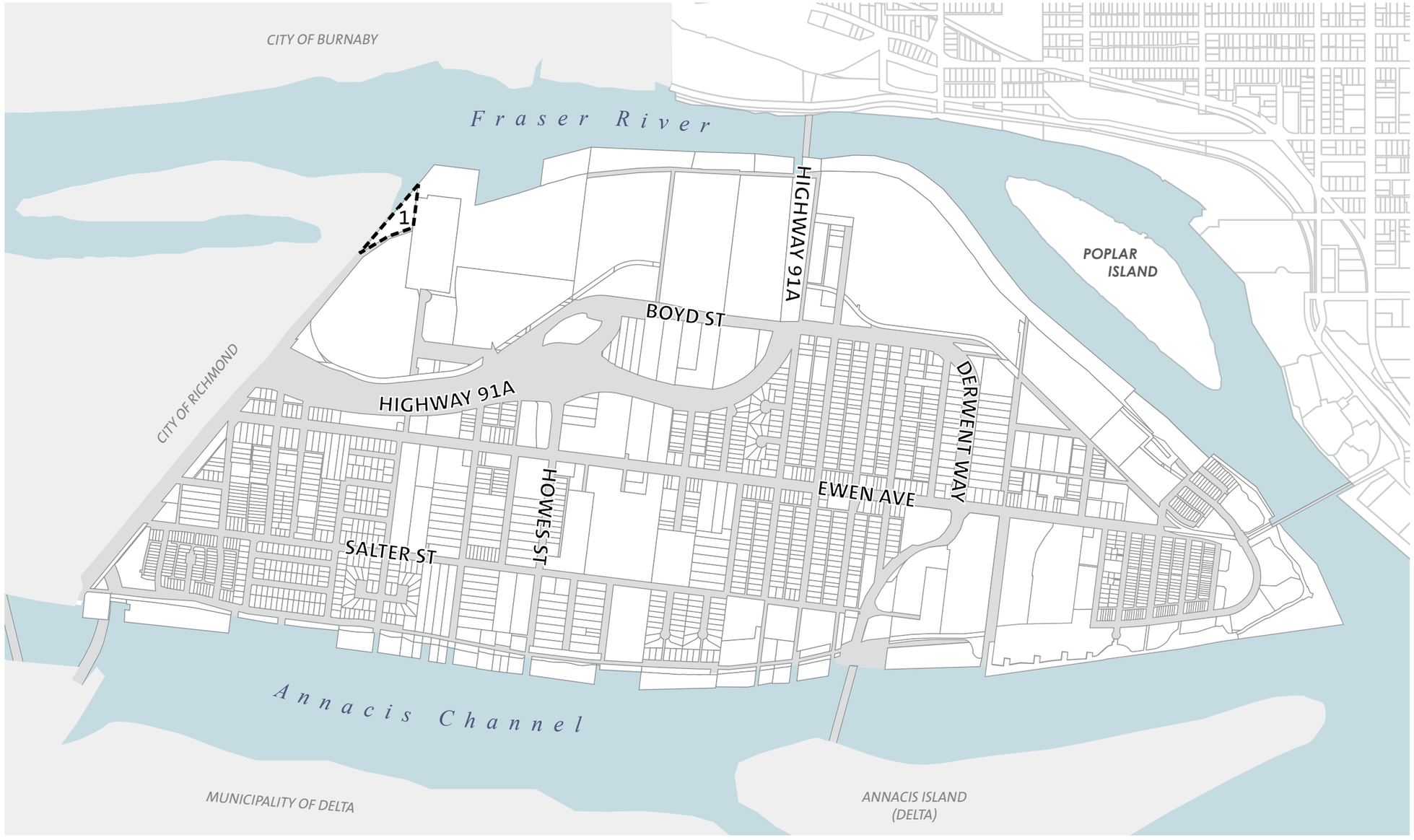
There is one Development Permit Area in this section that encompasses the North Arm – Bay Area. The Development Permit Area encompasses sensitive environmental habitat that should be protected and enhanced and establishes guidelines for the restoration, maintenance, and protection of the natural environment, ecosystems and biological diversity.

[Discussion of this area is also contained in Chapter 4: Environment and Natural Features and the Ecological Inventory of Queensborough.]

Natural Features Development Permit Areas

1. North Arm - Bay Area

Map D
Natural Features Development Permit Areas



Natural Features Development Permit Areas

1. North Arm - Bay Area

#1 North Arm - Bay Area

The North Arm – Bay area, identified as Development Permit Area #1 [see Map D], is designated in order to preserve its scenic value when viewed from the rest of the City and the Queensborough Perimeter Trail, and for its valuable aquatic and wildlife habitat. This area is designated to preserve the natural environment while allowing a trail and a lookout feature for public use.

Development permits issued in this area shall be in accordance with the guidelines indicated in the Development Guidelines prepared for Star of Fortune Gaming Management (B.C.) Corp., Inc. No.537205 by Stantec Architecture dated March 9, 2004 and the following guideline.

DESIGN GUIDELINES

ENVIRONMENT

All plans in this area shall be reviewed by Fisheries and Oceans Canada. **BA.1**

E. Natural Hazard Development Permit Areas

INTENT

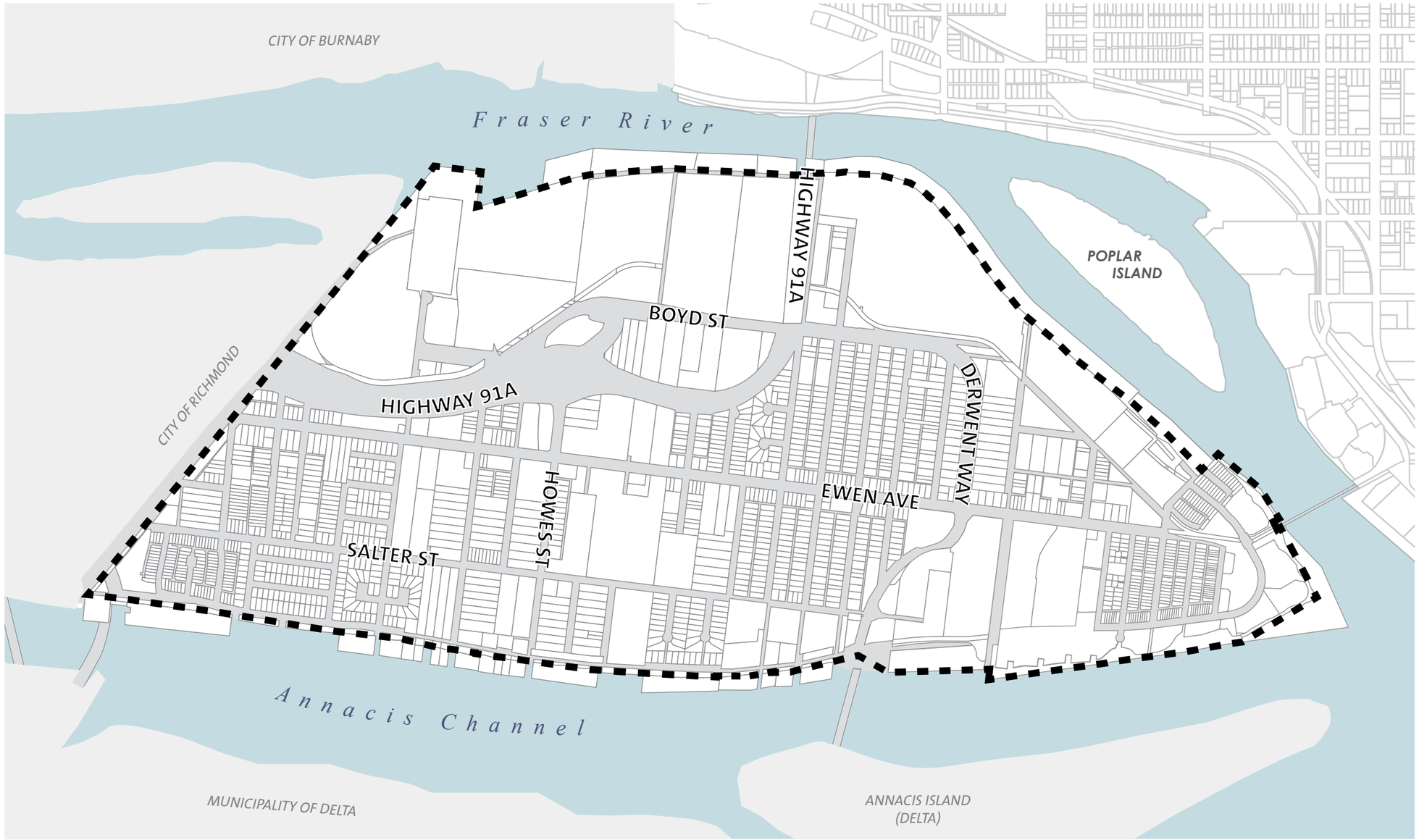
Guidelines for this development permit area are intended to minimize the potential for loss of life and property damage in the event of flooding of the Fraser River, while allowing for the continued use of industrial lands to provide employment and the continued renewal and development of an historic New Westminster neighbourhood.

[Discussion of this area is also contained in Chapter 5: Flood Management.]

Natural Hazard Development Permit Areas

1. Flood Hazard

Map E
Natural Hazard Development Permit Areas

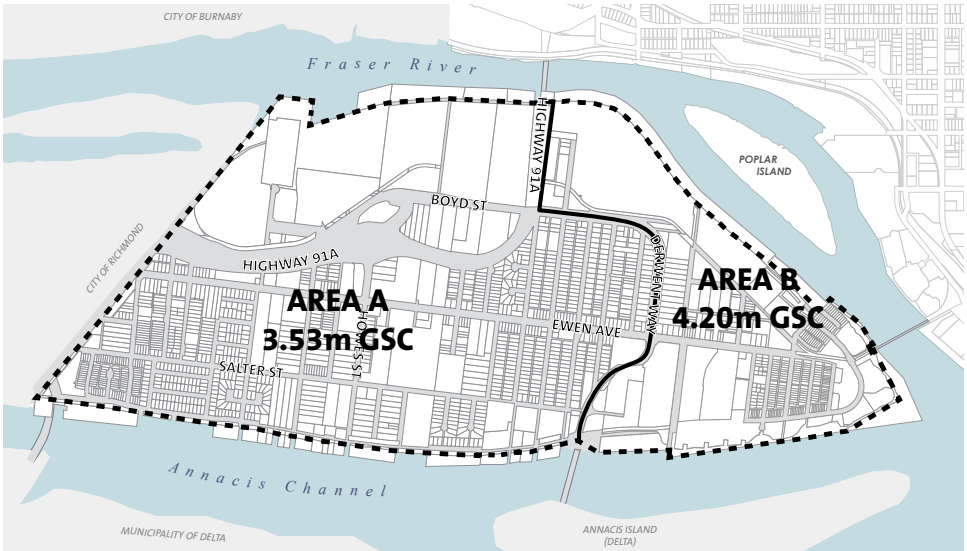


Natural Hazard Development Permit Area

1. Flood Hazard

#1 Flood Hazard

The Flood Hazard Development Permit Area is identified as Development Permit Area #1 [see Map E]. Queensborough is located at the upstream end of Lulu Island in the floodplain of the Fraser River. Development in this area of the City is protected by perimeter dykes maintained by the City, which are continuous with dykes in the City of Richmond farther downstream. However, new buildings and structures in Queensborough should be constructed at an elevation that is sufficient to minimize the potential for loss of life and property damage in the event of dyke failure, or an extreme flood event that tops the perimeter dykes. The minimum construction levels, which are based on current knowledge of flood patterns, are 3.53 metres above Geodetic Survey of Canada (GSC) datum for Area A shown on the following map (flood construction level A), generally downstream from Derwent Way on the south side of Queensborough and Wood Street on the north side, and 4.20 metres above GSC datum (flood construction level B) for Area B upstream of Derwent Way and Wood Street. Placement of imported fill to achieve these construction levels could produce local settlement problems and undesirable diversion of flood water, so a combination of fill and structural support may be required.



Map 12. Flood Construction Levels

EXEMPTIONS

The following are exempted from the requirement for a development permit:

- Subdivision of land (buildings constructed on subdivided lots must still comply when applicable).
- Alteration of land not involving the construction or alteration of a building or structure.
- Buildings and structures on land in an agricultural zoning district, other than residential buildings.
- Buildings and structures for park and open space recreational uses.
- Construction and alteration of buildings authorized by a heritage alteration permit, including building additions.
- Detached accessory buildings and structures such as garages, tool sheds and greenhouses that are not used for human habitation.
- Residential building additions that would increase the habitable floor area of the building by less than 25% of the floor area that existed on [insert date of first reading of OCP], unless the building has been increased in floor area since that date without a development permit and the aggregate additional floor area exceeds 25% of the floor area that existed on that date.
- Building alterations that do not increase the floor area of the building.

In addition, buildings and structures for industrial uses on parcels that are not adjacent to a dyke are exempt from the requirement for a development permit. However, owners are encouraged to construct industrial buildings used for business or the storage of goods and located in Area A at or above flood construction level A, and industrial buildings used for such purposes and located in Area B at or above flood construction level B.

DESIGN GUIDELINES

FLOOD CONSTRUCTION LEVEL

Buildings and structures for residential and institutional uses in Area A should be constructed so that the lower surface of the floor system of the lowest storey containing habitable space is at or above flood construction level A. **FH.1**

Buildings and structures for residential and institutional uses in Area B should be constructed so that the lower surface of the floor system of the lowest storey containing habitable space is at or above flood construction level B. **FH.2**

Buildings and structures for industrial uses on parcels adjacent to dykes in Area A should be constructed so that the lower surface of the floor system of the lowest storey used for business or the storage of goods that could be damaged by flood is at or above flood construction level A. **FH.3**

Buildings and structures for industrial uses on parcels adjacent to dykes in Area B should be constructed so that the lower surface of the floor system of the lowest storey used for business or the storage of goods that could be damaged by flood is at or above flood construction level B. **FH.4**

If natural grade of a residential parcel is below the desired flood construction level, imported fill should not be used to raise the grade above 1.5 metres above GSC datum or 150 millimeters above the centre of the road abutting the property, whichever is higher. **FH.5**

In the case of floors comprised of concrete slabs, the upper surface of the concrete slab should be at or above the applicable flood construction level. **FH.6**

NON-HABITABLE SPACE

FH.7 The following building areas are not considered habitable space for the purpose of these Guidelines:

- Underground parking garages, provided that signs are posted and maintained at points of entry indicating that the parking area is subject to flooding of the Fraser River.
- Attached and enclosed garage not exceeding 42 square metres (452.08 square feet) in floor area per dwelling unit. For the purpose of this calculation a secondary suite is not considered a unit.
- Manoeuvring aisles used to access compliant off-street parking spaces.
- Attached carports.
- Enclosed entrance foyers up to 11 square metres (118.40 square feet) in floor area per dwelling unit in the building.
- Elevator shafts, provided that operation of the elevators below the applicable flood construction level is not possible during flood events.
- Enclosed building areas with floor to ceiling heights of less than 1.52 metres (5 feet) measured to the underside of the floor system above.
- Porches.
- Undercrofts enclosed only by wood lattice or similar screening.

NON-HABITABLE SPACE CONTINUED

No area below the required elevation shall be used for the installation of fixed equipment susceptible to damage by floodwaters, with the exception of furnaces and hot water heaters. **FH.8**

Garbage and recycling carts may be permitted in the non-habitable space below the required elevation. **FH.9**

Bicycle parking may be permitted in the non-habitable space below the required elevation. **FH.10**

Site alteration and building construction should be planned and executed so as to minimize abrupt transitions from the elevations of adjacent sites and buildings and the diversion of flood waters to adjacent sites. **FH.11**

F. Comprehensive Development Development Permit Areas

INTENT

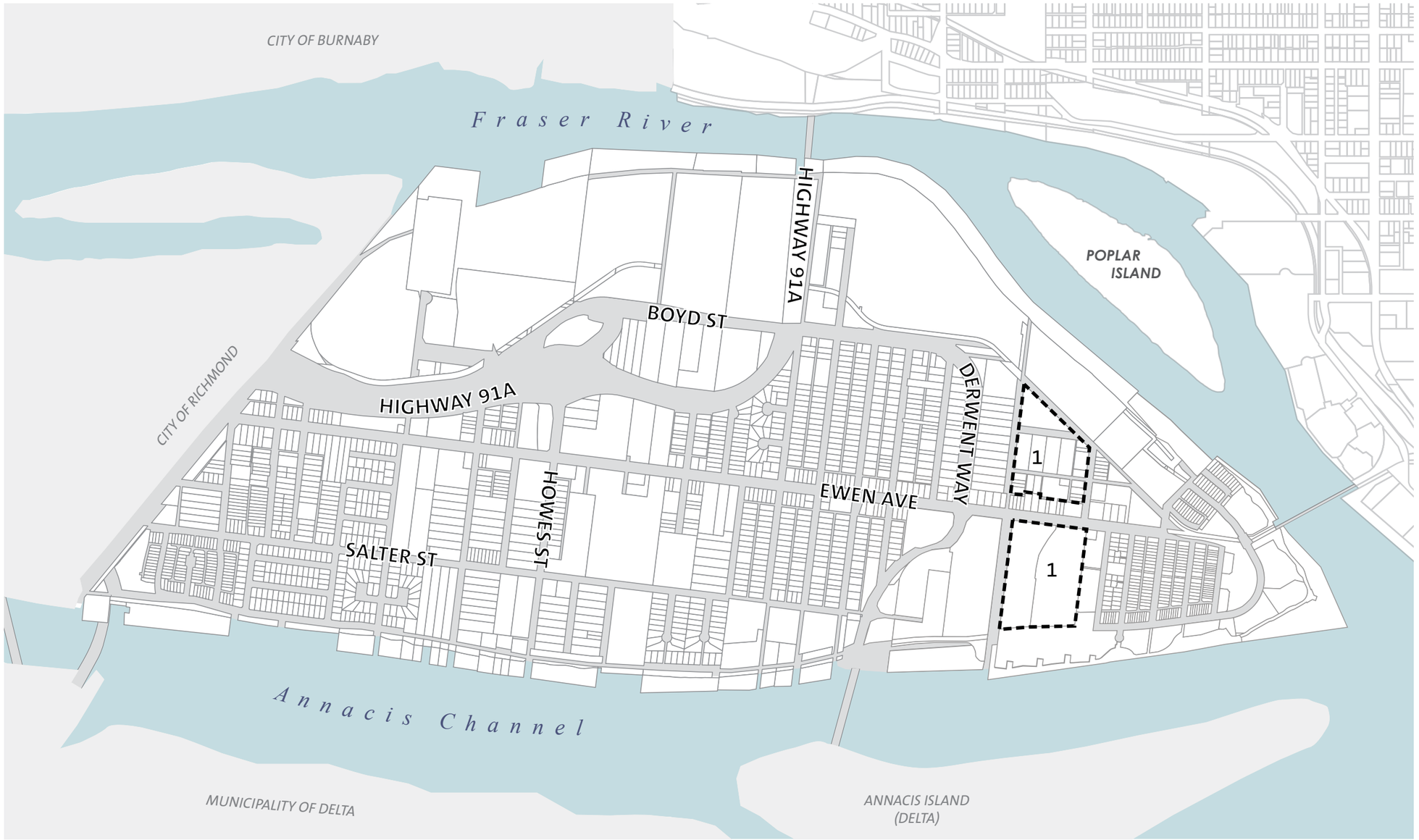
This Development Permit Area will include both residential and employment generating land uses. By promoting a variety of employment opportunities the Development Permit Area will contribute to the economic viability of industry in New Westminster. The Development Permit Area will also focus on environmental sustainability and on improving the livability of these neighbourhoods through the provision of good quality multi-family housing of high quality design. Guidelines in these Development Permit Areas focus on the building and site design of commercial, industrial and residential land uses, and their compatibility with adjacent land uses and transportation corridors.

[Discussion of this area is also contained in Chapter 2: Economy and Employment, the Livable City Strategy and the Industrial Strategy.]

Comprehensive Development Development Permit Areas

1. Queensborough Comprehensive Development

Map F
Comprehensive Development Development Permit Areas



Comprehensive Development Development Permit Areas

1. Queensborough Comprehensive Development

#1 Queensborough Comprehensive Development

The Queensborough Comprehensive Development Area, identified as Development Permit Area #1 [see Map F], is designated to provide an opportunity to transition between residential and industrial development by allowing light industrial, commercial and residential development. This Development Permit Area encourages best practices for promoting water and energy conservation and reducing greenhouse gas emissions. It also establishes guidelines for the form and character of industrial, commercial and multi-family residential development.

Properties located within this Development Permit Area that are zoned Light Industrial Districts (M-1) that develop industrial uses in accordance with the zone must instead comply with the guidelines included in the Queensborough Light Industrial and Mixed Employment Development Permit Area.

Properties located within this Development Permit Area that are zoned Heavy Industrial Districts (M-2) that develop industrial uses in accordance with the zone must instead comply with the guidelines included in the Queensborough Heavy Industrial Development Permit Area.

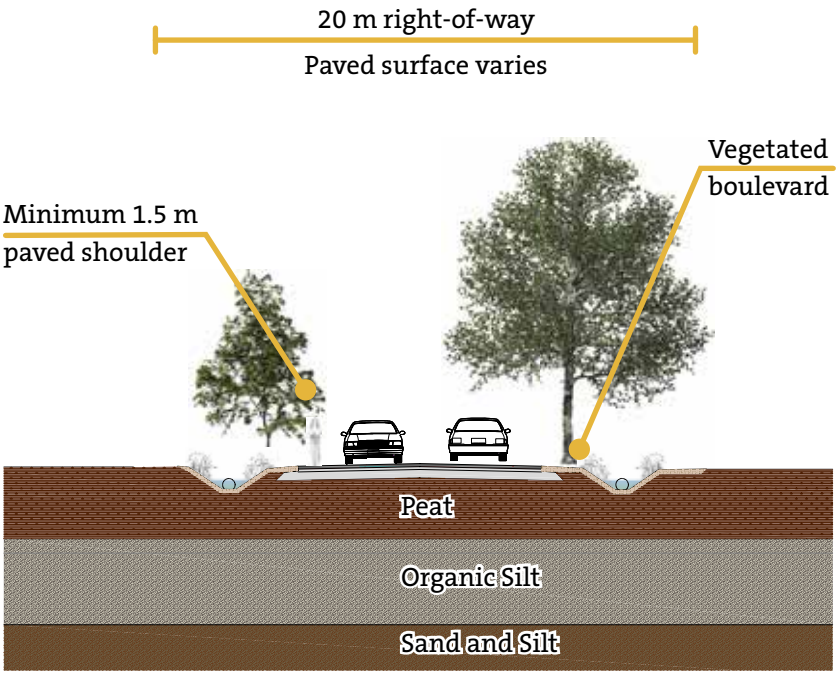
In accordance with the Comprehensive Development land use designation, the redevelopment of this area, which includes a rezoning and public review process, will require the creation of a master plan and design guidelines that will be applied to the area. The following principles must be considered in the creation of the master plan:

1. Locate land uses such that they establish a sensitive transition between industrial and non-industrial land uses.
2. Include residential land uses in locations that will help to complete the eastern residential neighbourhood.
3. Consider including commercial land uses fronting onto Ewen Avenue where they will help to create a compact, local serving commercial node.
4. Reinforce Ewen Avenue as the community "main street."
5. Protect heritage resources.
6. Protect and enhance riparian areas.
7. Include trail segments shown on the Parks, Trails and Greenway Streets Map (e.g. Stanley Greenway and Mid-Island Trail).
8. Provide an appropriate level of vehicular access in support of community and site-connectivity.

Appendix No. 1
Local Road Streetscape Improvement Standards

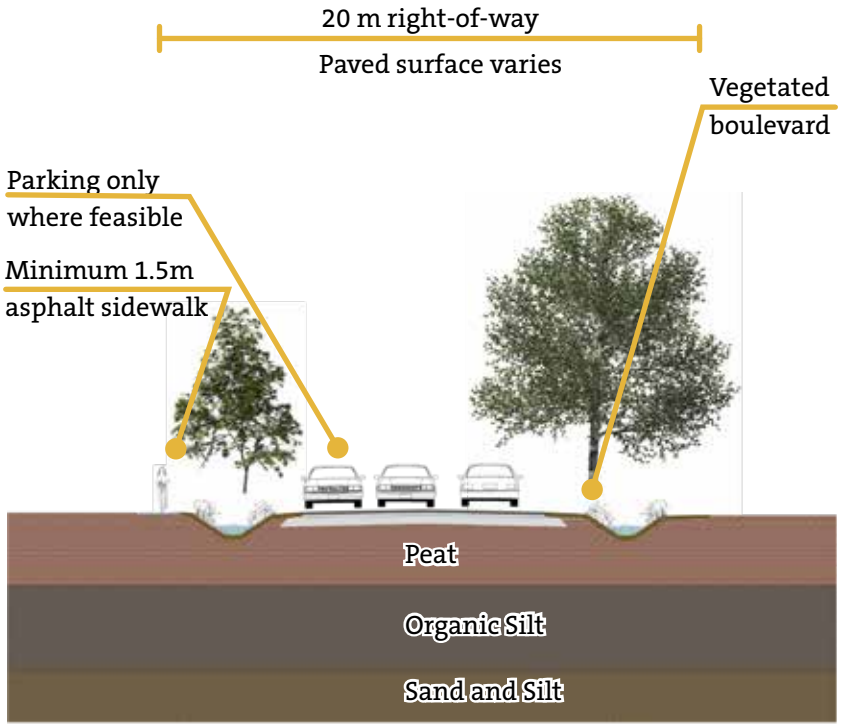
RURAL OPTION

- An on-street paved shoulder with pedestrian marking.
- Restoration of existing asphalt width and ditches.
- Shared cycling on roadway.
- Typical culvert at driveway.
- Parking only where there is sufficient pavement width.



SEMI-RURAL OPTION

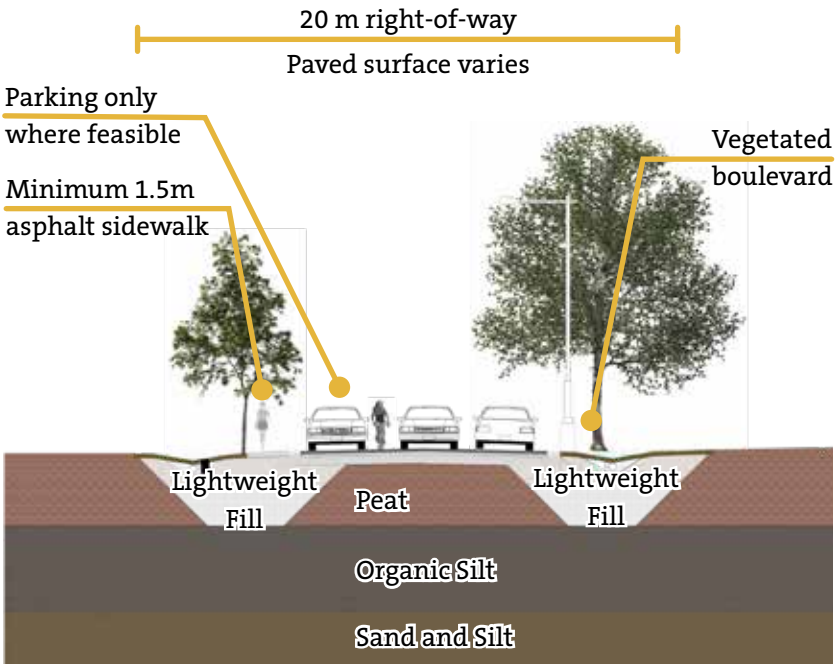
- An off-street asphalt pathway behind the ditch.
- Restoration of existing asphalt width and ditches.
- Shared cycling on roadway.
- Typical culvert at driveway.
- Parking only where there is sufficient pavement width.



Notes: Street upgrades will be through Local Street Improvements Program at owners cost. The program requires owners representing 50% of the blocks total property value to sign a petition for area improvements which must be ratified by Council. Final option selection would be determined through public consultation on a street by street basis.

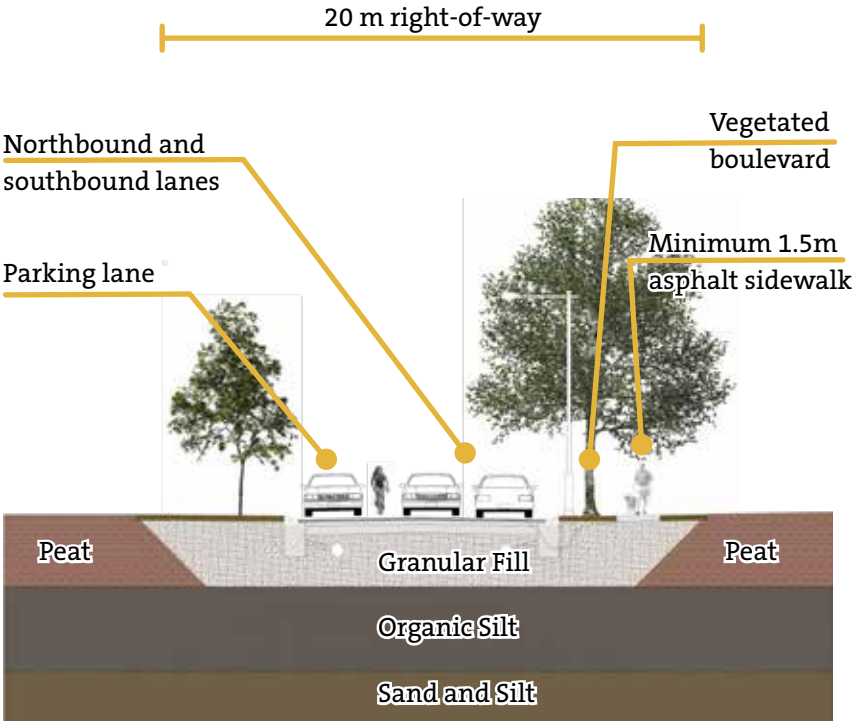
Sidewalk improvements would only be constructed as part of a Local Area Service Initiative.

The Urban Option is required for blocks undergoing substantial redevelopment.



SEMI-URBAN OPTION

- Pedestrian sidewalk on one side only.
- Curb and gutter.
- Shared cycling on the roadway.
- Typical culvert at driveway.



URBAN OPTION

- Pedestrian sidewalks on one or two sides.
- 8.5 metre (27.9 foot) wide asphalt road.
- Curb and gutter.
- Staggered parking possible on both sides of the street with alternating traffic.
- Improved street lighting.

Appendix No. 2
Advance Street Plan for Queensborough

PURPOSE OF THE ADVANCE STREET PLAN

Queensborough's history as an agricultural and industrial community is reflected in the number of single detached parcels with a larger than average area. For example, a number of single detached parcels in Queensborough are upward of 1,858.1 square metres (20,000 square feet), as compared to the minimum lot area requirement for single detached parcels of 371.6 square metres (4,000 square feet).

Some larger parcels are in areas where there has already been some subdivision into minimum sized parcels. In these areas, many decisions about how the neighbourhood should develop have already been made. For example, the location of new streets and lanes, which streets new houses should front onto, and from which streets houses should take access were all likely determined at the time of subdivision.

In some cases, the previous development decisions have made it clear how the remaining large parcels would subdivide in the future. In other cases, there are a number of ways that the remaining large parcels could potentially subdivide. In still other cases, there are whole blocks made up of larger parcels where these development decisions remain to be made. The Advance Street Plan gives guidance on development decisions for those areas falling into the last two categories.

The Advance Street Plan guides future development such that it ensures appropriate connectivity for pedestrians, bikes and vehicles through the community. It ensures the neighbourhood evolves in the way best suited to accessing and servicing future development. The Advance Street Plan also provides a degree of certainty for land owners and developers regarding the future development of the community, including a general understanding of the scale of future right-of-way dedication and some of the off-site requirements expected during subdivision.

Toward this purpose, the Advance Street Plan includes development principles and dimensioned maps of advance street plan areas. The development principles guide development decisions, such as which streets new houses should front onto, and from which streets or lanes houses should take access. The Street Maps illustrate the location and width of future street and lane rights-of-way, in some cases in stages.

ROLE OF THE ADVANCE STREET PLAN

The Advance Street Plan regulates development in the four areas in Queensborough identified below. This policy will be used in conjunction with all applicable statutory plans and bylaws when reviewing applications for development in any of the four plan areas.

All development applications in the Advance Street Plan areas will be evaluated in relation to the development principles and related area street maps contained within this plan. Alternative development configurations that are deemed to meet the intent of the Advance Street Plan may also be considered at the discretion of the City.

DEVELOPMENT PRINCIPLES

There are six development principles for the Advance Street Plan Areas:

1. Regardless of their original frontage orientation, all parcels along Salter Street should subdivide such that resulting parcels have frontage on Salter Street.
2. Except for those having frontage on Salter Street, single detached parcels along all other existing and new streets should subdivide such that resulting parcels have frontage on their respective street.
3. The principal building on each single detached parcel should be oriented toward the street on which that parcel has frontage to create a strong street wall.
4. Multiple family developments should orient units to front onto all adjacent streets and/or greenways to create a strong street/greenway wall.
5. Parcels having frontage on Ewen Avenue should take access from a rear lane or a street other than Ewen Avenue.
6. Wherever possible, all other parcels should take access from a rear lane.

All parcels created through subdivision in the Advance Street Plan Areas should conform to the development principles regarding frontage, principal building orientation and access. Any existing properties in the Area are also encouraged to conform with the development principles over time.

Advance Street Plan Area 1

Advance Street Plan Area 2

Advance Street Plan Area 3

Advance Street Plan Area 4

APPENDIX

AREA STREET MAPS
AREA #1: PHILLIPS STREET (AT SALTER STREET)

Advance Street Plan Area #1 which is bounded by Canil Avenue on the northwest, Phillips Street on the northeast, Salter Street on the southeast and Boundary Canal on the southwest (Figure 1a). Eight parcels make up this area, including 202 to 212 Phillips, 1425 Salter and 211 Boundary.

A City right-of-way of irregular width separates the six Phillips parcels from 1425 Salter and 211 Boundary. A City sanitary sewer pump station (blue dot) is located in the northwest end of this right-of-way. A Canadian National Railway statutory right-of-way (purple shading) is located parallel to the southeast bank of Boundary Canal.[1] The Queensborough Perimeter Trail is located within this right-of-way.

In Phase One of future development in this area (Figure 1b), a new "Street A" will connect Salter Street and the western terminus of Canil Avenue using the existing right-of-way. It will angle northward to accommodate the existing sanitary pump station. Street A will have a 19.4 metre (64 foot) City right-of-way.[2] A new "Lane A" will bisect the block created by this street configuration. This lane will be within a 6.1 metre (20 foot) statutory right-of-way which will allow closure of a portion of the lane in Phase Two of development, described below.

It is possible that the new parcels created by the Phase One subdivision could be consolidated for further subdivision. In this case, the southeastern portion of Lane A will be closed and a new "Lane B" will extend from Phillips Street to Street A (Figure 1c).

All Area #1 parcels created through subdivision should conform to the development principles regarding frontage, principal building orientation and access. Any existing properties in the Area will also be encouraged to conform with the development principles over time.

The creation of new streets and lanes will require dedication from adjacent parcels (Figure 1d). Off-site improvements will likely also be identified at the time of subdivision, potentially including but not limited to the addition of street trees on all new and existing streets adjacent to development areas. The 211 Boundary parcel would also be required to dedicate the portion of the site formerly covered by the CN Railway right-of-way, which is the site of the Queensborough Perimeter Trail, and is also used by the City for maintenance of Boundary Canal.

1 The railway right-of-way has since been removed from 211 Boundary. Despite what is depicted in Figure 1a, the railway right-of-way extends north from Salter Street and ends at the property line of 211 Boundary and does not extend onto that property.

2 Generally, for local streets that serve primarily adjacent parcels (i.e. have minimal through-traffic), a narrow street right-of-way of 18.5 metres (60.1 feet) may be considered. Although the proposed new street will serve primarily adjacent parcels, other technical considerations result in a slightly wider right-of-way requirement for this street.

Figure 1a.
Advance Street Plan
Area #1

APPENDIX

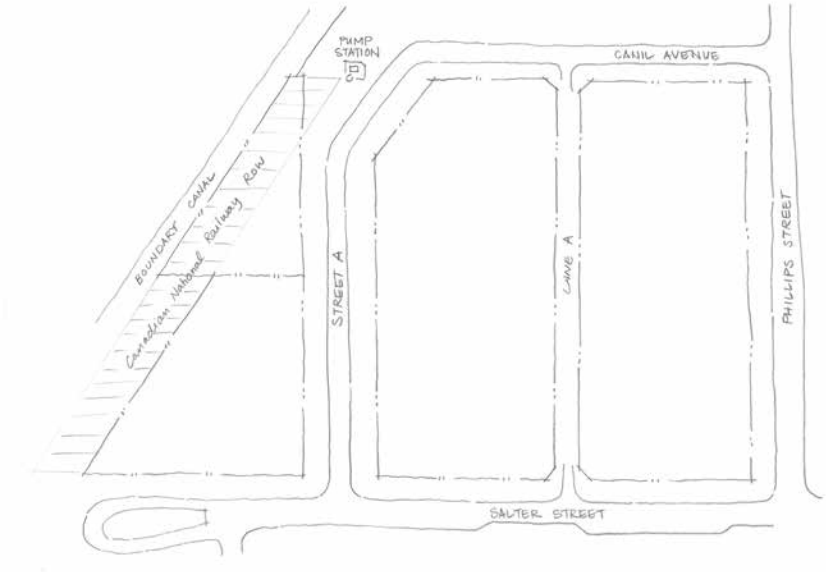


Figure 1b.
Area #1 Street Map
(Phase One of Two)

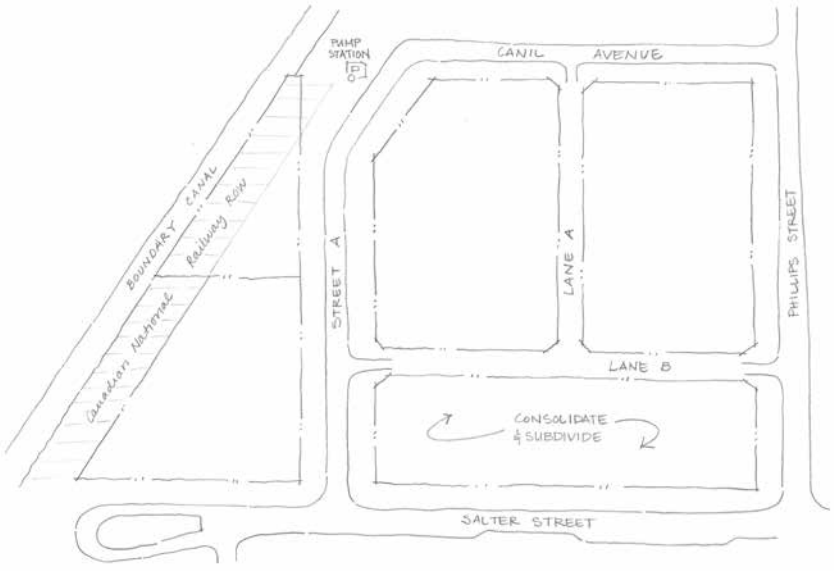


Figure 1c.
Area #1 Street Map
(Phase Two of Two)

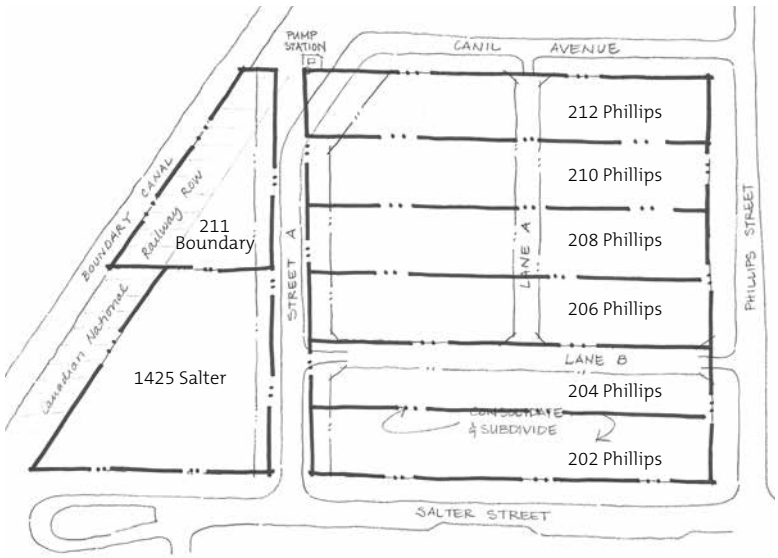


Figure 1d: Comparison to Existing Parcels (2013) for Area #1

Existing property lines shown in heavy black.
Future property lines shown in light black.

AREA #2: SALTER STREET (BETWEEN GIFFORD AND JARDINE STREETS)

Advance Street Plan Area #2 is bounded by Ewen Avenue on the northwest, Jardine Street on the northeast, Salter Street on the southeast and Gifford Street on the southwest (Figure 2a). Fourteen parcels in total make up this area, including 204 to 240 Jardine, 1102 to 1134 Ewen and 1135 Salter.

A City right-of-way runs in a northwest/southeast direction along the length of the rear lot line of 204 Jardine. The City holds statutory rights-of-way (purple shading) on 204 through 240 Jardine which provide access to the City sanitary sewer system and pump station (blue dot). The City also holds a narrow statutory right-of-way (thin purple line) for a future public greenway which runs from the front to the rear property line along the northeast edge of 1130/1132 Ewen.

In future development in this area (Figure 2b), a new "Street A" will connect Salter Street to a northeast extension of Basran Avenue. New "Lane A," "Lane B," "Lane C," and "Lane D" will bisect the blocks created by this street configuration. Street A will have a narrow 18.5 metre (60.7 foot) City right-of-way. The lanes will be within a 6.1 metre (20 foot) City right-of-way. The extension of Basran will have a central boulevard at the intersection with Gifford Street and will transition to an 18.5 metre (60.1 foot) City right-of-way toward Street A. A new "Lane E" will continue northeast from the end of the Basran extension to Jardine Street. Lane E will be within a 10 metre (32.8 foot) City right-of-way and will include both a vehicle travel lane and a sidewalk which will continue the City greenway from Basran to Jardine. Another greenway (dashed arrow) will extend northwest from the Basran/Street A intersection to Ewen Avenue within a City held statutory right-of-way along the property line of adjacent parcels. The Basran extension and Lane E will be the dividing line between single detached residential to the southeast and the commercial and multiple family residential to the northwest.

Figure 2a: Advance Street Plan Area #2

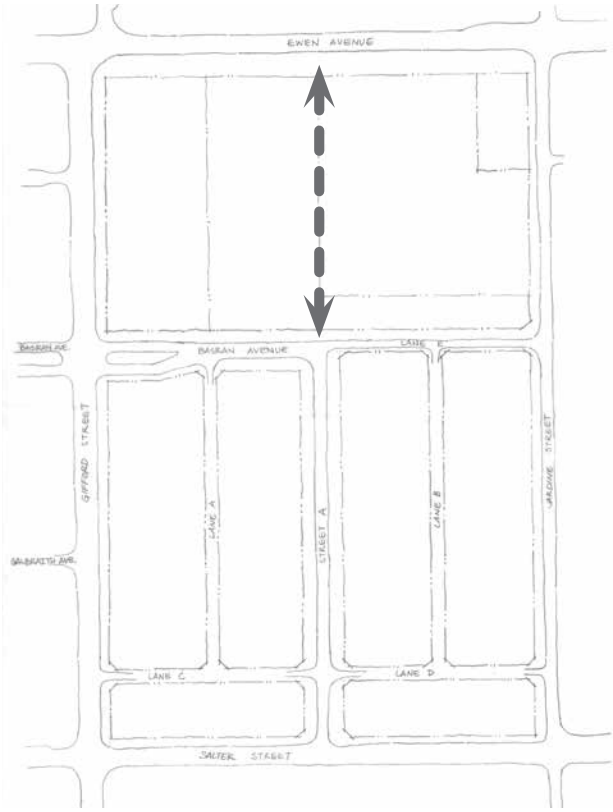
All Area #2 parcels created through subdivision should conform to the development principles regarding frontage, principal building orientation and access. Any existing properties in the Area will also be encouraged to conform with the development principles over time. For example, an existing driveway from the existing multiple family residential at 1130/1132 Ewen Avenue should connect to the Basran Avenue extension to provide an access alternative to Ewen.

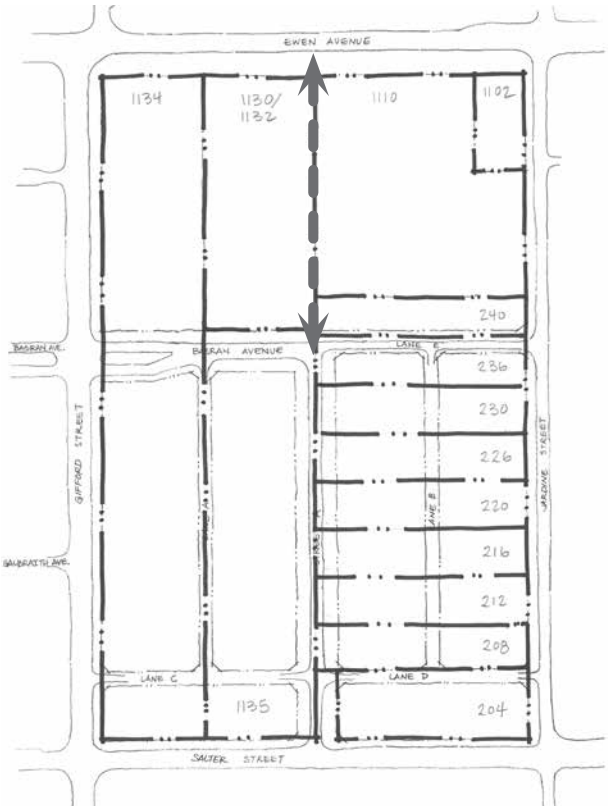
The creation of new streets and lanes will require dedication from adjacent parcels (Figure 2c). Off-site improvements will likely also be identified at the time of subdivision of any parcels in Area #2, potentially including but not limited to:

- Improvements to Gifford Street, including an increased right-of-way.
- Relocation of the existing City sanitary sewer pump station.
- The addition of street trees on all new and existing streets adjacent to development areas and on the Lane E greenway extension.

(below, left) Figure 2b: Draft Area #2 Street Map

(below, right) Figure 2c: Comparison to Existing Parcels (2013) for Area #2
Existing property lines shown in heavy black.
Future property lines shown in light black.





APPENDIX

AREA #3: EWEN AVENUE (1236 THROUGH 1248)

Advance Street Plan Area #3 is bounded by Ewen Avenue on the northwest, and residential properties on the other three sides (Figure 3a). Four parcels in total make up this area, including 1236 through 1248 Ewen. The 1242 and 1236 parcels each have a single detached dwelling. The 1238 and 1248 parcels each have a structure, but are identified respectively as being used as a storage yard or as vacant.

In Phase One of future development in this area (Figure 1b), Eckert Avenue will extend southwest and terminate in a cul-de-sac. An existing City right-of-way to the southwest of the Area will be widened to create "Lane A" which will accommodate vehicle travel. As the Eckert extension will be approximately 163 metres (535 feet) long, Lane A will also act as a fire access lane. An existing City right-of-way running parallel to the southwest edge of the Area would also be widened to create "Lane B" which will accommodate vehicle travel. Both of these lanes will be within a 6.1 metre (20 foot) City right-of-way. A new "Lane C" will be located at the south edge of the Area. Lane C will be within a 10 metre (32.8 foot) City right-of-way and will include both a vehicle travel lane and a sidewalk. This sidewalk will continue the City greenway from Basran Avenue, southwest to the existing City right-of-way where it will continue southeast.

It is possible that the new parcels created by the Phase One subdivision could be consolidated for further subdivision. In this case, a short new "Street A" would branch off toward the southeast from the Eckert Avenue cul-de-sac. Street A would also end in a cul-de-sac (Figure 3c).

All Area #3 parcels created through subdivision should conform to the development principles regarding frontage, principal building orientation and access. Any existing properties in the Area will also be encouraged to conform with the development principles over time.

The creation of new streets and lanes will require dedication from adjacent parcels (Figure 3d), including from those backing onto Lane A (1258 through 1262 Ewen). Off-site improvements would likely also be identified at the time of subdivision of any parcels in Area #3, potentially including but not limited to:

- The addition of street trees on all new and existing streets adjacent to development areas and on the Lane C greenway extension.

Figure 3a: Advance Street Plan Area #3

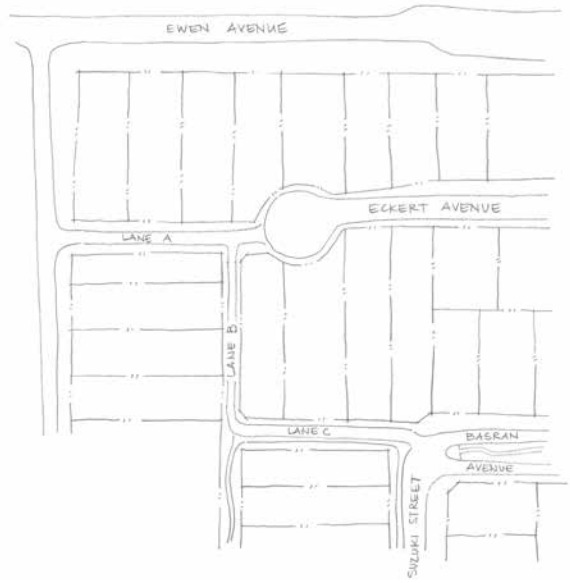


Figure 3b: Draft Area #3 Street Map (Phase One of Two)

Figure 3c: Draft Area #3 Street Map (Phase Two of Two)

Figure 3d: Comparison to Existing Parcels (2013) for Area #3

Existing property lines shown in heavy black.
Future property lines shown in light black.

AREA #4: CAMPBELL STREET (BETWEEN SALTER STREET AND EWEN AVENUE)

Advance Street Plan Area #4 is bounded by Ewen Avenue on the northwest, Campbell Street on the northeast, Salter Street on the southeast and the Queensborough Middle School and residential properties on the southwest (Figure 4a). Ten parcels in total make up this area, including 202 to 220 Campbell and 728 through 746 Ewen. All of the parcels have a single detached house, many with a detached garage or accessory building. The building on the 734 Ewen parcel is identified as being used as an apartment.

The City holds a statutory right-of-way (purple shading) for utilities and access which runs in an northeast/southwest direction along the length of the southeast lot line of 220 Campbell. A sanitary pump station (blue dot) is located within a separate right-of-way on the school parcel adjacent to the rear lot line of 218 Campbell.

In Phase One of future development in this area (Figure 4b), a new "Street A" will extend from Campbell Street to the southwest edge of the Area. This street will accommodate a segment of the City greenway network and will be the dividing line between multiple family residential to the northwest and single detached residential to the southeast. A new "Street B" will extend along the southwest edge of the Area, from Salter Street to Street A. Street A will be within a standard 20 metre (65.6 foot) City right-of-way to accommodate the greenway. Street B will be within a narrower 18.5 metre (60.7 foot) City right-of-way. A new "Lane A" and "Lane B" will bisect the block created by this street configuration. Both of these lanes will be within a 6.1 metre (20 foot) City right-of-way.

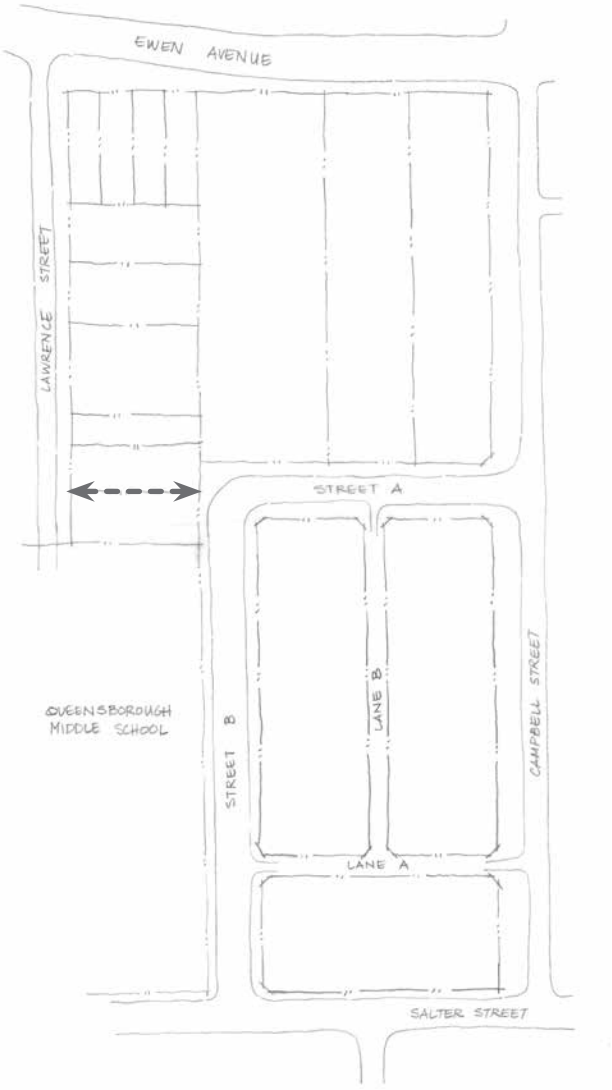
Figure 4a: Advance Street Plan Area #4

Over time the 202 and 206 Campbell Street parcels, one of which has a relatively new house (c. 2004), may choose to consolidate and redevelop. In this case, Lane A will extend to Campbell Street in a 6.1 metre (20 foot) City right-of-way (Figure 4c).

Once the parcels on Lawrence Street to the west of the Area redevelop as multiple family residential, Street A and the City greenway could extend to meet Lawrence in a 20 metre (65.6 foot) City right-of-way (dashed arrow). Alternatively, the extension of only the City greenway corridor in a right-of-way of 6 metres (19.7 foot) to 10 metres (32.8 foot) may be considered.

(below, left) Figure 4b: Draft Area #4 Street Map (Phase One of Two)

(below, right) Figure 4c: Draft Area #4 Street Map (Phase Two of Two)



APPENDIX

All Area #4 parcels created through subdivision should conform to the development principles regarding frontage, principal building orientation and access. Any existing properties in the Area will also be encouraged to conform with the development principles over time.

The creation of new streets and lanes will require dedication from adjacent parcels (Figure 4d). Off-site improvements would likely also be identified at the time of subdivision of any parcels in Area #4, potentially including but not limited to:

- Improvements to Campbell Street.
- Improvements to Lawrence Street when parcels along Lawrence are redeveloped as multiple family residential.
- Relocation of the existing City sanitary sewer pump station.
- The addition of street trees on all new and existing streets adjacent to development areas and on the future City greenway extension from Street A to Lawrence.

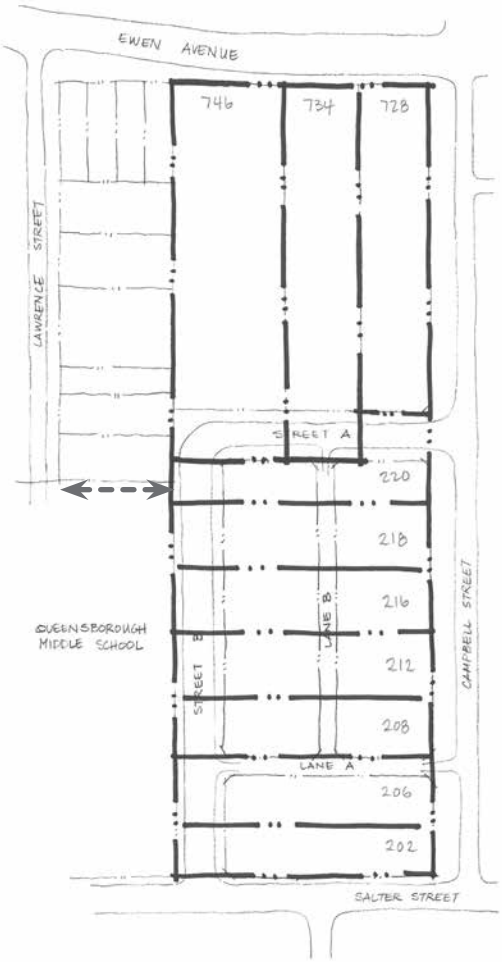


Figure 4d: Comparison to Existing Parcels (2013) for Area #4
Existing property lines shown in heavy black.
Future property lines shown in light black.

Street A will be located generally at the property line boundary between the Ewen Avenue parcels and 220 Campbell Street. The exact alignment of Street A will be determined by the City Engineering and Development Services departments at the time of development with the input of the affected parcel owners. Some options include: locating the Street A right-of-way primarily on the southeast edge of the Ewen parcels (as in Figure 4d); locating the right-of-way primarily on the 220 Campbell parcel (as in Figure 4e); or centering the right-of-way on the property line between 220 Campbell and 734/746 Ewen (as in Figure 4f). Alternative alignments that are deemed to meet the intent of the Advance Street Plan may also be considered at the discretion of the City.

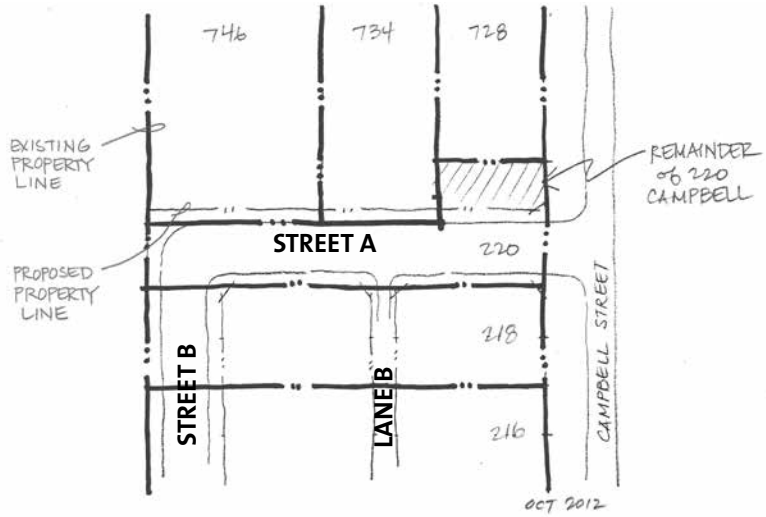


Figure 4e: First Alternative Alignment for Street A, Area #4
Existing property lines shown in heavy black.
Future property lines shown in light black.

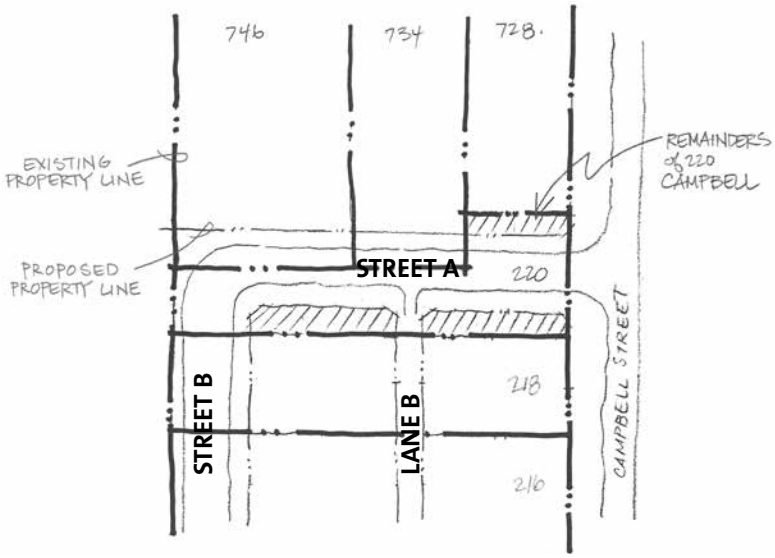


Figure 4f: Second Alternative Alignment for Street A, Area #4
Existing property lines shown in heavy black.
Future property lines shown in light black.

Appendix No. 3
Queensborough Industrial Park Design Guidelines

Queensborough Industrial Park
DESIGN GUIDELINES

February 13, 2009

Prepared by Ramsay Worden Architects Ltd.
in conjunction with Brook and Associates Inc.
and LandSpace Design Inc.

QUEENSBOROUGH INDUSTRIAL PARK

Table of Contents

New Westminster Waterfront 1900's

1.0 Introduction and Background

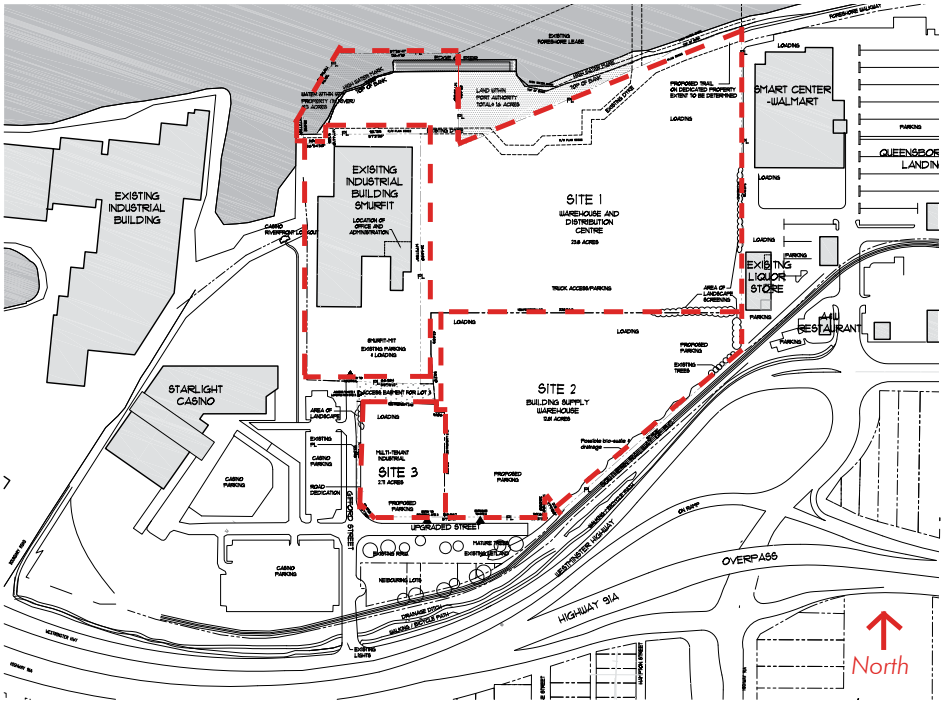
1.1 Intent

Queensborough Industrial Buildings 1900's

The intent of these Design Guidelines is to provide direction in the creation of an attractive master plan on this former Brownfield site that relates to its context and existing circulation networks. The vision for the proposed development emphasizes a continuation of the site's industrial use and generation of employment opportunities and economic development in New Westminster. The Guidelines encourage an attractive, environmentally responsible design that supports the site's function as an industrial business and employment node.

The proposed uses conform to the City of New Westminster M1 and M2 zoning. These Guidelines anticipate the subdivision of the existing parcel into the following 3 lots as indicated below:
Site 1 - M2
Site 2 - M1
Site 3 - M1

All three sites on this property are included within the Guidelines unless noted otherwise: specific references to individual sites occur throughout this document.



Overall Site Plan

1.2 Site Context

The Fraser River on the north side of this property brings industrial and recreational activity to this area. The presence of tugboats, fishing boats, barges, log booms, and nearby trails make the riverside an important part of New Westminster.

The Official Community Plan supports retaining the industrial base for local employment opportunities and maintaining the area's diverse nature.

Queensborough Landing (the new car-oriented shopping area) to the east, and the Starlight Casino to the southwest, form a commercial neighbourhood with this project. An existing packaging plant, Smurfit - MBI, is located to the northwest.

Directly to the south is a major traffic interchange: Westminster Highway, Highway 91A and the nearby Queensborough Bridge, resulting in easy site access. The area to the south and east in Queensborough has experienced rapid residential growth in the last 15 years.

Starlight Casino to the west


Queensborough Landing to the east


Nearby walking and bicycle trails


Smurfit - MBI to the west

1.3 Historical Context

The Fraser River was the main transportation route and a focus of early Queensborough industry

Lumber mills in early Queensborough

Water-oriented industries have been a major feature of the economy and the Queensborough landscape since the late 1880s. Early sawmill and shipyard activities established the industrial character of this area. These industries contributed to the distinct character and identity of Queensborough.

Rapid industrial expansion in the early 1900s encouraged adjacent residential development. This residential expansion was further aided when the streetcar line was installed down Ewen Avenue in 1912.

In Queensborough during the 1980s, regional trends moved away from traditional heavy industry to less labor intensive light industry.

Commercial development beginning in the 1990s including Queensborough Landing and the Starlight Casino made connections to the area's industrial and marine heritage through their building design, as supported by the Queensborough Official Community Plan.

2.0 Design Guidelines

2.1.1 Building Location & Siting

The site will be subdivided into three new legal lots with a variety of uses.

Site 1

A large scale industrial warehouse and distribution center is foreseen on Site 1, adjacent to the riverfront. The existing riverfront dock and loading facility are available at this location. Loading facilities could be located on the north and south sides of the building.

Considering this building has a reduced public interface and minimal architectural expression whose primary function would be to store and distribute manufactured products, its location and impact on neighbouring properties will be minimal. Architectural treatment of the north facade and landscaping should be considered to address views to the site from across the river.

Site 2

A building supply warehouse is contemplated for Site 2. This site is situated east of the Smurfit plant, Site 1 to the north and Queensborough Landing to the east. The southern facade and main entry should face the rail line and Boyd Street

Site 2 is an ideal location for a building supply warehouse as it has easy access from the highway and surrounding community. This site complements neighbouring land uses, acting as an appropriate transition between Starlight Casino and Queensborough Landing. Site 2 will also provide an appropriate buffer between the Highway and an industrial use on Site 1.

Aerial photograph including site outline

Site 3

A multi-tenant industrial building is planned for this 2.8 acre site, oriented to the south with Gifford Street to the west. Its loading area could be located on the north side away from the more public side of the site. Its loading access could be shared using a cross easement agreement with Site 1 to minimize the amount of roadway required. Building entries and offices (accessory to the industrial space) if provided should be orientated to Gifford Street and "upgraded street" to the south.

2.1.2 Setbacks

Site 1

The northern setback of this building is determined by its proximity to the riverfront and required setbacks. A small landscaped buffer between this building the Queensborough Landing parking lot and loading bay areas along the east setback is to be provided to screen the industrial building from the public parking lot.

Site 2

This building is to be set back from the railway line, highway, bicycle and walking trails and bio-swale or rain garden to the south and east. The landscape design of this area is intended to create a visually pleasing view from the highway. The north setback will include "back of house" facilities and loading area.

Site 3

Setback of this property to the north and south will be developed considering possible parking and loading areas and overall circulation patterns.

Landscaping and bio-swales incorporated into the parking lot and along the roadside provide attractive views into the development

2.1.3 Circulation, Access & Parking

Site 1

Site 1 is accessed from Gifford Street by way of a panhandle portion of the lot. The route extends along the northern side of the building on Site 3, where there is parking for trucks, and continues along the western property boundary. This access route is constructed to accommodate large trucks and emergency vehicles - a drive aisle will permit these vehicles to access all sides of the industrial building.

Potential office space should be located on the southwest corner adjacent to the Smurfit site office, near the site entrance.

Site 2

Access to Site 2 should be from Boyd Street. There is access to loading areas on the north around the east or west sides of the building. Provisions for loading are within the north setback.

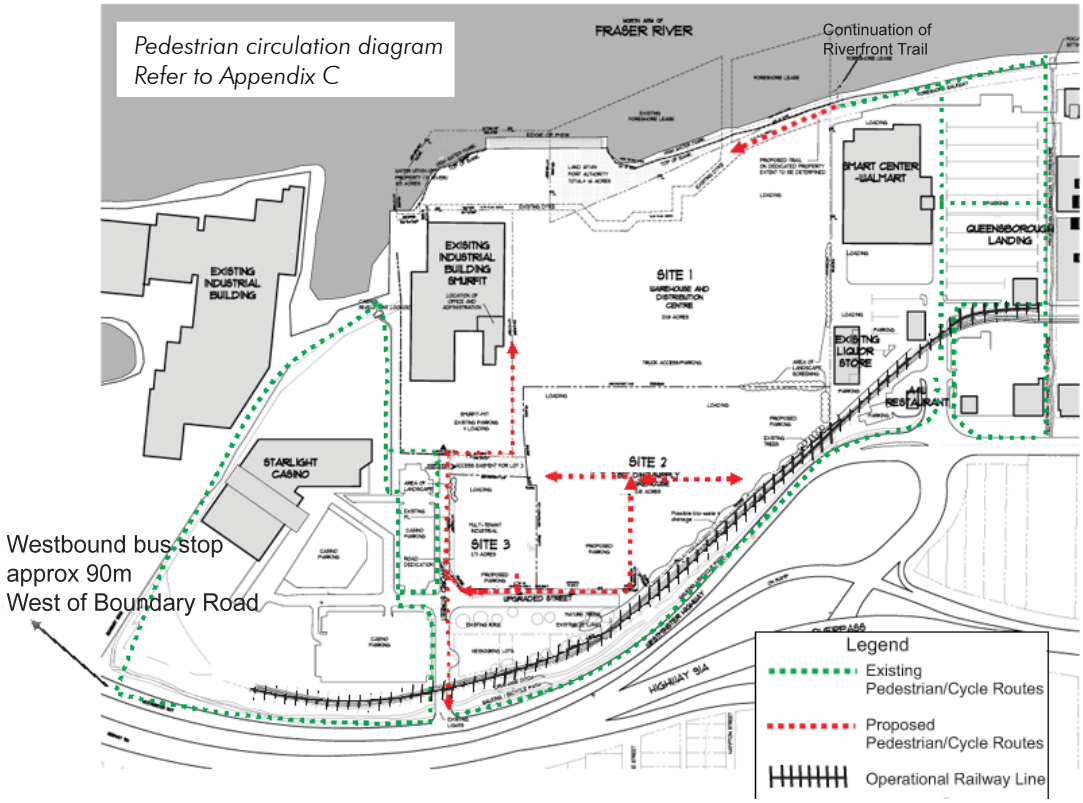
Site 3

Vehicle access to Site 3 is from Boyd or Gifford Street depending on the engineering requirements related to the distance from the intersection. The loading area to the north is accessed via Gifford Street.

Sites 1-3

The circulation network is designed to safely accommodate vehicle, cycle and pedestrian activity, recognizing the industrial nature of the site and its location adjacent to a highway and active railway line.

Safe and convenient pedestrian and cycle access to all three sites should be provided. Internal sidewalks and walkways that encourage direct, safe, continuous and clearly defined pedestrian access from public sidewalks, transit stops and parking areas to building entrances should be considered. Existing external and potential internal pedestrian/cycle circulation routes are shown in the illustration on the previous page. Sheltered and secure cycle parking should be provided in locations that can be overseen.



2.1.4 Transportation

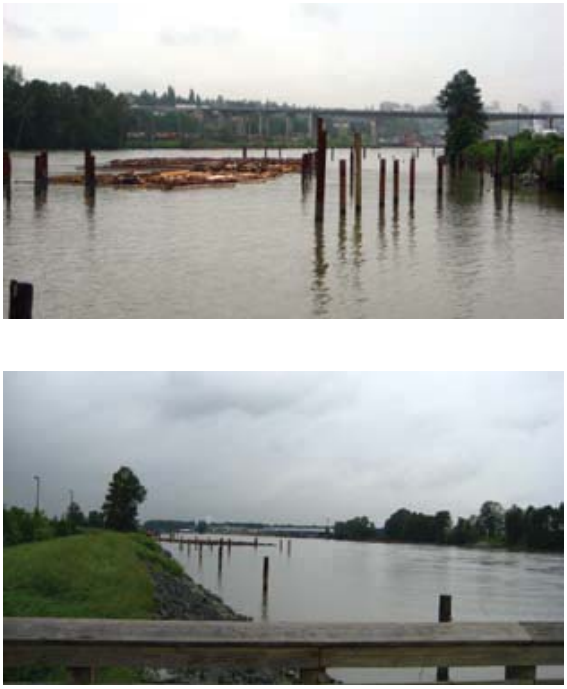
To encourage non-auto travel to the site, a number of *Transportation Demand Management (TDM)* measures could be considered including the following:

- priority parking of car sharing and high occupancy vehicles for employees
- the provision of shower facilities and lockers to encourage staff to cycle
- additional secure cycle parking for employees in excess of the bylaw requirements
- a riverfront dock for private marine transportation
- to support improved transit service to serve the three new developments, Smurfit and the Starlight Casino in consultation with the City of New Westminster and Translink

2.1.5 Riverfront Walkway

The Queensborough Riverfront Walkway currently terminates on the northeast corner of Site 1. The westerly views down the river make this location ideal for a viewing area or small park. This proposed amenity for the public and local employees would be a natural spot to enjoy lunch or relax.

A continuation of the riverfront trail will be determined through consultation with the Diking Authority, the Port Authority, the City of New Westminster, the property owner and the future tenants.



Views along the Riverfront Walkway

2.1.6 Wayfinding & Signage

Sites 2, 3

To accommodate signage within the development the following should be considered:

- Building design with integrated spaces for signage that respect architectural features and scale.
- Integrated task-oriented illumination for signage facing the street, pedestrian walkways or trails that avoid glare/light spillover onto adjacent land.
- Building identification signage as large scale design elements including awnings, banners or plaques that are visually appealing, attractive and visible to pedestrians and motorists.
- Directional signage for pedestrian walkways, parking and service areas.
- Clear and distinct graphics on all signage, coordinated with the image of the overall development.
- No signage should be permitted on fences.

Directional signage incorporating task-oriented illumination consistent with the overall design

2.1.7 Security/Crime Prevention

(Refer to the New Westminster Police Service's Crime Prevention Through Environmental Design (CPTED), Feb/2008)

The design of this development supports an overall sense of safety and security. Building and landscape design should consider the following:

- Exterior lighting directed to specific areas of the site, away from public view.
- Elimination of dead ends and hidden recesses or alcoves.
- Appropriate lighting levels that illuminate pathways around property, doorways, and front entries.

APPENDIX

2.1.8 Security/Crime Prevention (Cont)

(Refer to the New Westminster Police Service's Crime Prevention Through Environmental Design (CPTED), Feb/2008)

a. Consider a hierarchy of defensible spaces using precautions such as:

- Strategic use of fencing, landscaping and signage around the perimeter of the property to indicate "private space".
- The assessment of appropriate site access for a range of user groups.
- Strategic location and type of fencing including gate access.
- Address indicators that are easily seen from the street and clearly direct traffic to their destination.
- Assessing the impact on this development of user groups from adjacent structures and facilities.

An example of fencing that is resistant to graffiti and allows for clear sight lines

b. Consider surveillance strategies such as:

- Front entries that are well glazed with no areas of concealment either inside or outside (ie. cement columns which may block sight lines or provide concealment).
- Fencing material that allows for surveillance in and out of the property and is resistant to graffiti (ie. wrought iron).
- Landscaping material that does not impede sight lines around corners, in and out of suites or into doorways.
- Maintenance of landscaping materials at a height appropriate for surveillance.
- "Open" design of outside staircases that eliminate blind corners and areas of concealment.

2.2 Architectural Character

2.2.1 Intent

Designers are encouraged to incorporate an industrial vernacular that is regional in nature. These Guidelines support building design that is visually interesting, incorporating a variety of well proportioned architectural features into this large scale development. The architectural character should reinforce and contribute to the overall site design.

The industrial theme integrating wood features and metal siding was used on Queensborough Landing and Starlight Casino developments.

Timber and metal used at entries and commercial storefronts at Queensborough Landing

2.2.2 Exterior Building Materials
Sites 2, 3

a. Exterior building materials comprise a significant part of the building's visual impact. They shall be aesthetically pleasing and compatible with materials used in adjoining properties including metal cladding, wood cladding or concrete. The incorporation of timber or metal detailing at the public entries and storefronts representative of regional marine/industrial themes is strongly recommended.

b. Building and landscaping materials should be compatible, creating a coherent site design.

c. Building finishes should support graffiti removal where appropriate.

d. Building materials shall be durable and appropriate to the west coast climate.

Wood and metal details animate large scale facades and provide visual interest

Wooden poles were commonly used as structural components in industrial marine applications

Pockets of trees, recycled wood timbers and canopies will assist in articulating the view of the industrial building from across the river.

Awning/canopy supports, fencing and bollard components and service area enclosures integrate recycled wooden poles into the design

Recycled wooden poles support lighting systems and signage and provide opportunities for visual interest in parking lots

2.2.2 Exterior Building Materials
Site 1

a. These Guidelines promote an architectural strategy that is appropriate to the building's industrial nature. Carefully considered landscaping, including strategic placement of groups of trees, and particular attention to materials and colors for the north building elevation will enhance distant views across the river in New Westminster. Roof canopies above loading doors should provide scale, visual interest and shadow lines to the facade. Landscape design shall screen views to the active loading area and provide a human scaled environment to this industrial site.

b. Designers are encouraged to incorporate recycled wooden poles (found on the site) into the site design to provide a vertical contrast against the long linear massing typically found in warehouses. These wooden poles, commonly used as structural components in water-oriented industries, could be reinvented to define circulation routes, support lighting/signage/awnings and be integrated into the design of site furnishings.

c. A combination of landscaping and fencing should be incorporated along the public edges of the east facade that are open to the parking lot.

2.2.3 Colour

a. Colour schemes shall reinforce the architectural quality of the development.

b. The overall concept of integrating buildings into the overall site design should be supported with an earth-toned colour palette.

c. Bright colours are limited to discreet elements including entries, corporate identities and architectural and structural features.

d. Natural material colours are encouraged including galvanized metals, timber and stone.

2.2.4 Exterior Building Lighting

a. Lighting design should provide even illumination of the facade and outdoor spaces. Strong spot lights are to be avoided.

b. Concealed lighting under roof overhangs, downlighting or other strategies to minimize glare are expected.

c. Building lighting design shall minimize glare to adjoining properties and the surrounding community including the north side of the river.

d. Energy-efficient lighting strategies and fixtures shall be utilized.

2.2.5 Entrances and Front Facades
Sites 2, 3

a. Public entrances should be welcoming, human scaled, clearly defined and highly visible incorporating no less than three of the following:
- canopies
- overhangs
- recesses/projections
- raised corniced parapets over the door
- display windows where appropriate
- expressive architectural details
- integral planters or wing walls that incorporated landscaped areas and/or places for sitting

Timber structure provides a human scaled transition to a building entry at Queensborough Landing

b. Entrances should be located on the front facade, visible from the street and directly accessible from the parking lot.

c. Entrance design should incorporate human scaled elements providing an approachable, welcoming facade.

d. Entrances shall be designed to provide a transition in scale between the overall building mass and the detailed site design.

e. Materials and colours of entrance signage are expected to be consistent with the overall site design.


A well proportioned entrance incorporating a canopy, generous amounts of glazing, accent colors, interesting architectural details including recycled wooden poles and landscaping

f. Provide appropriately scaled weather protection at public building entrances and on portions of the front facade.

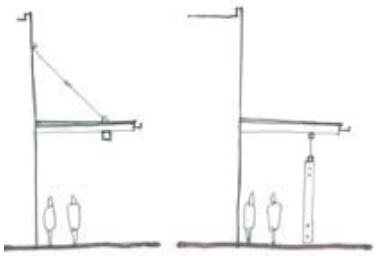
g. Building facades oriented to public spaces (including parking lots) should:
- minimize blank walls (walls without windows, showcases, displays or entries)
- incorporate wall plane projections to reduce overall building scale for walls exceeding 120 ft. in length and to add visual interest.

2.2.6 Weather Protection

Site 2, 3

a. Awnings or other projections are encouraged to provide weather protection at a pedestrian scale where applicable.

b. Weather protection elements, integrated into the overall building design with appropriate use of materials and colours is supported.



Weather protection at front facade

2.3 Landscape Design

2.3.1 Intent

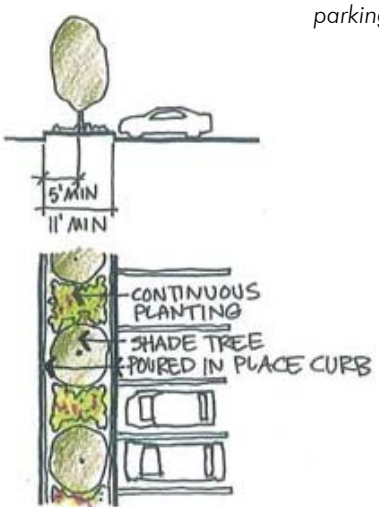
Public and private spaces shall be appropriately landscaped to provide high quality visual and environmental comfort and be accessible to all. Landscaping should also contribute to stormwater management.

Changes in paving materials and colour to highlight pedestrian crossings and reduce the scale of large parking areas

2.3.2 Parking Lot Design

Site 1

a. Include rain gardens and other landscape strategies in the grass medians between the parking area and at the edges of the parking loading areas.



Landscaping at parking lot edges

Site 2, 3

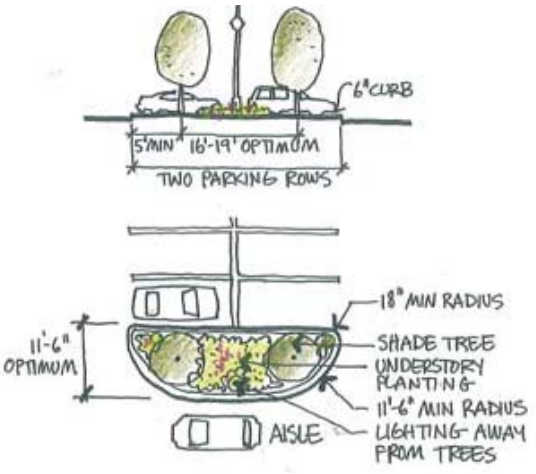
b. Install decorative paving or a change in paving material/colour, including permeable paving, to emphasize pedestrian routes and crossings, entrances and other special features.

c. Strategic use of paving material, colour and light standard locations can create the illusion of smaller scaled "parking courts" within a large parking lot.

d. The diversion of surface water in parking lots to bio-swales and rain gardens is a highly recommended strategy for filtering and directing water away from the municipal storm water system, into the river.

e. Permeable materials and surfaces will be utilized wherever possible, considering the restrictive high water table and large truck traffic.

f. Where possible, install surfaces containing recycled or sustainable materials that also allows for infiltration of rainwater.



Landscaped islands

Landscaping including mass planting provide visual interest

Setting back plant material from curb edges provides protection from vehicle overhang

g. Consider landscaped islands at the beginning and end of each parking row and to break up long rows and/or highlight special features:
   - plant at least one high-branching deciduous shade tree in each island
   - include understory planting such as shrubs, perennials, ornamental grasses and ground cover.

h. Landscaped medians are encouraged for visual relief and as rain gardens to facilitate sub-surface infiltration.

2.3.3 Screening and Buffers

a. Landscaping between loading areas, neighbouring properties and public roadways is encouraged (refer to Site Plan on page 1).

b. Distribute landscaping throughout the site to soften and screen parking lot edges, reinforce circulation routes, create pleasant pedestrian conditions and maximize shade and stormwater benefits.

c. Provide mass planting clusters where possible to create visual interest and provide transition in scale between buildings and the natural environment.

2.3.4 Planting

a. Consider the following in selecting plants:
   - Choose plants that are native-like, hardy, drought and salt tolerant and resistant to the stresses of compacted soils and weather exposure.
   - Sun, shade and irrigation requirements.
   - Provide seasonal interest.

b. Retain and protect trees, vegetation, natural slopes and native soils and integrate these features into the overall landscape design where possible.

c. Depending on species, trees should be planted away from curbs, side walks, driveways and other hard surfaces to buffer from stress caused by vehicle overhang and compacted soils.

d. Set back all other plant material, except sod or ground cover, a minimum 1'- 0".

e. Limit landscape features that might impact motorist/pedestrian sight distance, sign visibility and/or cause obstructions to a maximum height of 3'-0".

f. High branching, deciduous trees should be locating along pedestrian routes.
g. Provisions should be made to ensure healthy plant growth. Refer to *BCSLA/BCLNA Landscape Standards*.

2.4 Site Furniture and Amenities
Sites 2, 3

2.4.1 Intent

The design of site furniture and amenities, including outdoor employee amenity areas, should be integrated into the overall site design, providing visual continuity between the landscape and building designs. An integrated approach to the detailed design of street lighting, shopping cart kiosks, benches, waste receptacles, fencing and screens is encouraged.

2.4.2 Lighting

a. Ensure all parking spaces and circulation routes are well-lit.
b. Direct light downward to avoid light pollution and avoid light overspill on adjacent properties, streets and open spaces.
c. Provide pedestrian-scaled lighting where appropriate.
d. Consider lighting elements for their aesthetic and design value, not simply their lighting function or ease of maintenance.
e. Coordinate the location of lighting with overall site planning.
f. Consider energy efficient lighting strategies wherever possible.

2.4.3 Fencing and Screens

a. Fencing and screens that correspond with landscaped buffer areas (refer to site plan on page 1) should be consistent with the overall site design and furnishings.
b. Solid walls and solid fencing shall not be permitted adjacent to private or public open space where safety and security is an issue.
c. Where solid screens are provided, materials should be compatible or complementary to the building's exterior finishes.
d. Chain link fencing will not be permitted in front yard setbacks that are adjacent to public roadways. All chain link fencing will be black vinyl.

Lighting design coordinated with overall site design

Lighting, landscaping and benches along pathways create pedestrian friendly environments

Fencing and screens that relate to the overall site design

Provide comfortable seating that relates to other site furnishings

Recycled wooden poles integrated into parking lot structures and supports for awnings and signage

2.4.4 Signage

a. Signs shall be carefully integrated into the site, landscape and architectural design.

b. Size, shape and proportions of signs should respect their surroundings and not obscure other design features or structures.

c. Task-oriented sign illumination that avoids glare/light spillover toward adjacent land uses is supported.

2.4.5 Benches, Waste & Recycling Receptacles, Bicycle Racks and Shopping Cart Kiosks

Site 2

a. Benches could be provided near drop off areas, and along extended pedestrian routes.

b. Waste and recycling receptacles shall be provided at building entry ways and near benches.

c. Bicycle parking, located in highly visible, well-lit, accessible and weather protected areas is encouraged. Incorporate signage as appropriate.

d. Shopping Cart Kiosks should be conveniently located to encourage replacement.

APPENDIX

2.5 Smart Growth Strategies

2.5.1 Intent

The Design Guidelines support sustainable building and landscape practices and a responsible approach to water, energy and waste management including opportunities to reduce greenhouse gas emissions. Nearby riverfront, drainage ditches and bicycle and walking trails should be protected and considered by this development.

Refer to Section 2.1.4 for transportation considerations.

2.5.2 Water Conservation

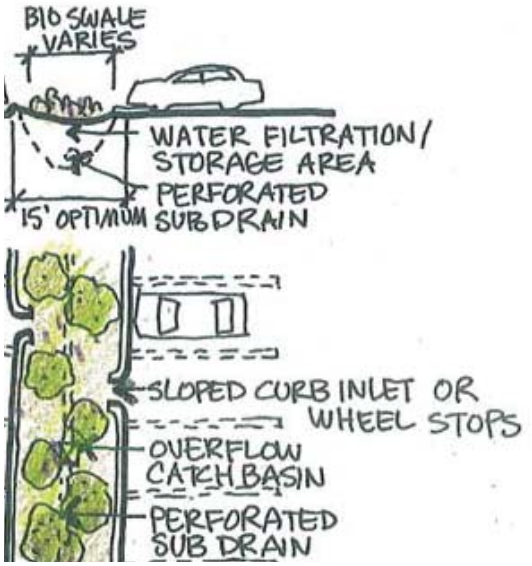
a. Manage rainwater on-site with designs that encourage infiltration, evapotranspiration and water re-use:

- create and re-use bio-retention areas, such as swales, rain-gardens, vegetated islands and overflow ponds.
- include catchbasin restrictors and oil/grit separators as appropriate.
- incorporate opportunities to collect rainwater for landscape irrigation and toilet systems where possible
- rain gardens for infiltration and treatment should consist of gravel trenches with permeable soils and suitable vegetation. Overflow piping could divert excess overflow into the stormwater system.

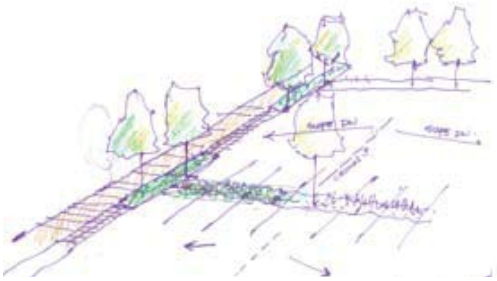
b. Consider poured in place curbs with cuts for water inlets for drainage into landscape islands or the use of wheel stops.

c. Consider water conserving appliances and fixtures wherever possible.

d. Low flow toilets and urinals operated by hand or sensors are encouraged.



Example of parking lot bio-swale



Divert surface water away from municipal storm water systems

Existing bio-swale

Natural drainage systems

e. Develop alternate drainage strategies, including a gravity fed method of diverting water to the river, to reduce reliance on the municipal storm water system and minimize the energy required to pump water into the river. The large warehouse on Site 1 is most appropriate for gravity fed roof drainage considering the site's slope and proximity to the river.

f. On sites 1 and 3 a gravel roof ballast should be used to store and evaporate rainwater to decrease roof run-off. Ballast material will be a light colour to reduce solar gain. On Site 2 a reflective white TPO roof will be used to reduce solar gain.

2.5.3 Energy Conservation

a. Commercial or office components of buildings should be designed to ASHRAE 90.1 in accordance with the new BC green building code. Industrial Buildings on Site 1 and 3 will increase roof insulation to R12, improving heat retention and reducing energy required for heating. Access to natural light through the use of skylights to reduce energy consumption will be provided. Energy efficient heating, air conditioning and ventillation will be used.

b. Install energy conserving fixtures and appliances. HVAC systems to contain no CFCs.

c. Use efficient white light sources on site to reduce energy costs and to create a natural colour balance for safety and security. LED lighting is also recommended.

d. Consider energy monitoring systems.

e. Encourage strategies to reduce the heat island effect.

APPENDIX

2.5.4 Waste Management

a. On-site recycling and waste receptacles serving tenants and employees will be provided on each site in locations that are convenient for collection and pick-up.

b. Location and design of the recycling/waste facilities will be determined at the detailed design stage.

c. Recycling facilities for construction waste including concrete, asphalt, rebar and heavy timber (including wooden poles) will be utilitzed on all sites.

d. Recyclable metals shall be sent to recycling and salvage facilities.

2.5.5 Materials

a. Durable building materials are encouraged. Refer to *CSA S4 78-95 Guidelines on Durability in Buildings*.

b. Mass walls or rainscreen walls are to be used for building exteriors.

c. Use low emitting materials: (VOC) for paint, flooring, sealants, etc., should be specified.

Appendix A Site Photos

Queensborough Industrial Site

Neighbouring Development
Pro-First Walmart

RAMSAY WORDEN ARCHITECTS

RAMSAY WORDEN ARCHITECTS

Neighbouring Development
Starlight Casinos

Queensborough Industrial Site

BROOK

APPENDIX

Queensborough Industrial Site

Riverfront Walkway

RAMSAY WORDEN ARCHITECTS

RAMSAY WORDEN ARCHITECTS

BROOK

Queensborough Industrial Site

Queensborough Historical Photos

Queensborough Industrial Site

Existing Streetscape Along New Westminster Highway

RAMSAY WORDEN ARCHITECTS

RAMSAY WORDEN ARCHITECTS

BROOK

Queensborough Industrial Site

Industrial Neighbours

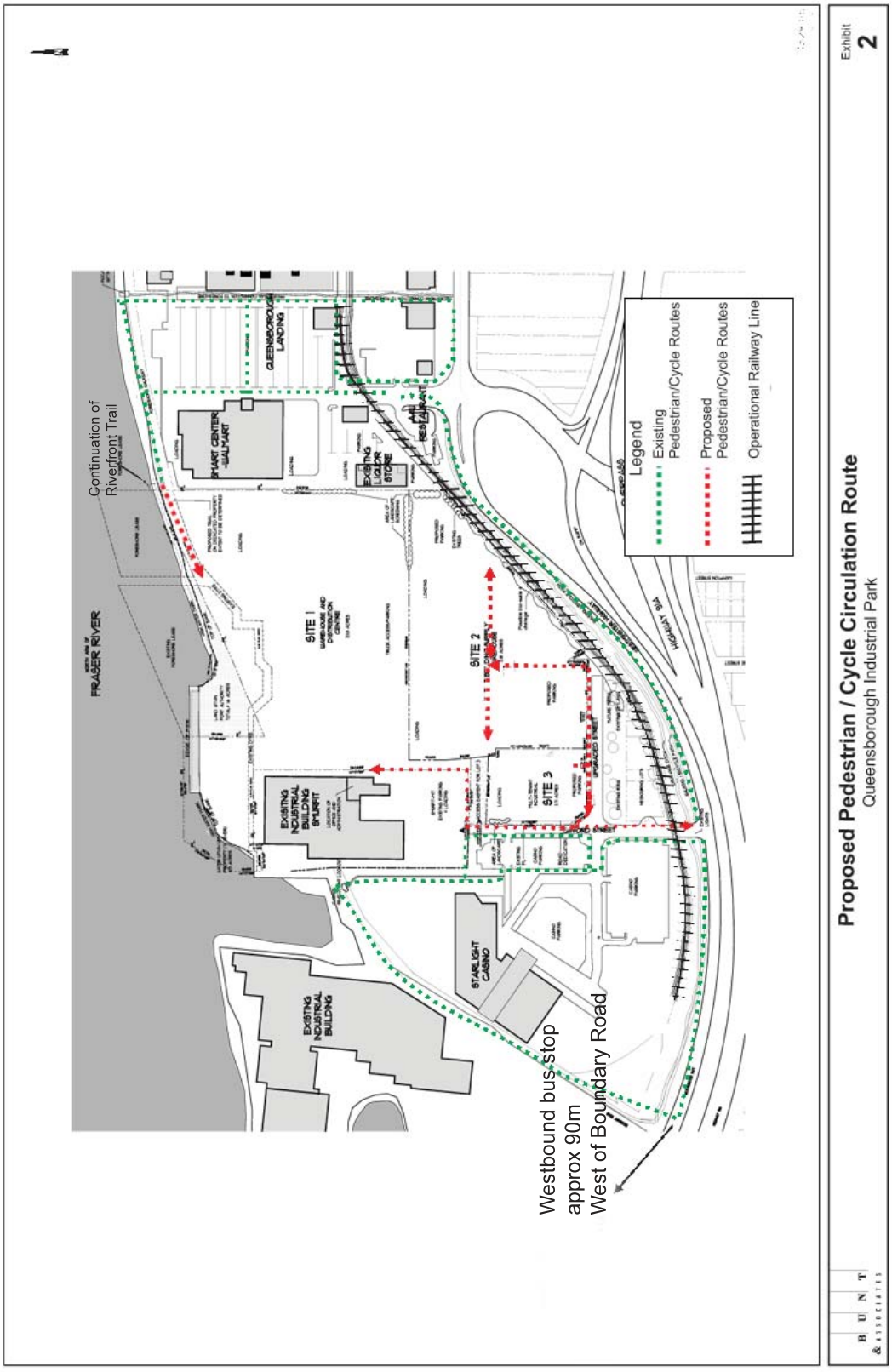
Queensborough Industrial Site

Existing Water Course Ditches

RAMSAY WORDEN ARCHITECTS

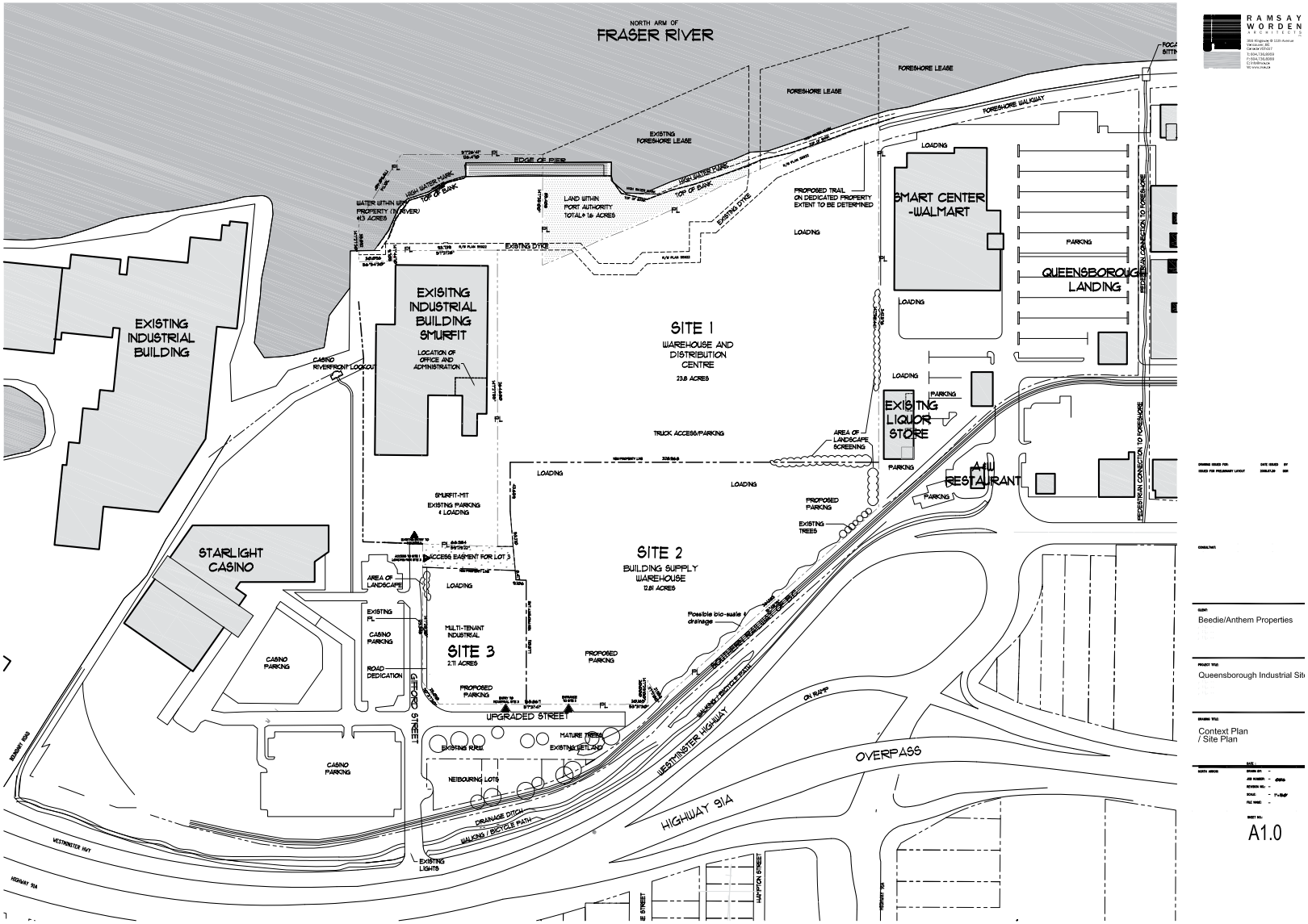
Appendix B Pedestrian and Cycle Routes

APPENDIX


Continuation of Riverfront Trail
FRASER RIVER
QUEENSBOROUGH LANDING
SITE 1
SITE 2
SITE 3
EXISTING INDUSTRIAL BUILDING
STARLIGHT CASINO
Westbound bus stop approx 90m West of Boundary Road
Legend
Existing Pedestrian/Cycle Routes
Proposed Pedestrian/Cycle Routes
Operational Railway Line
Proposed Pedestrian / Cycle Circulation Route
Queensborough Industrial Park
Exhibit 2

Appendix C Site/Context Plan

APPENDIX



RAMSAY WORDEN ARCHITECTS

Beedie/Anthem Properties

Queensborough Industrial Site

Context Plan / Site Plan

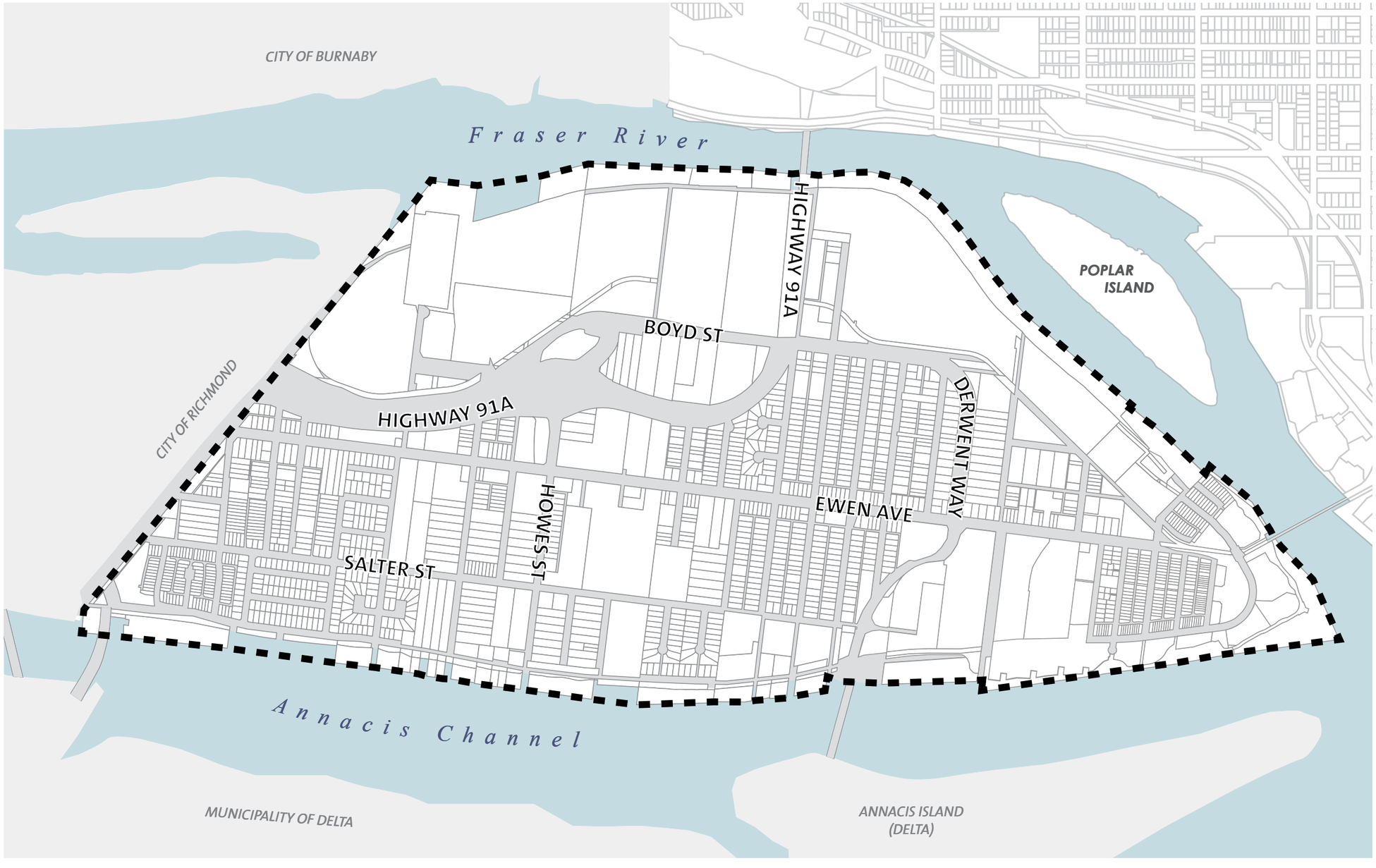
A1.0

Schedules

LIST OF SCHEDULES

A. Floodplain Boundary
B. Parks, Trails and Greenway Streets Map
C. Land Use Designation Map

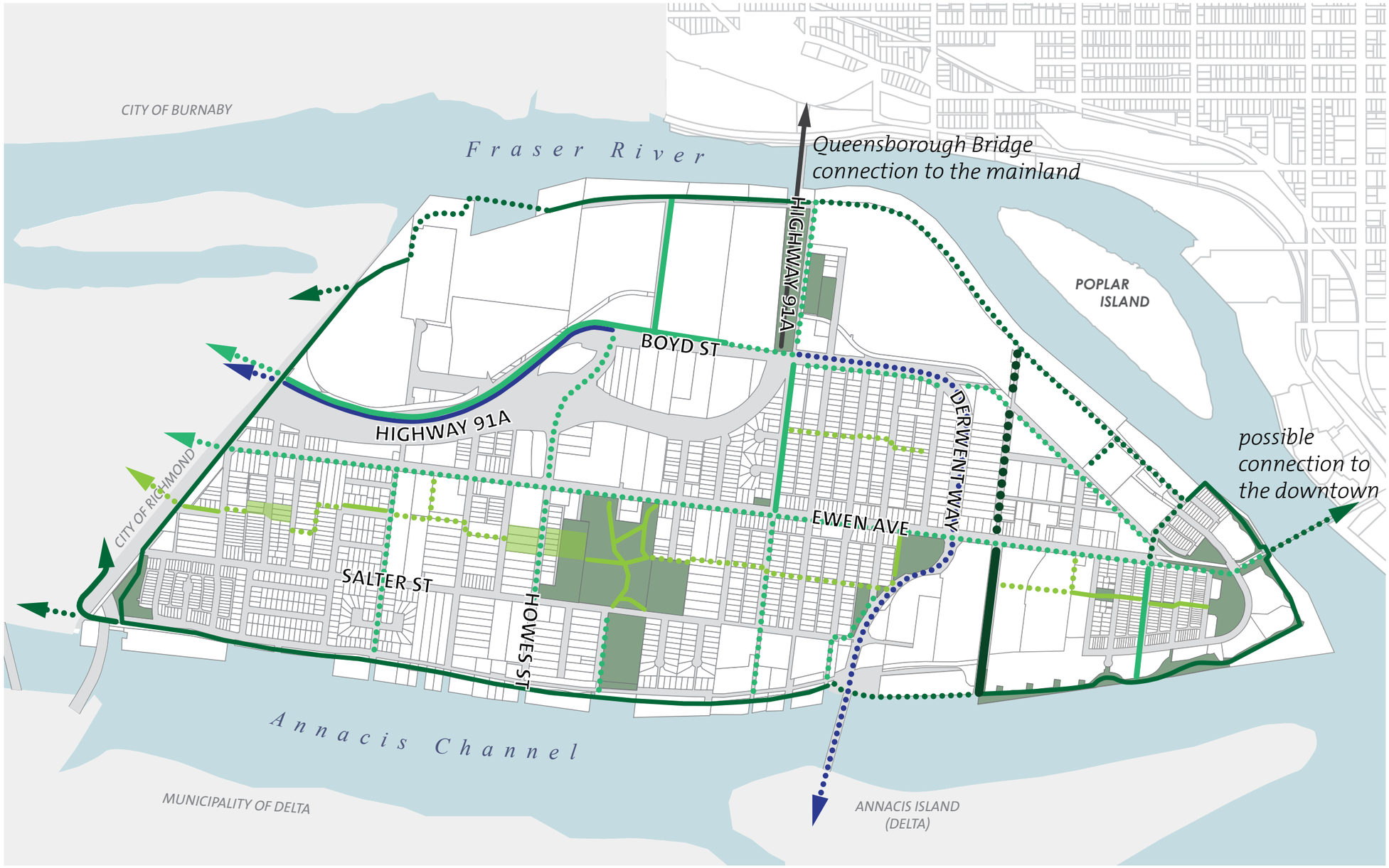
SCHEDULE A
Hazard Area Map



KEY:

- - - Area subject to flooding in Queensborough

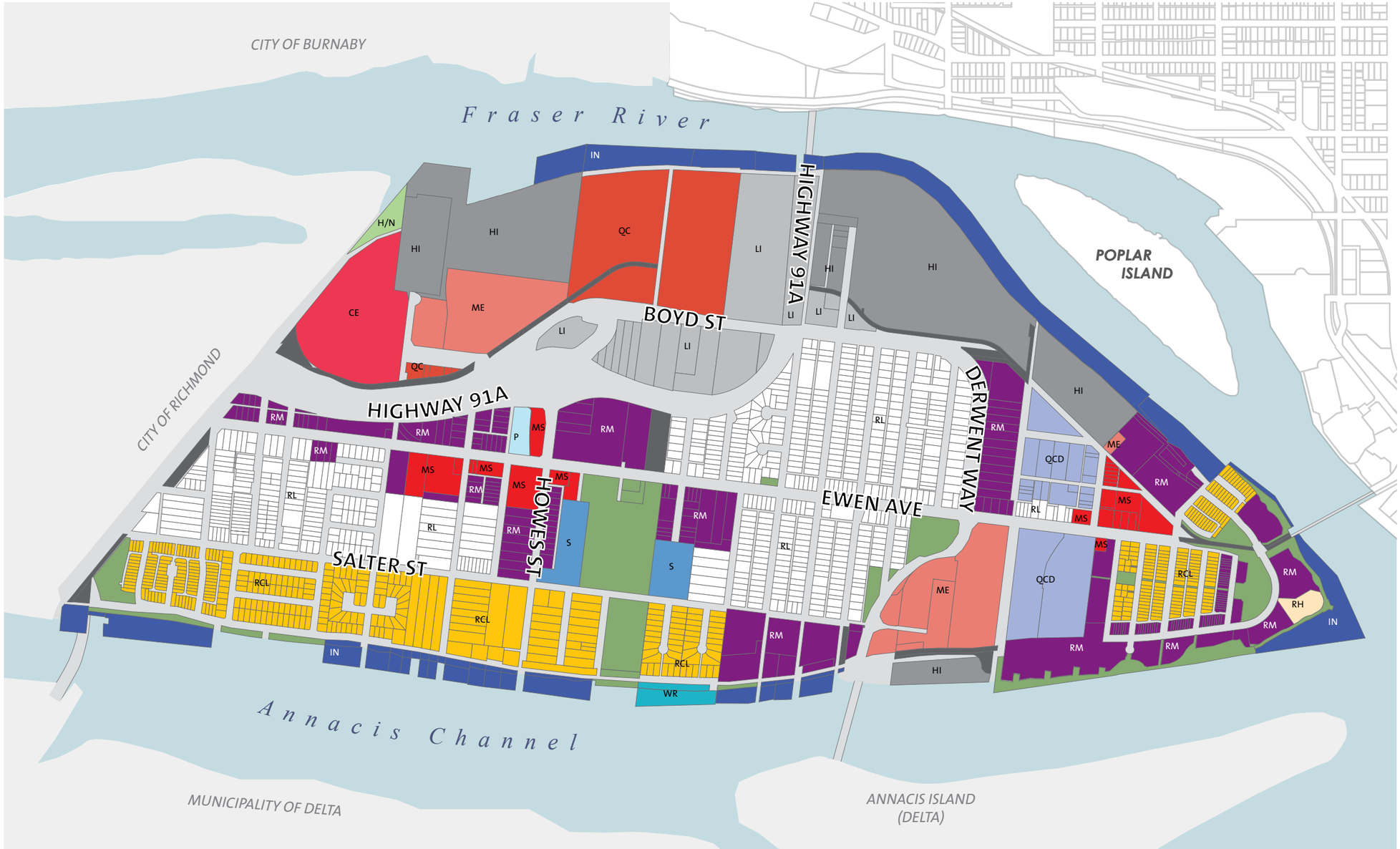
SCHEDULE B
Parks, Trails and Greenway Streets Map



KEY:

- Planned
- Existing
- Dedicated Bike Route
- Perimeter Trail
- Stanley Street Greenway
- Greenway Streets
- Mid-Island trail
- Planned Mid-Island Trail connection Area
- Parks/Open Space

SCHEDULE C
Land Use Designation Map



KEY:

- (RL) Residential - Low Density
- (RCL) Residential - Compact Lot
- (RM) Residential - Medium Density
- (RH) Residential - High Density
- (MS) Queensborough Main Street
- (QC) Queensborough Commercial
- (CE) Commercial Entertainment
- (ME) Mixed Employment
- (LI) Light Industrial
- (HI) Heavy Industrial
- (IN) Intertidal
- (WR) Waterfront Residential
- (P) Major Institutional
- (S) School
- Parks/Community Facilities
- (H/N) Habitat/Natural
- Utilities
- (QCD) Queensborough Comprehensive Development

NEW WESTMINSTER

511 Royal Avenue • New Westminster, BC V3L 1H9
General Inquiries (604) 527-4532 • Fax (604) 527-4511

QUEENSBOROUGH COMMUNITY PLAN