

## #5 Queensborough Eastern Node

The Queensborough Eastern Node multi-family area, identified as Development Permit Area #5 [see Map B], is designated in order to provide master-planned housing in close proximity to the neighbourhood high street, commercial centre, existing single family housing along Ewen Avenue, and adjacent multi-family housing. 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 and multi-family residential development.

Development permits issued in this area shall also take the Queensborough Eastern Node Master Plan into consideration, an excerpt of which is included as Appendix No. 4.

[BYLAW NO. 8151, 2019]

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 Industrial and Mixed Employment Development Permit Area.

### SUB-PRECINCTS

The Queensborough Eastern Node and surrounding area has been divided into seven precincts. There are both interface/neighbouring precincts and residential precincts. The interface precincts will inform the development of the residential precincts, and will be considered in the application of the remainder of these guidelines.



**Precinct 1 – Greenways Interface:** These are the primary greenways that frame the residential development and create buffers from adjacent development, but as public lands, are not subject of these guidelines. Residential development adjacent to the Greenway Interface precinct will consider access to the greenway, and ensure the pedestrian realm of the greenway is protected.

**Precinct 2 – Pedestrian Spine Interface:** The internal east-west pedestrian spine through the neighbourhood will connect the Stanley Street Greenway and Mercer Street. It will be publicly accessible, and will be a landscaped pathway with benches and passive seating areas. Residential development adjacent to this precinct will create inviting pedestrian spaces by paying particular attention to the legibility of the publicly accessible space.

**Precinct 3 – Greenway Residential:** This precinct is ground oriented multi-family housing that fronts the greenways and sensitively utilizes those thick edges to buffer adjacent land uses. Consideration will be given to orienting buildings sensitively, providing pedestrian access, and creating a pedestrian friendly interface.

**Precinct 4 – Mercer High Street Interface:** This precinct will be mixed commercial - multi-family development that pays particular consideration to the Mercer Street frontage as a commercial high-street and opportunity to relate to the commercial development. To accommodate the floodplain, ground level commercial, office, or studio space will be considered along the Mercer Street frontage. Though guided by the Queensborough Main Street Development Permit Area, the interface between this residential precinct and the adjacent Mercer Street Interface precinct will be a key consideration.

**Precinct 5 – Interior Residential:** This precinct may utilize a mix of multi-family forms to define streetscapes and greenspace edges. It has less direct relationship with the interface precincts, but will sensitively link development within this area with surrounding development, and ensure suitable connections to the interface precincts.

**Precinct 6 – Low Density Residential Interface:** As a transition to the heritage housing along Ewen Avenue, this precinct will likely include additional multi-family and compact lot development north of the lane. Consideration will be given to easing the transition between the existing housing, existing commercial use (pub) and the new neighbourhood.

**Precinct 7 – Commercial Centre Context:** As the commercial and social heart of the neighbourhood, providing direct access to the commercial centre through the neighbourhood, particularly for pedestrians and cyclists, is an important consideration.

### DESIGN GUIDELINES

#### SITING

- QEN.1** Building siting must contribute to a pedestrian scale neighbourhood character. Consider the following:
- Orient residential units adjacent to the Stanley Street Greenway, and Duncan Street Greenway.
  - When buildings are oriented with side facades facing a public or private greenway or public street, the façade is encouraged to create a strong relationship with the greenway or street by incorporating entrance features, or other architectural features that create a direct relationship to the greenway or street.
  - 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, special architectural, and/or public realm features to reinforce a sense of arrival at intersections that provide key access points through and into the community and neighbourhood commercial node. This includes intersections between interior walkways and public streets. 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).
  - The design of the lane behind Mercer Street gives special consideration to the mix of users, including commercial parking, residential parking, and residential unit entrances.
- QEN.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, noise, etc.
  - Consider building siting that sensitively addresses non-residential neighbouring buildings and uses, as well as low-density residential development that will remain along Ewen Avenue.
  - 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). **QEN.2  
CONT.**
- 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).

**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:

**QEN.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 rooflines, 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.
- In multi-family developments, 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 industrial riverfront community context and/or the legacy of its historically prominent citizens.

Consider providing 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, including reuse of artefacts found on site.

**QEN.4**

### MASSING

- QEN.5** Building massing must contribute to a pedestrian scale neighbourhood character. Consider the following:
- In multi-family buildings, 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.
  - In multi-family buildings, 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 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).

- QEN.6** Building massing must maximize natural light and ventilation. 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

- QEN.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.

**ENTRANCES**

Primary pedestrian entrances into buildings must be integrated into the design of the building, yet be clearly expressed. Consider the following: **QEN.8**

- 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: **QEN.9**

- Make entries for 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).
- For multi-family buildings, 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: **QEN.10**

- Consider roof forms that reflect the riverfront industrial heritage of the area.
- 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

**QEN.11** 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.
- Take microclimate into consideration when locating and sizing windows.

**QEN.12** 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.

### SIGNS

**QEN.13** 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: **QEN.14**

- Include balconies for above grade units and patios for ground oriented units.
- 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).
- Incorporate usable open spaces on rooftops, where appropriate.

Each multi-family development must provide semi-private outdoor common space. Use common space to create a transition from private residential areas to the development entry at public streets or greenways. Orient private patios and entries around the semi-private common space to facilitate neighbourly interactions and provide overlook for children as they play. **QEN.15**

In multi-family development, common outdoor space must be designed to be of a usable size and configuration. Include a range of activities and generations. Consider the following: **QEN.16**

- 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 in areas that capture the sun, are shaded (e.g. by building canopies or trees) and/or are sheltered from wind and rain.
- Seating areas and furnishings made of high quality contemporary materials.
- 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), or play elements in visible locations.

Each multi-family 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. **QEN.17**

### NOISE

- QEN.18** 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 primary 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.
  - The design of each new development and building must consider the “Guidelines for New Development in Proximity to Railway Operations”, prepared for the Federation of Canadian Municipalities and Railway Association of Canada, as amended from time to time.
- QEN.19** 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

- QEN.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 development 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: **QEN.21**

- Use a natural palette of wood, architectural concrete, stone, brick, or metal and muted paint colour tones (e.g. Benjamin Moore’s Historical Vancouver True Colours) that reflect the area’s riverfront industrial heritage.
- 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: **QEN.22**

- Use high quality building materials (e.g. wood, architectural concrete, stone, brick, or acceptable alternative) rather than materials that are visibly simulated 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 (included in Schedule B), or the Public Realm Map (included in Appendix No. 4) as accommodating a portion of any public open space, walkway, or publicly accessible private open space 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. For development adjacent to a greenway, consider the following: **QEN.23**

- Each development adjacent to any trail, as identified on the Parks, Trails and Greenway Streets Map (Schedule B) and the Public Realm Map (included in Appendix No. 4), must set buildings and other structures back from the walkway while at the same time providing a frontage that is pedestrian scale. 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.

## Queensborough Eastern Node

### QEN.23 CONT.

- Each development adjacent to any trail, as identified on the Parks, Trails, and Greenway Streets Map (Schedule B) is encouraged to provide internal pathway connections to the greenway or trail.
- Interior publicly accessible trails and spaces should provide connections between public streets and greenways. These internal walkways should be designed in a manner that is inviting and are legibly public.
- Encourage development adjacent to the new lane parallel to Ewen Avenue to include landscaping and a publicly accessible path along the north side.

### PRIVATE OPEN SPACE

#### QEN.24

The principle internal east-west greenway identified on the Master Plan Map (see Appendix No. 4) will be privately owned and maintained, but publicly accessible open space and trail. For development of the greenway, consider the following:

- Open space should be provided generally as shown on the Master Plan Map.
- Prioritize pedestrian movement first, bicycle movement second throughout the area.
- Provide a contiguous paved walkway to a minimum 2 metre width between Stanley -Greenway and Mercer Street.
- Implement the Urban Forest Management Strategy through the overall neighbourhood. Design the tree planting specification for all trees in the area such that they will flourish.
- Provide public seating and lighting at reasonable intervals along the walkway, including at the entrances to other publicly accessible private walkways.
- Include features like seating, covered areas, community gardens and natural play areas.
- Use street furnishings and fixtures that reflect the industrial riverfront heritage of the area, characterized by the refined use of metal, concrete and timber.
- Each segment of the greenway should be designed to have its own sense of place while still fitting in with an overall design concept.
- Residential units that have a side orientation towards the greenway should include windows that overlook the space to ensure eyes on the street.
- Residential units that have a front orientation towards the greenway should include a transition between “public” and private space.

**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:

**QEN.25**

- 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**

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.

**QEN.26**

**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.

**QEN.27**

Provide a continuous line of shade trees along the south side of the multi-use pathway on Duncan Street, aiming for a minimum 27% canopy coverage.

**QEN.28**

Each development must integrate trees, including shade trees. Consider the following:

**QEN.29**

- 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.

### TREES & PLANTING CONTINUED

- QEN.30** 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 metres (40 feet).
- QEN.31** 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.
  - Plant shade trees at an approximate ratio of one tree for every five parking spaces on the site. Plant trees in a minimum 3 metres (9.8 feet) wide continuous trench and protect trees with bollards or tree guards.
- QEN.32** Develop and/or enhance areas of understory vegetation using diverse, multi-storey planting which will support habitat for barn owls, smaller wildlife, songbirds and important pollinators such as bees, butterflies and dragonflies.

**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:

**QEN.33**

- 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.

New development must not result in an increase in train whistles. Remove or consolidate existing driveways for lands undergoing redevelopment, where possible, to reduce the need for trains to whistle.

**QEN.34**

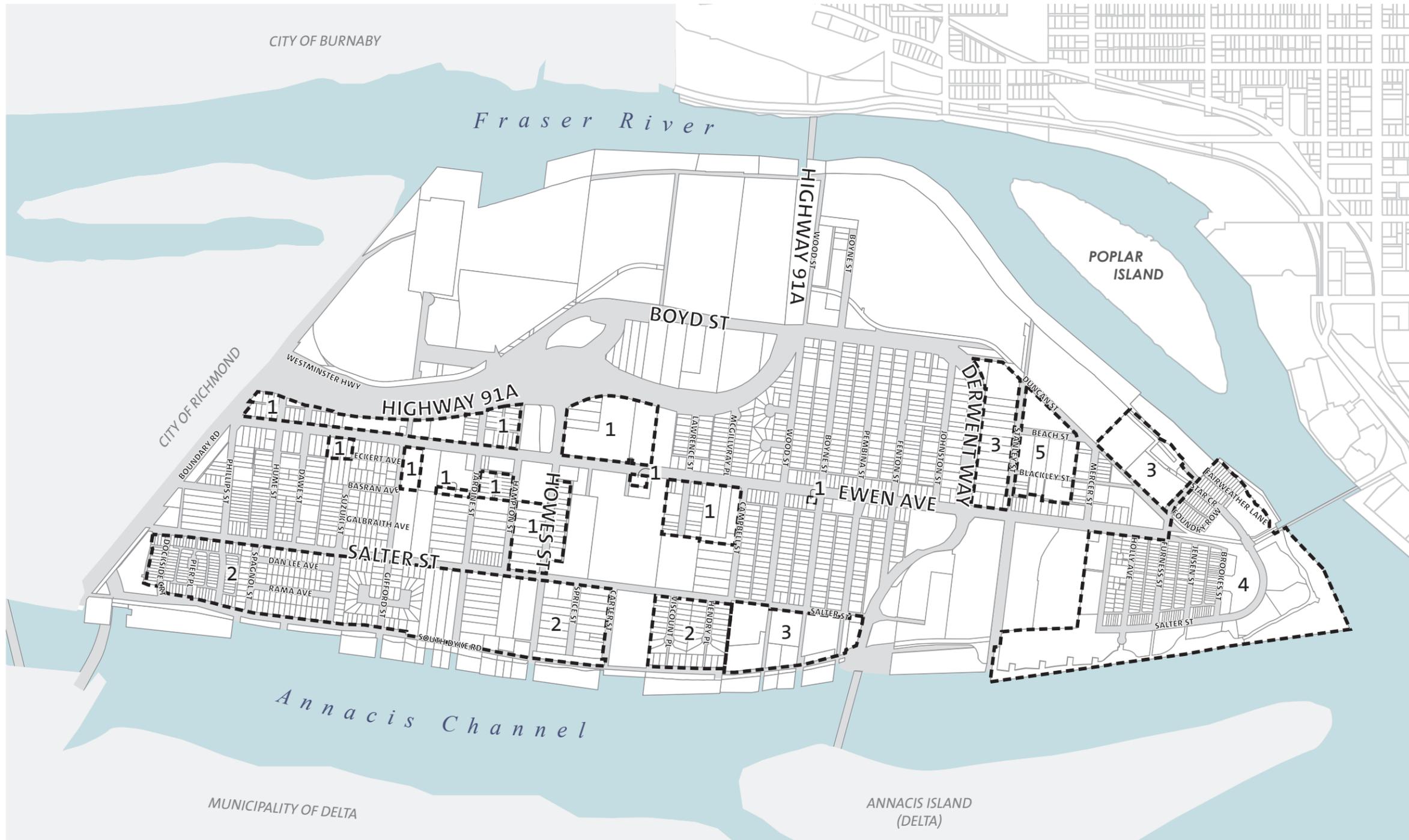
Infrastructure for electric vehicles for residential parking spaces are required to meet electric vehicle charging provisions in the zoning bylaw. Infrastructure for electric vehicles for visitor parking should also be provided.

[BYLAW NO. 8039,2018]

**QEN.35**

Infrastructure for electrical vehicles for commercial and institutional uses with more than 10 parking spaces, should provide an energized outlet Level 2 or higher for a minimum of one parking space for every 10 spaces, plus one space for additional parking spaces that number less than 10. In some cases, in addition to an energized Level 2 outlet, electric vehicle supply equipment may be required.

# Map B Residential Development Permit Areas



### Residential Development Permit Areas

- 1. Ewen Avenue Multi-family
- 2. Compact Lot
- 3. East Queensborough
- 4. Port Royal
- 5. Queensborough Eastern Node

DEVELOPMENT PERMIT AREAS

[BYLAW NO. 8021, 2018; 7982, 2018; 8151, 2019]