A.1

MOTION

1. Guidelines Associated with the By-law Amendments to Implement the False Creek Flats Plan

THAT the attached documents entitled:

"*Brewery Creek IC-3, C-3A, C-2C and RM-4/4N Guidelines*";

"*Micro Dwelling Policies and Guidelines*";

"*MC-1 and MC-2 Guidelines for Cedar Cottage, Hudson Street and East Hastings (Clark to Semlin) Areas*";

"*East False Creek FC-1 Guidelines*";

"*False Creek Flats Urban Design Policies and Guidelines for I-2 and I-3*";

"*False Creek Flats Urban Design Policies and Guidelines for IC-3 (Sub-area A)";*

"*False Creek Flats Urban Design and Development Policies and Guidelines for FC-2*";

be approved by Council for use by applicants and staff for development applications in the corresponding Districts.

* * * * *

BREWERY CREEK I-3, IC-3, IC-3A, C-3A, C-2C AND RM-4/4N GUIDELINES

Adopted by City Council on September 10, 1996; last amended October 31, 2017

Application and Intent

These guidelines are to be used in conjunction with the I-3, IC-3, IC-3A, C-3A, C-2C and RM-4/4N District Schedules in the area shown in the map on the reverse side of this page. These guidelines will be used in reviewing development applications seeking conditional approval or relaxations.

The Recognition of Brewery Creek

Brewery Creek was one of Vancouver's significant watercourses and provided a major impetus for the development of industry along its banks due to the availability of fresh water.

In cases where a development is proposed on or adjacent to the former watercourse (see map below), Brewery Creek should be recognized in one or more of the following ways:

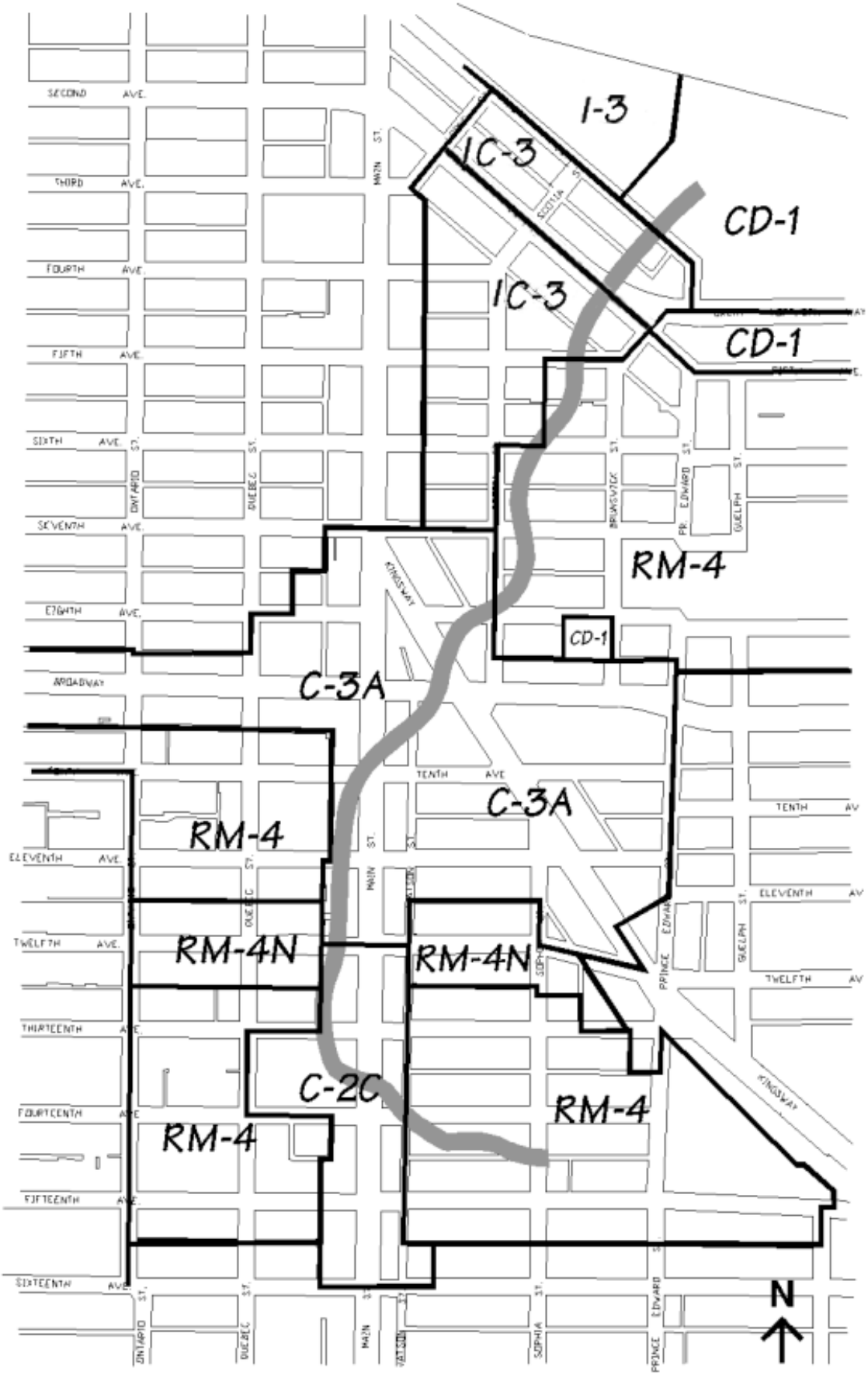
(a) design elements symbolizing or recognizing the creek;
(b) open space on the site of or adjacent to the former watercourse;
(c) 'daylight' the creek, if feasible; or
(d) channelling stormwater along its original course.

Where feasible, site plans and the design of buildings should also leave options open for the future pursuit of 'daylighting' of the creek or creating a channel for stormwater along its original course.

Community Input

Community input should be sought from neighbourhood organizations, neighbours and other interested citizens in cases where the creek is recognized.

Figure 1. Brewery Creek Water Course



MICRO DWELLING POLICIES AND GUIDELINES

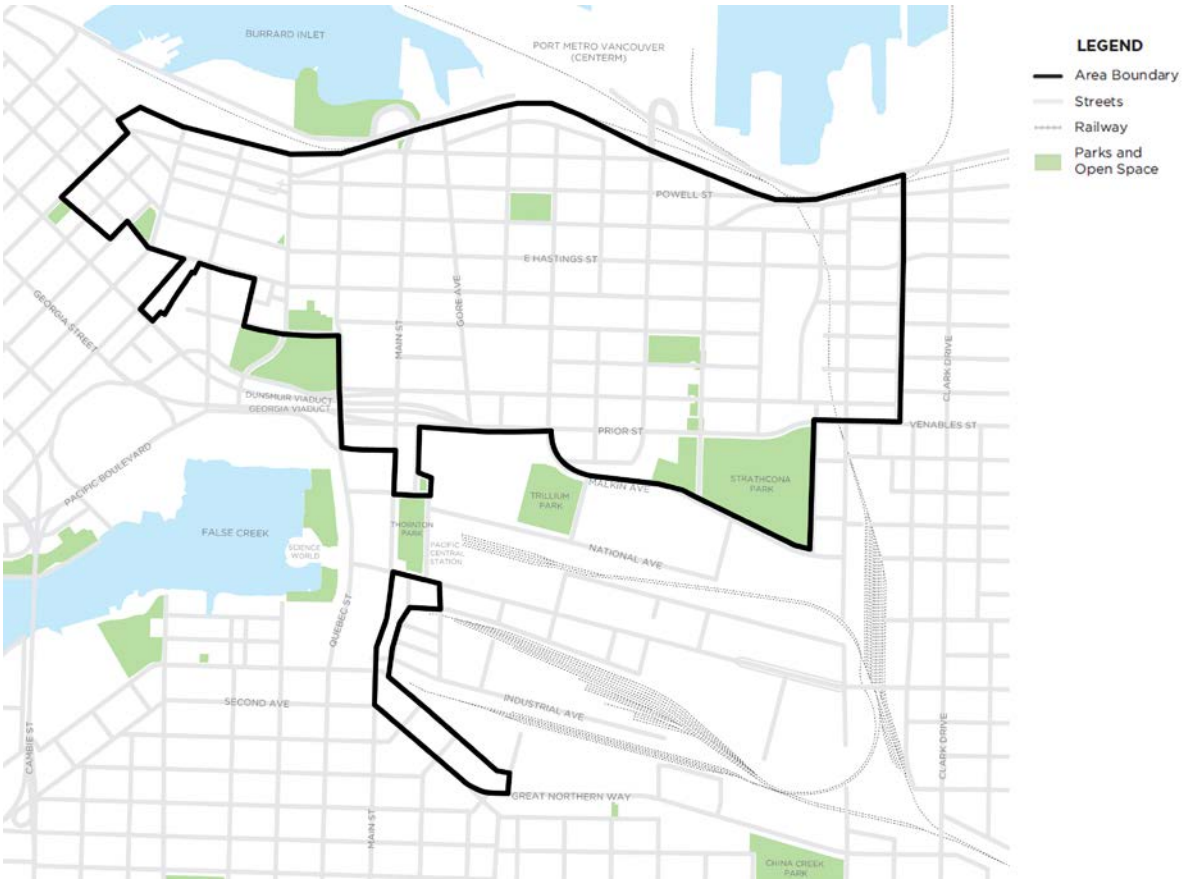
Adopted by City Council on March 15, 2014
Amended October 31, 2017

1 Intent

The intent of these guidelines is to encourage the creation of new livable, affordable micro dwelling rental units in the Downtown Eastside and the False Creek Flats areas. Micro dwellings will preferably be located in buildings with a variety of unit sizes and located in close proximity to open green space, commercial, and community and recreational facilities. The aim of these policies and guidelines are to provide flexibility to achieve the City's affordable housing objectives for replacement housing for low-income singles and affordable housing for moderate income renters in the Downtown Eastside and for low-income singles and moderate income renters as outlined in the False Creek Flats Plan.

2 Application

These policies and guidelines are to be used in conjunction with the Zoning and Development By-law, the Downtown Official Development Plan (Victory Square or C2) or a CD-1 By-law, the Downtown Eastside Oppenheimer District Official Development Plan (Victory Square), the HA-1 and HA-1A (Chinatown), HA-2 (Gastown), IC-3 and FC-1 (the area North of National Avenue), FC-2 and the Rezoning Policy for the Downtown Eastside which permit a Micro Dwelling Unit as illustrated in the map on the next page. These policies and guidelines should be consulted in seeking approval for this conditional use.



The Micro Dwelling Unit policies and guidelines are only applicable for development permit applications and applicants should also refer to the Vancouver Building By-law and depending on type of rental, applicants should also refer to the Social Housing Design Guidelines and the Rental 100 program. Micro dwelling unit will be secured through a Housing Agreement which must be registered against the title of the property prior to issuance of the Development Permit. The covenant is to ensure that the units are secured as either non-market or market rental units for 60 years or the life of the building (or whichever is greater).

Micro Dwelling Units are new self-contained units (with private bathrooms and kitchens) which are smaller than 320 square feet and may be relaxed down to 250 square feet and are intended for single occupancy.

3 General Design Considerations

An application for a Micro Dwelling Unit is a conditional use and requires approval by the Director of Planning or Development Permit Board. In the consideration to allow this use, livability and affordability will be primary goals. These policies and guidelines delineate a set of principles for livability, which include light and ventilation, privacy, and amenity and outdoor space, as well as affordability.

3.1 Light and Ventilation

Natural day light and well ventilated spaces are essential to occupant comfort and well-being. The provision of good day lighting and proper ventilation is an especially important design consideration for Micro Dwelling Units, due to their small size and limited window area. Maximum exposure to daylight and ventilation and fresh air for all small units is encouraged. The Horizontal Angle of Daylight provisions should be considered.

(a) A minimum of two operable vents should be placed as far apart as possible, to facilitate good air flow.
(b) Opportunities for higher ceilings (minimum of 9’6”) and reflective light shelves that allow light further into the unit should be considered. When the principal living area,

including the kitchen space, is more than 7.6m deep, a strategy to provide natural light to the rear portion of the area must be demonstrated.

(c) The provision for open residential balconies or sundecks should be considered.

3.2 Noise

Good sound separation between units is a key aspect of livability.

(a) The placement of balconies, windows and their operable vents and their adjacencies must be considered to minimize noise.

(b) Where casement windows are used, the windows must open in opposite direction to each other to lessen sound transfer between units.

4 Guidelines Pertaining to Regulations

4.1 Internal Design and Facilities

4.1.1 Living/Sleeping Space

Due to small unit size, the principal living area of a Micro Dwelling Unit may also serve as the main sleeping area. As a result, consideration should be given to ensure the thoughtful design of this area so that it may accommodate a multitude of different functions.

(a) The minimum dimension of the main living/sleeping space should be 3 metres; enough to accommodate a fold down bed and circulation space and day lighted by a large window.

(b) The sleeping area may be located in a wall recess away from the main living area, but the space must remain contiguous with the main living area and not be enclosed.

(c) A sleeping area located in the main living area must include built-in hide-a-beds and fold-down kitchen tables that consider day and night uses of the space.

4.1.2 Bathroom

Consideration should be given to the overall design of the unit with regard to privacy, unit identity, sight lines and the direction of the door swing.

(a) A complete bathroom must be provided which is equipped with a wash-basin, toilet, and a shower and/or bath.

(b) Bathrooms must be physically separated from the remainder of the unit by partitions and a door to ensure privacy and to isolate noise and odours.

4.1.3 Kitchen

The ability to cook is an essential component of livability. Each Micro Dwelling must include kitchen that is properly ventilated and includes a sink, ample counter space for food preparation, a stove/oven and a modestly-sized refrigerator with freezer.

(a) Kitchens must include a fridge and freezer combination with a minimum 12 cubic foot unit with a footprint of 24” x 24” and bulk food storage options.

(b) The kitchen and dining area should include room for two people to stand or sit side-by-side.

4.1.4 Flexibility for Future Unit Reconfiguration

Considerations should be given to the consolidation of building services (i.e., electrical, plumbing, etc.) in order to allow the potential combining of units (conversion to one or two bedrooms) to address future housing need in the area.

4.2 Storage, Outdoor and Amenity Space

4.2.1 In Suite Storage Space

Considerations should be given to storage space for micro dwelling units, with preference for in-suite open and closed shelving units and loft areas in addition to the consideration of accessible and secure storage lockers located outside of the unit. Bulk storage is still required (see Administrative Bulletin Bulk Storage – Residential Developments 1997).

4.2.2 Outdoor Space

Access to outdoor space and fresh air are important to health and well-being and will improve the livability of smaller units. The provision of outdoor space, either in the form of private or shared space, based on an aggregate of 4.52m^2 per unit is required for all Micro Dwelling Units. If physical limitations impact the quality of the outdoor space, less may be required.

Privacy for residents should be considered.

(a) Usable private outdoor space should be provided for each micro dwelling unit in the form of balconies, decks or patios.
(b) Usable shared open space should include be provided in the form of shared courtyards, and common roof decks.
(c) The private open space should have a minimum single horizontal dimension of 1.8 m and a minimum area of 4.5 m^2 and should be designed to capture sun and views where possible, as well as to avoid noise and to take account of visual privacy and security.
(d) Alternatively, a micro dwelling unit that is designed to provide a strong open relationship with the exterior in the form of large operable windows and/or "Juliet" balconies may also be considered. Such operable doors and windows should allow a large amount of area to be open to the exterior, such as casements, sliders, double or single hung types. The amount of openness to the exterior should be large enough to accommodate two adults side-by-side.

4.2.3 Amenity Space

Micro Dwelling Units should include amenity space throughout the building that is accessible to all tenants and includes things such as lounge space, common meeting rooms, etc.

5 Unit Type and Distribution

A mix of Micro Dwelling Units and larger studio, 1-bedroom and 2-3 bedroom units in a building is encouraged. Flexibility may be given to achieve determined housing objectives for the neighbourhood, such as the need for low-income single housing to replace Single Room Occupancy hotels or flexibility to support project design and viability to allow more 3-bedroom family units within a development.

6 Affordability

Rents must be below average market rents for studio apartments in the local area, in accordance with the annual Canadian Mortgage and Housing Corporation Rental Housing Market Survey. It should be noted that other targets for affordability may be applied. Rental amounts are to be secured in the Housing Agreement.

MC-1 AND MC-2 GUIDELINES FOR CEDAR COTTAGE, HUDSON STREET, EAST HASTINGS (CLARK TO SEMLIN) AND FALSE CREEK FLATS (MALKIN-ATLANTIC-PRIOR) AREAS

Adopted by City Council on March 24, 1998
Amended April 23, 2002, July 22, 2003, and October 31, 2017

Contents

Note: These guidelines are organized under standard headings. As a consequence, there are gaps in the numbering sequence where no guidelines apply.

1 Application and Intent

These guidelines are to be used in conjunction with the MC-1, MC-1 Subarea A and MC-2 Districts Schedule of the Zoning and Development By-law in the MC-1 areas of Cedar Cottage, Hudson Street and the MC-1 and MC-2 areas of East Hastings (Clark to Semlin) and the MC-1 Subarea A area for False Creek Flats Malkin-Atlantic-Prior Subarea.

With respect to Cedar Cottage, these guidelines follow the policy directions of the 1996 MC-1/Welwyn Planning Policies developed for the Cedar Cottage MC-1. The 1996 MC-1/Welwyn Policies also outline proposals for some streetscape improvements along Commercial Street and at key intersections which are to be implemented separately.

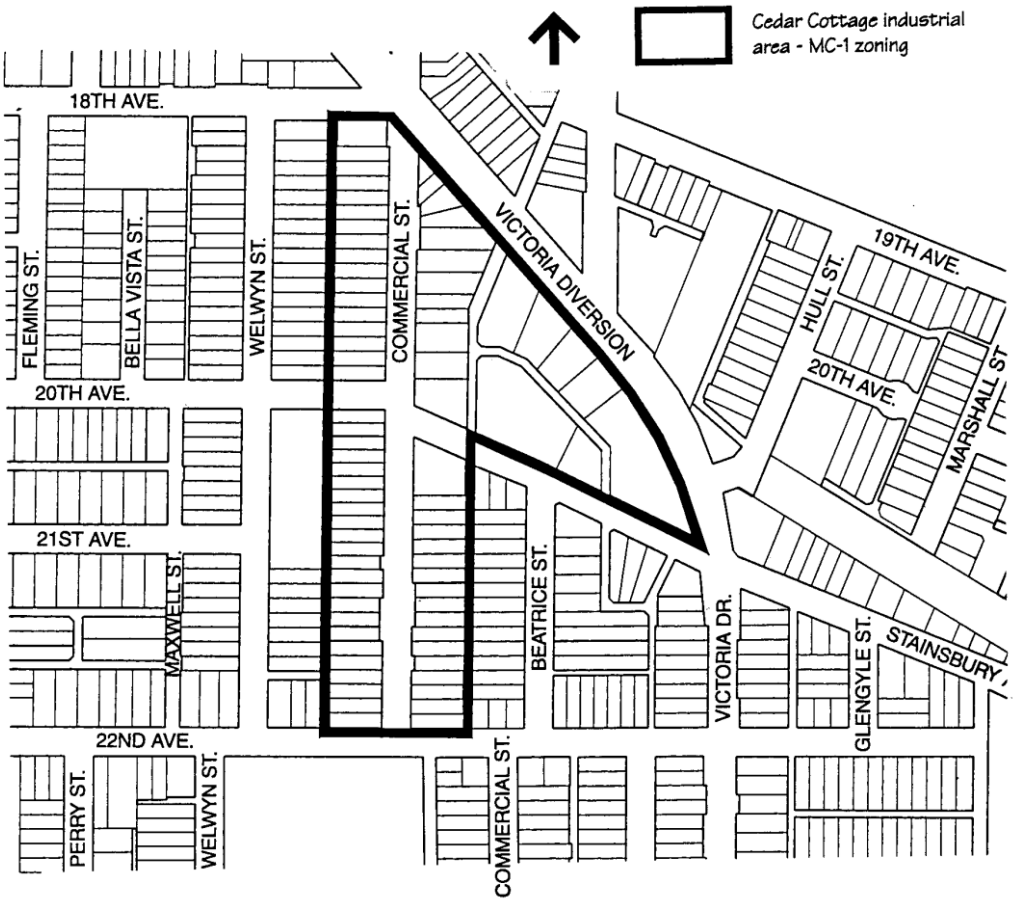
With respect to the Hudson Street and East Hastings (Clark to Semlin) Areas, Council approved their rezoning from industrial to MC-1 and MC-2 mixed use on April 23, 2002.

With respect to The MC-1 Subarea A for False Creek Flats (Malkin-Atlantic-Prior), these guidelines follow the policy directions of the False Creek Flats Area Plan and Policies adopted by Council on October 31, 2017

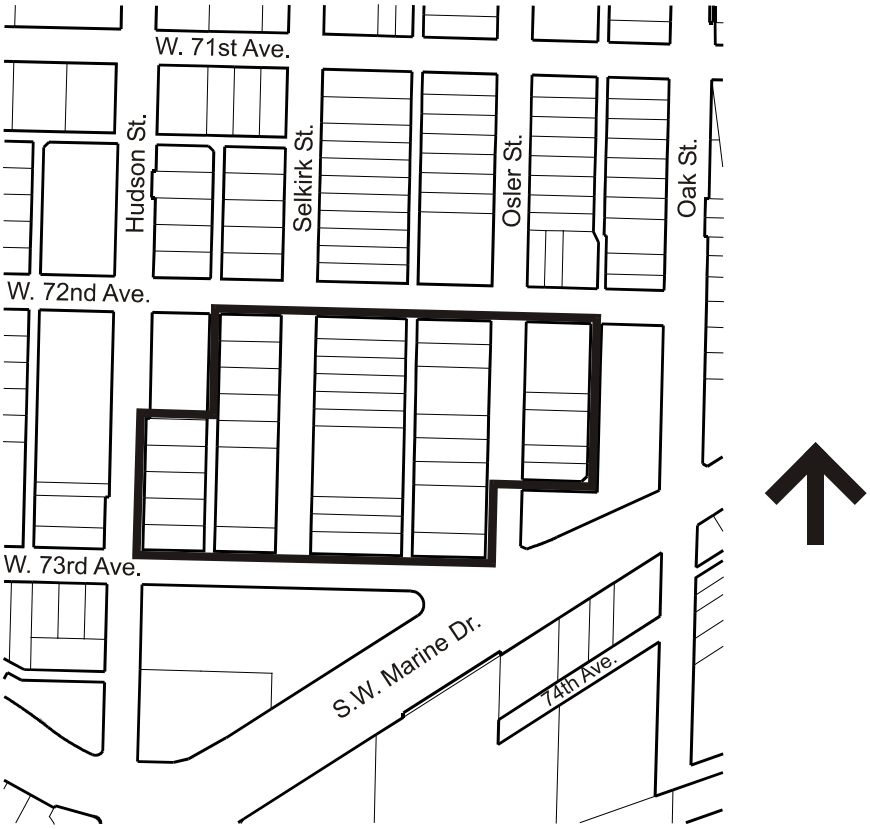
These guidelines should be consulted in seeking approval for conditional uses or discretionary variations in regulations in the MC-1 and MC-2 areas. As well as assisting the applicant, these guidelines will be used by City staff in the evaluation of projects.

The intent of the guidelines is to:

(a) Achieve compatibility among residential, commercial, and industrial uses in these mixed use areas; and
(b) Guide building massing and design for neighbourliness, appropriate scale and pedestrian interest.

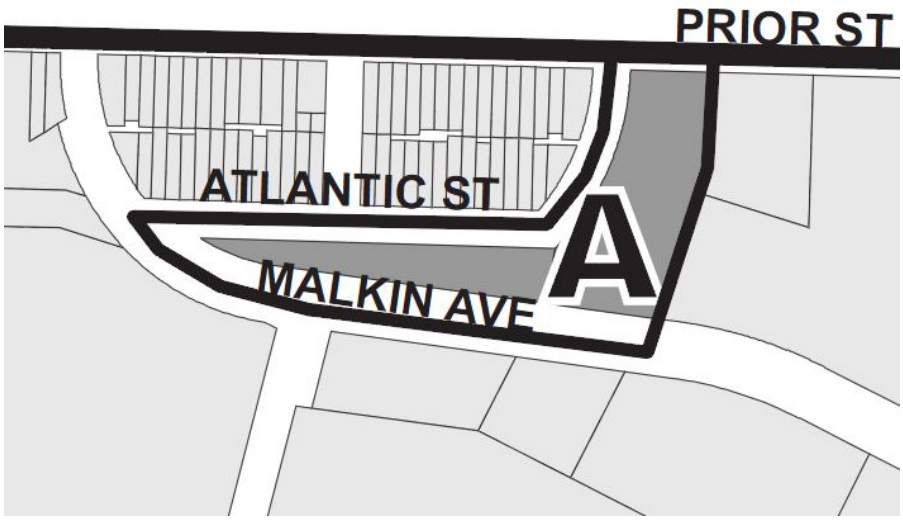


Hudson Street Area
- MC-1 zoning



East Hastings (Clark to Semlin)
- MC-1 and MC-2 zoning

False Creek Flats (Malkin-Atlantic-Prior) MC-1 Subarea A



2 General Design Considerations

2.1/2.2 Neighbourhood/Streetscape Character

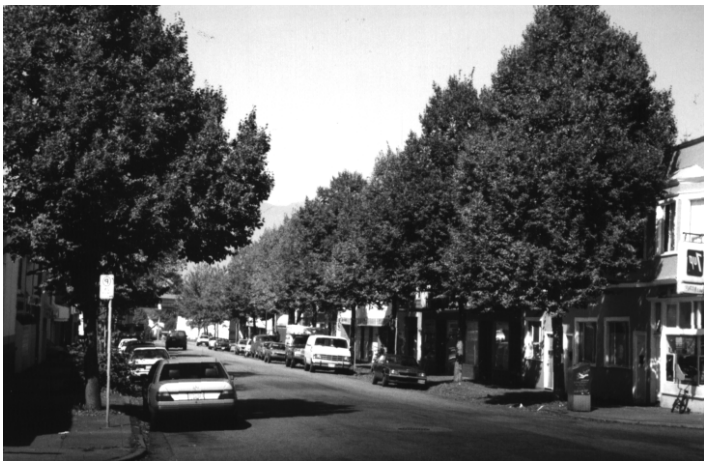
Existing Character

The Cedar Cottage Area

The Cedar Cottage Area has a mix of small and large industrial, service, office and residential uses, with a small amount of retail. The buildings are generally two to four storeys, continuous, and located right at the front property line. The mixture of old and new, the modest scale, the variety of design and use, the urban feel of the street, and the mature street trees contribute to a valued idiosyncratic character.

Typical Early 1900s Building

Mature Linden trees: a key asset



Hudson Street Area

The Hudson Street Area has a mix of industrial, service and cultural and recreational uses with a small amount of office and retail uses within its 2.3 ha area. Most buildings are one to two storeys, continuous, and located at the front property line. An existing residential development is located on the north portion of Hudson Street and abuts Hudson Street Area developments which also front Hudson Street.

Typical Hudson Street Area Building

Hudson Street Area Streetscape

East Hastings (Clark to Semlin) Area

The East Hastings (Clark to Semlin) Area has a mix of industrial and non-industrial uses. Manufacturing and wholesaling uses are varied and include garment, metal products, kitchen, mattress and food. Retail and Service uses include several auto dealerships and repair, Canadian Tire and Value Village outlets, the Waldorf Hotel and the Memorial Gardens Funeral Home. Along Hastings Street, development is discontinuous with changing character along its length and no clear pattern of similarity in form, scale and massing. Several large sites are extensively paved or vacant, while some segments are more intensely developed where buildings are continuous, two to three storeys, and built to the front property line.

Typical Hastings Street (Clark to Semlin) Area Building

Hastings Street (Clark to Semlin) Area Streetscape

MC-1 Subarea A for False Creek Flats (Malkin-Atlantic-Prior)

The MC-1 Subarea A - False Creek Flats (Malkin-Atlantic-Prior) Subarea is situated between I-2 zoning on the south, RT-3 Strathcona neighbourhoods to the north, and the Strathcona community Garden and Chinese Free Masons Manor on the east. The pre-date residences along Atlantic Street, Heatley Avenue and Prior Street have a fine-grained scale and ground-oriented residential character ranging from one and a half to three storeys. These streets are lined with front gardens and a regular street tree pattern. Malkin Street on the other hand is takes on more of an industrial urban fabric.

Pennyway House - Atlantic Street

View to West on Atlantic St.

Character Objectives

The existing pattern of development in the three areas varies, and future development may also have a wide range of uses. In all three areas, these guidelines aim to ensure livability, neighbourliness, compatibility of uses and building massing, quality design and materials, and an attractive street-level treatment.

There are also differences among the areas. In Cedar Cottage, the traditional older buildings with bay windows are the inspiration for guidelines on massing and streetscape treatment. In Hudson Street, the buildings have no traditional character but there is a typical frontage scale and street wall. The guidelines aim to continue the frontage scale and streetwall where possible, while recognizing that all-residential buildings may occur, and will have setbacks. In both these areas, it is anticipated that most new development will be multi-storey, full lot development.

The existing character of Hastings Street is different from the other two areas, and much more diverse. With larger lot assemblies, and a major arterial location, a much wider range of development may occur, from low intensity auto sales and service, to fully developed mixed use. A variety of building scales and placements may occur. The guidelines aim to ensure as much compatibility of siting and massing between neighbouring developments as is reasonable, given their possibly diverse nature; as well as to ensure attractive, quality building design, materials and landscaping.

The MC-1 Subarea A for False Creek Flats (Malkin-Atlantic-Prior) transitions from larger scale industrial uses to finer grain early 20th century residences and is situated adjacent to the Strathcona Community Garden Park. The intent of these guidelines is for development in this subarea to respond sympathetically to the heritage character while acknowledging the impacts of adjacent industry. Frontages along residential streets should complement and enhance the existing scale, proportions, yards and streetwall. Facades fronting Malkin Street should, in general be more compatible with adjacent industrial uses and functions.

2.3 Orientation

The Cedar Cottage Area has an established pattern of building faces aligning with streets, which are unusual in layout—orthogonal, curved and angled. The Hudson Street and East Hastings (Clark to Semlin) Areas have an established orthogonal alignment of building face to the street grid.

(a) Building faces should be aligned to respect the established street orientations;
(b) On corner sites, both street-facing facades should be fully developed as front elevations; and
(c) In the Cedar Cottage Area, development at the southeast corner of Commercial Street and Victoria Diversion should respond to this key intersection with some form of landmark or focal element to “announce” the presence of the area to passersby.

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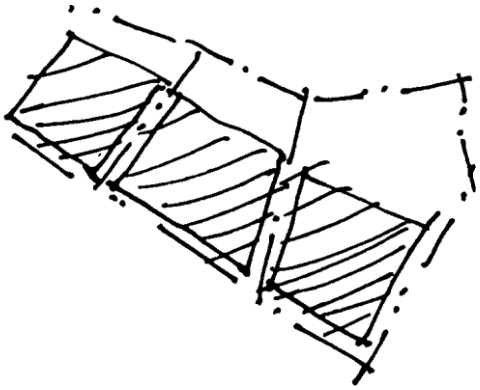
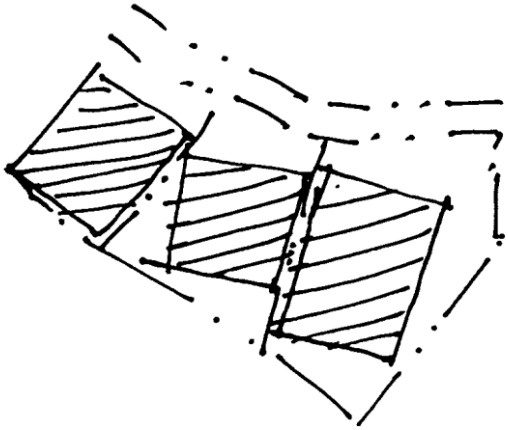
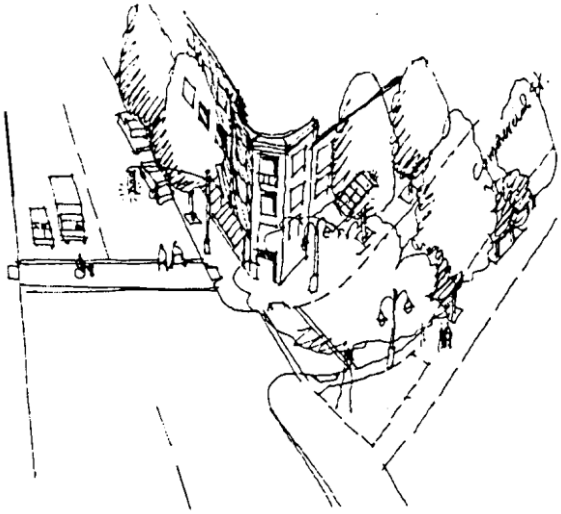


Not this.....



Landmark opportunity at Commercial and Victoria



2.4 Views

(a) Existing views enjoyed by adjacent developments should not be unduly compromised by incompatible siting, massing or orientation; and

(b) Opportunities for near views of gardens and landscaped areas should be provided for residents.

2.6 Light and Ventilation

Provision of sufficient daylight access to individual units and open spaces is one of the most challenging aspects in the design of residential units in low rise housing. The horizontal angle of daylight regulations in section 4.10 of the Districts Schedule should be supplemented with the following considerations:

(a) Living rooms should not face into courtyards;
(b) Below grade residential units often have inadequate daylight, and are generally discouraged;
(c) In double-fronting units (i.e., street/courtyard or lane/courtyard), a minimum clear courtyard dimension of 6.0 m (measured to any obstruction including exterior corridors) and a courtyard height/width ratio of 1.5 to 1.0 may be acceptable provided no primary (living rooms) or secondary living spaces (bedrooms, dining rooms) face onto the courtyard. Secondary living spaces, however, may face the courtyard on the highest floor only;
(d) Secondary living spaces (bedrooms, dining rooms) may face into the courtyard on lower floors provided that the minimum courtyard width is 9.2 m;
(e) Courtyard configuration and building massing should maximize sun access to the courtyard level including terracing of upper levels on the south side of courtyards;
(f) Mechanical ventilation of commercial space should be exhausted at a location having the least impact on residential livability; and
(g) Development should locate residential units and open spaces away from areas of noxious odours and fumes related to nearby traffic or land uses.

2.7 Weather

(a) Weather protection should be provided for common entrances, and for grade level or upper level individual residential entrances; and retail frontages. Weather protection need not be provided for service, office or industrial uses, but building design should anticipate future uses and provide a location for weather protection to be added at a later date.

2.8 Noise

The Cedar Cottage, Hudson Street East Hastings (Clark to Semlin) and False Creek Flats, (Malkin-Atlantic-Prior) Areas contain industrial and commercial uses. Noise producing activities such as loading, manufacturing processes, exhaust fans, arterial traffic and transit will continue both in and around the areas.

The restrictions on uses noted in section 3 of the guidelines will ensure a level of compatibility for uses within buildings, on adjacent sites, and in neighbouring areas. In addition, section 4.15 of the District s Schedule sets out acoustic standards and the requirement for an acoustic report to be provided for developments containing residential uses.

(a) Some of the methods which may be used to buffer residential units from external noise include:
    (i) orienting bedrooms and outdoor areas away from noise sources;
    (ii) providing mechanical ventilation (to allow the choice of keeping the windows closed);
    (iii) enclosing balconies or using sound absorptive materials and sound barriers; and
    (iv) using sound-deadening construction materials (e.g., concrete, acoustically rated glazing or glass block walls) and other techniques.
(b) Local noise generated by the development itself, such as parking and loading activities, exhaust fans, and restaurant entertainment, should be mitigated by location and design; and
(c) The City has regulations governing the noise levels that may be produced in various areas. The MC-1, MC-1 Subarea A, and MC-2 zones are in the “active” industrial category of the Noise By-law, which may affect some residential uses proposed. The Health Department should be contacted for details.

2.9 Privacy

Privacy in relation to other units, passersby, and adjacent development is a crucial aspect of residential livability and neighbourliness.

(a) Unit orientation, window placement and screening should be used to enhance privacy;
(b) Balconies and patios should be oriented, screened or landscaped to reduce direct overlook of adjacent residential uses or other units in the project;
(c) Habitable rooms within the developments should be oriented away from pedestrian circulation routes;
(d) Residential units located at street level should ensure privacy through setbacks, level changes, and/or screening; and
(e) In developments with courtyards, stacked units are encouraged to reduce privacy conflicts due to access corridors.

2.10 Safety and Security

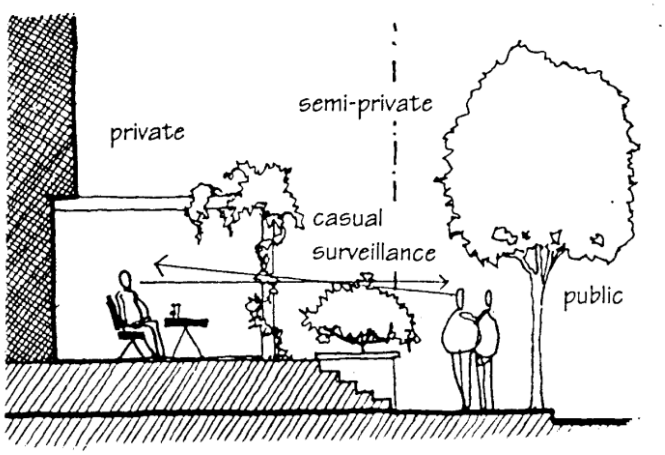
Safety and a sense of security are key components of livability. New development, both residential and non-residential, must provide a secure environment. The principles of "crime prevention through environmental design" (CPTED) should be incorporated in all new development.

(a) Public, private and semi-private territories should be clearly defined. Public and semi-private spaces should be configured to maximize surveillance. Spaces which are neither clearly public or private tend to be unsupervised and unkept areas, and should be avoided;
(b) Separate lobbies and circulation (including elevators) should be provided for non-residential and residential uses. Lobbies should be visible from the street and main entrances to buildings should front the street;
(c) Personal safety and security should be integral to the design of parking facilities. Underground residential parking, including pedestrian access routes from parking into the building, should be secure and separate from commercial parking. When open parking occurs, the area should be secured from public access in non-business hours (see Section 4.9 Off-street Parking and Loading).
(d) Both residential and non-residential uses should maximize opportunities for surveillance of sidewalks, entries, circulation routes, semi-private areas, children's play areas and parking entrances. Blind corners and recessed entries should be avoided. Visibility into stairwells and halls is desirable. Laundry facilities, amenity rooms, and storage rooms should be grouped together and visible for surveillance;
(e) Residential lighting should ensure good visibility of access routes and landscaped areas, without excessive lighting levels, glare or overspill to neighbours;

(f) Landscaping and screening design should not provide opportunities for intruders to hide; and

(g) Access routes from the building to residential garbage facilities should be separate and secure from those to non-residential garbage facilities.

Territory Definition



2.11 Access and Circulation

2.11.1 Pedestrian Access

(a) Primary pedestrian access to all uses should be from the street at street level;
(b) Residential entries should be separate and distinct from non-residential entries and lobbies;
(c) Internal public circulation systems such as shopping malls, are discouraged;
(d) Elevators should be provided on sites with frontage exceeding 15.0 m, where the vertical distance from parking to the highest unit entry exceeds three storeys; and
(e) Corridors should be adequately sized for moving furniture and should not be overly long (no more than 23.0 m in any one direction) or circuitous.

2.11.2 Vehicular Access

To ensure an active pedestrian environment, vehicular and service functions should not conflict with street frontage and pedestrian activity.

(a) Vehicular access to underground parking, loading and service areas should be provided from the lane rather than the street. In the Cedar Cottage Area, the exception is Porter Street, which is the equivalent of a lane for some sites fronting on Commercial Street;
(b) Negative impacts of vehicular entrance parking ramps and service areas should be minimized through proper treatment such as enclosure, screening, high quality finishes, sensitive lighting, and landscaping; and
(c) Where street access is considered, as noted in (a), vehicular entrances should be designed integrally with the building. Any vehicular entrance from the street should minimize interruption to pedestrian movement and building frontage on the street. In particular, large or long access ramps located directly off the street should be avoided.

3 Uses

3.1 Residential Use (Dwelling)

(a) In the Cedar Cottage and Hudson Street Areas, residential use is appropriate on any site; and
(b) In the MC-1 zoned part of East Hastings (Clark to Semlin) Area, residential use is appropriate on any site. (Residential uses are inappropriate on the north side of East Hastings Street because it is adjacent to a long term heavy impact industrial area. Therefore, residential use is not included in the MC-2 zoning.)
(c) In MC-1 Subarea A for False Creek Flats (Malkin-Atlantic-Prior) residential use is appropriate on any site.

Not withstanding the above, residential uses are discouraged where incompatible with other uses in the same project or uses nearby. (It should be noted that combining residential with some industrial uses is not permitted by the Building By-law or requires special code equivalencies. Early discussion with the Chief Building Official is advised.)

3.2 All Residential Buildings (Multiple Dwelling)

Section 3.2 of the District Schedule requires non-residential uses at grade. However, buildings with residential uses at grade may be considered in the following locations in the Cedar Cottage, Hudson Street and East Hastings (Clark to Semlin) MC-1 and MC-1 Subarea A for False Creek Flats (Malkin-Atlantic-Prior) Areas.

(a) In the Cedar Cottage Area, buildings with residential uses at grade may be considered along the north side of Stainsbury Avenue between Porter Street and the Victoria Diversion, and on Commercial Street between East 18th Avenue and East 22nd Avenue;
(b) In the Hudson Street Area, buildings with residential uses at grade may be considered throughout the area; and
(c) In the East Hastings (Clark to Semlin) MC-1 District Area, residential uses at grade may be considered along the Pender Street frontage.
(d) In MC-1 Subarea A for False Creek Flats (Malkin-Atlantic-Prior), buildings with residential uses may be considered fronting Atlantic Street, Heatley Avenue, and Prior Street.

3.3 Uses at Grade

Where non-residential uses are required at grade, they may be retail uses, as well as service, office and industrial uses, as long as pedestrian interest is provided (as suggested in section 5 Architectural Components).

3.4 All Other Conditional Uses

Generally, all other conditional uses may be considered anywhere in the Cedar Cottage, Hudson Street and East Hastings (Clark to Semlin) MC-1 and MC-2 Areas subject to the guidelines in other Sections of this document, however:

(a) Some uses may be discouraged either in the same building or on an adjacent site when they are incompatible with residential uses, as indicated in the Residential Compatibility Matrix (Appendix A); and
(b) Institutional uses, including churches, may be considered as long as parking, circulation and access issues can be satisfactorily addressed.

4.2 Frontage

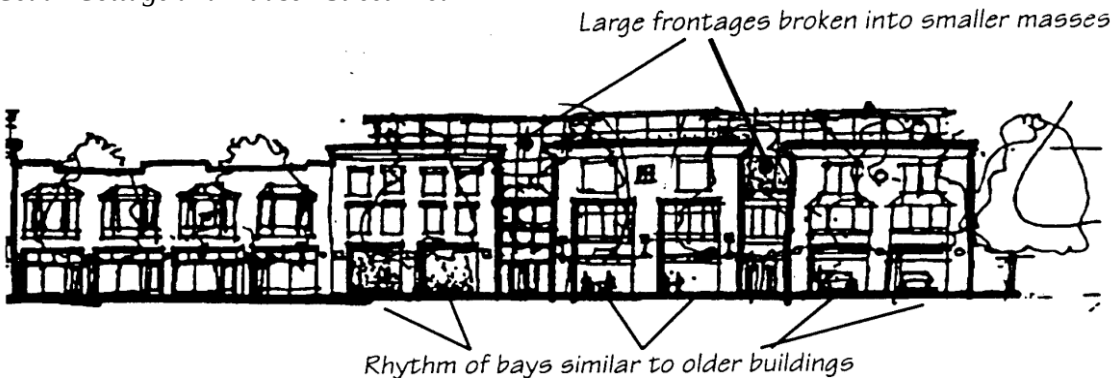
There is no maximum or minimum frontage for a development. However, in the Cedar Cottage Area, the design of development should maintain the traditional small scale and rhythm of Commercial Street, and extend it to the Victoria Diversion and Stainsbury Avenue. Similarly, in the Hudson Street Area and MC-1 Subarea A for False Creek Flats (Malkin-Atlantic-Prior) the scale of development should maintain the pattern that currently exists with adjacent development. In the East Hastings (Clark to Semlin) Area, current ownership patterns and the scale of development are such that development on larger lot assemblies will be more common. In addition, this area may see the continuation of relatively low scale, low density development. The design of development should consider the following principles in establishing and maintaining pedestrian scale and interest along the street.

(a) In the Cedar Cottage Area and MC-1 Subarea A for False Creek Flats (Malkin-Atlantic-Prior), buildings should be designed with a rhythm of bays that relate to the traditional scale of buildings (e.g., a typical 20.1 m wide building has 4 bays). At ground level, the bays should be designed so that they can be infilled with different treatments, depending on the use; and

(b) In both the Cedar Cottage and Hudson Street Areas, on sites with larger frontages (e.g., more than 30.2 m), the development should be expressed as a number of smaller buildings. This should be done through a significant break in the massing.

(c) In the East Hastings (Clark to Semlin) Area, larger assemblies and the arterial location make larger, longer building design acceptable. However, facades should be designed to avoid monotony through variety the use of articulation, windows, vertical elements, textured surfaces, architectural detailing, graphics or colours.

Cedar Cottage and Hudson Street Area



East Hastings (Clark to Semlin): On larger sites, architectural treatment can avoid monotony.

4.3 Height

(a) The maximum height of 12.2 m may be increased up to 13.8 m to allow for:
  (i) non-combustible construction of the residential component; or
  (ii) provision of roof design features beneficial to the character of the area; or
  (iii) response to topography, where the slope is more than 1.5 m across the site; or
  (iv) provision of raised residential entries, if desired.

4.4 Front Yard and Setback

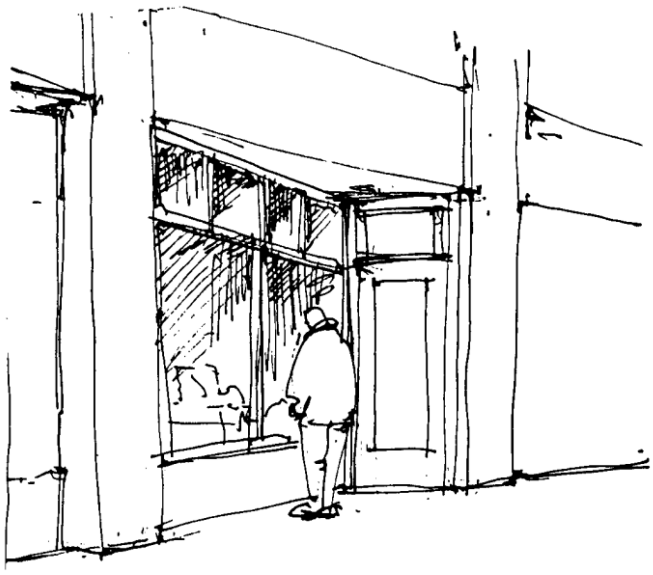
The current pattern in the Cedar Cottage, Hudson Street Area and the Pender Street frontage within the East Hastings (Clark to Semlin) Area is for buildings to be built to the property line, without setbacks. In the MC-1 Subarea A for False Creek Flats (Malkin-Atlantic-Prior), setbacks range, on average from 3.0 meters to 7.0 meters. Regulations generally call for new buildings to be placed at the front property line. However:

(a) In the Cedar Cottage Area, Hudson Street Area and on the Pender Street frontage, modest front setbacks may be considered where:
  (i) it is desirable to inset store frontages, doors, etc.;
  (ii) a pedestrian courtyard or other features benefiting pedestrian character are provided;
  (iii) bay windows are to be located on upper storeys (to avoid street encroachment);
  (iv) residential use is located at grade and space for steps or patio is desired; or
  (v) needed to help new residential development adapt to existing industrial uses.

(b) In the False Creek Flats (Malkin-Atlantic-Prior) sub-area, front setbacks on the residential streets of Heatley Avenue and Atlantic Street should be considered to create a transitional yard and landscaping for the adjacent residentially scaled streets.
(c) Setbacks should be configured and sized to achieve transition to neighbouring building faces.

Along Hastings Street, more diverse building forms on larger lots, with surface parking in some areas, is expected to continue. Buildings may be set back to mitigate the location along a major truck route and arterial. However, efforts should be made to site the buildings so as to define the street, anchor corners, and relate to neighbouring buildings.

(a) On larger sites with surface parking, buildings should be sited with the longest face of the building oriented towards the street.
(b) Building setbacks should provide a transition to those on the adjoining site. Encourage continuity between neighbouring development either by locating new buildings to join with existing buildings, or by locating buildings with one side at zero setback to allow a building on an adjoining site to abut the proposed building.
(c) On corner sites, buildings should be located at the corner.
(d) Open parking lots should have a landscaping strip along the street edges.



4.5 Side Yards and Setbacks

On corner sites, the building should be built to the property line of the flanking street or avenue, but with the same provisos as noted in Section 4.4 for the front yard and setback applying.

4.7 Floor Space Ratio

(a) Not all projects and sites will be able to achieve the maximum discretionary 2.5 FSR. (For example, while 1.5 FSR residential is easily accommodated on three levels above grade, the ground floor level is unlikely to accommodate a full 1.0 FSR of other use due to requirements for parking, loading and so forth.) Factors influencing the achievable density and use mix include:
   (i) proportion of non-residential and residential use;
   (ii) corner or mid-block site location;
   (iii) site frontage;
   (iv) mix of dwelling unit sizes;
   (v) response to guidelines on height and front setbacks; and
   (vi) ability to provide required parking.

(b) Section 5.2 of the District s Schedule permits a relaxation of the residential FSR from 1.5 to 1.8. The 0.3 FSR should be used for additional residential space at grade, in the rear, provided the additional space is non-market and/or guaranteed rental housing.

4.9 Off-Street Parking and Loading

Parking and loading are essential service functions. However, they can seriously detract from residential livability unless careful design is used to screen them from residential uses in and near the development. The type of parking provided, whether surface or underground, may be dependent on the use and intensity of the development. Lower intensity development on larger sites or developments such as auto-oriented sales or service generally has surface parking. More intensive development such as mixed use residential generally provides parking underground. Both types of parking may occur, particularly in the Hastings Street (Clark to Semlin) Area.

(a) For most types of development, parking should generally be located underground; exceptions may be considered for small sites, or where a limited number of at-grade stalls are provided for visitor parking;

(b) Where it is not reasonable to place all parking underground, given the type of development, any at-grade stalls should be located at the rear of the site and not within the front setback, or side setback on a flanking street. Roof top parking will not be considered in the Cedar Cottage, Hudson Street and False Creek Flats (Malkin-Atlantic-Prior) Areas. However, where topography permits, it may be considered in the Hastings (Clark to Semlin) Area as long as impacts can be mitigated. Where an open parking lot occurs, the area should be secured from public access in non-business hours [see section 2.10 (c)];

(c) For slabs over parking/loading areas, under-slab height at the point of parking access should be limited to 3.7 m maximum. Where structural or mechanical elements project below a slab over parking/loading area, requiring an increase in the 3.7 m maximum height at the lane, these elements should be screened from view;

(d) Parking at or above grade should be screened effectively from view of pedestrians and neighbours. Depending on the specific site, this should include solid roofs to avoid noise and visual impacts to dwelling units above, appropriate lighting, architecturally treated surfaces, screen walls, doors, and landscaping along the lane to reduce impacts on adjacent dwelling units;

(e) Parking for non-residential uses and residential visitors should be separate from residential parking, which should be secured by garage doors; and

(f) Convenient loading of furniture to residential units should be facilitated by the design of loading areas and access routes.

4.10 Horizontal Angle of Daylight

(a) Where the horizontal angle of daylight is proposed to be decreased as permitted in section 5.3 of the MC-1 MC-1 Subarea A and MC-2 District Schedule, the distance of unobstructed view should not normally be less than 12.0 m for living rooms and 6.0 m for bedrooms and dens; and

(b) In situations where the horizontal angle of daylight is decreased to the minimum of 3.7 m, additional overshadowing of windows by overhead balconies or other projections should be avoided.

5 Architectural Components

5.1 Roofs

(a) Where the prevailing scale of the street is consistent, and less than four storeys, the fourth floor should be designed to visually recede from the street. Examples of how to achieve this are:
   (i) emphasis on third floor cornice;
   (ii) change to lighter, more transparent material or expression; and/or
   (iii) setback of fourth floor facade from main facade plane.

(b) Roofs should be designed to be attractive as seen from above through landscaping, elements such as gazebos and trellises, and choice of materials and colour. Elements such as roof gardens and roof decks should be provided to increase usability of roofs whenever issues of overview and privacy can be adequately addressed; and

(c) Elevator penthouses, mechanical rooms, equipment and vents should be integrated with the architectural treatment of the roof.

5.2 Windows and Skylights

Windows at grade are important to enhance pedestrian interest, particularly since retail uses are not required at grade in this area.

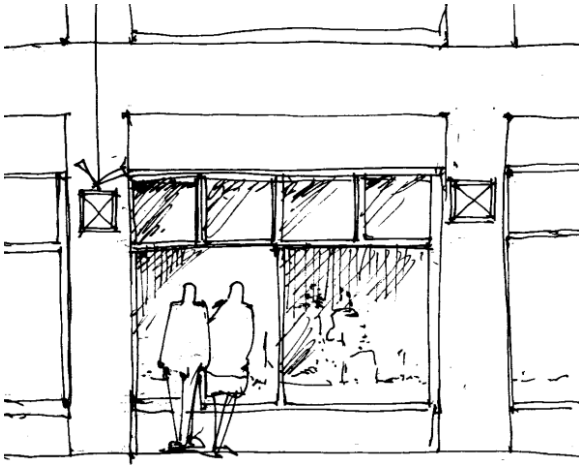
(a) For retail, service or office use:
   (i) maximize transparency through use of high transom, low sill window designs, as well as openable windows where appropriate. For service and office uses, design should allow for retail use in the future.

(b) For industrial use:
   (i) provide windows for viewing to industrial processes where possible; and
   (ii) where windows cannot be used, use other means to add visual interest such as expressed vertical elements, vines, murals, and detailing. Avoid long stretches of blank wall.

(c) For residential use, where located at grade:
   (i) design windows to contribute to pedestrian interest and street surveillance, as well as needed privacy and territorial definition.

Details add interest where transparency cannot

Maximize transparency for pedestrian interest



5.3 Entrances, Stairs and Porches

(a) When residential uses are located at grade, individual unit entrances at grade are an option but not a requirement. If provided, they can help achieve unit identity and pedestrian interest, but also need to be designed for privacy and territorial identity; and

(b) Shared residential entrances to buildings should also be designed as attractive, visible features.

5.4 Balconies

(a) Balconies should be designed to maximize light into the unit.

5.5 Exterior Walls and Finishing

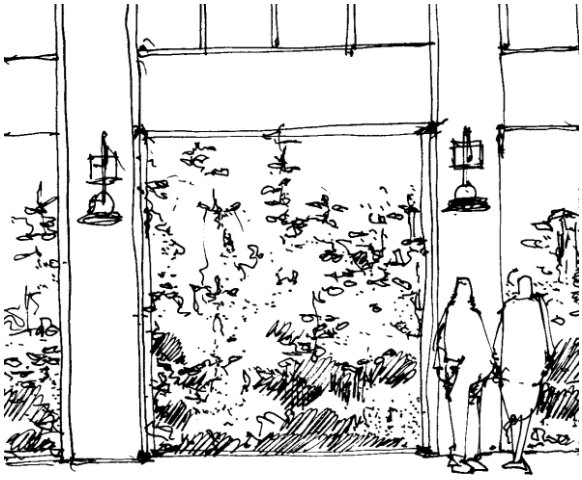
(a) The lower levels of development should be carefully designed to be related to pedestrian scale, and enhance the close-up view of the pedestrian. The use of high quality materials and more intensive detailing that contribute to pedestrian interest is encouraged;

(b) Vines or other landscaping should be used to soften blank building walls throughout the area;

(c) When party walls are likely to remain exposed for the foreseeable future, as a result of adjacent low-scale development, they should be carefully designed emphasizing quality materials, textures, articulation, colour and/or landscaped with climbing or hanging plants; and

(d) Walls abutting the lane should be carefully designed to be attractive to neighbouring developments and passersby through articulation, the use of quality materials, and landscaping.

Vine planting adds interest



5.6 Awnings and Canopies

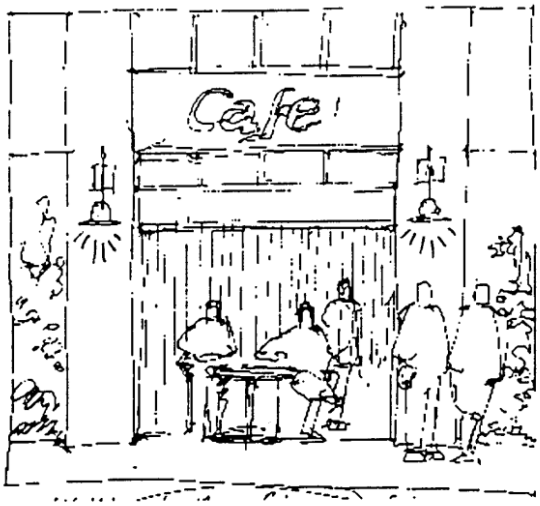
Section 2.7 describes where weather protection should be located. In terms of appearance, using a uniform canopy or awning design across the entire building is inappropriate to the diversity to be maintained.

(a) Design architecturally integrated, high quality awnings and canopies, but ensure some variety in form, and/or the ability for tenants to vary them to suit themselves.
(b) Ensure that awnings and canopies are deep enough and close enough to the ground to provide shelter.

Architecturally integrated, high quality awnings and canopies

5.7 Lights

(a) Individual projects should contribute to improved lighting levels for pedestrians by providing low intensity lighting on the building face; and
(b) Buildings, open spaces and parking areas should have lighting located and designed to ensure that all areas are well lit. However, site lighting should be sensitive to the residential uses in the building and neighbouring area. Visible, glaring light sources can be avoided through using down-lights mounted on lower walls or on landscaped elements, or free-standing pole lights with shaded fixtures.

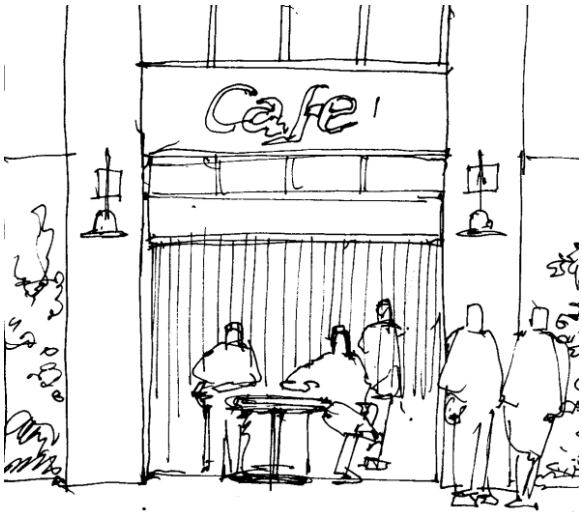


7 Open Space

7.1 Public Open Space

(a) In the Cedar Cottage Area, small public mini-parks are anticipated as part of intersection improvements for the corners of Commercial Street at 18th, 20th and 22nd Avenues. In the Hudson Street Area, properties on the northern portion of Selkirk and Osler Street and fronting 72nd Street have been acquired by the Vancouver Park Board and will be developed as a future park. In False Creek Flats (Malkin-Atlantic-Prior), Strathcona Community Garden abuts a portion of the eastern most lot. Developments abutting these locations should respond through locating windows and/or doors to advantage, provision of outdoor seating, etc.

Cafes on the park, parkettes and elsewhere



7.2 Semi-Private Open Space

(a) "Active" or "social" semi-private open space is desirable, and should be provided for residents wherever possible. It could be located above the commercial level or on the rooftop but should maximize sun exposure, and be protected from noise and overlook from neighbouring buildings. Privacy of adjacent units and properties, view blockage and noise impact on units and properties below should be addressed;

(b) In courtyard projects, courtyards typically serve a combination of functions, such as circulation, as a buffer between units, and as a source of daylight and air to courtyard-facing rooms. Owing to their often forced linearity and requirements of protecting privacy while providing access, this type of courtyard is rarely suitable as social semi-private open space; and

(c) Large development parcels may have site area that could be publicly used as open space, on a voluntary basis. Where this occurs, consideration should be given to design for usability, attractiveness, security/safety, and maintenance.

7.3 Private Open Space

(a) Private open space should be provided for each unit in the form of balconies, decks or patios with a minimum single horizontal dimension of 1.8 m and a minimum area of 4.5 m^2;

(b) Private open space should be designed to capture sun and views where possible, as well as to avoid noise and to take account of visual privacy and security. Balcony enclosure to reduce noise may be appropriate in some cases; and

(c) To help create defined and usable private space at grade, a front garden or low, raised porch should be considered.

8 Landscaping

8.1 Streetscape

A streetscape concept plan for the MC-1 , MC-1 Subarea A and MC-2 area s may be adopted in the future. In the meantime, street trees should be provided on all streets not currently having them, or where their spacing is inconsistent. Park Board and Engineering staff will specify species, spacing, and location.

8.2 Site Landscape

(a) Existing trees and significant landscape features should be retained where possible;

(b) Landscaping close to the street should be used to soften the built form, and contribute to pedestrian interest. Layering of plant material, including vines on vertical surfaces, can have a rich appearance in minimal space;

(c) Landscaping should be provided on amenity roof decks and for screening to provide privacy where required;

(d) Landscaping should be considered adjacent to rear lanes, provided that branches are kept clear of the lane right-of-way, and provided that security is not unduly compromised;

(e) Landscaping should be used to help mitigate impacts between residential and industrial uses;

(f) Landscape design on other parts of the site should relate to anticipated activities; and

(g) Along Hastings Street where development with surface parking may occur, surface parking lots should be landscaped to reduce the visual impact. Consider introducing distinct paving surfaces, geometric patterns, trees, landscaped planters and trellises to improve the image of the parking area.

Planting on roof deck and over underground garage entrance

9.2 Underground Wiring

In order to improve the visual environment for residents, developments on larger sites (45.0 m frontage or wider) should investigate with the City Engineer the feasibility of using underground wiring for electric, telephone and cable services, including the removal or partial removal or existing overhead plant.

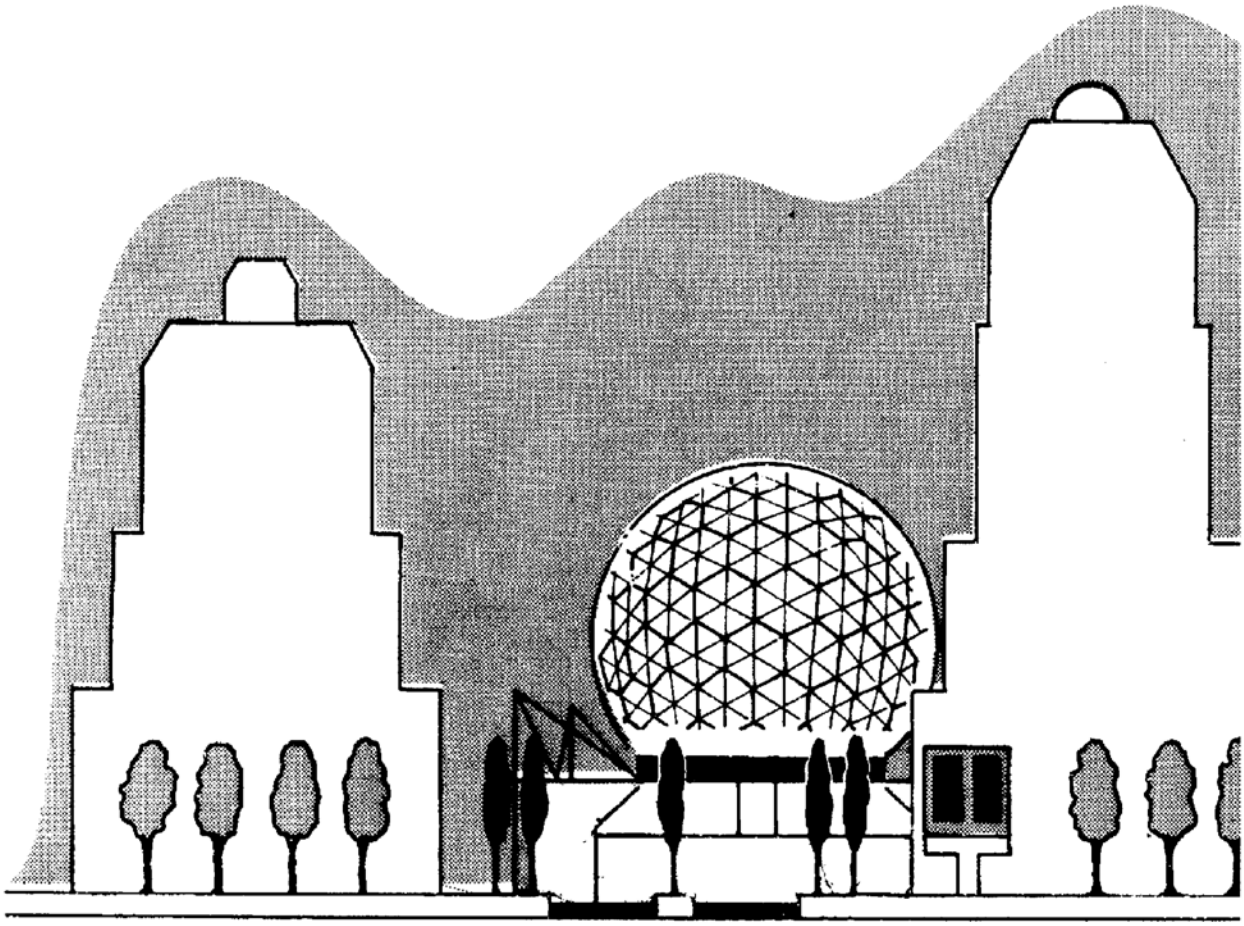
9.3 Garbage and Recycling

Garbage and recycling are essential services. They can seriously detract from residential livability unless careful design is used to screen them from residential uses in and near the development.

(a) Garbage and recycling facilities should be located adjacent to the lane. They should be fully enclosed by a roof and sides, and screened from the lane.

EAST FALSE CREEK FC-1 GUIDELINES

Adopted by City Council on February 18, 1986
Amended April 4, 1989, February 4, 1992 September 10, 1996, and October 31, 2017



Contents

Note: The guidelines in this report are organized under standardized headings which are being used for all guideline reports. As a consequence, there are gaps in the numbering sequence where no guidelines apply under a standardized heading.

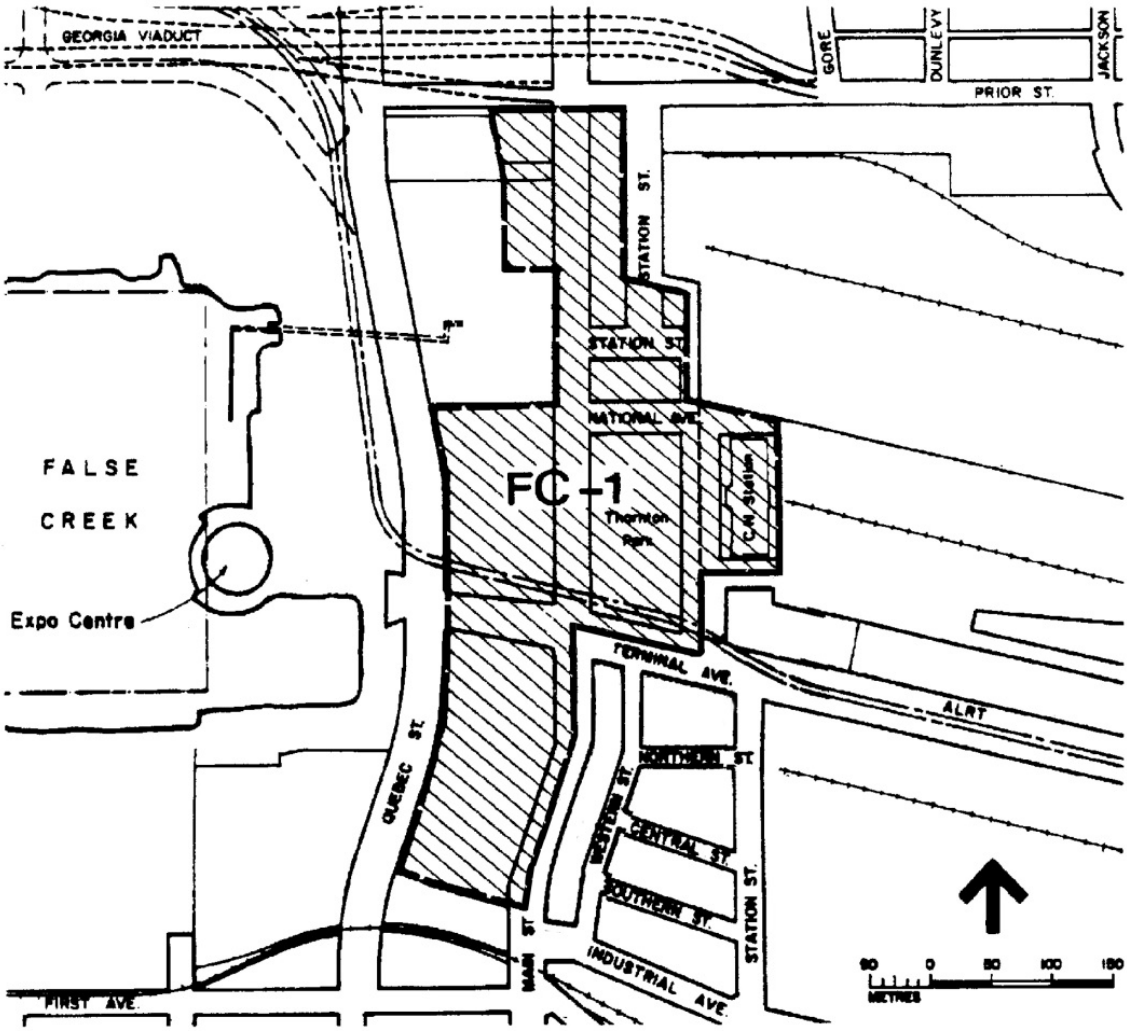
1 Application and Intent

These guidelines should be used in conjunction with the FC-1 District Schedule of the **Zoning and Development By-law** for developments in the East False Creek area (see Figure 1). They deal with criteria that should be considered in the planning and design of commercial and mixed-use buildings. The guidelines should be consulted in seeking conditional approval. As well as assisting the applicant, the guidelines will also be used by City staff in the evaluation of projects.

The intent of the guidelines is to help achieve good quality development in the East False Creek area, and to ensure the compatibility of different uses (including residential) in a high-density mixed commercial use neighbourhood.

Wherever reference is made in these guidelines to residential uses, the provision also applies to Artist Studio, - Class A, Artist Studio - Class B and the associated residential unit.

Figure 1. East False Creek FC-1 Zoning District



2 General Design Considerations

2.1 Neighbourhood Character

The East False Creek area is located at the eastern end of the False Creek basin. To the north, it is bounded by the Georgia Viaduct (and north of this, the Chinatown and Strathcona districts). To the east and south, it is bounded by industrial uses. To the northwest is the Pacific Place comprehensive redevelopment area. To the west is the False Creek water area, and industrial uses on the south shore west of Quebec Street.

It is intended that East False Creek redevelop as a mixed-use area, primarily commercial in character but with compatible industrial and residential uses where appropriate. A variety of commercial uses would be focussed on Main Street, around Thornton Park and the Main and Terminal SkyTrain station location. Visitor and residential hotels are also encouraged. The proximity of the area to the False Creek waterfront and future B.C. Place eastern residential neighbourhood, and excellent views of the North Shore mountains and downtown, make certain locations desirable places to live.

Within the FC-1 zoned area, transition in built form will occur between the small-scale of lower buildings on the northerly part of Main stepping up to higher elements near Terminal. On Main, the street will be defined by four to six-storey buildings with predominantly retail uses at grade and either mixed-use or residential use above. West of Quebec, the openness of the waterfront park will provide strong contrast to the continuity of built form provided by four to six-storey buildings from the near perspective and higher tower elements from the distant perspective.

On the City-owned waterfront land, a new character has been provided by the Science Centre dome. This 45.8 m high spherical structure creates a dramatic visual presence from nearby neighbourhoods and establishes a focal point from False Creek and from Terminal Avenue. High rise buildings should be developed in the FC-1 area on either side of this structure to frame it and reinforce its function as a focal point.

2.2 Street Character

The area is dominated by the three major arterial streets of Main, Terminal, and Quebec. These vary in right-of-way allowance from 30.5 m to 36.6 m in width. Terminal and Quebec both have centre median areas which are landscaped and treed to some extent.

Along Main Street, north of Station Street, there is a continuity of built form, generally three to four stores in height built to a consistent street wall line. On Main Street south of Station Street there is more openness created by the open space and mature trees of Thornton Park, and south of Terminal, by landscaped setbacks each side of the street in front of existing auto-oriented uses.

Buildings should create a strong, dual sense of enclosure for the eastern False Creek water body with continuous medium scale street wall buildings along the eastern edge of Quebec Street to visually define the open space from the near perspective and towers set back above to provide a visual backdrop from the distant perspective.

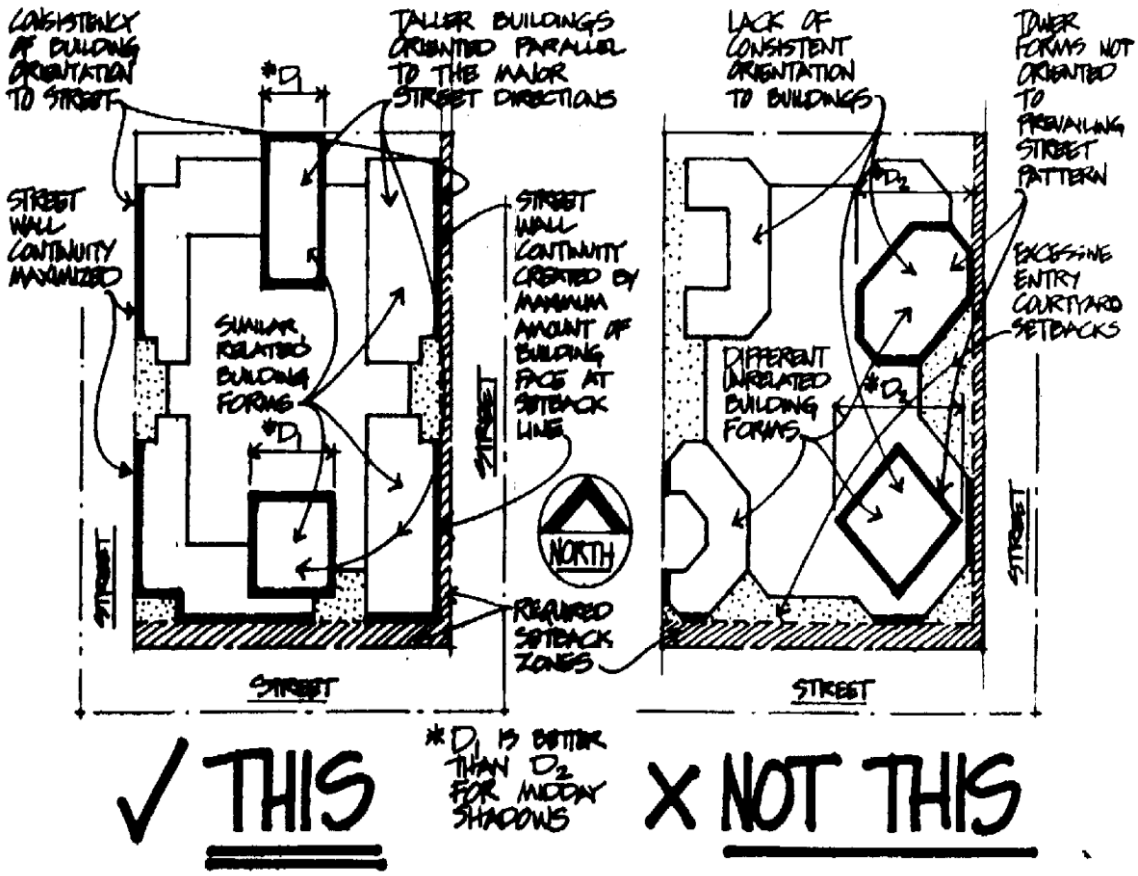
2.3 Orientation

Except for Terminal Avenue, the major streets in the area are oriented in a generally north-south direction. Main Street south of Terminal has a slight jog in alignment, but north of Terminal it is straight. Older buildings on Main Street and the C.N. Station on the east side of Thornton Park all are strongly oriented to the north-south streets.

As illustrated in Figure 2, new development should respect the predominant east-west orientation of older buildings in the area for urban design consistency as well as to reduce the amount of shadowing during mid-day hours. Buildings to the west of Thornton Park should relate to the strong axial focus of the C.N. Station to the east of Thornton Park.

Buildings along the east side of Quebec should orient to the waterfront amenity potential to the west.

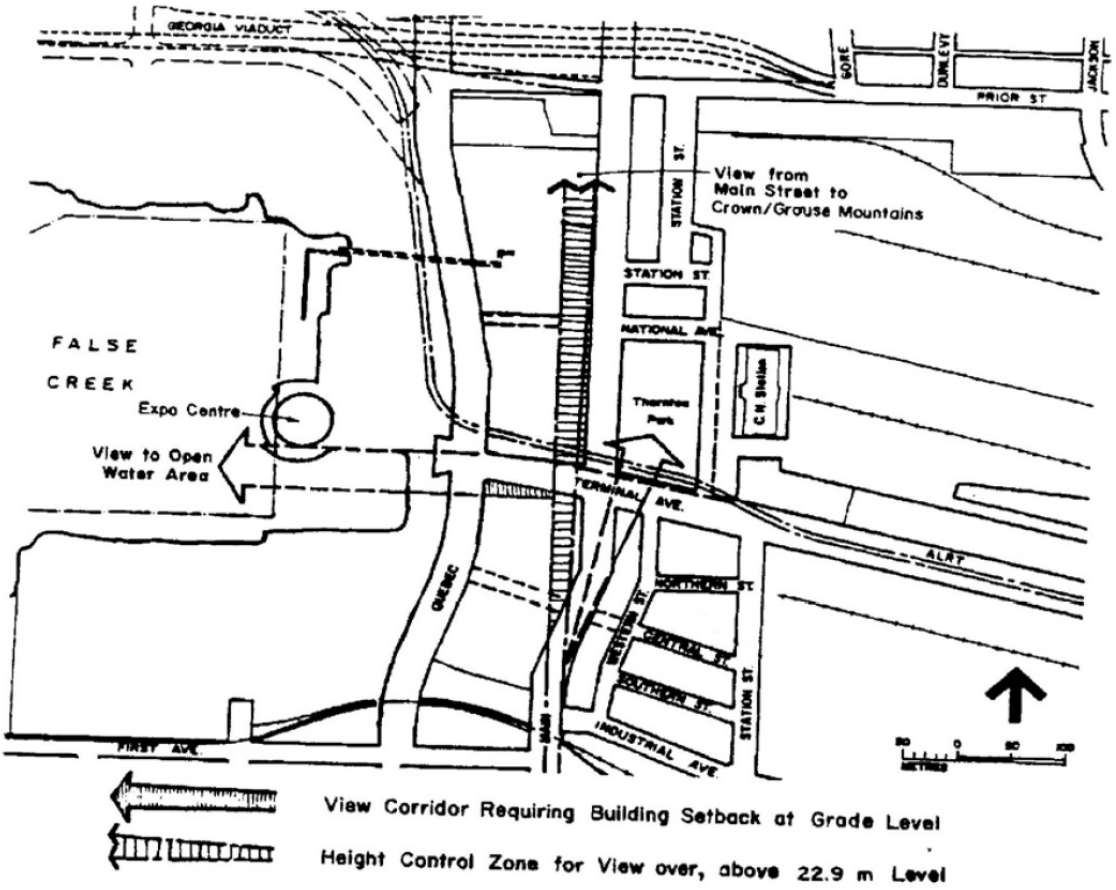
Figure 2. Building Orientation



2.4 Views

Important public views from and to the East False Creek area should be protected and enhanced. These include views of False Creek, the North Shore mountains, the downtown, and significant landmark features from the major arterial streets of Main, Terminal and Quebec, and from future street alignments and other public area vantage points, both within and outside of the East False Creek area. For SkyTrain system users as well as the high volumes of vehicular traffic approaching the downtown area via Terminal Avenue, this street-end location offers the first partial view of the False Creek water area, the Stadium, and associated B.C. Place development.

Figure 3. View Protection Corridors



Public Views

Important view corridors down extensions of Main, Terminal, and Quebec Streets should be preserved through appropriate development setbacks and building height restrictions, as illustrated in Figure 3.

The heights of tower form buildings adjacent to the Main/Terminal location should be limited to maintain the continuity of the North Shore mountain skyline as viewed from points higher than the 5th Avenue elevations on Main Street to the south and the Mt. Pleasant residential are to the southeast.

Without compromising the above view objectives, a new landmark view should be created for the area by the new building(s) proposed adjacent to the Main and Terminal location appearing significantly higher than adjacent development.

Private Views

The terracing of moderate height buildings above the 6th storey level is encouraged to allow views down streets and from interior courtyards. Tower forms should be limited in number, width and location to allow private views between them.

The utilization of building design features such as bay windows and articulated facades is encouraged to facilitate private views from residential units.

2.6 Light and Ventilation

New development built adjacent to existing hotels and rooming houses can seriously affect the livability of units which face interior side yards by blocking off light and air. Measures should be taken to ensure the livability of these units is maintained, particularly the amount of air and light which can penetrate windows on interior side yards and three-sided interior lightwells.

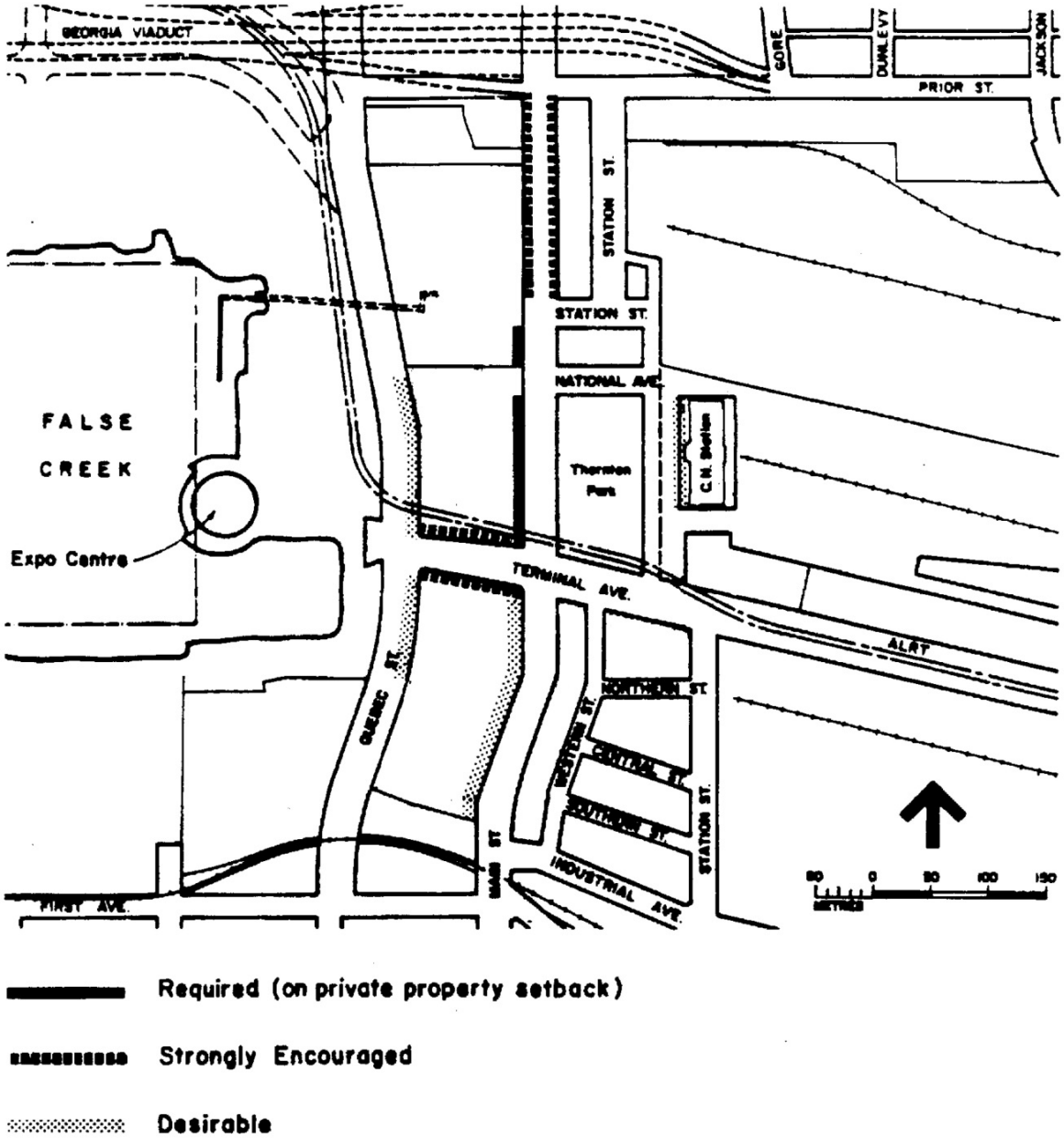
New development adjacent to existing hotels and rooming houses should comply with the Council-approved document entitled **Guidelines for New Development Adjacent to Hotels and Rooming Houses**.

2.7 Weather

The Vancouver climate is mild and wet for extended periods of the year. Bright sunny days are relatively few and occur mostly in the spring and summer. Therefore it is important that pedestrians be adequately protected from the frequent occurrences of inclement wet weather, and that the availability of sunshine to public and private living areas be maximized in new development. Excessive wind conditions along pedestrian areas arising from new higher buildings also nee dot be ameliorated.

In areas of high pedestrian traffic, the provision of weather protection from the rain is encouraged, in the form of awnings, canopies, or arcades along sidewalk areas or where buildings are set back on private property, as illustrated in Figure 4.

Figure 4. Streets Where Pedestrian Weather Protection is Encouraged



For residential development, buildings should be located and shaped to maximize sun penetration to outdoor areas and living rooms.

Higher buildings in new development should be located and shaped to minimize shadowing impacts on adjacent public and private open space areas.

Buildings, particularly those over 45.8 m in height, should be designed to minimize downdrafts on usable outdoor areas and adjacent sidewalks by providing breaks at or near ground level.

2.8 Noise

East False Creek is affected by noise produced by vehicular arterial traffic cutting through the area, rail traffic along the eastern boundary, and certain heavy industrial uses (e.g. Lafarge Concrete) located within or adjacent to the area. The elevated SkyTrain line also runs along Quebec Street and Terminal Avenue, with a station at Main Street. For new mixed-use development, the impact of noise must be recognized and minimized to the greatest extent possible to ensure acceptable residential livability.

All residential buildings should meet CMHC acoustic standards for noise within buildings, and between buildings and the outside environment (i.e. 55 decibels for outdoor spaces and 35 decibels for interior bedrooms).

In order to provide a good quality acoustic environment, careful attention should be given to siting, orientation, design, and construction. The following list provides some indication of possible noise attenuation procedures and design features:

(a) Orienting outdoor areas and bedrooms away from noise sources;
(b) Sheltering doors and windows (especially openable ones) from noise sources;
(c) Providing glass or high walls around outdoor decks and patios;
(d) Utilizing glass block walls; or acoustically rated glazing;
(e) Using alternate ventilation (to minimize opening windows)
(f) Managing interior noise levels (e.g. use of sound-reducing materials).

2.9 Privacy

Uses at the boundary with different zoning should be compatible with that zoning. For example, adjacent to continuing industrial areas, appropriately designed office or other commercial uses should be provided so that they buffer new residential development in the mixed-use FC-1 zoning area.

In order to maximize privacy for residents in new mixed-use development, office uses should not overlook directly into residential units and private open spaces. This can be done by building orientation and design, trees and planting buffers and other screening devices and walls.

2.10 Security

Security is an important concern in the East False Creek area because of its relative isolation from adjacent neighbourhoods, its proximity to an area of high crime potential (e.g. Main-Hastings-Cordova beer parlour belt), and its potential for relatively high-density mixed-use development centered around the Main and Terminal location.

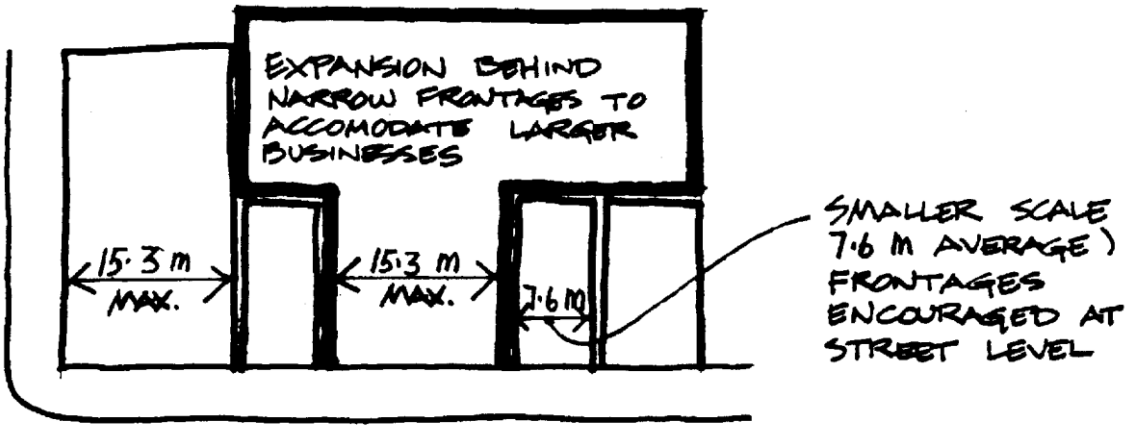
For new, major development, underground or above-grade parking facilities should meet those standards contained in the City Council-approved document entitled **Parking Facility Design Guidelines and Standards**.

4 Guidelines Pertaining to the Regulations of the Zoning and Development By-law

4.2 Frontage

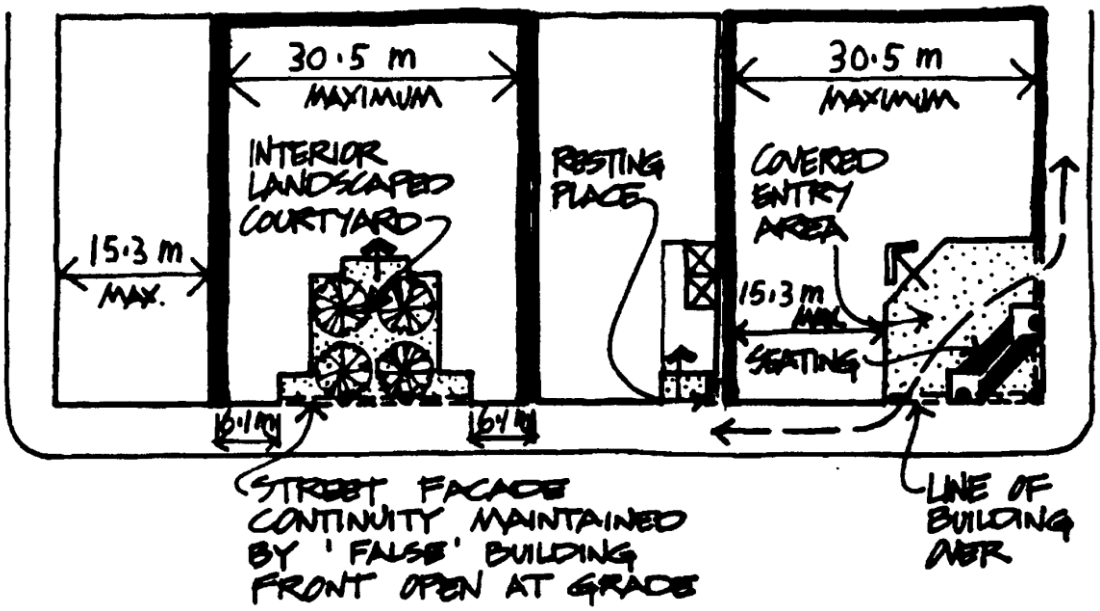
By limiting shopfront widths to a maximum of 15.3 m, with an average of 7.6 m preferred, smaller-scale commercial uses and visual diversity are encouraged along the Main Street area, from Prior to Industrial. To accommodate larger businesses, expansion of ground floor space behind the restricted street frontage areas is permitted as illustrated in Figure 5.

Figure 5. Street Frontage Restrictions for Outright Approval Uses



Where pedestrian amenities such as courtyard, covered entry area, resting place or other features of pedestrian interest are provided, the maximum frontage regulation may be increase up to a 30.5 m maximum, as illustrated in Figure 6.

Figure 6. Examples of How Frontage May Be Increased



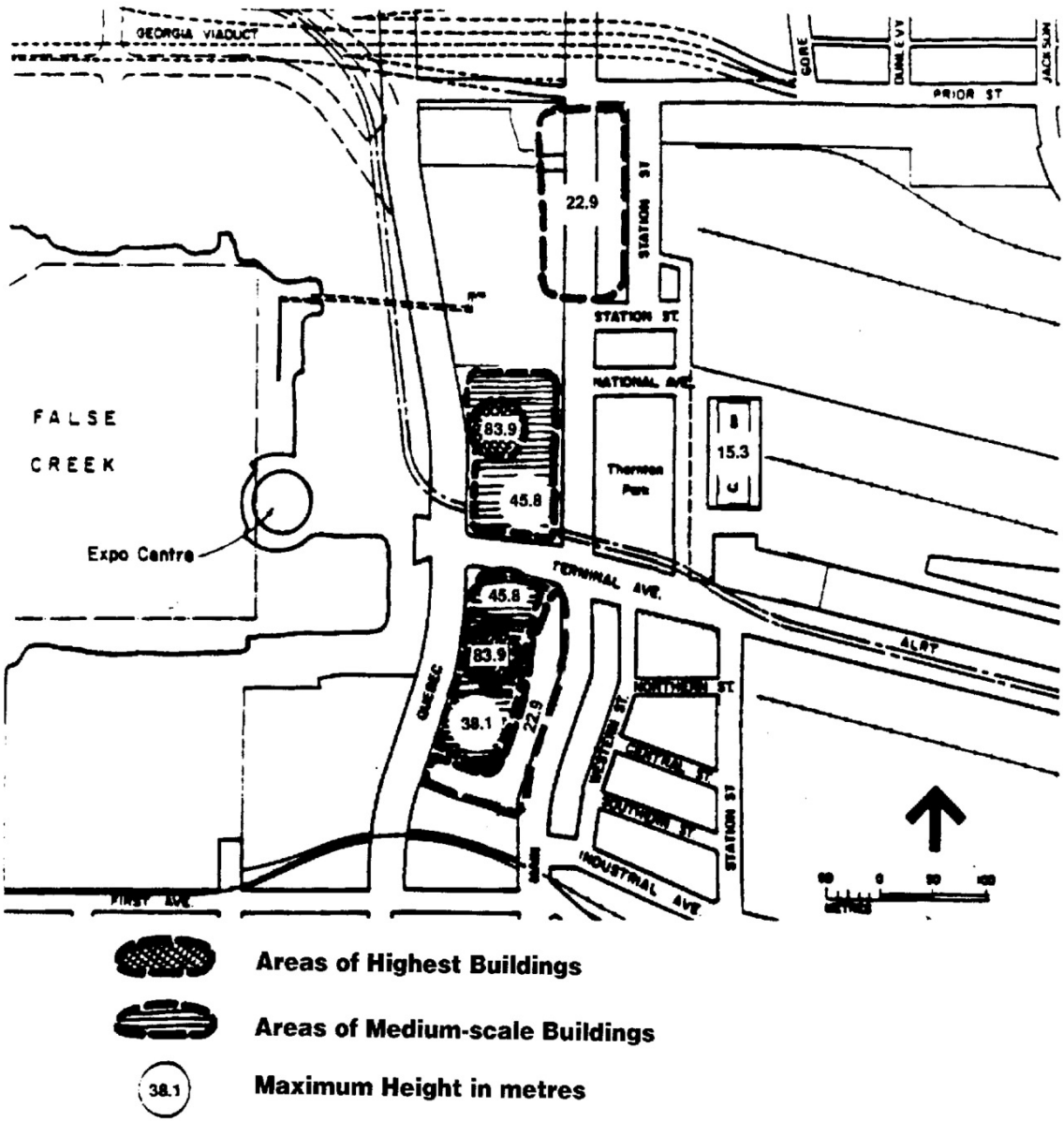
4.3 Height

Building height limits for East False Creek are based on:

(a) Minimizing impacts on North Shore mountain and downtown views from Mount Pleasant, and areas to the east;
(b) Developing a dual sense of enclosure for the waterfront open space with medium height buildings along Quebec Street and towers set back above;
(c) Providing a suitable transition in scale from existing lower-scale buildings on Main Street and around Thornton Park;
(d) Emphasizing the Science Centre dome as a focal point by framing it with high buildings on either side.

Buildings should not exceed the heights indicated in Figure 7.

Figure 7. Building Height Limits

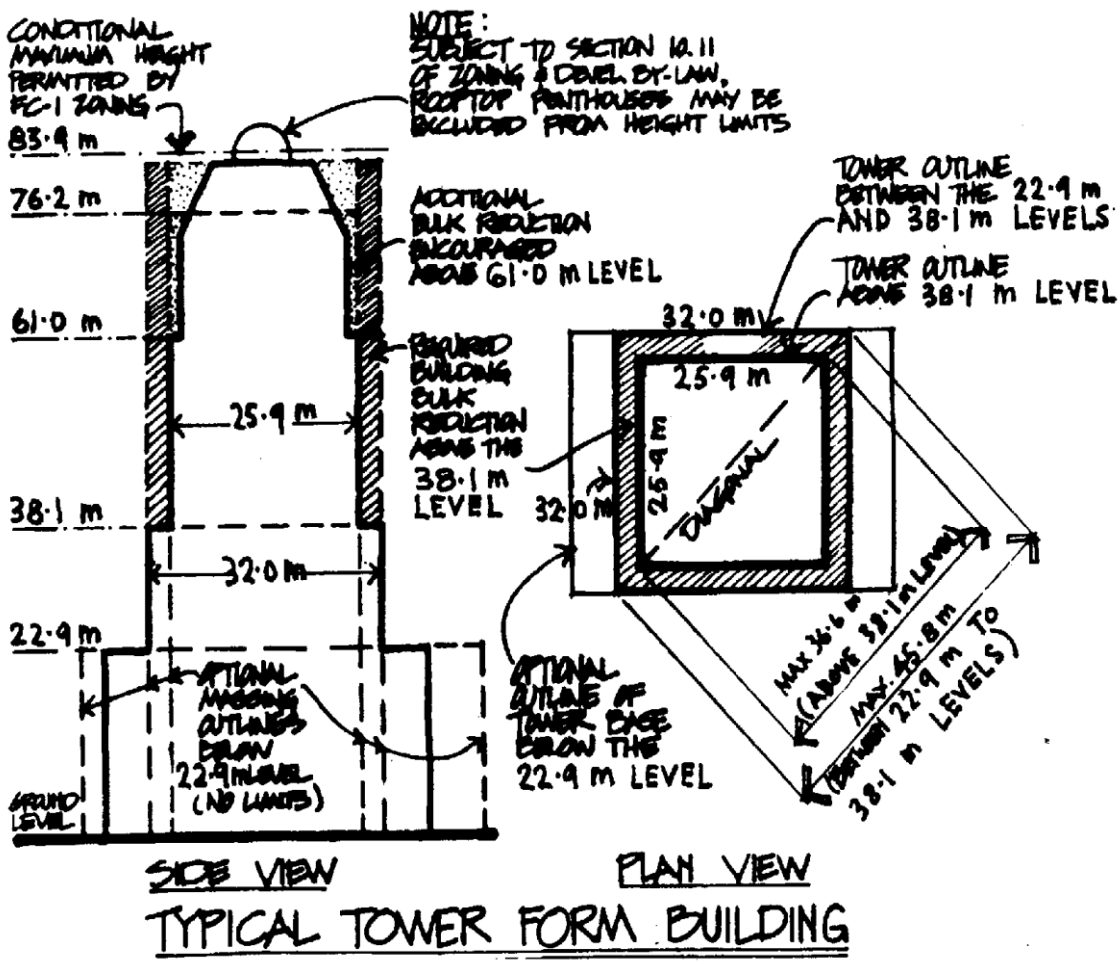


However, some discretion in building heights is provided for architectural features such as cupolas, decorative roofs and gables where these contribute to visual interest or the provision of landmark elements. An increase in these height limits may also be permitted where it can be shown that the roof silhouette or unusual shaping of the upper stories of the building creates visual interest, landmark elements, or interesting building tops.

For higher buildings, bulky shapes should be avoided that lack articulation and visual interest. For higher buildings allowed to exceed the above height limits, the added bulk should be compensated by improved articulation of the tower mass to create a light, graceful effect, and by tapering or terracing of the building form below the variable height limit.

To limit visual bulkiness, the diagonal dimension of the floor plan of higher buildings above the 22.9 m level, but less than the 38.1 m level, should not exceed 45.8 m. For tower form buildings above the 38.1 m level, the diagonal dimension of the floor plan should not exceed 36.6 m. The highest building(s) above the 61.0 m level should be further shaped and articulated so as to appear increasingly slender.These criteria for higher buildings are illustrated in Figure 8.

Figure 8. Criteria for Higher Buildings Permitted Above 22.9 m Height Level



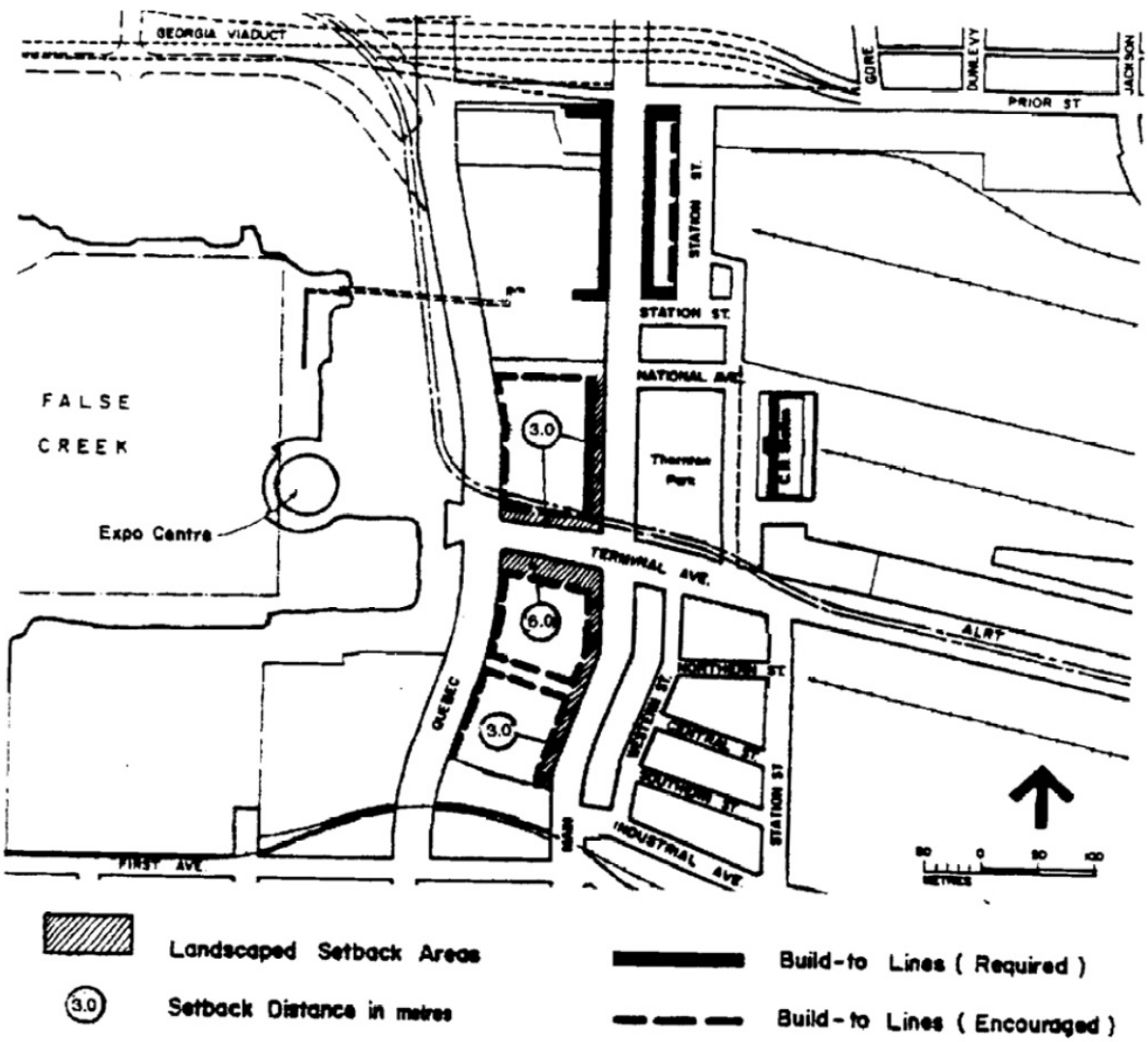
4.4 Front Yard

In order to achieve a strong spatial definition along major streets in the area, and around Thornton Park, moderate height buildings should be located along a continuous build-to line along or adjacent to the street property lines or required setbacks for a height of at least 7.6 m, as illustrated in Figure 9.

Exceptions to continuity of build-to lines may be permitted for small entry lobbies, pedestrian access points or covered arcades or gallerias, as illustrated in Figure 6.

Portions of buildings above 22.9 m should be stepped back a minimum 6.1 m from the build-to lines in order to avoid an overwhelming scale on the street, as well as to admit more light.

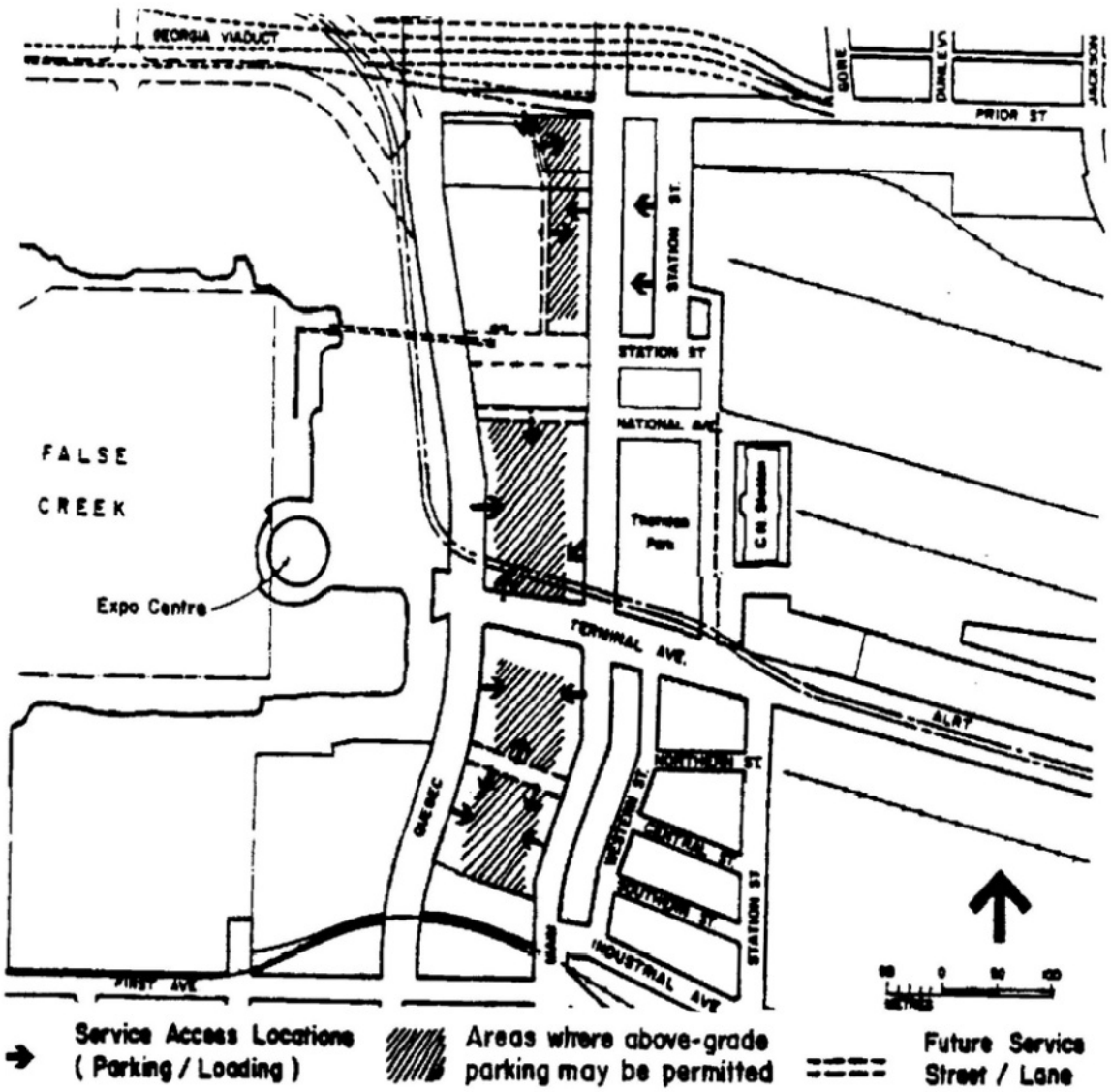
Figure 9. Build-to Lines and Setbacks



4.9 Off-Street Parking and Loading

Adequate parking and loading access should be provided for each development, preferably from secondary/local streets or lanes. Where developments face only onto arterial streets, they should provide convenient, easy access and egress so as not to disrupt adjacent arterial traffic movement, as illustrated in Figure 10.

Figure 10. Parking and Service Access



Parking should be provided in out-of-sight locations, preferably underground. Where parking can only be provided on grade, it should be located behind buildings, that front onto the street, or heavily screened with landscaping or low walls. For large development sites having a depth exceeding 36.6 m, above-grade parking may be permitted provided that it is located a minimum 6.1 m from the required build-to lines on the major arterial streets of Main, Terminal and Quebec, as illustrated in Figure 10.

5 Architectural Components

5.3 Entrances

Main entries to shops and building lobbies should open onto the street sidewalk or adjacent courtyard as directly as possible. Where lobbies are set back from the property line they should be highly visible, clear-glazed, and easily recognisable from the street.

5.5 Exterior Walls and Finishing

Building design should recognize the high degree of visibility the area will have. Quality of design will be extremely important in this location. The facade treatment and materials of new development along Main Street north of Terminal and around Thornton Park next to the C.N. Station should be related to the existing older buildings in the area. Small-scale brick masonry and stone wall-facing materials are encouraged in this area.

(a) Clear-glazed windows through which retail and business activity, or display of merchandise, is visible;
(b) Individualization of frontages;
(c) Small-scale frontages;
(d) Landscaping, lighting and signage.

5.6 Awnings, Canopies, Recesses and Arcades

Weather protection features provided by new development should comply with the City Council-approved document entitled **Central Area Pedestrian Weather Protection (except Downtown South)** (Part 9 - Design Guidelines).

7 Open Space

New development should be shaped to create usable courtyard spaces that are ‘formed’ by buildings and/or landscaping rather than spaces that surround a building.

Private open space for residences should meet CMHC standards and utilize features such as patios, balconies, roof decks and terraces. These should be oriented to capture sunlight, take advantage of views and reduce noise impacts.

8 Landscaping

New boulevard tree-planting should be related to established landscaping features, provided they are considered suitable for the urban environment of the area. Trees should be of a size at the time of planting to satisfy visual impact objectives and minimize potential vandalism problems that could necessitate continuing tree replacement.

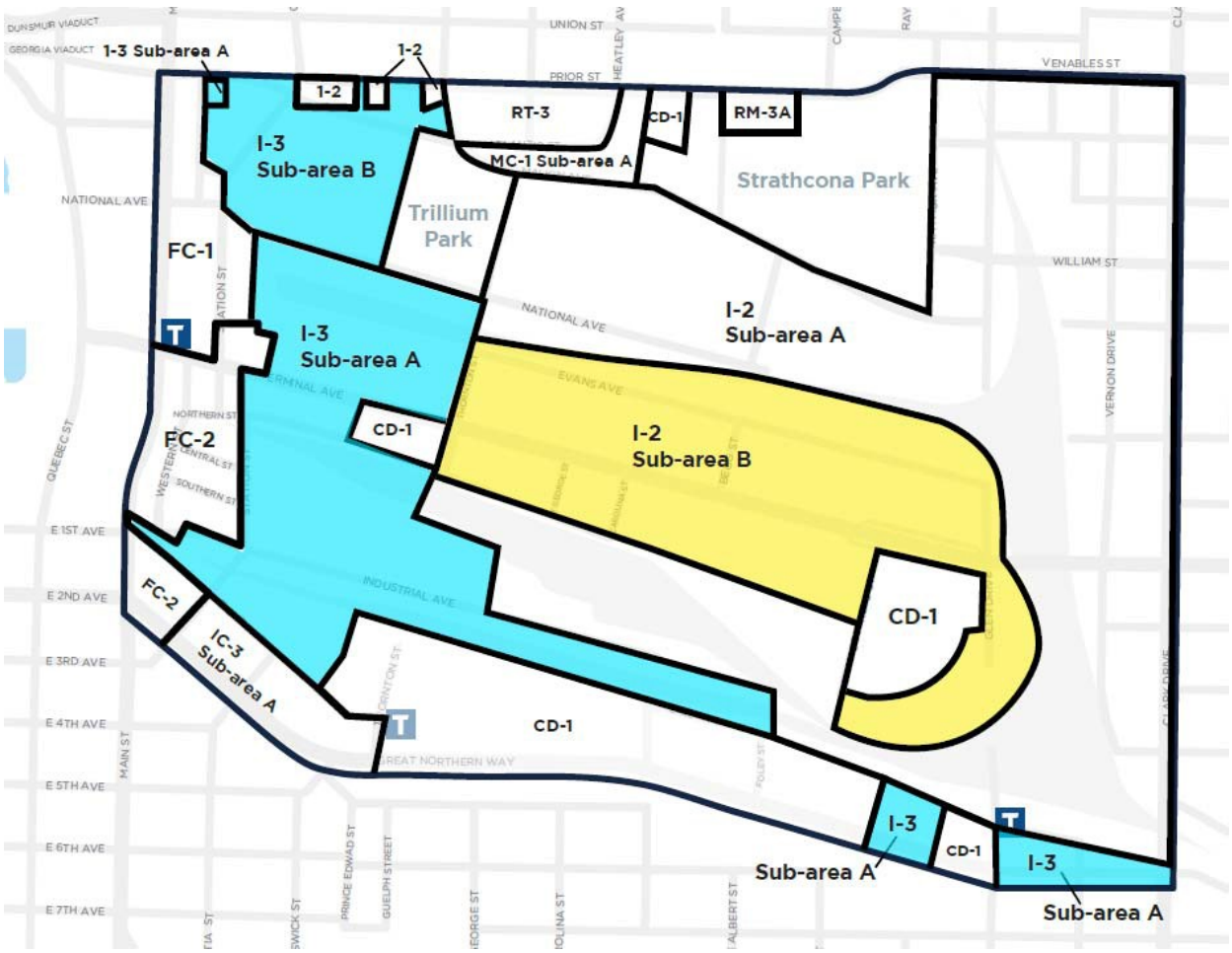
FALSE CREEK FLATS URBAN DESIGN POLICIES AND GUIDELINES FOR I-2 AND I-3

Adopted by City Council on October 31, 2017

False Creek Flats

Contents

Note: These policies and guidelines are organized under standard headings. As a consequence, there are gaps in the numbering sequence where no guidelines apply.



Map 1 – False Creek Flats Zone District Map for I-2 Sub-area B and I-3 Sub-Areas A and B

1 Application and Intent

1.1 Plan Principles

These policies and guidelines apply to I-2 Sub-area B and I-3 Sub-area A and are to be used in conjunction with the I-2 and I-3 District Schedules for the Terminal Spine, Creative Campus and Health Hub Sub-Areas of the False Creek Flats and should be consulted in seeking approval for conditional uses or discretionary variations in regulations. These policies and guidelines do not apply to the I-2 Sub-Area A Back-of-House sub-area. As well as assisting the applicant, these policies and guidelines will be used to evaluate conditional or discretionary relaxations.

The intent of these policies and guidelines are to:

(a) **Intensify Employment Opportunities:** Increase job space around existing and future transit sites that reflect the industrial character and nature of the area. Explore opportunities for higher use of existing buildings for more intensified job space.

(b) **Maximize Flexibility:** Ensure that new buildings can adapt and evolve to accommodate future changes in economic production.

(c) **Encourage Vertical Stacking of Industry and Production Spaces:** There is increasingly an opportunity to stack many industrial/production businesses in the same building. With the goal of increasing employment and the productive output of the area, the plan supports a return of vertically stacked industrial uses in the Flats.

(d) **Take Advantage of Unique Opportunities:** A thriving economy requires space for all scales of businesses from start-ups to headquarters. Large lot sizes create flexibility and scale not available elsewhere in the inner city. Plan for flexible outdoor spaces that can host a variety of uses over 24 hours.

(e) **Create Buildings that Respect & Respond to the Public Realm:** Design buildings at the scale of the pedestrian by incorporating elements at the ground floor that help to create attractive, well- functioning and welcoming spaces.

(f) **Reference Industrial & Institutional Urban Fabric:** Consider a campus approach to the design and siting of developments on large sites. Accommodate industrial and institutional scales within a finer grained urban setting to facilitate organic growth and phasing over time.

(g) **Create healthy and productive workspaces:** Design the public realm to maximize sunlight on public spaces and daylight in work environments.

(h) **Encourage Working Rooftops:** Expand economic functions to the roof tops of buildings.

(i) **Create Thoughtful Transitions Respectful of Surrounding Residential Neighbourhoods:** Require transitions between working industrial lands and adjacent residential.

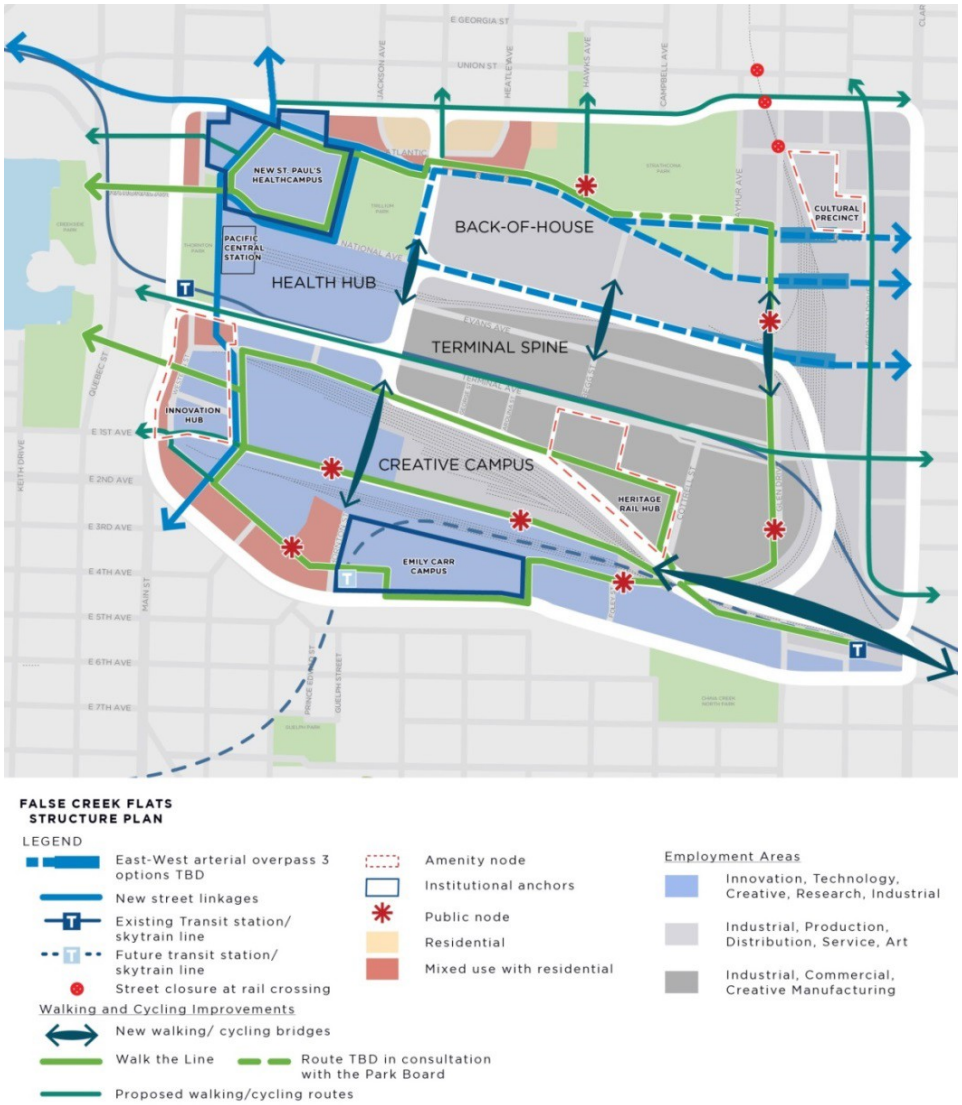
(j) **Showcase Functional Workspaces in the Public Realm:** Create links between the public realm and industrial function to showcase the industrial character of the Flats.

(k) **Create Buildings and Neighbourhoods that Respond to Sea Level Rise:** Low topographic elevations and anticipated sea level rise presents a major challenge for development in False Creek Flats. Provide adaptive, flood resilient building design solutions.

(l) **Re-purpose Vehicle Parking:** Minimize surface parking and design for parking areas to transition to work space over time as other modes of transportation improve.

1.2 Structure Plan

The structure plan provides a quick reference for the overall physical framework and context for the False Creek Flats Area Plan, District Schedules and these Policies and Guidelines.



Map 2- Structure Plan

2 General Design Considerations

Development should provide opportunities for flexible and diverse building typologies and light industrial uses at grade. Buildings are encouraged to have more active and engaging ground floors that showcase functional workspace. New and improved connections through the area for walking and cycling are anticipated and will improve transportation.

Proposals will be evaluated by staff based the urban design performance objectives including setbacks, massing, building articulation, access to daylight and views, provision of on-site public open space, transition to surround communities, improved building articulation and animated streetscapes. There is a need to seek ways to create a more comfortable pedestrian experience by greening the streets with tree planting, continuous sidewalks and by encouraging active street frontages for businesses. Site layout and building design should reinforce the urban industrial scale and street network.

2.1 Neighbourhood Character

I-2 Terminal Spine Sub-Area

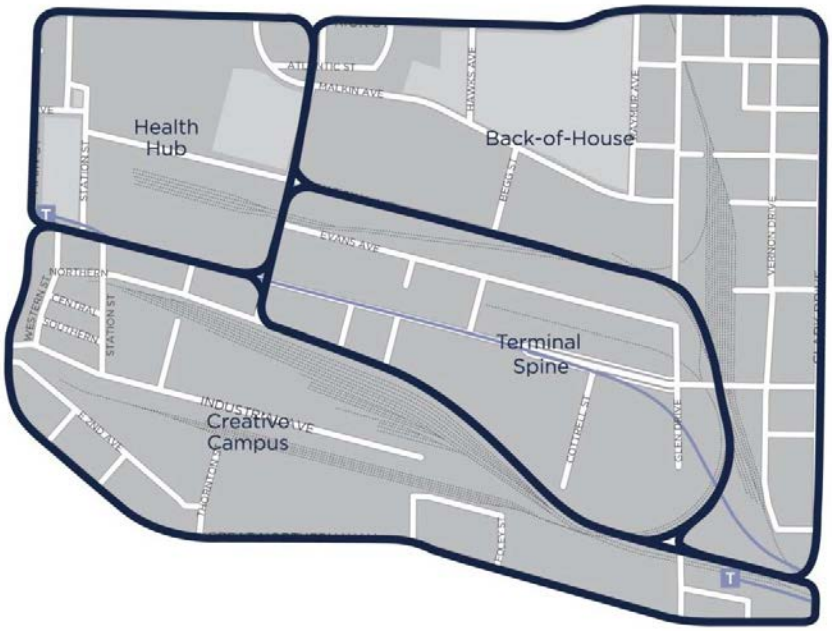
The intent for the Terminal Spine Sub-area is to become an intensified industrial area emphasizing the quality of the public realm and serve as a transition from the higher density I-3 zone district to the I-2 Back- of-House sub-area.

I-3 Health Hub and Creative Campus Sub-Areas

The intent for the Health Hub and Creative Campus sub-areas is to enable intensification opportunities for flexible industrial and light industrial workspace, office space and other employment opportunities while enhancing public life and creating pedestrian interest.

The Health Hub includes the anticipated new St. Paul's Hospital and health campus on a 7.5 hectare (18.5 acre) site in the north-west corner of the False Creek Flats. It will significantly intensify employment, deliver disaster-resilient infrastructure and create a well-connected public realm that integrates the new hospital and health campus into the city and adjacent neighbourhoods. In addition, the sub-area contains Thornton and Trillium Parks, Pacific Central Station and related railyards.

The Creative Campus sub-area is located in the west and southern sector. With a distinct street grid and unique mix of industrial, office, IT, and creative industries, this transit rich sub-area will become the 'public face' of the False Creek Flats and provide a point of convergence where new connections link amenity and public spaces in this intensified employment node.



Map 3 - False Creek Flats Character Areas.

Large Sites

Large sites in the Flats are generally defined by being **1.25 ha** (12,500sm) or larger and having frontages longer than the average neighbourhood block of approximately 61 meters. Additional large sites may be created through the consolidation of smaller lots.

The character and intent for large site should be considered with respect to its sub-area and be based on its own unique qualities. Large site design lends itself to a campus approach meaning prioritizing grouped building arrangements that create community outdoor open spaces and internalized vehicular access. New drives and vehicular access should integrate with the existing roads network and public open space network as well as limit the number of sidewalk crossings.

Map 4 – Existing Large Sites in the Flats

2.2 Unique Spaces and Places

The diverse combination of uses and forms of development in False Creek Flats provides for opportunities to create unique and varied places. Creation of opportunities for public engagement in a variety of distinct places is highly encouraged.

2.3 Orientation

Building design, where possible, should seek to reinforce established street orientations emphasizing street level entrances and storefronts. The following strategies are highly encouraged:

(a) Building faces that align with respective street orientations and established street wall heights.
(b) Building faces built out to front yard setbacks.
(c) On corner sites, both street facing facades should be developed as front elevations.
(d) Reinforce irregular, curved or angled sites resulting in non-orthogonal building geometries.
(e) Tower elements may be re-oriented with respect to daylight and solar performance, views, and architectural expression.

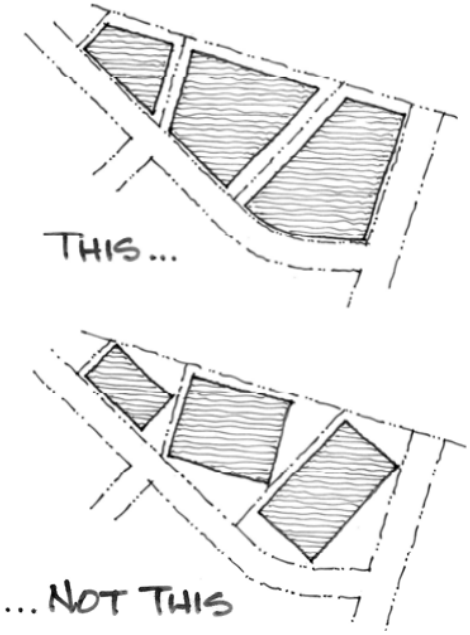


Figure 1- Orientation

2.4 Views

New development should be considerate of the impact on existing distant views. However as development progresses, the industrial and institutional scales and densities anticipated in False Creek Flats may have an impact on the ability to preserve these existing views. Development should therefore place a higher emphasis on the following strategies:

(a) Provide an attractive near view. This can include a finer grained urban fabric and building modules, high-quality materials and detailing, visually permeable facades, programming for active outdoor uses and landscape elements.
(b) Visually linking of open space. This can serve to expand the depth of views and may be achieved with building separations and setbacks.
(c) The form and shape of tower elements should be informed by view studies.

2.5 Topography: Floodplain

False Creek Flats has low topographic elevations and may be at risk of flooding during large storms by the end of the century if projected sea level rise occurs. The *Flood Plain Standards and Requirements* as adopted by Vancouver City Council sets the designated flood plain at 4.6m from GVRD datum. As a consequence, existing grades including street right of ways, are often one to two meters below the anticipated ground floor elevations. A plan to raise street elevations may be considered in the future. Therefore, new development should be designed to be adaptive when incorporating flood resilient construction methods and to accommodate public realm objectives for both the current and potential future at grade conditions. Solutions should be accommodated within the property, be visually interesting, and relate to the pedestrian scale. Examples include increased building setbacks, internalized stairs and ramping as well as adaptable entries, loading and parking.

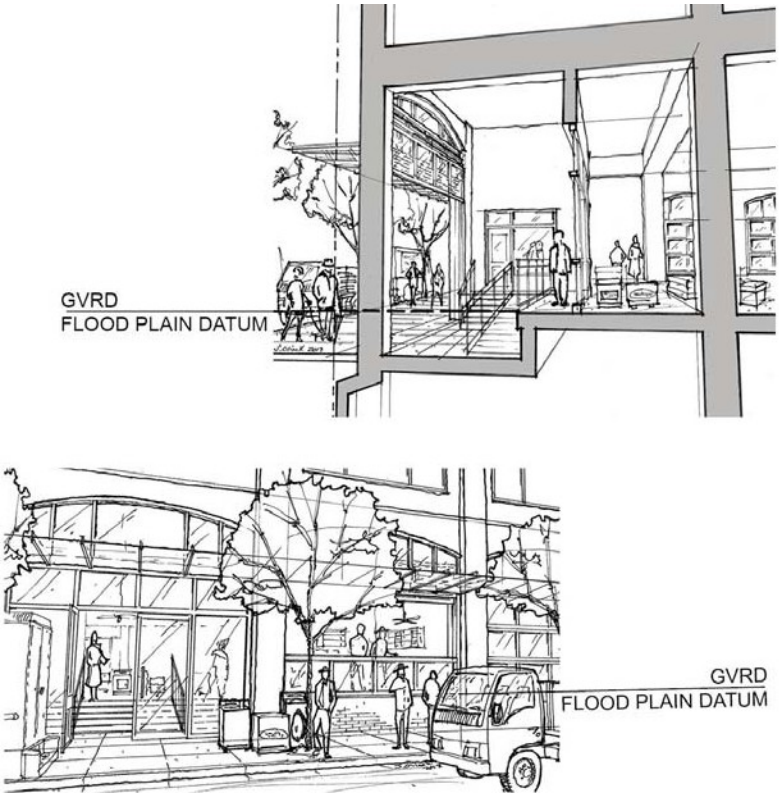


Figure 2 - Floodplain Strategies

2.6 Light and Ventilation

Daylight and ventilation in work environments can improve energy usage as well as promoting health and productivity. Considerations include:

(a) solar shading devices, light shelfs and glazing performance;
(b) building orientation and massing;
(c) increased floor and ceiling heights; and
(d) operable windows.

2.7 Weather

In all cases, weather protection should be provided at common building entries and individual entries. Continuous weather protection should be provided along all street frontages, except that, it may not be provided continuously where it can be shown the provision would interfere with well-functioning industrial uses or where pedestrian traffic is not anticipated. Explore opportunities for weather protection that can encourage use as functional outdoor workspace.

2.10 Safety and Security

New development must provide a secure environment. The principles of "crime prevention through environmental design" (CPTED) should be incorporated in all new development. Some strategies include:

(a) Maximize opportunities for natural surveillance;
(b) Provide unobstructed and transparent sightlines to exits and destinations;
(c) Foster territoriality and a sense of ownership;
(d) No hiding places;
(e) Lighting of public spaces;
(f) Lobbies visible from the street and main entrances to buildings fronting the street;
(g) Personal safety and security should be integral to the design of parking facilities and comply with the Off-street Parking and Loading By-law.

2.11 Access and Circulation

2.11.1 Pedestrian Access

(a) Primary pedestrian access to all uses should be from the street at street level;
(b) Internal public circulation systems such as shopping malls, are highly discouraged;
(c) Corridors and elevators should be adequately sized for their intended use such as transporting goods or moving furniture and should not be overly long (no more than 23.0m in any one direction) or circuitous.

2.11.2 Bicycle Access

(a) Design buildings to accommodate and encourage cycling. Strategies include easy access to secure bicycle storage, access separate from vehicles, wider aisles, automatic door openers, weather protected exterior bicycle racks, maintenance stations, and enhanced end-of-trip facilities.
(b) Provide direct routes between bike routes and building entrances, public bike share stations, bike parking, and other end-of-trip facilities.

2.11.3 Vehicular Access

To ensure a safe and active pedestrian environment, vehicular and service functions should not conflict with street frontage and pedestrian activity when possible.

(a) Vehicular access, loading and service areas should be provided from the lane rather than the street where lanes are provided;
(b) Where street access is considered, vehicular entrances should be designed integrally with the building or via side yard setbacks.
(c) Explore opportunities for shared access drives in side yards with adjacent properties.
(d) Where loading and vehicular access is required from the street, openings should be limited or functional integrated with the adjacent public realm. Consideration should be given to limiting bay openings to one structural bay at an approximate 7.6m (25ft) module.

2.12 Heritage

Heritage buildings located in the Flats, contribute to its character and architectural diversity. The Vancouver Heritage Register should be consulted when evaluating existing structures. Provide options that demonstrate a significant retention strategy when re-developing a site with a heritage building. Other older character buildings, although not listed in the Register, should also be considered for retention. In general, reuse of existing structures can contribute to sustainable solutions that are enriched by the historic narrative of a site. Review of developments with potential heritage resources with city staff is encouraged early in pre- application meetings.

3 Use

3.2 Vertical Stacking of Uses

As a means of intensifying industry and production spaces, exploration of vertically stacked uses is encouraged. Objectives for mezzanines and accessories uses include:

(a) continuity with the adjacent primary use or space;
(b) locate mezzanines away from front or flanking facades;
(c) a minimum floor to floor height for mezzanines of of 3.1 meters (10ft); and
(d) convenient access to loading, garbage and elevators for all floors and mezzanines.

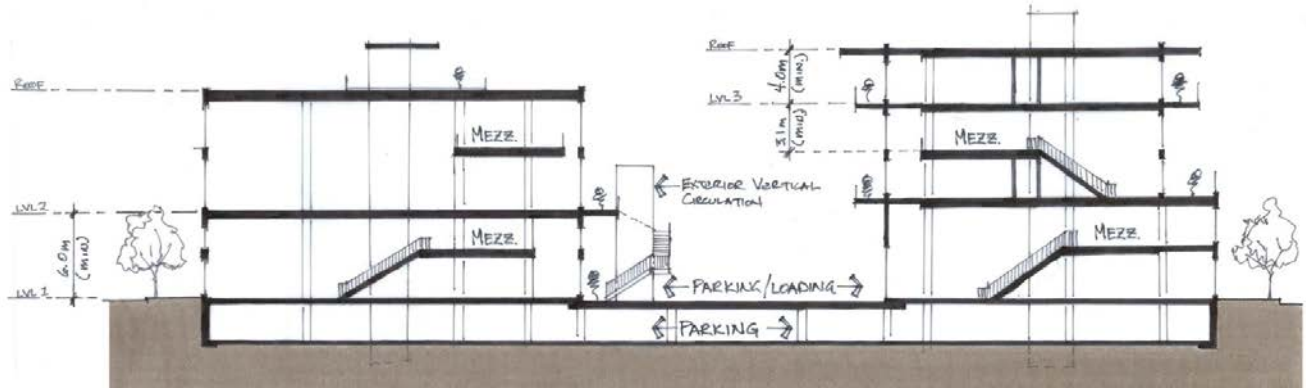
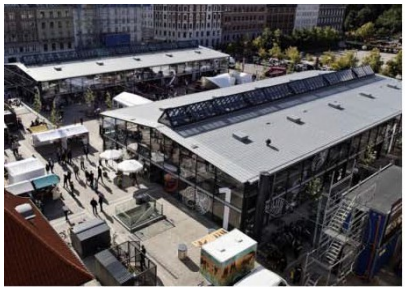


Figure 3 – Vertical Stacking of Industrial Spaces

Provide active and engaging uses at grade. Emphasize attractive, well-functioning and welcoming frontages that showcase workspace. Strategies including visually permeable frontages, operable window walls, setbacks and weather protection to accommodate outdoor workspaces are encouraged. The Director of Planning may consider relaxations to 2.3 and 3.3 – Conditions of Use in the District Schedules to encourage outdoor workspace and activities on-site based on the compatibility with the surrounding area and adjoining non-industrial districts.

Other than entrances and lobbies, Office uses should be located above the ground floor level. Where accessory retail or service uses are permitted these spaces should be designed to function in concert with the primary use and have their own entrances and street presence.



4 Policies and Guidelines Pertaining to the Regulations of the Zoning and Development By-law and the Parking By-law

4.3 Height

The intent for increasing maximum achievable building heights in the False Creek Flats includes for intensified employment opportunities, well-functioning and flexible job space, vertical stacking of industrial uses, working and green roof tops and response to sea level rise. New development should create an active and engaging public realm within a unique, vibrant, attractive, interesting and amenity rich environment. The Director of Planning may increase the maximum achievable building height based on the objectives of all applicable policies and guidelines including the evaluation of:

(a) Impact of height, bulk, massing, location and overall design of the building on the site, surrounding buildings and streets. In addition to the general design considerations listed in Sections 2 and 5 describe the intents and objectives relating to general building expression and architectural components.

(b) The provision of on-site open space, landscape, and the effects of overall design on the general amenity of the area. In particular Sections 7 and 8 describe open space and landscape objectives for the Public Places and Spaces, Network of Public Spaces, On-Site Public Open Space, streetscapes and landscape.

(c) The effect on traffic in the area. See 2.11 for Access and Circulation, 4.5 for Side Yards and 4.9 for Off-Street Parking and Loading describing objectives for pedestrian, bicycle and vehicular access and circulation.

(d) Provision for pedestrian needs including continuous sidewalks, weather protection, safety, and active and engaging frontages that respect and respond to the public realm.

4.4 Front Yard and Setback

The intent for front yard setbacks is to provide opportunities for building articulation, to step inward as building heights increase and to establish a consistent street wall and building shoulder. The Director of Planning may consider relaxations to regulations controlling front yard setbacks based on the objectives of these policies and guidelines and the following:

(a) Minor projections into the 0.6m front setback with the intent of improved building performance and articulation. Examples include solar shading devices or cornices.
(b) Above 18.3 meters (approximately 4 storeys) reductions to setbacks should be balanced by commensurate and equal increases along the same building face. See Figure 7.
(c) On corner lots the flanking street's façade will be evaluated using the same urban design objectives as the front façade.

4.5 Side Yards and Setbacks

The intent for side yard setbacks is to provide visual and physical breaks along long street frontages and generally step inwards as building height increases. The intent is to create building separation of approximately 15.3m (50ft). Those separations should be located to generally align or relate to the existing street network. Explore opportunities for the Network of Public Spaces and other public space and landscape objectives as well as for vehicular and loading access where lanes may not exist. Adjacent developments should explore opportunities for shared access drives. For small lots, irregularly shaped lots or where a need is otherwise demonstrated, the Director of Planning may consider relaxations to regulations controlling side yard setbacks based on the objectives of these policies and guidelines and the following:

(a) fit within the street network, neighbourhood patterns and urban fabric;
(b) provision of a commensurate amount of open space;
(c) impact on existing and future development;
(d) building and tower separations; and
(e) vehicular access, parking and loading provisions.

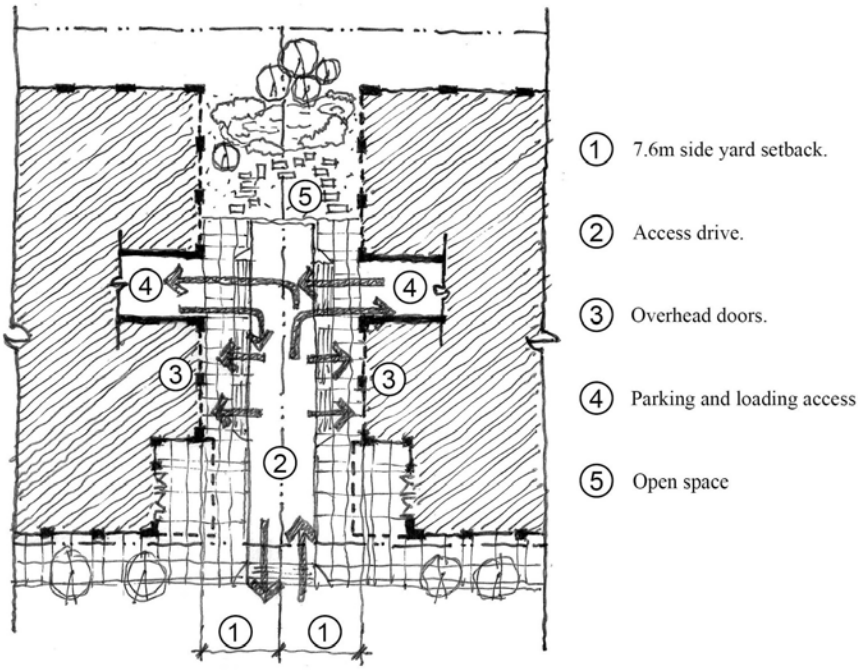


Figure 4 –
Side Yard Setback Diagram

4.6 Rear Yard and Setbacks

Where rear yard setbacks are regulated by the district schedules, space abutting the lane or rear property line should be considered with respect to adjacent use. Residential uses and buildings taller than 22 meters (72 ft) are also subject to greater setbacks. In addition, rear setbacks may be required for transition to surrounding neighbourhoods, for sun shadow impacts on public open space or by proximity to rail.

4.7 Floor Space Ratio (FSR)

The intent for increasing the maximum achievable floor area is to provide opportunities for intensified employment and well-functioning and flexible job space. At the same time, new development should create an active and engaging public realm within a unique, vibrant, attractive, interesting and amenity rich environment. Not all sites will be able to achieve the maximum floor area. The Director of Planning consider increases to the maximum achievable floor area based on the objectives of all applicable policies and guidelines and including evaluation of:

(a) Impact of height, bulk, massing, location and overall design of the building on the site, surrounding buildings and streets. In addition to the general design considerations listed in Sections 2 and 5 describe the intents and objectives relating to general building expression and architectural components.

(b) The provision of on-site open space, landscape, and the effects of overall design on the general amenity of the area. In particular Sections 7 and 8 describe open space and landscape objectives for the Public Places and Spaces, Network of Public Spaces, On-Site Public Open Space, streetscapes and landscape.

(c) The effect on traffic in the area. See 2.11 for Access and Circulation, 4.5 for Side Yards and 4.9 for Off-Street Parking and Loading describing objectives for pedestrian, bicycle and vehicular access and circulation.

(d) Provision for pedestrian needs including continuous sidewalks, weather protection, safety, and active and engaging frontages that respect and respond to the public realm.

4.9 Off-Street Parking and Loading

Parking and loading are essential services to the function of industrial, manufacturing and production spaces. However, they can detract from other objectives of the False Creek Flats by creating a physical and visual break between the building and its connection to the public realm. In addition parking and loading access and layout should minimize surface parking as well as consider opportunities for it to transition to work space, over time, as other modes of transportation improve.

(a) Locate parking accesses and passenger loading/unloading in locations that support efficient vehicular movements and minimize circulation on the street network.

  (i) Parking should be located underground or within the building envelope. Exceptions may be considered for small sites.

  (ii) Where it is not reasonable to place all parking and loading within the building envelope, at-grade stalls should be located at the rear of the site and not within the front yard or on a flanking street.

(iii) Above-ground parking structures are discouraged, but not prohibited. They will not be exempted from density calculations and may require analysis on the impacts to urban design and the public realm at the time of development permit approval. Explore adaptable solutions where parking can transition into employment space in the future.

(b) Limit impact on sidewalks and the public realm by minimizing the number and size of access drives and internalize manoeuvering as much as is feasible. Explore opportunities for shared access drives in side yards.

(c) Consider adaptability of loading bays such as having a secondary function as workspace.

(d) Accommodate loading, deliveries, servicing and maneuvering on-site.

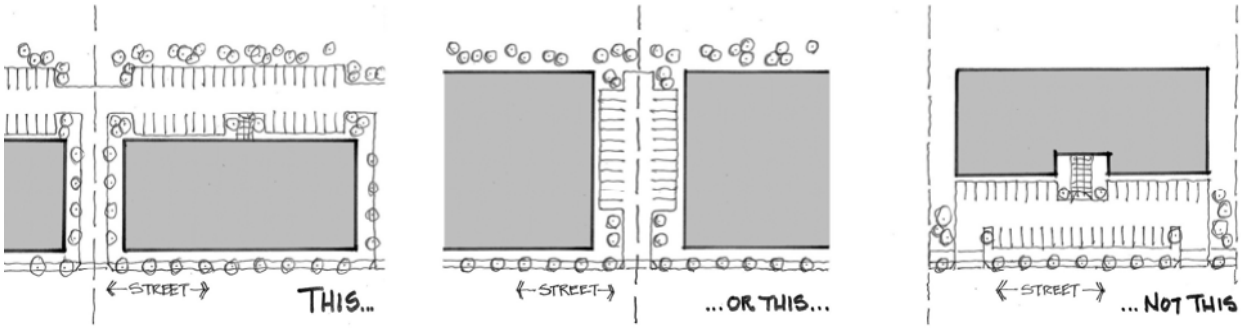
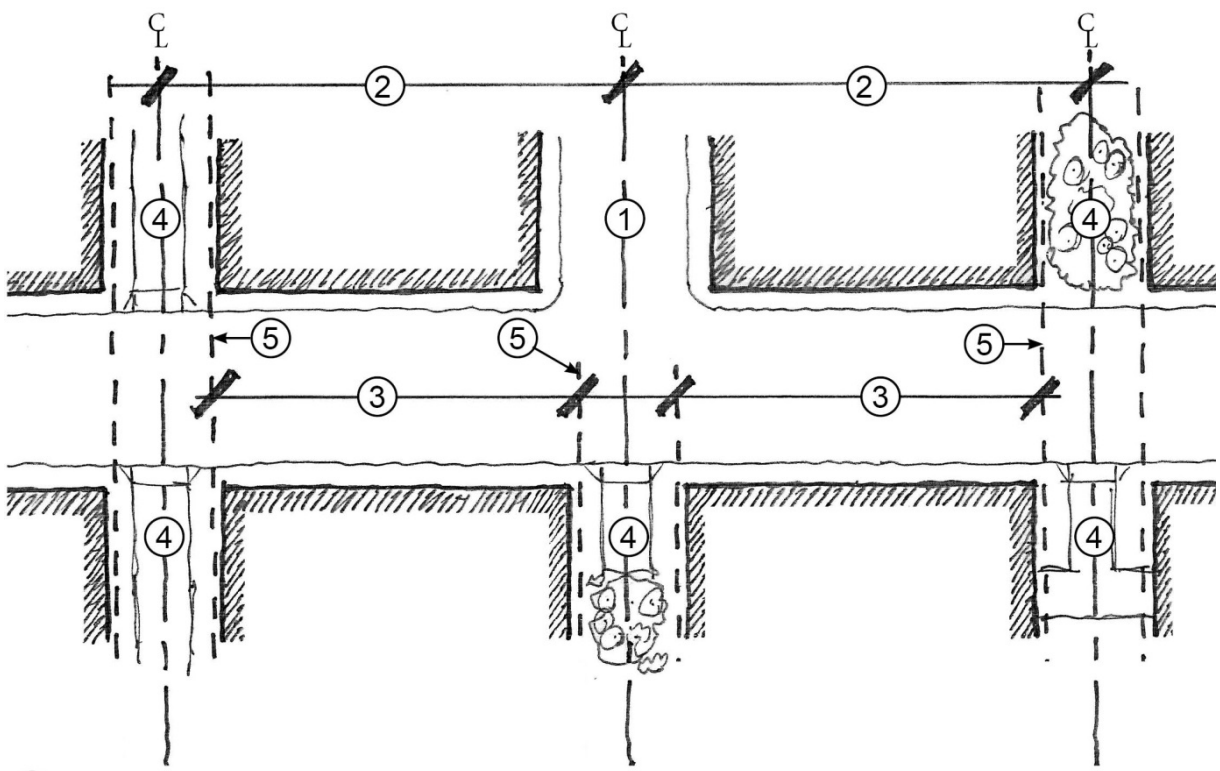


Figure 5 - Parking Strategies

4.16 Building Depth and Building Width

The district schedules regulate that neither the width nor depth of an individual building should exceed 61.0 m (200 ft) without a building separation of a minimum 15.25m (50ft). The intent for limiting building width and depth is to create building separations at approximately every 76 meters (250ft). See 4.5 - Side Yards for design intent. The building separations can be treated as side yard spaces creating opportunities for vehicular access, open space, views and to reinforce the existing street network. The Director of Planning may consider relaxations to regulations controlling building depth and building width based on the objectives of these policies and guidelines including:

(a) fit within the street network, neighbourhood patterns and urban fabric;
(b) provision of a commensurate amount of open space;
(c) impact on existing and future development;
(d) building and tower separations; and
(e) vehicular access, parking and loading provisions.



1. Existing Street
2. Street Network (Approximately 76m (250ft))
3. Building Width 61m (200ft) Max.
4. Building Separation: Opportunities for vehicular access and open space.
5. Overlay of historic or reintroduced street grid.

Figure 6 – Building Separation

4.17 Building Massing

Objectives in the False Creek Flats for intensified employment opportunities and well-functioning workspaces are anticipated to result in a form of development with greater densities, building heights, and floor plates. Form and massing should therefore be carefully considered with respect to the objectives of these policies and guidelines including access to daylight on the public realm, creating engaging public spaces, building articulation, an attractive near view, and finer grained urban settings.

(a) **Stepped Massing**: The intent for the stepping of building setbacks is to reduce apparent bulk and massing as height increases to improve access to daylight and views on the adjacent public realm and developments.

To encourage a more varied architectural expression, the Director of Planning will consider relaxations to the front, side and rear setbacks based on the evaluation of sun shading analysis and the contextual relationship to existing and anticipated future development. Projections (+) into setbacks should be balanced by a commensurate recesses (-) from the setbacks.

Application drawings should include sun shading diagrams and context analysis for evaluation of these objectives.

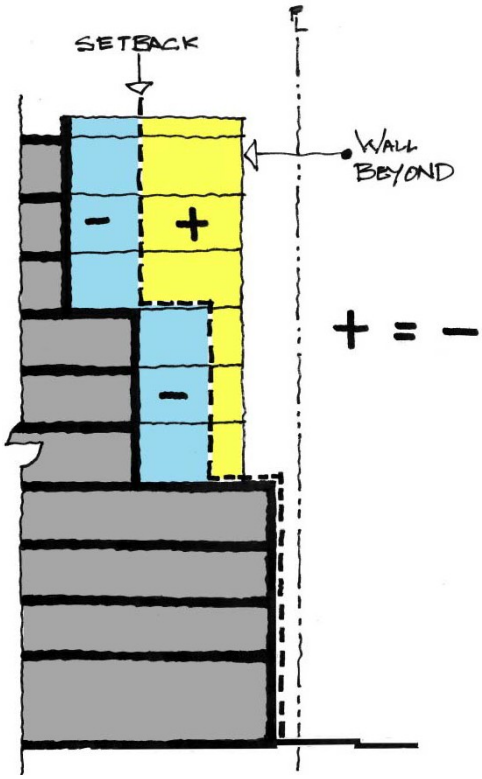


Figure 7 - Stepped Massing Section Diagram

(b) **Longer Buildings**: Where the need for longer or wider buildings can be demonstrated, relaxations to regulations controlling building width and depth and building separation may be considered based on design merit and the provision of a commensurate amount of quality open space and pedestrian interest. Consideration should also be given to significant facade articulation and on-site connections by transparent bridges and walkways on the upper floors. Break up long frontages and expanses of wall planes with substantial recesses, setbacks or building separations.

(c) **Tower Elements:** Tower elements (considered to be any portion of a building over 22.0 m (72 ft.) in height) should:

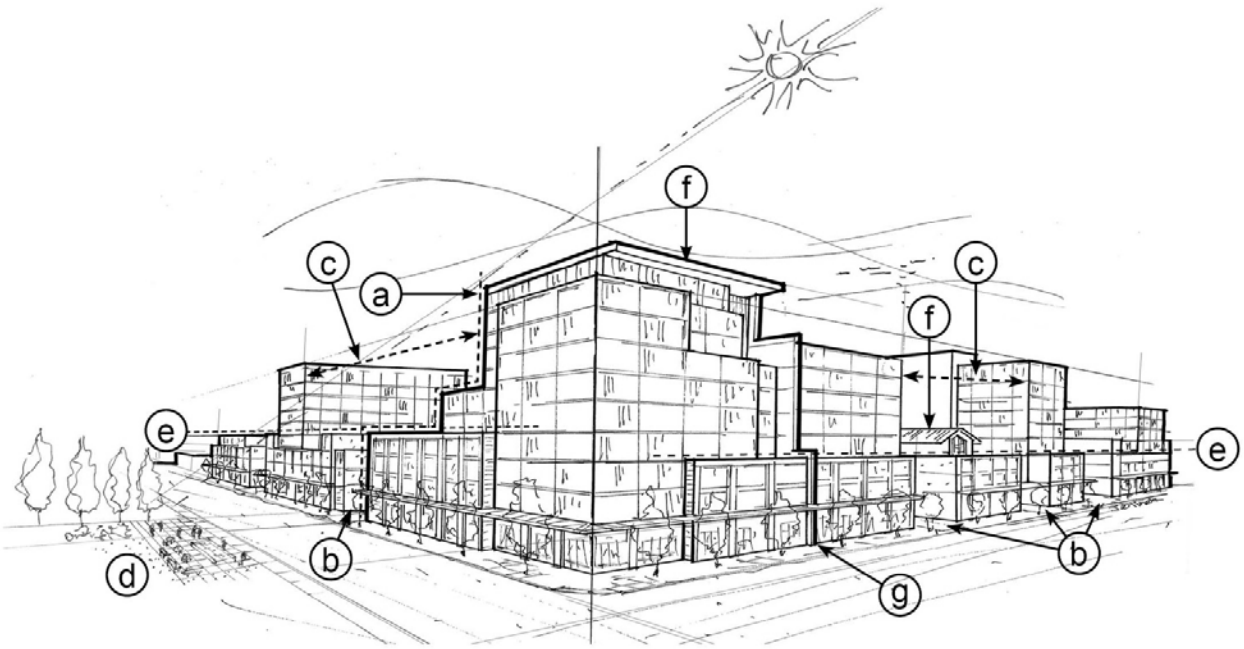
(i) be separated from other commercial tower elements by 15.2 m (50ft)
(ii) be separated from residential tower elements by 24.0 m (80ft).

Where adjacent sites are not fully developed, the proposed tower should maintain a distance of 7.6m (25ft) from the interior side and rear property lines unless residential uses are permitted on the adjacent lots in which case the setbacks should increase to 12.5 m (41 ft.).

(d) **The Network of Public Space**: Building massing should respect the importance of sunlight on the Network of Public Space. Development along Walk-the-Line and the Network of Public Space should seek to minimize shadowing on the opposite sidewalks, mini-parks, urban plazas and other public places.

(e) **Street Wall and Shoulder**: The intent is for development to be built out to the 0.6m front yard setback and create a consistent 4 storey, 18.3 meter shoulder.

(f) **Roof:** The profile and silhouette of roofs should be considered as part of the skyline. Elevator penthouses, mechanical rooms, equipment, vents and other appurtenances should be integrated with the architectural treatment of the roof and screened from view.



(a) Stepped Massing

(b) Building Separation

(c) Tower Separation

(d) Network of Public Spaces

(e) Consistent Street Wall and Shoulder

(f) Roof: Architecturally integrated and visually interesting.

(g) Side Yard Setback Relaxation

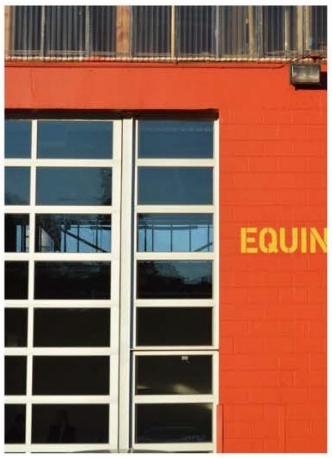
Figure 8 – Building Massing Diagram

5 Architectural Components

The intent for architectural components and materials is to recognize the area's unique industrial heritage as well as the following objectives:

(a) Reinforce the near view with high-quality materials, detailing and active storefronts.
(b) Express a finer grain urban fabric by articulating smaller structural bays and modules.
(c) Generic "big box" building designs that exhibit little facade interest and transparency to the street should be avoided.
(d) Storefronts should be transparent at grade and are encouraged not to contain long blank walls.
(e) High clearance warehouse-type spaces should have clerestorey windows at the upper storey of the facade.
(f) Building interface at the public realm should emphasize details and proportions at the scale of the pedestrian with particular consideration to the objectives of animated streetscapes and showcasing functional outdoor workspaces.
(g) Reference the "heavy duty" context with details and expression.










5.1 Roofs

(a) Encourage working rooftops to expand economic functions to the roofs of buildings.
(b) Roof tops should be designed to be attractive where seen from above through use of landscaping, green roof technologies, choice of materials and colour.
(c) Elements such as gazebos and trellises may be considered, height and floor area permitting.

5.2 Windows

Windows at grade are important to enhance pedestrian interest, particularly where retail uses are not required at grade.

(a) For retail, service or office uses:
    (i) maximize transparency through use of high transom, low sill window designs, as well as openable windows where appropriate. For service and office uses, design should allow for adaptation to retail use in the future.
(b) For industrial uses:
    (i) provide windows for viewing to industrial processes where possible; and
    (ii) where windows cannot be used, use other means to add visual interest such as expressed vertical elements, vines, murals, and detailing. Avoid long stretches of blank wall.
(c) Uses and functions which do not lend themselves to enhancing pedestrian interest should be located away from ground floor windows.
(d) Use of mirrored or highly reflective glazing, window decals or other vision obscured treatments are discouraged, and may not be permitted, especially at grade.

5.3 Entrances

The intent is to create buildings and spaces that relate to and respect the public realm as well as to showcase functional workspace. Characteristics of these buildings include:

(a) Main building entries should be clearly identifiable, transparent and accessible from the street.
(b) Locate secondary entrances and individual small tenant entries with frequency along adjoining sidewalks. Separate uses or accessory retail spaces should have separate and distinct entries.
(c) Reinforce visually and physically, the connection of interior spaces to the public realm. Strategies, such as operable folding storefronts and roll-up doors, are encouraged to introduce opportunities for outdoor workspace.
(d) Provide pedestrian interest and comfort at entries provided through specifically designed seating, signage, lighting and features that indicate the building's use and function.

5.4 Building Articulation

(a) Express an approximately 7.6 meters (25ft) structural bay spacing on street facing facades, especially at the four lower floors or podium.
(b) Building articulation can be achieved with materiality, shadow lines and exposed structural components.
(c) Feature banding to break up perceived wall height may be used to assist in achieving horizontal articulation.
(d) Highly visible circulation and building systems are encouraged.
(e) Vertical service elements, such as stair and elevator shafts, may be used to assist in articulation, as well as being expressive of their function.

5.5 Exterior Walls and Finishing

(a) Exterior building design should reflect the industrial and institutional urban fabric of the sub-area by using appropriate, durable, and high-quality materials.
(b) Exterior materials that are encouraged include:
(i) contemporary metal cladding systems;
(ii) heavy timber structural elements;
(iii) glass and steel;
(iv) masonry, architectural concrete or brick.
(c) Stucco and vinyl are discouraged as primary exterior materials and may not be permitted by the Building By-law.

5.6 Awnings and Canopies

(a) In terms of appearance, a uniform canopy or awning across the entire building façade may be inappropriate to the diverse and varied character of the Flats. Design architecturally integrated, high quality awnings and canopies, but ensure some variety in form, and/or the ability for tenants to vary them.
(b) Ensure that awnings and canopies are deep enough and close enough to the ground to provide shelter. The recommended minimum depth to height ratio is approximately 7:10.
(c) Transparent or translucent glazed canopies that permit the passage of light are encouraged.
(d) Section 2.7 describes where weather protection should be provided.

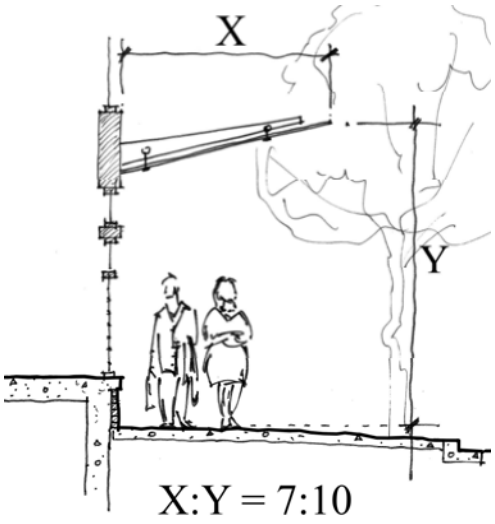


Figure 10 – Weather Protection

5.7 Lighting

(a) Building, entry path and parking lighting should be integrated into the site and building design.
(b) For exterior lighting, incandescent and other white light sources are encouraged, while sodium vapour light sources are discouraged. Better performing, more efficient light sources such as LED's are highly encouraged.
(c) Exterior lights should be oriented away from adjacent residential properties, with cut-off shields to minimize light.
(d) For larger developments or campuses or where proximity to adjacent development is a concern, a site lighting plan indicating light levels and light fixture types should be provided.
(e) Review opportunities to utilize lighting design standards and guidelines that reduce negative impacts to birds and other wildlife.

5.8 Signs

(a) Corporate signage should be subordinate to the design of the building and architecturally integrated with the development.

(b) Internally illuminated or back light sign boxes are discouraged.

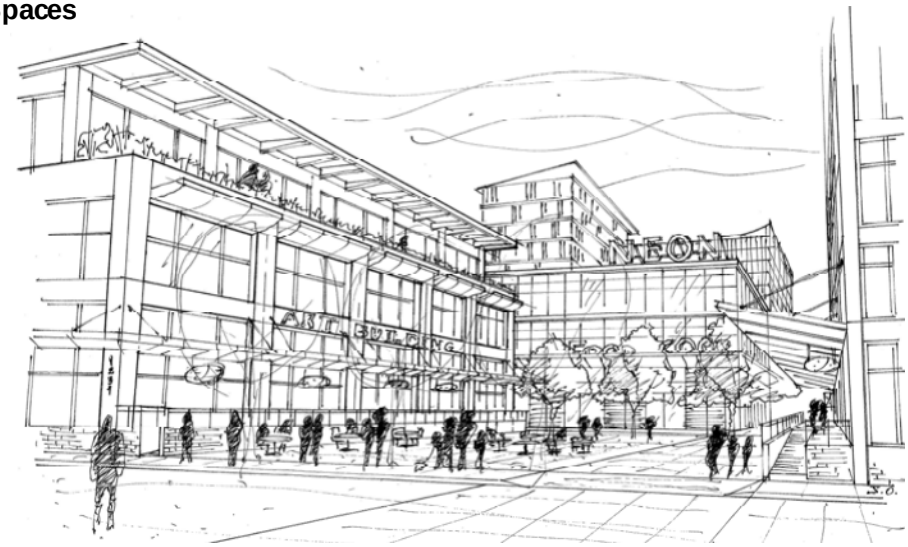
(c) Signage that compliments the industrial urban fabric and character established in the Flats is encouraged. Examples include neon, signage painted on walls, signs with individual letters placed directly on the building or signs incorporating materials that reinforce the character specific sub- areas such as steel, glass and heavy timber.

(d) One freestanding, ground oriented pylon sign is appropriate at each entrance to a large campus site, complimented by wayfinding signage at key decision points along internal drives or paths.

(e) At grade uses are encouraged to have minimal, clear, pedestrian oriented signage located at premises entries.

7 Open Space

7.1 Public Places and Spaces



Create unique, vibrant, attractive, interesting and amenity rich environments that appeal to the increasingly mobile employees of the twenty-first century. It is hoped these interesting and inviting places will support innovation by providing venues that support the spillover of new ideas and breakthroughs within the local economy.

Objectives and character descriptions of the key public pathways and connections envisioned for False Creek Flats include:

(a) **Innovation Corridor – Railtown to Mount Pleasant**: A new off-Main complete street will connect Gore to Station to Lorne, and will serve as a primary north-south link for all transportation modes and tie the innovation nodes together along this corridor.

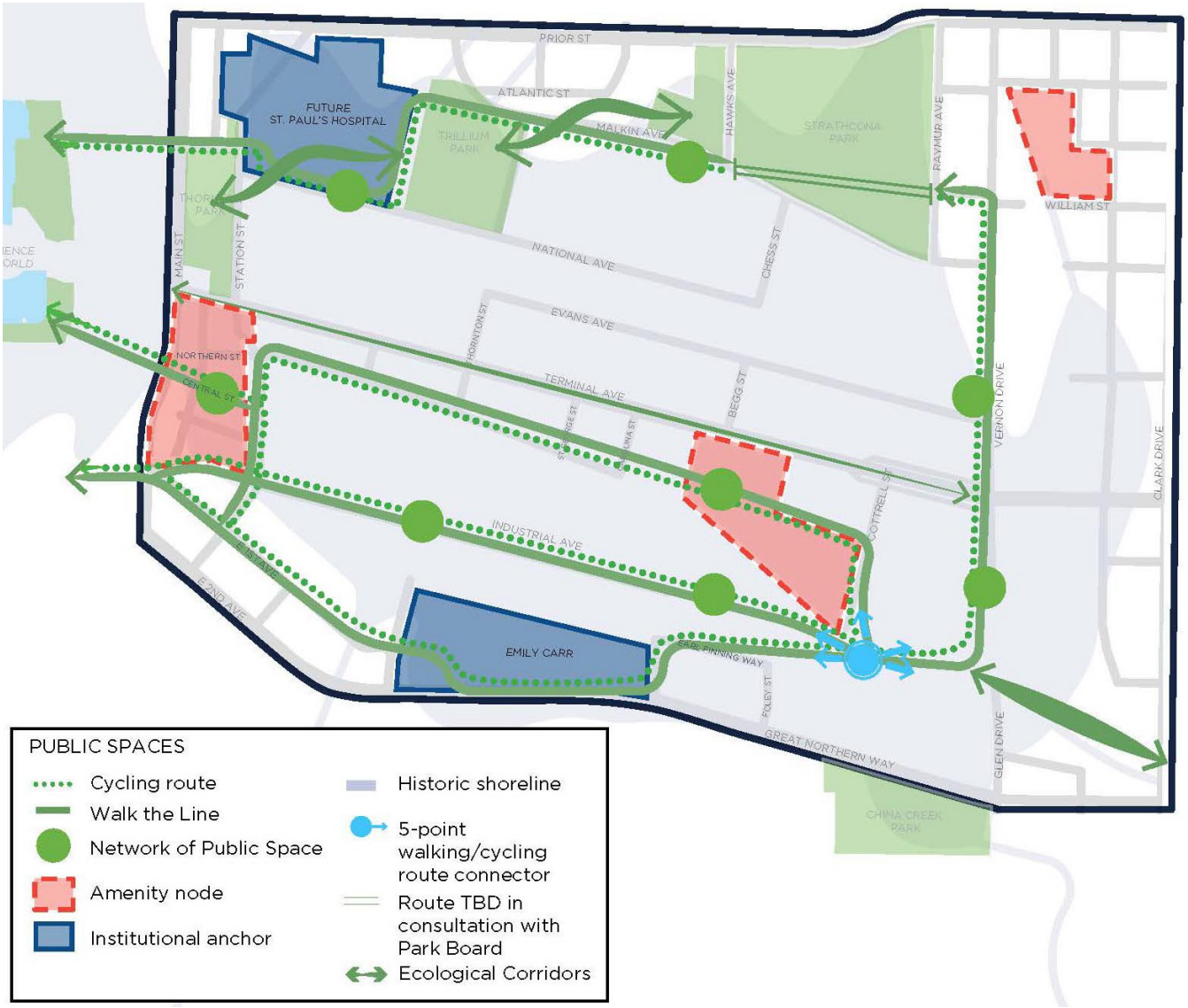
(b) **Arts Walk**: The lane between First Avenue and Second Avenue has a unique character and the potential to contribute to the public space network. While maintaining its primary function for servicing, it provides an opportunity to animate a walking link between the Innovation Hub and Emily Carr. This link is envisioned to be lined with commercial galleries, or an "arts walk." The future lane treatment could include lighting, seating and other public realm improvements.

(c) **Central Spine**: A key connection to the Creative Campus is a prominent public linkage along Central Street, through the Innovation Hub to the Seawall that will provide the southwestern starting point of Walk-the-Line. Development should explore opportunities for shared programming as a means to showcase adjacent workspace.

(d) **The Five Points**: The meeting point of the CN and BNSF yards has the potential to link five key desire lines for the flats public space network. Opportunities for public spaces on an elevated structure would provide key vantage points over the rail with views to downtown and the mountains.

(e) **Walk-the-Line**: Walk-the-Line is envisioned as a multipurpose route that connects the various sub-areas into a cohesive whole. The general concept is to roughly trace the old shore line of False Creek, extending the Seawall through the Flats on an approximately 4.5km loop.

(f) **Central Valley Greenway**: Maintain this important cycling route along East 1st Avenue until such a time as a future Industrial Avenue linkage is realized.



Map 5 – Public Spaces and Places

Development should respect the importance of sunlight between 10:00am and 2:00 pm between the March and September equinoxes on the Network of Public Spaces and Walk-the-Line route as listed below and shown below on Map 5.

(i) Central Street from Main Street to Station Street;
(ii) Industrial Avenue from Main Street to Cottrell Street;
(iii) Cottrell Street from Industrial Avenue to the future Northern Street extension;
(iv) Station Street from Northern to East First Avenue;
(v) East First Avenue from Main Street to Thornton Street;
(vi) Thornton Street from East First Avenue to Great Northern Way;
(vii) Great Northern Way from Thornton Street to Fraser Street;
(viii) Fraser Street from Great Northern Way to Earle Finning Way;
(ix) the Railyards between Foley Street and Glen Drive;
(x) East Fifth Avenue from Glen Drive to Clark Drive;

(xi) Glen Drive from East Fifth Avenue to William Street;
(xii) William Street from Glen Drive to Raymur Street;
(xiii) Malkin Avenue from Chess Street to Atlantic Street;
(xiv) National Avenue from Thornton Street to Quebec Street; and
(xv) the public open space nodes at the intersections of Hawks Avenue and Malkin Avenue, Thornton Street and National Avenue, Evans Avenue and Glen Drive, the eastern terminus of Industrial Avenue and the 1700 Block of Glen Drive.

7.2 Semi-Private Open Space

Social semi-private open space is desirable for both employees, visitors and residents and should be provided to accommodate the intended users wherever possible. It could be located at grade or on the rooftop as part of a landscaped rooftop garden and should maximize sun exposure.

7.4 On-Site Public Open Space

The following should guide design and location of open spaces on private land.

(a) Consider opportunities to compliment public open space design including:
  (i) Create inviting and comfortable places for people;
  (ii) Reintroduce water and natural systems;
  (iii) Encourage lively building edges and more welcoming street experience;
  (iv) Respect existing public views and explore creating new views of prominent features such significant landmarks;
  (v) Support the display of local art, craft or industry;
  (vi) Explore opportunities for unconventional open spaces;
  (vii) Improve wayfinding and legibility;
  (viii) Encourage 24/7 activity and public life; and
  (ix) Consider ways to ensure a safe, clean, clutter free environments.
(b) Large sites, greater than 1.25 hectares, should incorporate green spaces for employees and the public as part of site landscape design.
(c) Open space on privately owned land should be considered with the same objectives to reinforce the network of public spaces. Enhanced front and side yard setbacks can provide opportunities that help link open spaces.
(d) Where practical, the public open space and greenways will be constructed on City owned land or City Right of Way (R.O.W.). In some circumstances, an additional R.O.W. may be requested from development to provide a more useable trail width.
(f) Landscaping elements and public art, including temporary projects, are encouraged.
(g) Reflect the industrial history of the area as well as contemporary life, innovation and experimentation.

Public Art

Public art should be considered based on the following process and objectives:

(a) Consideration for 24/7 access and use of the site;
(b) Opportunities for rotating installations and diversity of scale and material;
(c) Opportunities for art to be embedded in public spaces and infrastructure;
(d) Consider opportunities to create diversity throughout the site and in unexpected places; and
(e) Create public spaces built upon people being together in innovative ways.

8 Landscaping

8.1 Streetscape

The following design objectives apply to public open space:

(a) Provide continuous sidewalks for the site's full frontage to encourage pedestrian use.
(b) Landscape design should provide for views into buildings for pedestrian interest, as well as special features such as opportunities to sit, view or take part in walking or active recreation.
(c) Explore opportunities for integrated rain water management.

(d) Provide a high quality public realm with street trees, landscaping, lighting, street furniture, signage and wayfinding, and green infrastructure where possible.

(i) Street trees should be provided on all streets not currently having them, or where their spacing is inconsistent. Through the enquiry and approval process, the Parks Board and Engineering staff may specify species, spacing, and location.

8.2 Site Landscape

(a) Existing trees and significant landscape features should be evaluated for retention where possible;
(b) Landscaping should be used to help mitigate impacts between residential and industrial uses as well as rail;
(c) Landscape design on other parts of the site should relate to anticipated activities;
(d) A layered landscape treatment should be provided to screen surface parking and loading areas while providing strategic visual access to entries and access areas.
(e) Strengthen urban forest connectivity;
(f) Consider planted roof tops;
(g) Enhance habitat for birds, pollinators and other flora and fauna and following the *Bird Friendly Design Guidelines*; and
(h) Limit extent of underground parking layout and design to accommodate retention of existing trees and for the provision of new ones.

9 Utilities, Sanitation, and Public Services

9.1 Water and Sewer Services

Upgrades to water and sewer services throughout the False Creek Flats may be required by future development proposals.

(a) Some water mains may need to be upgraded or replaced to support future development in the False Creek Flats including along National Avenue, Thornton Street, and in the North East corner of the False Creek Flats.

(b) The City of Vancouver is committed to increasing outdoor public access to drinking water through the Access to Water program. Throughout the Area, the City's waterworks branch will look for opportunities to install water fountains through redevelopment prioritizing locations along bike routes, near parks, public plazas, and other areas with a high demand for water.

(c) The sewer system in False Creek Flats was initially constructed in the early 1900s through to the 1950's and largely rebuilt and separated in the 1970's. However, certain sewer mains are nearly 100 years old, and will likely require rehabilitation in the near term outside of the City's sewer separation program.

9.2 Integrated Rainwater Management

The Flats area is the outfall for the Terminal and China Creek drainage areas. As a result of this large catchment, a large diameter storm main exists under Terminal Avenue which discharges directly to False Creek making the entire drainage area a good candidate for integrated rainwater management techniques to improve water quality. Where possible, employ engineered systems (rain gardens, pervious paving and cisterns) and roof-top systems (including green roofs) to capture, treat and convey rainwater into the City's storm water system.

9.3 Garbage and Recycling

Garbage and recycling are essential services that can detract from the pedestrian experience and nearby development unless careful design is used to screen them.

(a) Garbage and recycling facilities should be located adjacent to the lane, fully enclosed by a roof and sides or within the building envelope, and screened from the lane and street where possible.

(b) A location for onsite queuing and pick-up is highly encouraged.

9.4 Neighbourhood Energy System

Where the General Manager of Engineering Services deems a connection to the NES is available and appropriate, buildings within any development will be required to connect to the NES prior to occupancy, or post-occupancy through a deferred services agreement, or otherwise, at such time that a system becomes available. Buildings shall be subject to the *Neighbourhood Energy Connectivity Standards – Design Guidelines.*

9.5 Underground Wiring

In order to improve the visual environment for residents, developments on larger sites (45.0 m frontage or wider) should investigate with the City Engineer the feasibility of using underground wiring for electric, telephone and cable services, including the removal or partial removal or existing overhead plant.

10 Environmental Considerations

10.1 Soils: Retention, Cleansing and Replacement

Provide soil remediation on all sites as required by the *Environmental Management Act*, *the Vancouver Charter* and all city policies with respect to the remediation of city streets. Additional considerations include:

(a) Limit excavation thereby reducing soils remediation;
(b) Reintroduce water and natural systems such as urban forests, wetlands and pollinator meadows;
(c) Topsoil should be retained and soil quality improved where necessary;
(d) Contaminated soils should be replaced with quality soils to enhance plant growth and ground water quality; and
(e) Employ soil remediation techniques such as piling and ground densification to ensure buildings are seismically stable and not subject to liquefaction.

10.2 Green Buildings

Development should explore opportunities for:

(a) Green building technologies to help advance the criteria for healthy productive workspaces;
(b) Green roof tops, including potential business opportunities such as a permanent home for urban agriculture or other rooftop businesses or uses;
(c) Passive design features and technologies including complimenting the burgeoning green building economic sector;
(d) Support innovation with respect to green building and renewable energy system design, operation and placemaking;
(e) Green fleet programming and electric vehicle charging infrastructure; and
(f) Passive strategies to building heating, ventilation and cooling including solar orientation and operable windows.

10.5 Energy: Conservation and Efficiency

(a) Building materials, systems and construction methods should be considered to conserve energy and reduce long-term operating costs.

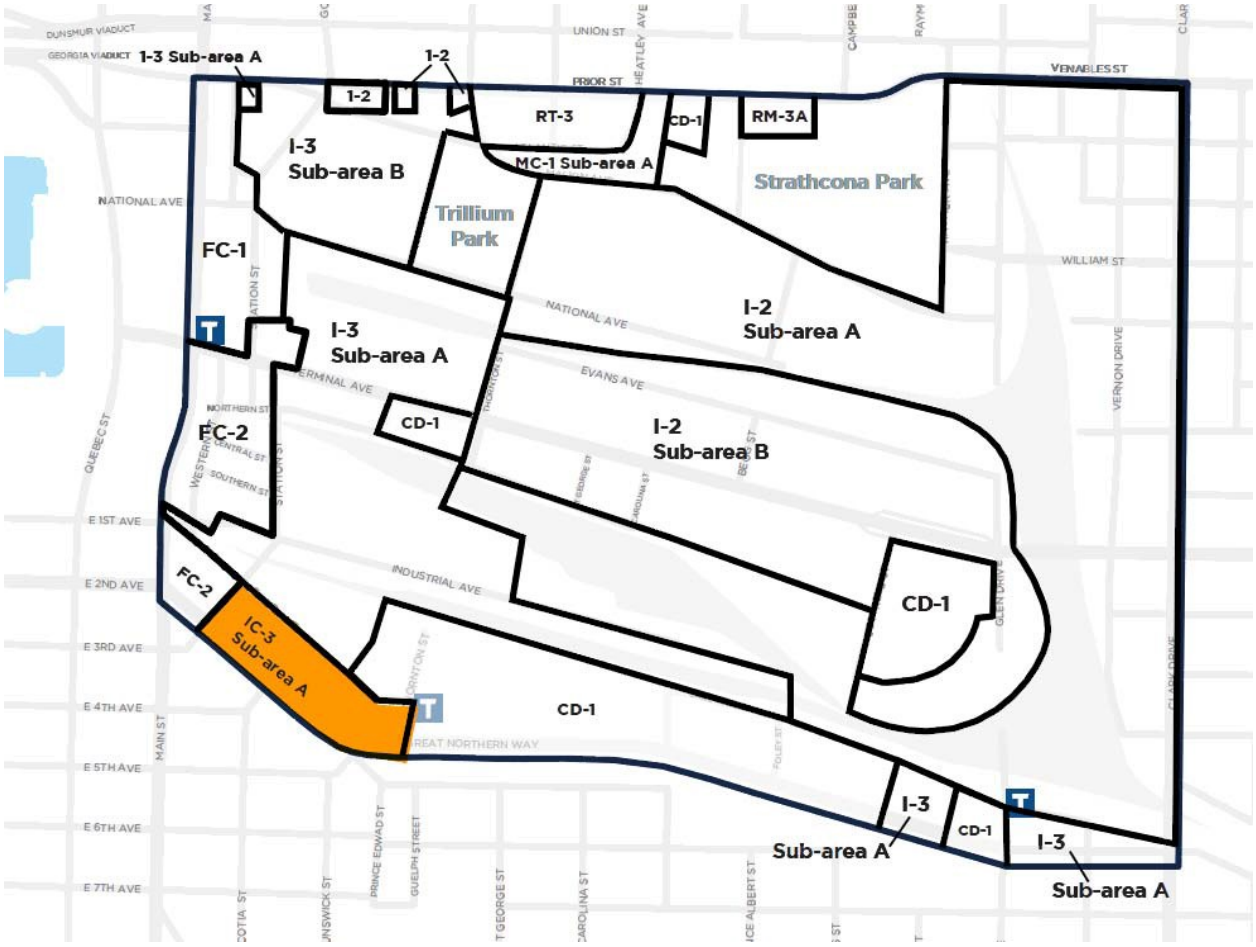
FALSE CREEK FLATS URBAN DESIGN POLICIES AND GUIDELINES FOR IC-3

Adopted by City Council on October 31, 2017

False Creek Flats – IC-3

Contents

Note: These policies and guidelines are organized under standard headings. As a consequence, there are gaps in the numbering sequence where no guidelines apply.



Map 1 – False Creek Flats Zone District Map for IC-3A

1 Application and Intent

1.1 Plan Principles

These policies and guidelines are to be used in conjunction with the IC-3 District Schedules in the Creative Campus Subarea of False Creek Flats and should be consulted in seeking approval for conditional or discretionary relaxations to regulations. As well as assisting the applicant, these policies and guidelines will be used by City staff in the evaluation of projects.

The intent of the policies and guidelines is to:

(a) **Intensify Employment Opportunities:** Increase job space around existing and future transit sites that reflect the industrial character and nature of the area. Explore opportunities for higher use of existing buildings for more intensified job space.

(b) **Maximize Flexibility:** Ensure that new buildings can adapt and evolve to accommodate future changes in economic production.

(c) **Encourage Vertical Stacking of Industry and Production Spaces:** There is increasingly an opportunity to stack many industrial/production businesses in the same building. With the goal of increasing employment and the productive output of the area, the plan supports a return of vertically stacked industrial uses in the Flats.

(d) **Take Advantage of Unique Opportunities:** A thriving economy requires space for all scales of businesses from start-ups to headquarters. Large lot sizes create flexibility and scale not available elsewhere in the inner city. Plan for flexible outdoor spaces that can host a variety of uses over 24 hours.

(e) **Create Buildings that Respect & Respond to the Public Realm:** Design buildings at the scale of the pedestrian by incorporating elements at the ground floor that help to create attractive, well- functioning and welcoming spaces.

(f) **Reference Industrial & Institutional Urban Fabric:** Consider a campus approach to the design and siting of developments on large sites. Accommodate industrial and institutional scales within a finer grained urban setting to facilitate organic growth and phasing over time.

(g) **Create healthy and productive workspaces:** Design the public realm to maximize sunlight on public spaces and daylight in work environments.

(h) **Encourage Working Rooftops:** Expand economic functions to the roof tops of buildings.

(i) **Create Thoughtful Transitions Respectful of Surrounding Residential Neighbourhoods:** Require transitions between working industrial lands and adjacent residential.

(j) **Showcase Functional Workspaces in the Public Realm:** Create links between the public realm and industrial function to showcase the industrial character of the Flats.

(k) **Create Buildings and Neighbourhoods that Respond to Sea Level Rise:** Low topographic elevations and anticipated sea level rise presents a major challenge for

development in False Creek Flats. Provide adaptive, flood resilient building design solutions.

(l) **Re-purpose Vehicle Parking:** Minimize surface parking and design for parking areas to transition to work space over time as other modes of transportation improve

2 General Design Considerations

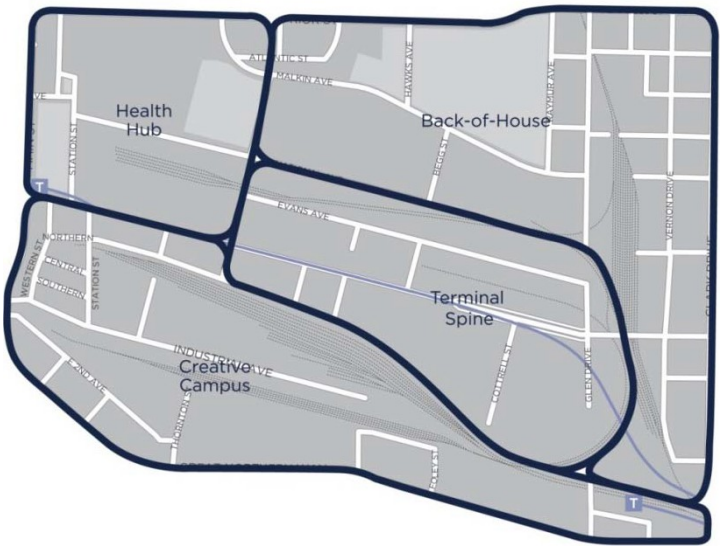
Proposals will be evaluated based on urban design performance objectives including setbacks, massing, building articulation, access to daylight and views, transition to surround communities, improved building articulation and animated streetscapes as described by this section. Throughout False Creek Flats, there is a need to seek ways to create a more comfortable pedestrian experience by greening the streets with tree planting, continuous sidewalks and by encouraging active street frontages for businesses.

Site layout and building design such as building separations, widths, depths, or setbacks should reinforce the surrounding scale and street network and provide a means to inform opportunities for open space, vehicular access, rain water management and permeability as well as augmenting the Network of Public Spaces described in Section 7.

2.1 Neighbourhood Character

I-3 - Creative Campus Sub-Area

The intent for the Creative Campus sub-area is to enable intensification opportunities for well-functioning, flexible industrial and light industrial workspace, office space and other employment opportunities while enhancing the public life and creating pedestrian interest. IC-3 permits residential uses. Residential uses should be carefully designed and considered with respect to non-compatible uses.

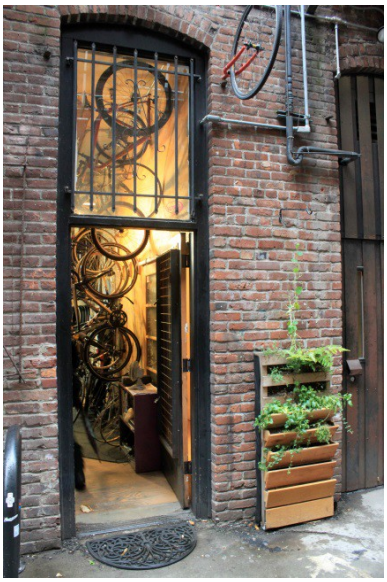


Map 3 - False Creek Flats Character Areas.

2.2 Unique Spaces and Places

The diverse combination of uses and forms of development in the False Creek Flats intentionally provides for opportunities to create unique and varied places. Creation of opportunities for public engagement in a variety of distinct places are highly encouraged.

2.4 Views



New development should be considerate of the impact on existing distant views. However as development progresses, the anticipated scale and density will impact the ability to preserve these existing views. Development should therefore place a higher emphasis on the following strategies:

(a) Provide an attractive near view. This can include a finer grained urban fabric and building modules, high-quality materials and detailing, visually permeable facades, programming for active outdoor uses and landscape elements.

(b) Visually linking new open space to existing open space. This can serve to expand the depth of views.

(c) The form and shape of tower elements should be informed by view studies.

(d) View Cones may limit building heights along Lorne Street.

2.5 Topography: Floodplain

False Creek Flats has low topographic elevations and will be at risk of flooding during large storms by the end of the century if projected sea level rise occurs. The *Flood Plain Standards and Requirements* as adopted by Vancouver City Council sets the designated flood plain at 4.6m from GVRD datum. As a consequence, existing grades including street right of ways, are often one to two meters below the anticipated ground floor elevations. A plan to raise street elevations may be considered in the future. Therefore, new development should be designed to be adaptive when incorporating flood resilient construction methods and to accommodate public realm objectives for both the current and potential future at grade conditions. Solutions should be accommodated within the property, be visually interesting, relate to the pedestrian scale, and may include increased building setbacks, internalized stairs and ramping as well as adaptable entries, loading and parking.

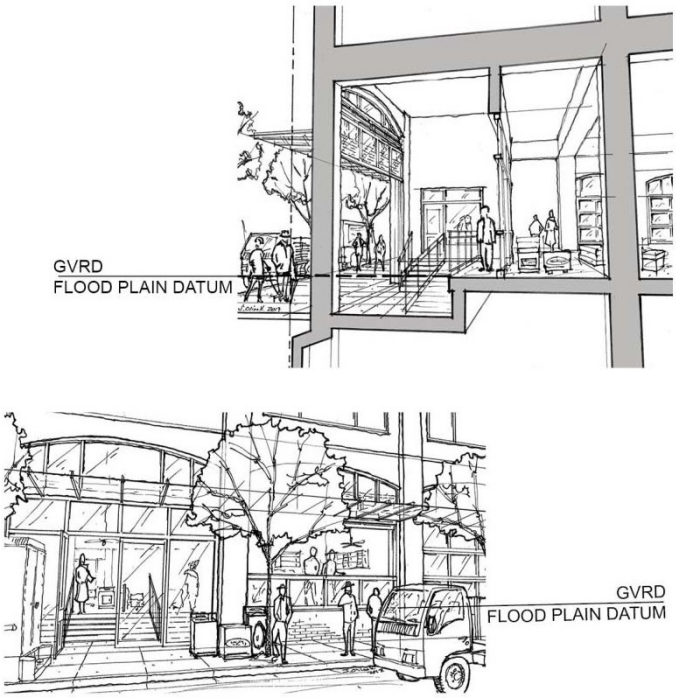


Figure 2 - Floodplain Strategies

2.6 Light and Ventilation

Light and ventilation are important for both workspace and residences.

Residential: For dwelling uses the horizontal angle of daylight (H.A.D.) regulations in section 4.10 of the Districts Schedule should be supplemented with the following considerations:

(a) living rooms should not face into courtyards less than 73m wide;
(b) building massing should maximize sun access to courtyards and outdoor amenity areas;
(c) mechanical ventilation of commercial and service spaces should be pre-ducted for exhaust through the roof at the highest level or at a location having the least impact on residential livability;
(d) maximize opportunities for cross ventilation of dwelling units such as corner units or double fronting units; and
(e) locate residential units and open spaces away from areas of noxious odours and fumes related to nearby traffic or land uses.

Note: Consult individual sub-areas for permitted Dwelling Uses and tenancy.

All other Uses: Daylight and ventilation in work environments can improve energy usage as well as promoting a health and productivity. Considerations include:

(a) solar shading devices and glazing performance;
(b) building orientation and massing;
(c) increased floor and ceiling heights; and
(d) operable windows.

2.7 Weather

Weather protection should be provided continuously and at all common building entries as well as at individual entries.

(a) In terms of appearance, a uniform canopy or awning across the entire building façade may be inappropriate to the diverse and varied character of the sub-area. Design architecturally integrated, high quality awnings and canopies, but ensure some variety in form, and/or the ability for tenants to vary them.
(b) Ensure that awnings and canopies are deep enough and close enough to the ground to provide shelter. The recommended minimum depth to height ratio is approximately 7:10.
(c) Transparent or translucent glazed canopies that permit the passage of light are encouraged.

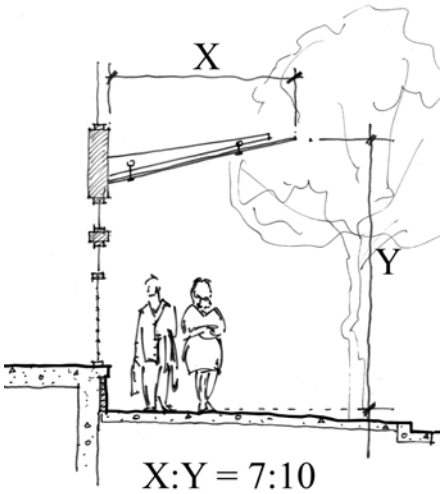
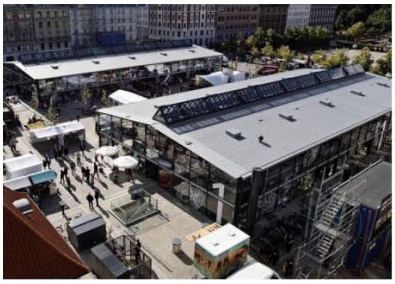


Figure 10 – Weather Protection

3 Use

3.3 Uses at Grade

Active and engaging uses at grade should be provided. In the False Creek Flats an emphasis is placed on providing attractive, well-functioning and welcoming space to showcase workspace. Strategies including visually permeable frontages, operable window walls, setbacks and weather protection to accommodate outdoor workspaces are encouraged. Other than entrances and lobbies, Residential and Office uses should not be located at the ground floor level. Section 7 for the 'Arts Walk' should inform ground floor design, in particular for considerations along the lane.



4 Policies and Guidelines Pertaining to the Regulations of the Zoning and Development By-law and the Parking By-law

4.3 Height

The intent for increasing maximum achievable building heights includes for intensified employment opportunities, well-functioning and flexible job space, vertical stacking of industrial uses, working and green roof tops and response to sea level rise. New development should create an active and engaging public realm within a unique, vibrant, attractive, interesting and amenity rich environment. The Director of Planning may increase the maximum achievable building height based on the objectives of all applicable policies and guidelines including the evaluation of:

(a) Impact of height, bulk, massing, location and overall design of the building on the site, surrounding buildings and streets. In addition to the general design considerations listed in Sections 2 and 5 describe the intents and objectives relating to general building expression and architectural components.

(b) The provision of on-site open space, landscape, and the effects of overall design on the general amenity of the area. In particular Sections 7 and 8 describe open space and landscape objectives for the Public Places and Spaces, Network of Public Spaces, On-Site Public Open Space, streetscapes and landscape.

(c) The effect on traffic in the area.

(d) Provision for pedestrian needs including continuous sidewalks, weather protection, safety, and active and engaging frontages that respect and respond to the public realm.

4.7 Floor Space Ratio (FSR)

The intent for increasing the maximum achievable floor area is to provide opportunities for intensified employment and well-functioning and flexible job space. New development should create an active and engaging public realm within a unique, vibrant, attractive, interesting and amenity rich environment. Not all

sites will be able to achieve the maximum floor area. The Director of Planning may increase the maximum achievable floor area based on evaluation of the objectives of all applicable policies and guidelines and including:

(a) Impact of height, bulk, massing, location and overall design of the building on the site, surrounding buildings and streets. In addition to the general design considerations listed in Sections 2 and 5 describe the intents and objectives relating to general building expression and architectural components.
(b) The provision of on-site open space, landscape, and the effects of overall design on the general amenity of the area. In particular Sections 7 and 8 describe open space and landscape objectives for the Public Places and Spaces, Network of Public Spaces, On-Site Public Open Space, streetscapes and landscape.
(c) The effect on traffic in the area.
(d) Provision for pedestrian needs including continuous sidewalks, weather protection, safety, and active and engaging frontages that respect and respond to the public realm.

4.17 Building Massing

Form and massing should be carefully considered with respect to the objectives of these policies and guidelines including access to daylight on the public realm, creating engaging public spaces, building articulation, an attractive near view and finer grained urban settings.

(a) **Tower Elements:** Tower elements (considered to be any portion of a building over 22.0 m (72 ft.) in height) should:
   (i) be separated from other commercial tower elements by 15.2 m (50ft)
   (ii) be separated from residential tower elements by 24.0 m (80ft).

   Where adjacent sites are not fully developed, the proposed tower should maintain a distance of 7.6m (25ft) from the interior side and rear property lines unless residential uses are permitted on the adjacent lots in which case the setbacks should increase to 12.5 m (41 ft.).

(b) **The Network of Public Space**: Building massing should respect the importance of sunlight on the Network of Public Space. Development along Walk the Line and adjacent to the Network of Public Space as described in Section 7 should seek to minimize shadowing on the opposite sidewalks, mini-parks, urban plazas and other public places.

(c) **Street Wall and Shoulder**: The intent is for development to be built out to the front yard setback and create a consistent approximately 4 storey 18.3 meter street wall and shoulder. This should be evaluated based on existing and anticipated adjacent development.

(d) **Roof:** The profile and silhouette of roofs should be considered as part of the skyline. Elevator penthouses, mechanical rooms, equipment, vents and other appurtenances should be integrated with the architectural treatment of the roof and screened from view.

5 Architectural Components

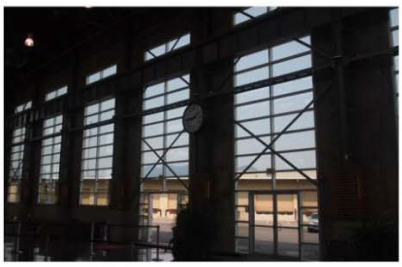
The intent for architectural components and materials is to recognize the area's unique industrial character as well as the following:

(a) Reinforce the near view with high-quality materials, detailing and active storefronts.
(b) Express a finer grain urban fabric by articulating smaller structural bays and modules.
(c) Generic "big box" building designs that exhibit little facade interest and transparency to the street should be avoided.
(d) Storefronts should be transparent at grade and are encouraged not to contain long blank walls.
(e) High clearance warehouse-type spaces should have clerestorey windows at the upper storey of the facade.
(f) Building interface with the public realm should emphasize details and proportions at the scale of the pedestrian with particular consideration to the objectives of animated streetscapes and showcasing functional outdoor workspaces.
(g) Reference the "heavy duty" context with details and expression.







5.2 Windows

Windows at grade are important to enhance pedestrian interest.

(a) Maximize transparency through use of high transom, low sill window designs, as well as openable windows where appropriate.
(b) Where windows cannot be used, use other means to add visual interest such as expressed vertical elements, vines, murals, and detailing. Avoid long stretches of blank wall.
(c) Uses and functions which do not lend themselves to enhancing pedestrian interest should be located away from ground floor windows.
(d) Use of mirrored or highly reflective glazing, window decals or other vision obscured treatments are highly discouraged, and may not be permitted, especially at grade.

5.3 Entrances

The intent is to create buildings and spaces that relate to and respect the public realm as well as to showcase functional workspace. Characteristics of these buildings include:

(a) Main building entries should be clearly identifiable, transparent and accessible from the street.
(b) Locate secondary entrances and individual small tenant entries with frequency along adjoining sidewalks. Separate uses or accessory retail spaces should have separate and distinct entries.
(c) Reinforce visually and physically, the connection of interior spaces to the public realm. Strategies, such as operable folding storefronts and roll-up doors, are encouraged to introduce opportunities for outdoor workspace.
(d) Provide pedestrian interest and comfort at entries provided through specifically designed seating, signage, lighting and features that indicate the building's use and function,

5.5 Exterior Walls and Finishing

(a) Exterior building design should reflect the industrial and institutional urban contaxt and be of high-quality durable materials.
(b) Exterior materials that are encouraged include:
    (v) contemporary metal cladding systems;
    (vi) heavy timber structural elements;
    (vii) glass and steel;
    (viii) masonry, architectural concrete or brick.
(c) Stucco and vinyl are discouraged as primary exterior materials and may not be permitted by the Building By-law.
(d) Roofs, especially visible from above, should be architecturally treated and/or landscaped.

7 Open Space

7.1 Public Places and Spaces

Create unique, vibrant, attractive, interesting and amenity rich environments. Objectives and character descriptions of the key public pathways and connections envisioned for the False Creek Flats include:

(a) **Innovation Corridor – Railtown to Mount Pleasant**: A new off-Main complete street will connect Gore to Station to Lorne, and will serve as a primary north-south link for all transportation modes and tie the innovation nodes together along this corridor. This route may take on the character of a high-street with active and lively storefronts.

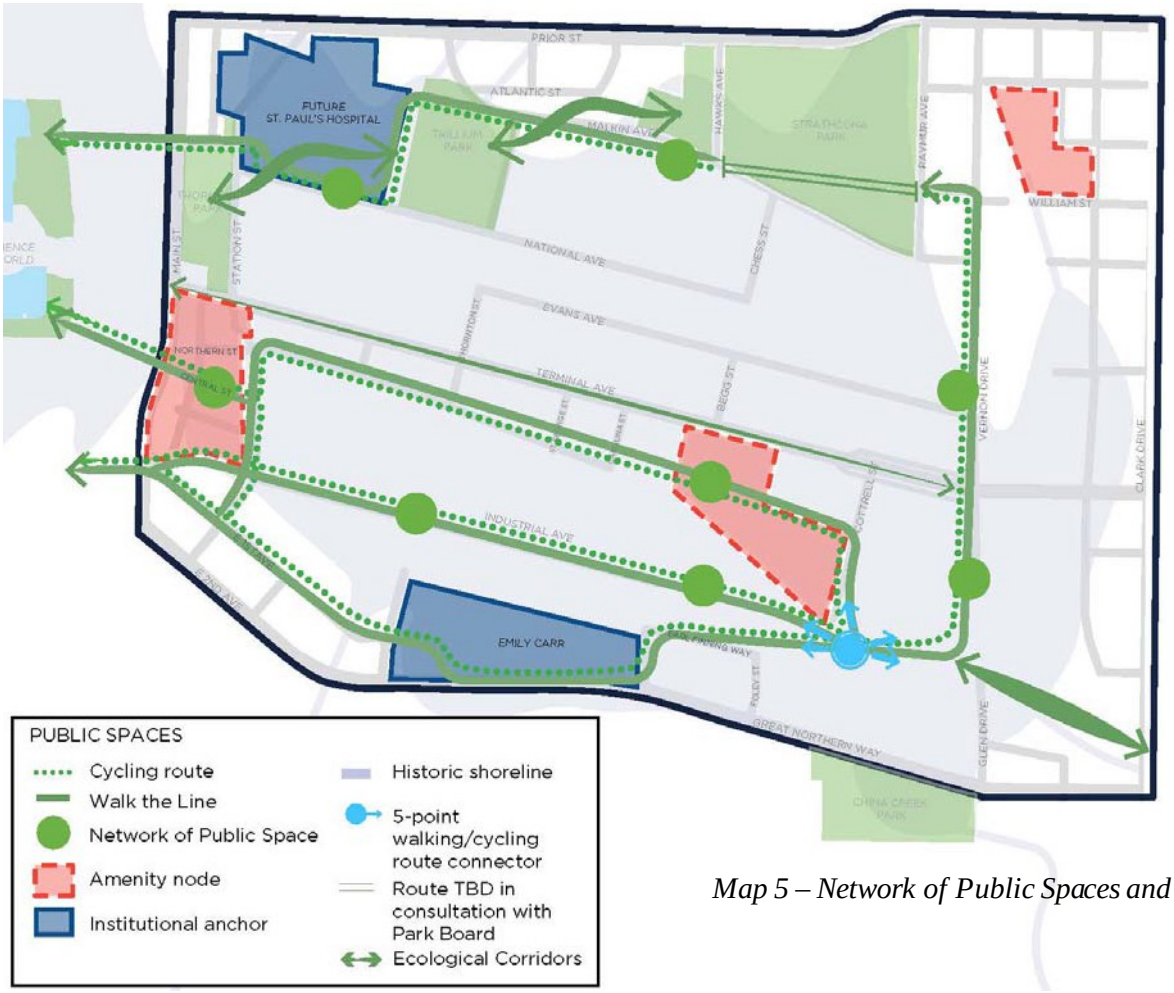
(b) **Arts Walk**: The lane between First Avenue and Second Avenue has a unique character and the potential to contribute to the public space network. While maintaining its primary function for servicing, it provides an opportunity to animate a walking link between the Innovation Hub and Emily Carr. This link is envisioned to be lined with commercial galleries, or an "arts walk." The future lane treatment could include lighting, seating and other public realm improvements.

(c) **Central Spine**: A key connection to the Creative Campus is a prominent public linkage along Central Street, through the Innovation Hub to the Seawall that will provide the southwestern starting point of Walk-the-Line. Development should explore opportunities for shared programming as a means to showcase adjacent workspace.

(d) **The Five Points**: The meeting point of the CN and BNSF yards has the potential to link five key desire lines for the flats public space network. Opportunities for public spaces on an elevated structure would provide key vantage points over the rail with views to downtown and the mountains.

(e) **Walk-the-Line**: Walk-the-Line is envisioned as a multipurpose route that connects the various sub-areas into a cohesive whole. The general concept is to roughly trace the old shore line of False Creek, extending the Seawall through the Flats on an approximately 4.5km loop.

(f) **Central Valley Greenway:** Maintain this important cycling route along East 1st Avenue until such a time as a future Industrial Avenue linkage is realized.



Map 5 – Network of Public Spaces and Places

7.2 Semi-Private Open Space

Social semi-private open space is desirable for employees, visitors and residents and should be provided to accommodate the intended users wherever possible. It could be located at grade or on the rooftop as part of a landscaped rooftop garden and should maximize sun exposure.
.

7.3 Private Open Space

(a) For residential uses, private open space should be provided for each dwelling unit in the form of balconies, decks or patios with a minimum single horizontal dimension of 1.8 m and a minimum area of 4.5 m² (50sf); and
(b) Private open space should be designed to capture sun and views where possible, as well as to avoid noise and to take account of visual privacy and security. Balcony enclosure to reduce noise may be appropriate in some cases.

7.4 On-Site Public Open Space

(a) Where practical, the public open space and greenways will be constructed on City owned land or City Right of Way (R.O.W.). In some circumstances, an additional R.O.W. may be requested from adjacent development to provide a more useable trail width.
(b) Landscaping elements and public art, including temporary projects, are encouraged.
(c) Reflect the industrial history of the area as well as contemporary life, innovation and experimentation.
(d) Enhance habitat for birds, pollinators and other flora and fauna and following the *Bird Friendly Design Guidelines.*

Public Art

Public art should be considered based on the following process and objectives:

(f) Consideration for 24/7 access and use of the site;
(g) Opportunities for rotating installations and diversity of scale and material;
(h) Opportunities for art to be embedded in public spaces and infrastructure;
(i) Consider opportunities to create diversity throughout the site and in unexpected places; and
(j) Create public spaces built upon people being together in innovative ways.

8 Landscaping

8.1 Streetscape

(a) Landscape design should provide for views into buildings for pedestrian interest, as well as special features such as opportunities to sit, view or take part in walking or active recreation.
(b) Explore opportunities for integrated rain water management.

(c) Provide a high quality public realm with street trees, landscaping, lighting, street furniture, signage and wayfinding, and green infrastructure where possible. Street trees should be provided on all streets not currently having them, or where their spacing is inconsistent.

8.2 Site Landscape

(a) Landscaping should be used to help mitigate impacts between residential and industrial uses.
(b) Landscape design on site should relate to anticipated activities.
(c) Strengthen urban forest connectivity.
(d) Consider planted roof tops.
(e) Enhance habitat for birds, pollinators and other flora and fauna and following the *Bird Friendly Design Guidelines*.
(f) Limit extent of underground parking layout and design to accommodate retention of existing trees and for the provision of new ones.

9 Utilities, Sanitation, and Public Services

9.3 Garbage and Recycling

Garbage and recycling are essential services that can detract from the pedestrian experience and nearby residential development unless careful design is used to screen them.

(a) Garbage and recycling facilities should be located adjacent to the lane, fully enclosed by a roof and sides or within the building envelope, and screened from the lane and street where possible.
(c) A location for onsite queuing and pick-up is highly encouraged.

9.4 Neighbourhood Energy System

Where the General Manager of Engineering Services deems a connection to the NES is available and appropriate, buildings within any development will be required to connect to the NES prior to occupancy, or post-occupancy through a deferred services agreement, or otherwise, at such time that a system becomes available. Buildings shall be subject to the *Neighbourhood Energy Connectivity Standards – Design Guidelines*. Where NES connection is not available or otherwise deemed unfeasible by the General Manager of Engineering Services, buildings shall be designed to meet an equivalent carbon performance outcome.

9.5 Underground Wiring

In order to improve the visual environment for residents, developments on larger sites (45.0 m frontage or wider) should investigate with the City Engineer the feasibility of using underground wiring for electric, telephone and cable services, including the removal or partial removal or existing overhead plant.

10 Environmental Considerations

10.1 Soils: Retention, Cleansing and Replacement

Provide soil remediation on all sites as required by the *Environmental Management Act*, *the Vancouver Charter* and all city policies with respect to the remediation of city streets. Additional considerations include:

(a) Limit excavation thereby reducing soils remediation;
(b) Reintroduce water and natural systems such as urban forests, wetlands and pollinator meadows;
(c) Topsoil should be retained and soil quality improved where necessary;
(d) Contaminated soils should be replaced with quality soils to enhance plant growth and ground water quality; and
(e) Employ soil remediation techniques such as piling and ground densification to ensure buildings are seismically stable and not subject to liquefaction.

10.2 Green Buildings

(a) Green building technologies to help advance the criteria for healthy productive workspaces;
(b) Green roof tops, including potential business opportunities such as a permanent home for urban agriculture or other rooftop businesses or uses;
(c) Passive design features and technologies including complimenting the burgeoning green building economic sector;
(d) Support innovation with respect to green building and renewable energy system design, operation and placemaking;
(e) Green fleet programming and electric vehicle charging infrastructure; and
(f) Passive strategies to building heating, ventilation and cooling including solar orientation and operable windows.

10.5 Energy: Conservation and Efficiency

(a) Building materials, systems and construction methods should be considered to conserve energy and reduce long-term operating costs.

FALSE CREEK FLATS URBAN DESIGN AND DEVELOPMENT POLICIES AND GUIDELINES FOR FC-2 – THE INNOVATION HUB

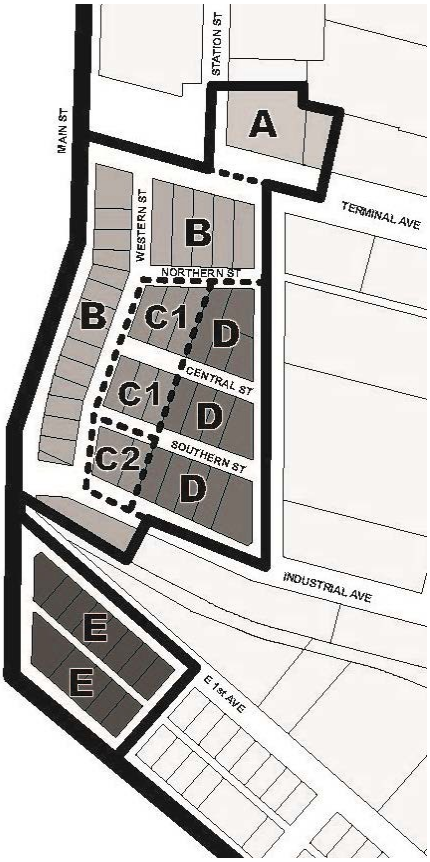
Adopted by City Council on October 31, 2017

Contents

Note: These guidelines are organized under standard headings. As a consequence, there are gaps in the numbering sequence where no guidelines apply.

PART ONE: URBAN DESIGN POLICIES AND GUIDELINES

False Creek Flats Innovation Hub



FC-2 Zone District Map

1 Application and Intent

1.1 Plan Principles - General

Part One of these Urban Design Policies and Guidelines for the Innovation Hub sub-area of False Creek Flats are to be used in conjunction with Part Two – Development Policies, the FC-2 District Schedule, and the False Creek Flats Area Plan. As well as assisting the applicant, approvals including conditional or discretionary variations in regulations will be evaluated based on these documents.

The objectives of these policies and guidelines are based on the following principles.

(a) **Intensify Employment Opportunities:** Increase job space around existing and future transit sites that reflect the industrial character and nature of the area. Explore opportunities for higher use of existing buildings for more intensified job space.

(b) **Maximize Flexibility:** Ensure that new buildings can adapt and evolve to accommodate future changes in economic production.

(c) **Encourage Vertical Stacking of Industry and Production Spaces:** There is increasingly an opportunity to stack many industrial/production businesses in the same building. With the goal of increasing employment and the productive output of the area, the plan supports a return of vertically stacked industrial uses in the Flats.

(d) **Take Advantage of Unique Opportunities:** A thriving economy requires space for all scales of businesses from start-ups to headquarters. Large lot sizes create flexibility and scale not available elsewhere in the inner city. Plan for flexible outdoor spaces that can host a variety of uses over 24 hours.

(e) **Create Buildings that Respect & Respond to the Public Realm:** Design buildings at the scale of the pedestrian by incorporating elements at the ground floor that help to create attractive, well- functioning and welcoming spaces.

(f) **Reference Industrial & Institutional Urban Fabric:** Consider a campus approach to the design and siting of developments on large sites. Accommodate industrial and institutional scales within a finer grained urban setting to facilitate organic growth and phasing over time.

(g) **Create healthy and productive workspaces:** Design the public realm to maximize sunlight on public spaces and daylight in work environments.

(h) **Encourage Working Rooftops:** Expand economic functions to the roof tops of buildings

(i) **Create Thoughtful Transitions Respectful of Surrounding Residential Neighbourhoods:** Require transitions between working industrial lands and adjacent residential.

(j) **Showcase Functional Workspaces in the Public Realm:** Create links between the public realm and industrial function to showcase the industrial character of the Flats.

(k) **Create Buildings and Neighbourhoods that Respond to Sea Level Rise:** Low topographic elevations and anticipated sea level rise presents a major challenge for development in False Creek Flats. Provide adaptive, flood resilient building design solutions.

(l) **Re-purpose Vehicle Parking:** Minimize surface parking and design for parking areas to transition to work space over time as other modes of transportation improve.

1.2 Plan Principles – Innovation Hub

The FC-2 District Schedule is comprised of five sub-areas referred to as the 'Innovation Hub'. The idea of a productive City is intertwined with many things: entrepreneurship, local economic conditions and stimuli, planning policy, connections, and networks. Goals for the innovation hub include:

Preserve and celebrate PDR [Production/Distribution/Repair] by making it visible

- Ground floor roll-up garage doors, large windows
- Protect industry and preserve affordability for existing businesses
- Generate new businesses and provide non-profit industrial rental space

Maintain unique and historical existing street network and industrial character

- Generally maintain block size
- Create a sense of place through retaining industrial materials

Connectivity

- Develop a pedestrian network
- Maintain porosity through to Main Street

Make spaces multi-functional + flexible

- Design buildings and spaces to accommodate industry of various sizes
- Design spaces that are flexible and adaptable to changing uses over time

A place for jobs + industry

- Job creation in innovative and creative industries
- Community partnerships
- Prioritize a circular economy

Explore innovative parking models

- Consider opportunities where loading can serve dual functions such as becoming seating over the lunch hour or semi-private spaces for off-peak hour events.

1.3 Structure Plan – Innovation Hub

The structure plan provides a quick reference for the overall physical policies and guidelines and context for the Innovation Hub. Part Two – Development Policies should be referenced for further requirements. The following outlines the anticipated public realm and street network objectives. (*Numbers below correspond to Structure Plan next page.)*

(1) **Station Street:** Station Street re-alignment and 'normalized' at Terminal Avenue and future potential extension through to East First Avenue at Lorne Street is envisioned to be a 'complete street' that facilitates multi-modal access and connectivity.

(2) **East First Avenue:** As part of a longer term strategy, a 'normalized' four-way intersection to consolidate the existing intersections of Industrial Avenue and East First Avenue at Main Street is desired to improve multi-modal movements.

(3) **Greening of Central Street:** Central Street functions as an east-west connection between Station Street and Main Street and will have a distinct hierarchy in the overall street network for the Innovation Hub. It should be a pedestrian and bike priority zone to link the Seaside Greenway to the Central Valley Greenway, as well as a location for future potential green infrastructure and ecological linkages between the False Creek Flats and False Creek.

(4) **Central Mews and Plazas:** The central mews will function as a public north-south connector showcasing functional workspace. At the intersection of the mews and Central Street, a significant central community plaza is anticipated as well as smaller plazas on the north and south termini of the mews.

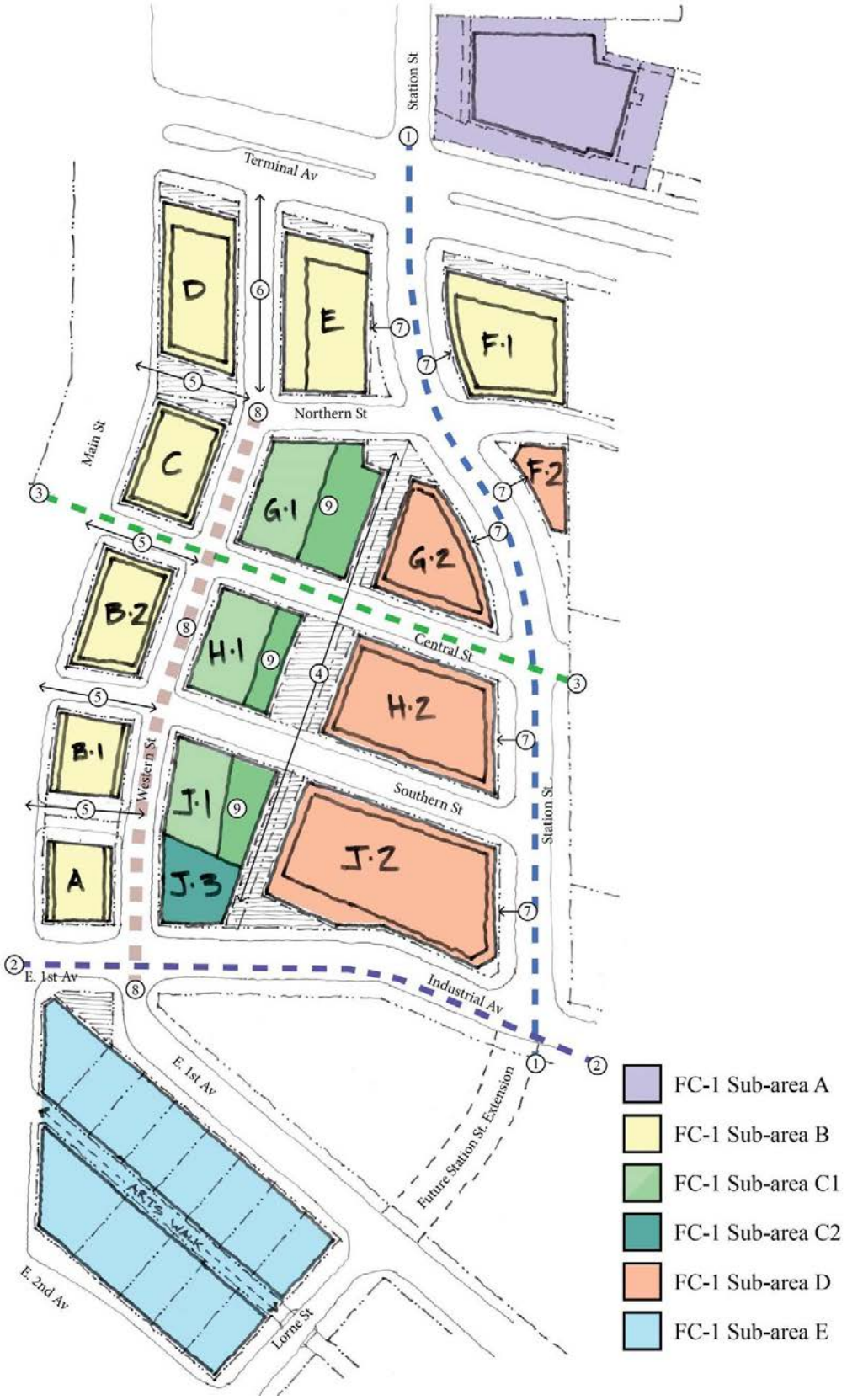
(5) **Pedestrian Porosity Between Main Street and Western Street:** Maintain public connections between Main Street and Western Street. These should occur in alignment with Southern, Central, and Northern Street. Explore opportunities for ground floor uses to be visually transparent between the two streets.

(6) **Western Street and the North Gateway:** The northern end of Western Street, in particular between Northern Street and Terminal Avenue, should be given special consideration as a public space and to potentially become car-light in the future, forming the desire path link to the SkyTrain.

(7) **Station Street for Non-Motorized Building Access:** Though much emphasis in the 'Innovation Hub' is placed on the internal street network, Station Street provides an important 'frontage' that provides opportunities for non-motorized entry and lobby access.

(8) **The 'Working' Street:** Western Street will function as a 'working' / industrial street that also aspires to be lively and engaging in how it interfaces with the adjacent building frontages. Consideration will be given to doubling its function as a social space and place for interaction including potentially being closed to traffic for the occasional special event.

(9) **Green Valley:** The buildings between Western Street and the Central Mews are at lower density and height. The intent is that they are situated to improve access to daylight and views for the surrounding buildings as well as being provided with green roof tops. This 'Green Valley' should include usable amenity green space for the community, the residents and the other tenants. Space devoted to urban agriculture may be considered for use by commercial tenants.



Structure Plan (with Lot Numbering)

2 General Design Considerations

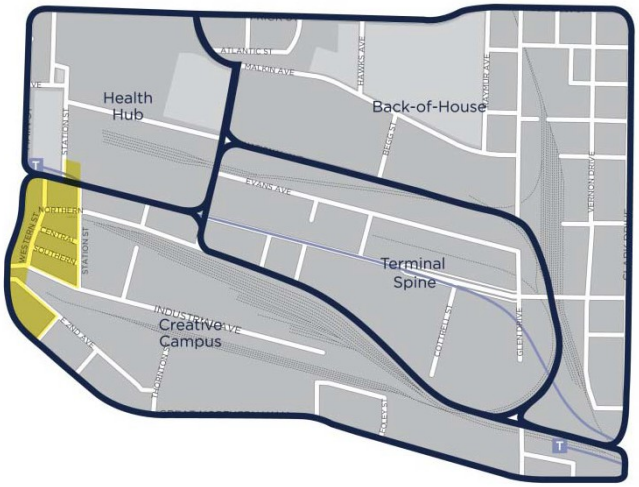
The Urban Design Policies and Guidelines for the Innovation Hub are derived from the policy objectives of the False Creek Flats Area Plan prioritizing the economic, employment, and enterprise characteristics of the Hub. Site layout and building design such as building separations, widths, depths, and setbacks should reinforce the surrounding urban industrial scale and street network and provide a means to inform opportunities for open space, vehicular access, rain water management and permeability as well as augmenting the Network of Public Spaces.

2.1 Neighbourhood

Character Innovation Hub

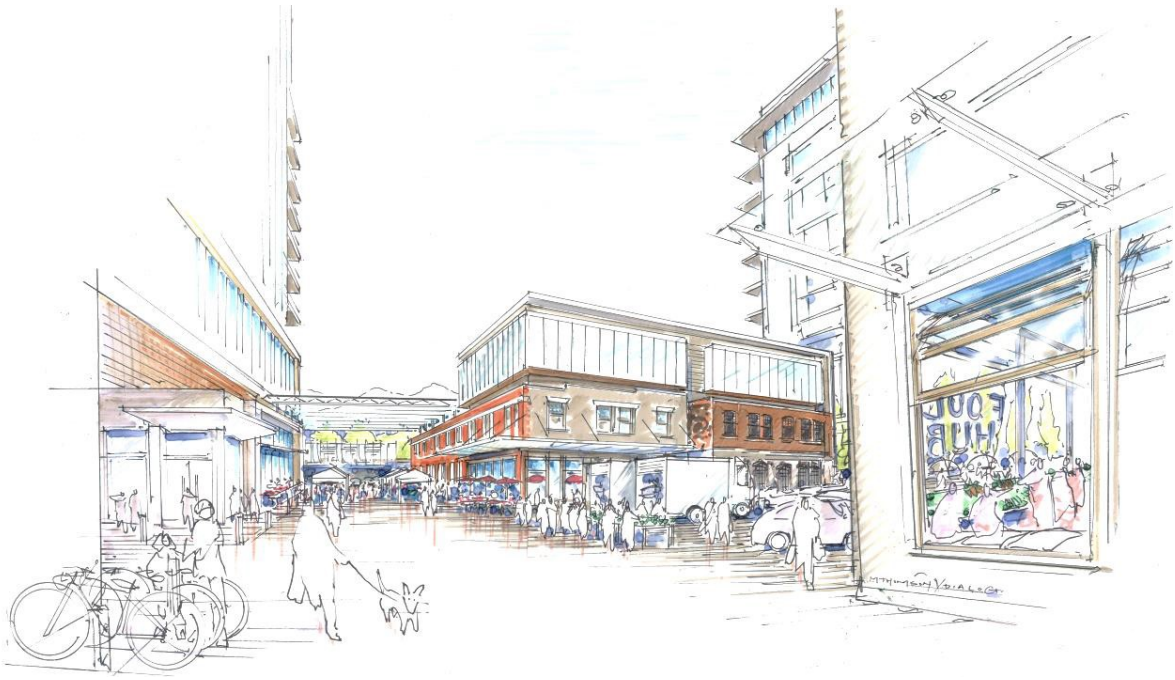
Amenity Node

Key to False Creek Flats is the strategic economic potential of the seven acres termed the Innovation Hub that embraces business and economic experimentation and growth. Additional heights and densities should be supported by an amenity-rich node including a plaza spaces, pedestrian connections, ground floor activations and amenity spaces.



Creative Campus Sub-Area

The FC-2 Innovation Hub falls within the Creative Campus sub-area. The intent for this sub-area is to enable intensification opportunities for well-functioning, flexible industrial and light industrial workspace while enhancing the public life and creating pedestrian interest. Refer to the *False Creek Flats Urban Design Policies and Guidelines for I-2 and I-3* for additional intent and character descriptions for this area.



Street Character – Embrace the Historic Street Grid

Embed the area's historic grid as a starting point for the transportation network. A separate FC-2 Transportation Planning Study will provide detail on the street network role and function as well as providing better definition of parking and loading requirements, right of way widths and turning lanes requirements.

2.2 Unique Spaces and Places

The diverse combination of uses and forms of development in the False Creek Flats provides for opportunities to create unique and varied places. Places which create opportunities for public engagement in a variety of distinct places are highly encouraged.

2.3 Orientation

Building design should re-enforce established street orientations emphasizing street level entrances and storefronts. On corner sites, both street facing facades should be developed as front elevations. Irregular, curved or angled sites should result in non-orthogonal building geometries in particular at the lower levels. Tower forms above may be reoriented with respect to views and solar orientation.

2.4 Views

View corridors from Queen Elizabeth Park and from the intersection at Main Street and 6th Avenue may limit the ultimate achievable building height in the Innovation Hub.

New development should be considerate of the impact on existing distant views. However as development progresses, the industrial and institutional scales and densities anticipated in the False Creek Flats will have an impact on the ability to preserve these existing views. Development should therefore place a higher emphasis on the following strategies:

(a) Provide an attractive near view. This can include a finer grained urban fabric and building modules, high-quality materials and detailing, visually permeable facades, programming for active outdoor uses and landscape elements.

(b) Visually linking new open space to existing open space. This can serve to expand the depth of views.

(c) The form and shape of tower elements should be informed by view studies.

(d) View Cones will significantly impact achievable heights.

2.5 Topography: Floodplain

The False Creek Flats has low topographic elevations and will be at risk of flooding during large storms by the end of the century if projected sea level rise occurs. The *Flood Plain Standards and Requirements* as adopted by Vancouver City Council sets the designated flood plain at 4.6m from GVRD datum. As a consequence, existing grades including street right of ways, are often one to two meters below the anticipated ground floor elevations. A plan to raise street elevations may be considered in the future. Therefore, new development should be designed to be adaptive when incorporating flood resilient construction methods while accommodating public realm objectives for both the current and potential future at grade conditions. Solutions should be accommodated within the property, be visually interesting, relate to the pedestrian scale, and may include increased building setbacks, internalized stairs and ramping as well as adaptable entries, loading and parking.

Floodplain strategies

2.6 Light and Ventilation

Light and ventilation are important for both workspace and residences.

Residential: For dwelling uses the horizontal angle of daylight (H.A.D.) regulations in section 4.10 of the Districts Schedule should be supplemented with the following considerations:

(a) living rooms should not face into courtyards;
(b) building massing should maximize sun access to courtyards and outdoor amenity areas;
(c) mechanical ventilation of commercial and service spaces should be pre-ducted for exhaust through the roof at the highest level or at a location having the least impact on residential livability;
(d) maximize opportunities for cross ventilation of dwelling units such as corner units or double fronting units; and
(e) locate residential units and open spaces away from areas of noxious odours and fumes related to nearby traffic or land uses.

Note: Consult individual sub-areas for permitted Dwelling Uses and tenancy.

All other Uses: Daylight and ventilation in work environments can improve energy usage as well as promoting health and productivity. Considerations include:

(a) solar shading devices and glazing performance;
(b) building orientation and massing;
(c) increased floor and ceiling heights; and
(d) operable windows.

2.7 Weather

In all cases, weather protection should be provided at common building entries and individual entries. Continuous weather protection should be provided along all street frontages except that, it may not be provided continuously where it can be shown the provision would interfere with well-functioning industrial uses or where pedestrian traffic is not anticipated. Explore opportunities for weather protection that can encourage use as functional outdoor workspace.

2.12 Heritage

Heritage Buildings: In the Innovation Hub, two buildings in particular, 242 Terminal and 250 Terminal, contribute to its heritage character and architectural diversity. Both buildings are registered as 'B' on the *Vancouver Heritage Register*. Development proposals on these sites should include a substantial heritage retention strategy and be reviewed with City Planning staff early in pre-application process.

Neon: Neon Products Ltd. was established in Vancouver in the 1920s at 250-270 Terminal Avenue and by the 1950s, Vancouver was the largest manufacturer of neon signs in Western Canada. Explore opportunities to revive the presence of neon and highlight this cultural heritage.

Street Network: This sub-area of the False Creek Flats differs from other industrial areas in Vancouver in that the narrow streets offer an opportunity for a more fine grain public realm network. Development should reinforce and respect the existing street network.

2.14 Floor Plates

Provide flexible floor plates that can evolve and grow over time as small businesses grow. In the Innovation Hub, development should favour maximizing floor plate sizes over building height for commercial, industrial or retail uses.

3 Use

A variety of uses are supported in the Innovation Hub including, but not limited to laboratories, research and development, digital or tech offices, arts and cultural facilities, spaces for local food economy, and residential uses. Residential, where permitted, is only anticipated at the third level and above with the floors below reserved for other uses.

3.2 Vertical Stacking of Uses

As a means of intensifying industry and production spaces, exploration of vertically stacked uses is encouraged. Objectives for mezzanines and accessories uses include:

(a) continuity with the adjacent primary use or space;
(b) locate mezzanines away from front or flanking facades;
(c) a minimum floor to floor height for mezzanines of of 3.1 meters (10ft); and
(d) convenient access to loading, garbage and elevators for all floors and mezzanines.

Vertical Stacking of Industrial Spaces

3.3 Uses at Grade

Active and engaging uses at grade should be provided. In the Flats an emphasis is placed on providing attractive, well-functioning and welcoming space to showcase workspace. Strategies including visually permeable frontages, operable window walls, setbacks and weather protection to accommodate outdoor workspaces are encouraged. The Director of Planning will consider relaxations to 2.3 and 3.3, Conditions of Use, in the District Schedules to encourage outdoor workspace and activities based on the compatibility of any dangerous, injurious, noxious or otherwise objectionable impact that could adversely affect the surrounding area and adjoining non-industrial districts.

Other than entrances and lobbies, residential and office uses should not be located at the ground floor level. Where accessory retail or service uses are permitted these spaces should be designed to function in concert with the primary use and have their own entrances and street presence.

4 Guidelines Pertaining to the Regulations of the Zoning and Development By-law and the Parking By-law

4.3 Height

The intent of increasing maximum achievable building heights in the Innovation Hub includes objectives for intensified employment opportunities, well-functioning and flexible job space, vertical stacking of industrial uses, working roof tops and response to sea level rise. New development should create an active and engaging public realm within a unique, vibrant, attractive, interesting and amenity rich environment. The Director of Planning may increase the maximum achievable building height based on the objectives of all applicable policies and guidelines including the evaluation of:

(a) Impact of height, bulk, massing, location and overall design of the building on the site, surrounding buildings and streets. In addition to the general design considerations listed in Sections 2 and 5 describe the intents and objectives relating to general building expression and architectural components.

(b) The provision of on-site open space, landscape, and the effects of overall design on the general amenity of the area. In particular Sections 7 and 8 describe open space and landscape objectives for the Public Places and Spaces, Network of Public Spaces, On-Site Public Open Space, streetscapes and landscape.

(c) The effect on traffic in the area. Part Two – Development Policies for Off-Street Parking and Loading describing objectives for pedestrian, bicycle and vehicular access and circulation.

(d) Provision for pedestrian needs including continuous sidewalks, weather protection, safety, and active and engaging frontages that respect and respond to the public realm.

(e) Two view corridors: one from Queen Elizabeth Park and one from the intersection at Main Street and 6th Avenue limit the achievable building heights. This will range from approximately 42 meters on the south up to 51 meters on the north.

4.4 Front Yard and Setback

The intent of front yard setbacks is for buildings to be built out to the street frontages and yet also to provide opportunities for building articulation. The Director of Planning will consider relaxations to regulations controlling front yard setbacks based on the objectives of these policies and guidelines and the following:

(a) Minor projections into the 0.6m front setback with the intent of improved building performance and articulation. Examples include solar shading devices or cornices.

(b) On corner lots the flanking street's façade will be evaluated the same urban design objectives as the front.

4.7 Floor Space Ratio (FSR)

The intent of increasing the maximum achievable floor area in the False Creek Flats is to provide opportunities for intensified employment and well-functioning and flexible job space. New development should create an active and engaging public realm within a unique, vibrant, attractive, interesting and amenity rich environment. See also Section 7 and Part 2. Not all sites will be able to achieve the maximum floor area. The Director of Planning may increase the maximum achievable floor area based on the objectives of all applicable policies and guidelines including the evaluation of:

(a) Impact of height, bulk, massing, location and overall design of the building on the site, surrounding buildings and streets. In addition to the general design considerations listed in Sections 2 and 5 describe the intents and objectives relating to general building expression and architectural components.

(b) The provision of on-site open space, landscape, and the effects of overall design on the general amenity of the area. In particular see Part Two – Development Policies for the provision of open space and streetscape.

(c) The effect on traffic in the area. See 2.11 for Access and Circulation, 4.5 for Side Yards and 4.9 for Off-Street Parking and Loading describing objectives for pedestrian, bicycle and vehicular
access and circulation.

(d) Provision for pedestrian needs including continuous sidewalks, weather protection, safety, and active and engaging frontages that respect and respond to the public realm.

4.17 Building Massing

Objectives in the False Creek Flats for intensified employment opportunities and well-functioning workspaces are anticipated to result in a form of development with greater than previously permissible densities, building heights, and floor plates. Form and massing should therefore be carefully considered with respect to other the objectives of these policies and guidelines.

(a) **Longer Buildings**: Where the need for longer or wider buildings can be demonstrated, relaxations to regulations controlling building width and depth and building separation may be considered based on design merit and the provision of a commensurate amount of quality open

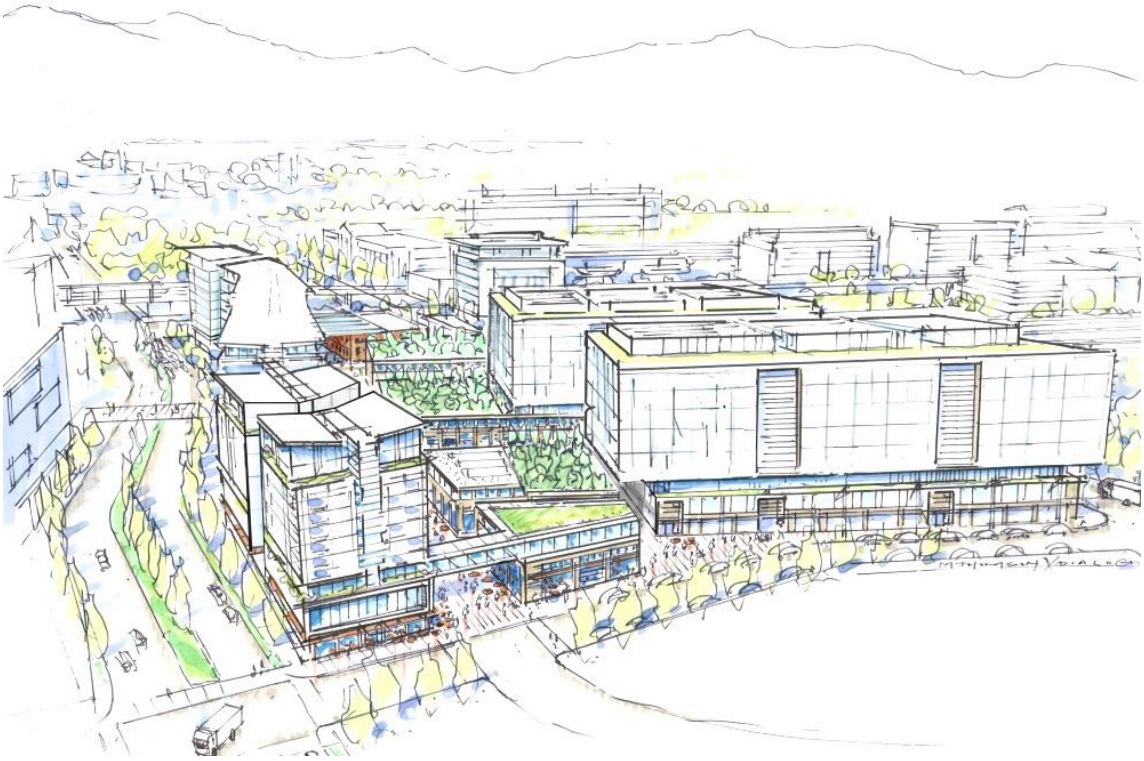
(b) space and pedestrian interest. Consideration should also be given to significant facade articulation and on-site connections by transparent bridges and walkways on the upper floors. Break up long frontages and expanses of wall planes with substantial recesses, setbacks or building separations.

(c) **Tower Elements:** Tower elements (considered to be any portion of a building over 22.0 m (72 ft.) in height) should:

(i) be separated from other commercial tower elements by 15.2 m (50ft)
(ii) be separated from residential tower elements by 24.0 m (80ft).
(iii) for residential uses, reduced tower separations to 15.2m (50ft) may be considered based on the impact to private views and access to daylight on existing and anticipated adjacent development

(d) **The Network of Public Space**: Building massing should respect the importance of sunlight on the Network of Public Space. Development along Walk-the-Line and the Network of Public Space should seek to minimize shadowing on the opposite sidewalks, mini-parks, urban plazas and other public places.

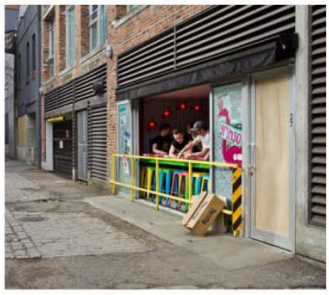
(e) **Roof:** The profile and silhouette of roofs should be considered as part of the skyline. Elevator penthouses, mechanical rooms, equipment, vents and other appurtenances should be integrated with the architectural treatment of the roof and screened from view.



5 Architectural Components

The intent of architectural components and materials is to recognize the areas unique industrial heritage as well as the following objectives:

(a) Reinforce the near view with high-quality materials, detailing and active storefronts.
(b) Express a finer grain urban fabric by articulating smaller structural bays and modules.
(c) Generic "big box" building designs that exhibit little facade interest and transparency to the street should be avoided.
(d) Storefronts should be transparent at grade and are encouraged not to contain long blank walls.
(e) High clearance warehouse-type spaces should have clerestorey windows at the upper storey of the facade.
(f) Building interface at the public realm should emphasize details and proportions at the scale of the pedestrian with particular consideration to the objectives of animated streetscapes and showcasing functional outdoor workspaces.
(g) Reference the "heavy duty" context with details and expression.



5.2 Roofs

(a) Encourage working rooftops to expand economic functions to the roofs of buildings.
(b) Roof tops should be designed to be attractive where seen from above through use of landscaping, green roof technologies, choice of materials and colour.
(c) Elements such as gazebos and trellises may be considered, height and floor area permitting.

5.2 Windows

Windows at grade are important to enhance pedestrian interest, particularly where retail uses are not required at grade.

(a) For retail, service or office uses:
  (i) maximize transparency through use of high transom, low sill window designs, as well as openable windows where appropriate. For service and office uses, design should allow for adaptation to retail use in the future.
(b) For industrial uses:
  (i) provide windows for viewing to industrial processes where possible; and
  (ii) where windows cannot be used, use other means to add visual interest such as expressed vertical elements, vines, murals, and detailing. Avoid long stretches of blank wall.
(c) Uses and functions which do not lend themselves to enhancing pedestrian interest should be located away from ground floor windows.
(d) Use of mirrored or highly reflective glazing, window decals or other vision obscured treatments are discouraged, and may not be permitted, especially at grade.

5.3 Entrances

The intent is to create buildings and spaces that relate to and respect the public realm as well as to showcase functional workspace. Characteristics of these buildings include:

(a) Main building entries should be clearly identifiable, transparent and accessible from the street.
(b) Locate secondary entrances and individual small tenant entries with frequency along adjoining sidewalks. Separate uses or accessory retail spaces should have separate and distinct entries.
(c) Reinforce visually and physically, the connection of interior spaces to the public realm. Strategies, such as operable folding storefronts and roll-up doors, are encouraged to introduce opportunities for outdoor workspace.
(d) Pedestrian interest and comfort at entries provided through specifically designed seating, signage, lighting and features that indicate the building's use and function,

5.4 Building Articulation

(a) Express an approximately 7.6 meters (25ft) structural bay spacing on street facing facades, especially at the four lower floors or podium.
(b) Building articulation can be achieved with materiality, shadow lines and exposed structural components.

(c) Feature banding to break up perceived wall height may be used to assist in achieving horizontal articulation.

(d) Highly visible circulation and building systems are encouraged.

(e) Vertical service elements, such as stair and elevator shafts, may be used to assist in articulation, as
well as being expressive of their function.

5.5 Exterior Walls and Finishing

(a) Exterior building design should reflect the industrial and institutional urban fabric of the sub-area by using appropriate, durable, and high-quality materials.

(b) Exterior materials that are encouraged include:
- (v) contemporary metal cladding systems;
- (vi) heavy timber structural elements;
- (vii) glass and steel;
- (viii) masonry, architectural concrete or brick.

(c) Stucco and vinyl are discouraged as primary exterior materials and may not be permitted by the Building By-law.

5.6 Awnings and Canopies

(a) In terms of appearance, a uniform canopy or awning across the entire building façade may be inappropriate to the diverse and varied character of the Flats. Design architecturally integrated, high quality awnings and canopies, but ensure some variety in form, and/or the ability for tenants to vary them to suit themselves.

(b) Ensure that awnings and canopies are deep enough and close enough to the ground to provide shelter. The recommended minimum depth to height ratio is approximately 7:10.

(c) Transparent or translucent glazed canopies that permit the passage of light are encouraged.

(d) Section 2.7 describes where weather protection should be provided.

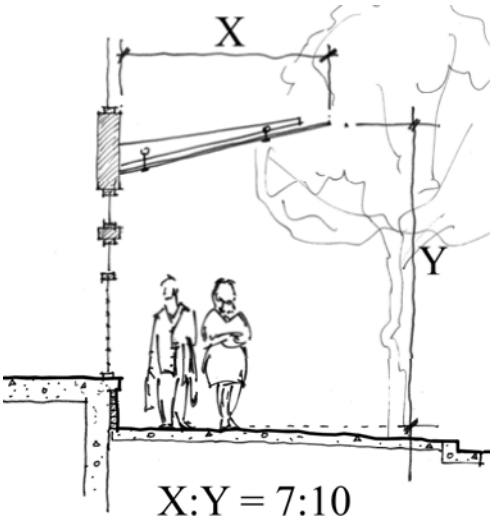


Figure 10 – Weather Protection

5.7 Lighting

(a) Building, entry path and parking lighting should be integrated into the site and building design.

(b) For exterior lighting, incandescent and other white light sources are encouraged, while sodium vapour light sources are discouraged. Better performing, more efficient light sources such as LED's are highly encouraged.

(c) Exterior lights should be oriented away from adjacent residential properties, with cut-off shields to minimize light.

(d) For larger developments or campuses or where proximity to adjacent development is a concern, a site lighting plan indicating light levels and light fixture types should be provided.

(e) Review opportunities to utilize lighting design standards and guidelines that reduce negative impacts to birds and other wildlife.

5.8 Signs

(a) Corporate signage should be subordinate to the design of the building and architecturally integrated with the development.

(b) Internally illuminated or back light sign boxes are discouraged.

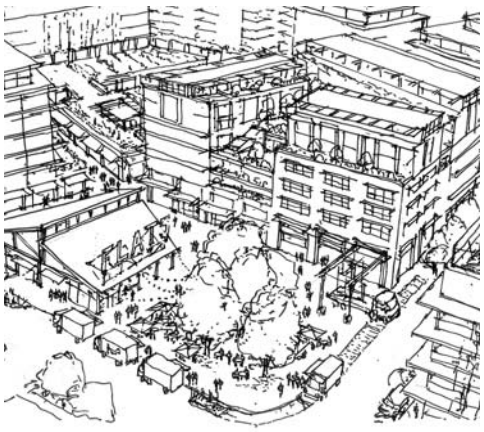
(c) Signage that compliments the industrial urban fabric and character established in the Flats is encouraged. Examples include neon, signage painted on walls, signs with individual letters placed directly on the building or signs incorporating materials that reinforce the character specific sub- areas such as steel, glass and heavy timber.

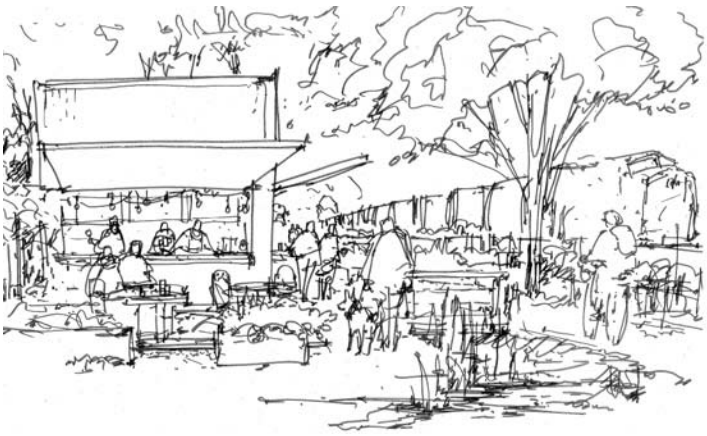
(d) One freestanding, ground oriented pylon sign is appropriate at each entrance to a large campus site, complimented by wayfinding signage at key decision points along internal drives or paths.

(e) At grade uses are encouraged to have minimal, clear, pedestrian oriented signage located at premises entries.

7 Open Space

7.1 Public Places and Spaces





Central Mews and Plazas:

The central mews will function as a public north-south connector showcasing functional workspace. At the intersection of the mews and Central Street, a significant central community plaza is anticipated as well as smaller plazas on the north and south terminuses of the mews. The design and provision of these spaces should be informed by access to daylighting, ground floor uses and adaptability including seating, pedestrian use, special events and even loading.

Arts Walk:

The lane between First Avenue and Second Avenue has a unique character and the potential to contribute to the public space network. While maintaining its primary function for servicing, it provides an opportunity to animate a walking link between the Innovation Hub and Emily Carr. This link is envisioned to be lined with commercial galleries, or an "arts walk." The future lane treatment could include lighting, seating and other public realm improvements.

Bike & Pedestrian Connections Central & Western Street

See Part Two Section 12. Central is a greenway and street that provides the main pedestrian and bike thoroughfare through the Hub creating a direct link to the sea wall. Urban green infrastructure will characterize Central Street with potential storm water management strategies being incorporated.

Active Frontages & Streets as Public Spaces

Explore opportunities for streets to be more than systems of conveyance such as off-peak and night time programming and events. For example artists working in the Innovation Hub might transform the space into a place for evening theatre performances.

7.3 Private Open Space

(a) Private open space should be provided for each dwelling unit in the form of balconies, decks or patios with a minimum single horizontal dimension of 1.8 m and a minimum area of 4.5 m² (50sf); and

(b) Private open space should be designed to capture sun and views where possible, as well as to avoid noise and to take account of visual privacy and security. Balcony enclosure to reduce noise may be appropriate in some cases;

7.4 On-Site Public Open Space

The following should guide design and location of open spaces on private land. In some circumstances, an additional Right of Way may be requested from development to provide publicly accessible open space.

(a) Create inviting and comfortable places for people;
(b) Reintroduce water and natural systems;
(c) Encourage lively building edges and more welcoming street experience;
(d) Respect existing public views and explore creating new views of prominent features such significant landmarks;
(e) Support the display of local art, craft or industry;
(f) Explore opportunities for unconventional open spaces;
(g) Improve wayfinding and legibility;
(h) Encourage 24/7 activity and public life;
(i) Consider ways to ensure a safe, clean, clutter free environments;
(e) Landscaping elements and public art, including temporary projects, are encouraged, and
(f) Reflect the industrial history of the area as well as contemporary life, innovation and experimentation.
(g) Enhance habitat for birds, pollinators and other flora and fauna and following the *Bird Friendly Design Guidelines.*

Public Art

Public art should be considered based on the following process and objectives:

(a) Consideration for 24/7 access and use of the site;
(b) Opportunities for rotating installations and diversity of scale and material;
(c) Opportunities for art to be embedded in public spaces and infrastructure;
(d) Consider opportunities to create diversity throughout the site and in unexpected places; and
(e) Create public spaces built upon people being together in innovative ways.

8 Landscaping

8.1 Streetscape

(a) Landscape design should provide for views into buildings for pedestrian interest, as well as special features such as opportunities to sit, view or take part in walking or active recreation.

(b) Explore opportunities for integrated rain water management.

(c) Provide a high quality public realm with street trees, landscaping, lighting, street furniture, signage and wayfinding, and green infrastructure where possible.

PART TWO:
DEVELOPMENT POLICIES

False Creek Flats Innovation Hub (FC-2 Sub Areas B, C, and D)

Part 2: Development Policies

The following development policies shall apply to Sub Areas B, C and D of the FC-2 District (Innovation Hub) to assist in achieving the False Creek Flats Plan.

1 Neighbourhood Energy Systems (NES)

Where the General Manager of Engineering Services deems a connection to the NES is available and appropriate, buildings within any development will be required to connect to the NES prior to occupancy, or post-occupancy through a deferred services agreement, or otherwise, at such time that a system becomes available, subject to the following detailed provisions;

(a) Prior to issuance of a development permit, the proposed approach to site heating and cooling will be developed in collaboration with the City and the City's designated Neighbourhood Energy utility provider, to the satisfaction of the General Manager of Engineering Services.

(b) Building-scale space heating and ventilation make-up air shall be provided by hydronic systems without electric resistance heat or distributed heat generating equipment unless otherwise approved by the General Manager of Engineering Services.

(c) Prior to the issuance of a building permit the detailed design of the building/s HVAC and mechanical heating system must be to the satisfaction of the General Manager of Engineering Services.

(d) The building(s) heating and domestic hot water system shall be designed to be easily connectable and compatible with the City-designated Neighbourhood Energy System to
supply all heating and domestic hot water requirements. The applicant shall refer to the
Neighbourhood Energy Connectivity Standards – Design Guidelines, for design requirements related to neighbourhood Energy compatibility at the building scale. Design provisions related to Neighbourhood Energy compatibility must be to the satisfaction of the General Manager of Engineering Services. Note that prior to issuance of building permit, a declaration signed by the registered professional of record certifying that the Neighbourhood Energy connectivity requirements have been satisfied will be required.

(e) Adequate space will be provided for Neighbourhood Energy Utility energy production equipment and infrastructure, determined by the City in consultation with the developer at the time of development permit application.

(f) City and/or City-designated NES use and access shall be granted to the building(s), P1 of the parkade, Neighbourhood Energy room, mechanical system and thermal energy system-related infrastructure within the development for the purpose of enabling NES connection and operation, or distribution infrastructure to service adjacent buildings on such terms and conditions as may be reasonably required by the General Manager of Engineering Services;

Where a NES connection is not available or otherwise deemed unfeasible at the time of development permit, the building shall be designed to meet the carbon performance targets identified in the *Green Building Policy for Rezonings*.

2 Green Building Policy

(a) Meet or exceed the requirements identified in the *Green Building Policy for Rezonings* at the time of application for Development Permit.

(b) Include visible green elements and employ green building and passive design elements. Examples include: rooftop gardens, green roofs and terraces, trees and plantings on upper levels and balconies, green walls and supports for vertical plant growth.

(c) Apply passive strategies to building heating, ventilation and cooling; examples include: the use of solar orientation and operable windows.

(d) Support the execution of innovative building design such as prefab/modular and/or tall wood for civic buildings or buildings that deliver public services.

3 Sustainability requirements

(a) Meet or exceed the requirements identified in the *Rezoning Policy for Sustainable Large Development:* http://bylaws.vancouver.ca/bulletin/R019.pdf

The Core Elements include the following:

- Sustainable Site Design
- Access to Nature
- Sustainable Food Systems
- Green Mobility
- Rainwater Management
- Zero Waste Planning
- Affordable Housing
- Low Carbon Energy Supply

4 Renewable Energy

(a) Support the supply and use of renewable energy, at both the site and neighbourhood scales.

(b) Support and demonstrate the use of rooftop and/or building-integrated solar renewable energy, with the goal of demonstrating how buildings can generate 7% or more of electricity demand on-site. For example, the rooftops of large commercial and industrial buildings could be designed to host a cooperative photovoltaic solar farm. In this case, access and other agreements will also be secured at the time of design to ensure the implementation of a photovoltaic solar farm.

5 Adaptation

(a) Plan for the impacts of sea level rise over the lifetime of buildings and infrastructure. Explore building and street design approaches that allow for adaptive alterations in the future with increasing flood risk, e.g. taller first floors, elevated utilities, water proof material, sump pumps & backflow preventers, and raised street networks to form flood cells.

(b) Plan for and incorporate design approaches for retrofitting buildings to improve both flood and seismic resilience, e.g. space and places for temporary flood barriers, at the time of application for Development Permit.

6 Integrated Rainwater Management Plan

(a) A detailed plan will be required at Development Enquiry to ensure that the development/s meet/s the requirements of the *Integrated Rainwater Management Plan* through strategies such as building design and infiltration systems.

(b) Employ engineered systems (rain gardens, pervious paving and cisterns) and roof-top systems (including green roofs) to capture, treat and convey rainwater into the City's storm water system.

7 Utilities and Site Servicing

(a) Ensure that existing utilities, including adjacent, on-site water, sanitary and storm water infrastructure, street lighting, and third party utilities are upgraded to meet the Innovation Hub's demands as necessary.

(b) Design, construct and install all new utilities incidental to servicing the area, and realign existing utilities if needed to meet Innovation Hub demands, within the proposed road network or statutory rights-of-way.

(c) Provide electrical services (including all third party utilities) on private property, without relying on space within streets or the public realm.

(d) A services agreement will be prepared setting out responsibilities for relocation and/or upgrading of utilities resulting from the development/s after giving consideration to the existing infrastructure and available development capacity.

(e) In order to improve the visual environment for residents, developments should investigate with the City Engineer the feasibility of using underground wiring for
electric, telephone and cable services, including the removal or partial removal or existing overhead plant.

8 Resilience

(a) Design all new buildings and utilities to minimize impact on critical roads and services following a significant shock.

(b) Provide disaster-resilient and redundant water, sewer, energy and communications connections in accordance with best practice, hospital standards and Vancouver Building By-Law requirements, including back-up systems where necessary.

(c) Meet the polices of the City's *Flood Plain Standards and Requirements Policy* to:

- Reduce or prevent injury, human trauma and loss of life in the case of a flood.
- Minimize property damage during flooding events.
- Reduce the time it takes to return to operational functionality after flood waters recede.

(d) Work with the City's Resiliency and Risk Management staff through the development permit processes to identify resilience vulnerabilities associated with the project and
develop mitigation strategies to address the vulnerabilities. Strategies should be explored to ensure the integrity of structures, systems and operations following a major disaster, with particular attention to earthquakes and flooding.

9 Environmental Remediation and Geotechnical

(a) Environmental remediation of contaminated development sites must be completed in accordance with Section 571B of *the Vancouver Charter*, and all city policies with respect to the remediation of city streets.

(b) Employ soil stabilization techniques such as piling and ground densification to ensure buildings, premises and roadways are seismically stable and not subject to liquefaction.

10 Rail

(a) Meet all applicable Transport Canada requirements, including but not limited to, *Grade Crossing Standards* and *Standard Respecting Railway Clearance*.

(b) Work with rail operators to align with relevant guidelines identified by the Federation of Canadian Municipalities and the Railway Association of Canada's *Guidelines for New Development in Proximity to Railway Operations.*

11 Circulation and Transportation

(a) Align with the policies and directions of the City's *Transportation 2040 Plan*

(b) Ensure that the 4.6 metre flood construction levels for ground floor heights are reconciled with street network elevations. Consider universal design and accessibility, phasing and implementation, and integration with existing infrastructure and development.

(c) Provide a *Transportation Study, including:* access, management, parking, loading and green mobility that assesses the impacts of the proposed development/s on existing transportation infrastructure, makes appropriate recommendations and determines the necessary mitigation measures, to the satisfaction of the General Manager of Engineering Services, and including the following detailed provisions:

11.1 Major Streets

Provide the following major streets:

(a) Station Street - Realign Station Street south of Terminal Avenue to normalize and create a 4-way intersection at Terminal Avenue. Widen Station Street to a 25 m right of way that includes sidewalks on both sides of the street, protected cycling facilities for all ages and abilities, and a high quality public realm with street trees, landscaping, lighting, street furniture, and green infrastructure where possible.

(b) Industrial Avenue – Pursue reconfiguration and consolidation the intersections of Industrial Avenue and East First Avenue at Main Street.

(c) Preserve the ability to extend Station Street south of Industrial Avenue to East First Avenue and connect to Lorne Street.

(d) Preserve the ability to provide a streetcar track within the street right-of-way on either East First Avenue or Industrial Avenue.

(e) A wider right-of-way may be required at intersections to accommodate turning lanes, pedestrian space, protected bike facilities and bus stops, subject to the Transportation Study and urban design intent.

(f) Provide appropriate traffic controls (e.g. full traffic signal, pedestrian actuated signals, protected bike phasing) and treatments at intersections and midblock crossings (e.g. raised crosswalks) to facilitate safe and efficient movement of all transportation modes.

11.2 Other Streets

Provide the following other streets:

(a) Western, Northern, Central, and Southern streets - using existing rights of way (a minimum of 15 m) until further transportation study assessment is provided. Facilitate access to residential properties and assume a simple street cross section with utility strip and paved surface, subject to above-noted Transportation Study for FC-2.

(b) Northern street - Access to residential properties and explore opportunity for walking and cycling connection that extends to Main Street.

(c) Central Street – "car light" or walking/cycling priority for the Central Valley Greenway and Walk the Line connection to the seawall, for all ages and abilities. Opportunities for green infrastructure, no driveways off of Central to support temporary street closures and public events. Dedication or SRW through the Main Street block and traffic signal at Main Street to be investigated.

(d) Southern Street - explore opportunity for walking and cycling connection that extends to
Main Street.

12 Pedestrian and Cyclist Supportive Design

(a) Provide public bike share station/s on private property in locations that are highly visible and in close proximity to cycling routes and building entrances.

(b) Design streets and other public connections with a public realm that provides a safe, accessible, comfortable, convenient, and delightful walking and cycling experience.

(c) Design buildings to support walkability by providing ground-oriented active uses, small retail frontages, and multiple entrances for direct access to public streets.

(d) Particularly on Main Street, provide wide, continuous and well-designed weather protection along pedestrian routes and at key waiting and gathering places to minimize gaps in weather protection, where possible.

(e) Design buildings to accommodate and encourage cycling. Consider design elements such as easy access to secured interior bicycle storage from building entrances, bike
access separated from vehicles, wider aisles and hallways, automatic door openers,
weather protected exterior bicycle racks near building entrances, maintenance stations, accommodating non-standard bicycle types, exceeding minimum secured bike parking requirements, enhanced end-of-trip facilities, and a bike mobility centre.

13 Parking and Loading

(a) Design parking and loading in accordance with the City's Parking By-Law to accommodate parking demand on the site. Refinements to parking and loading may be considered through the development permit process (e.g. district parking, providing on- site car share spaces).

(b) Provide on-street parking in appropriate locations that support commercial and retail uses. Manage on-street parking using parking meters, time restrictions, and loading zones.

(c) Design on-site parking to be flexible and adaptable for conversion to other uses when no longer needed for parking vehicles. Approach on-street parking as a flexible resource that is integrated into a pedestrian-friendly public realm.

(d) Design driveways with minimum width to reduce conflicts with people walking and cycling.

(e) Parking access will not be allowed from Main Street, Terminal Avenue and Central Street. Access should be avoided on Station Street, , subject to above-noted Transportation Study for FC-2..

(f) Loading and servicing is encouraged underground where possible, however, subject to the Transportation Study the option of smaller truck loading, deliveries, servicing and maneuvering on streets may be considered in certain areas, as an alternative to the use of private property only, with special consideration given to the safety of people walking and cycling on the streets.

(g) Above-ground parking structures are discouraged, but not prohibited. They will not be exempted from density calculations and may require analysis on the impacts to urban design and the public realm at the time of development permit approval.

14 Residential Development

(a) In the Innovation Hub, achieve 20% affordable housing consistent with the City's rezoning policy for sustainable large sites as follows:

- In Sub Area B (refer to FC-2 Zone District Map), allow increased density for residential use including a minimum of 8% of floor area as secured rental housing, seeking to achieve below market rentals for priority groups such as artists, low- income workers, and students, recognizing the City's objective for a range of public benefits in this area.
- In Sub Area C (refer to FC-2 Zone District Map), allow increased density for 100% non-market housing.

(b) Encourage innovative and creative residential forms to address housing needs of workers and students.