

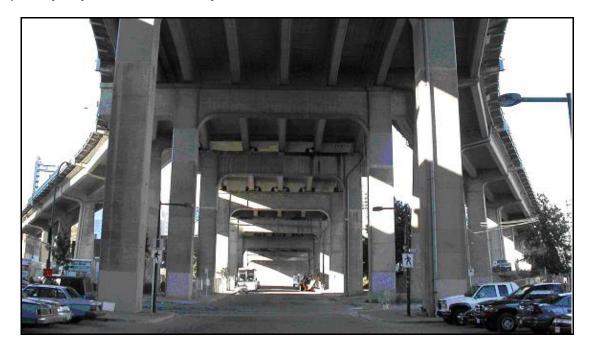
City of Vancouver Land Use and Development Policies and Guidelines

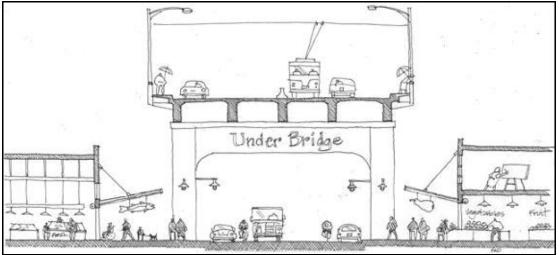
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# UNDER THE GRANVILLE BRIDGE NEIGHBOURHOOD COMMERCIAL CENTRE POLICIES AND GUIDELINES

Adopted by City Council on January 16, 2007





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

#### **1.0** Application and Intent

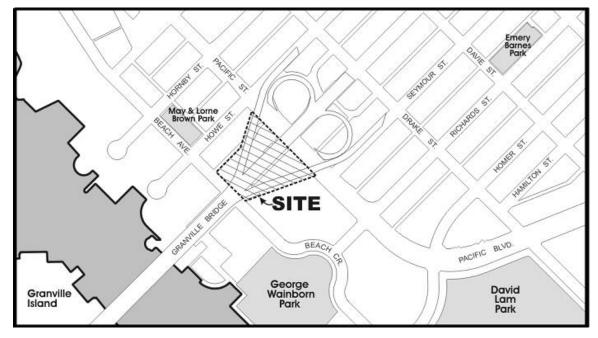
These Policies and Guidelines are intended to guide the development of a locally-serving commercial node for established, and emerging nearby neighbourhoods that incorporates a high level of quality in the design of both the public realm and the architecture.

#### 1.1 Purpose

These policies and guidelines:

- (a) inform the criteria for the selection of the developer for the site (among those responding to the 'CFEI' and 'RFP');
- (b) provide guidance for the drafting of a CD-1 zoning for the site identified in Figure 1, which will be considered by Council once a developer is selected for the neighbourhood commercial centre;
- (c) provide guidance for design professionals preparing development and building permit submissions and for City staff reviewing submitted applications; and
- (d) provide guidance for the design of the public realm.

Figure 1: Site Proposed for Rezoning



#### 1.2 Location of Site

The site for the proposed neighbourhood commercial centre is located between Pacific Street to the north, Beach Avenue to the south, immediately east of the Howe Street on-ramp and the lane to the west of Granville Street, and west of the Seymour Street off-ramp. (Outlined above in Figure 1)

Except for a privately-owned parcel at the southwest corner of Granville Street and Pacific Street, all the lands proposed for the centre are City-owned.

#### 2.0 Overall Concept

#### 2.1 Description of Overall Concept

It is envisaged that the commercial centre will be primarily oriented to serving the neighbouring residential community. It will be anchored by a grocery store on the east side of Granville Street. Adjacent to these stores, there will be commercial retail units. A small four storey office building with retail at grade is proposed for the northwest corner of Granville Street and Beach Avenue. There will be an opportunity for four seasonal structures which could be flower stalls, locations for the sale of fruits and vegetables and other food or goods in temporary structures that can be quickly dismounted to accommodate the repair and maintenance of the bridge. Lastly, while not mandatory, there is the opportunity to renovate and reuse two existing structures under the bridge on the west side of Granville Street. (see Figure 2, the Illustrative Plan)

The commercial centre will exhibit those qualities found in neighbourhood shopping areas: storefronts, heights no more than three storeys and adjacent on-street parking. Generally, higher buildings will be at the south end of the site where the sloping topography and the height of bridge deck provide the opportunity for more height. The character and building elements of Granville Island offer direction for the design of the buildings. Most parking will be provided at-grade on the streets and lanes rather than in underground parkades.

This new commercial centre will be distinguished through its public realm design. Special attention will be given to the design of hard surface treatment, material, patterns, textures and colour. Given Granville Bridge shadowing, soft landscape will be minimal and play less of a role in establishing the centre's identity. More reliance on the design of lighting, signage and celebratory/display systems will be necessary to humanize this challenging environment for pedestrians. Innovative low cost approaches for achieving an attractive public realm are sought.

Developments should improve and enhance the quality of the public realm through high quality architectural building expression, careful site planning, public and private landscaping and appropriate vehicular and pedestrian circulation as generally presented in the illustrative plan.

As part of a later second phase of development, it is anticipated that there may be opportunities to have additional commercial development on sites adjacent to the proposed neighbourhood commercial centre, such as the two non-market housing sites that are (1) immediately east of the Seymour Street off-ramp, north of Beach Avenue and (2) east of the Granville Bridge, south of Beach Avenue. These development sites could provide commercial retail units fronting on Granville Street and the lane, below the Seymour Street off-ramp. However, the details of these potential development sites are not the subject of this document and will be developed when funding is available for the non-market housing sites. (See Figure 4, Phasing of Development)

#### 3.0 New Parcel and Lane Configuration

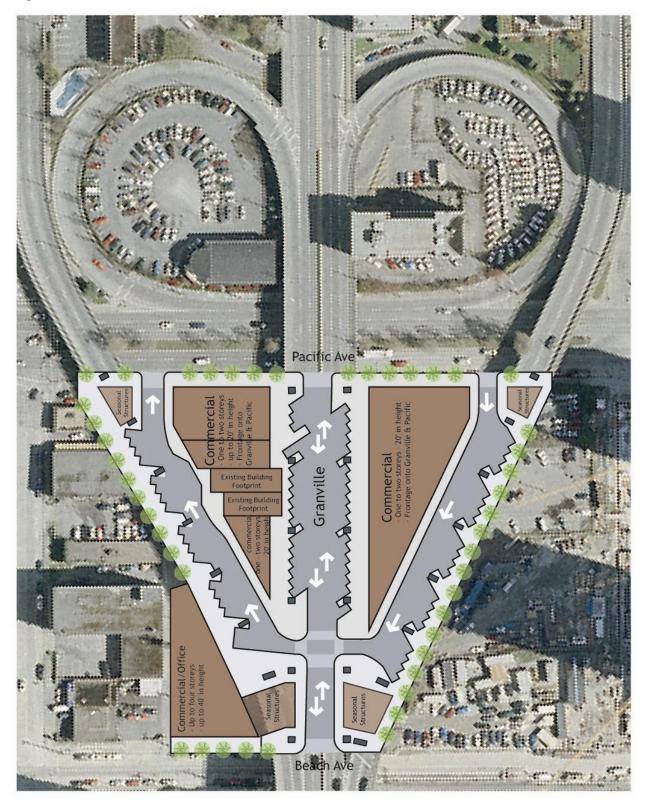
#### 3.1 Proposed Subdivision

#### 3.1.1 Parcel and Land Configuration

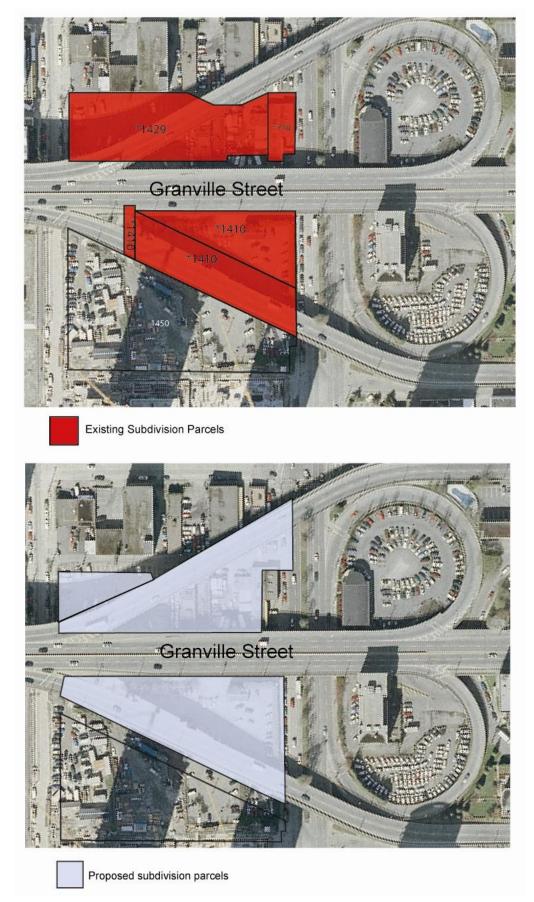
The neighborhood commercial centre will be developed on four City-Owned and one privately-owned parcel as well as portions of the lane, west of Granville Street. A reconfiguration is intended as generally illustrated in Figure 3.

The City of Vancouver will retain ownership of any stopped up lanes, or portions thereof.

Note: The ultimate alignment of the lane, west of Granville Street, may present modification requirements for the location of the rear wall of an existing building at1435 Granville Street, noting that it is anticipated that the existing rear exit stair will need to be upgraded should the building remain.



#### Figure 3: Existing and Proposed Subdivision Parcels



#### 4.0 Land Use and Density

#### 4.1 Uses

#### 4.1.1 Retail Mix

The neighbourhood commercial centre should be anchored by a grocery store. Smaller commercial retail units should also be accommodated. Restaurant and other neighbourhood-oriented service uses are also supported.

## 4.1.2 Office

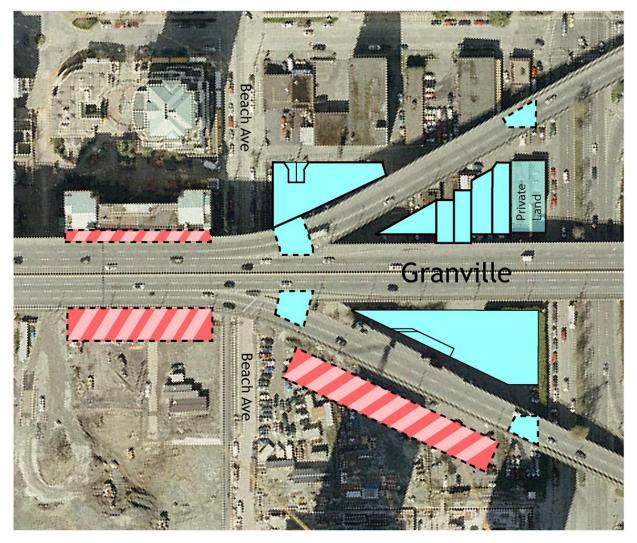
Office uses should be considered but, if included, are preferred on the upper storeys of buildings.

- 4.1.3 Industrial/fabrication uses Light Manufacturing uses, may be considered, where they contribute to visual interest and vitality of the area, provide for on-site retail sales, and do not present adverse effects for others (noise and emissions).
- 4.1.4 Non Supported Uses

Automobile-oriented uses, such as a Gasoline Station, Motor Vehicle Repair/Washing and Restaurant Drive-Thru services are not supported for new development. The privately-owned existing motor vehicle repair use at Granville Street and Pacific Street shall be a legal non-conforming use.

Residential uses are not supported.

#### Figure 4: Phasing of Development



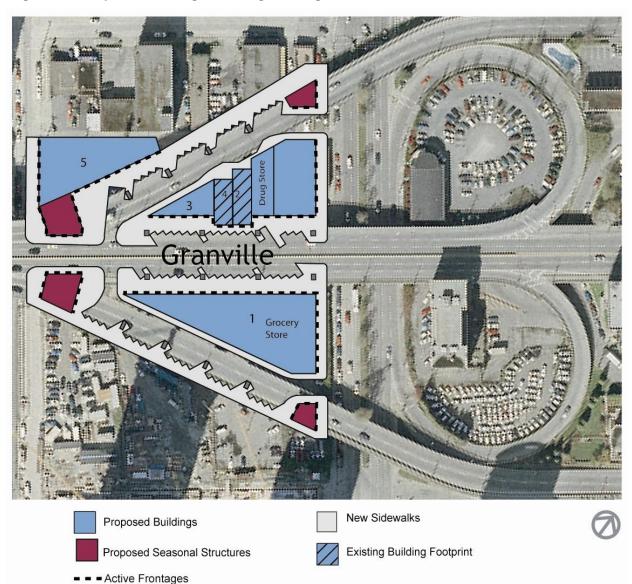


Phase 1 Commercial





**Phase 2** Commercial Subject to Rezoning



#### Figure 5: Proposed buildings, Existing Buildings and Seasonal Structures

4.2 Anchor Retail Locations and Active Frontages

4.2.1 Anchor Retail Locations

The grocery store will be located, east of Granville Street.

4.2.2 Active Frontages

The primary active frontages will be those facing Granville Street, Pacific Street and Beach Avenue. Where possible, building frontages facing the parking lanes, east and west of Granville Street, should also be active.

Active frontages should contribute to pedestrian amenity and visual interest. Buildings should have a storefront character. Outdoor display of goods is encouraged where possible. Sidewalk seating, as an extension of an internal restaurant or café space, is also supported.

#### 4.3 **Floor Space Ratio**

#### 4.3.1 Floor Space Regulation

The zoning shall not have a predetermined FSR. The amount of floor space will be determined by adherence to the policies and guidelines.

The following table provides an approximation of potential floor space in the neighbourhood commercial centre (see Figure 3, Proposed Buildings and Seasonal Structures)

#### Floor Area Estimates for Under Granville Bridge Neighbourhood Commercial Centre Figure 6:

New Permanent Structures									
					Gross	Gross			
	Parcel	Floor Plate	Number of Floors	Gross Floor Area	Retail Space	Office Space	Note:		
	1	1409	2	2818	1409	1409	NOLE.		
1	2	194	2	388	194	194			
	3	232	2	464	232	232			
							Privately		
	4	518	2 3.7	1036	518	518 2230	Owned		
Total:	5	826 <b>3179</b>	5.7	3056 7762	826 <b>3179</b>	4583			
				1102	3173	4000			
Retained									
	6	310	2	620	310	310	310		
				26 Meters <sup>2</sup>			86 Meters <sup>2</sup>		
			5 206 Mete 179 Mete	GKAP	└─ 171 - 139 M	4 232 Meters Meters <sup>2</sup> eters	ΡΑΟ		
				194	Meters <sup>2</sup>		409 Meters <sup>2</sup>		
	Not	city owned					D.		
	Sea	sonal Structures	5				76 Meters <sup>2</sup>		
	Reta	ained Buildings					A		
	City	owned							

#### 5.0 Built Form, Massing and Character

#### 5.1 Heights

#### 5.1.1 Maximum Building Height

Buildings will range in heights from a minimum of 6.1 m (20'-0") to a maximum of 12.2 m (40'-0"), depending on the slope of the site and the height of the bridge deck.

#### 5.1.2 Bridge Deck Clearance

All buildings should be a minimum of 2 metres below the level of the bridge deck, including architectural appurtenances and mechanical rooms. Increased vertical separation from the bridge structure may be required in some locations to provide sufficient clearances for bridge maintenance. Advice from Engineering Services staff should be pursued to determine these exact locations and a survey and elevation of the bridge structure shall be provided.

#### 5.1.3 Building Volume

Commercial use buildings will either be single storey with high interior volumes, that allow for a mezzanine level, or two to four storeys.

The inclusion of higher interior volume, especially for single storey buildings, is a necessary design response as a strategy to mediate the scale challenges of the under bridge environment and sloping topography of the site to assist in providing a sufficient height for the streetwall to create the sense of an urban room on Granville Street.

#### 5.1.4 Higher Buildings

Some site(s) will be considered for four storeys, with more typical floor to floor heights, to accommodate proposed office uses. The primary limiting condition will be the height of the bridge deck. These sites will be assessed on an individual basis.

#### 5.2 Setbacks and 'Build-To' Lines

#### 5.2.1 Bridge Structure Setback

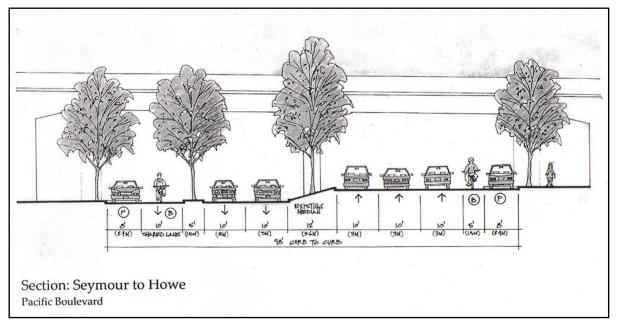
New development will be setback a minimum of 3.0 meters from the bridge deck drip line to ensure access for bridge maintenance and repair.

#### 5.2.2 Pacific Street Set Back

A setback of 5.3 metres should be provided on the south side of Pacific Street to allow for the future installation of the Council-adopted one-sided multi-way "Great Street" concept. (See Figure 7 for a cross-section of the concept.)

When funding becomes available, Pacific Street will be upgraded to a multi-way standard that reflects the council-approved concept for the Pacific Boulevard "Great Street" treatment.

Figure 7: Pacific Boulevard Section



5.2.3 'Build To' lines

While some variation in setbacks is encouraged to provide for patio areas, the 3 metre setback from the bridge deck drip line should be also be considered a 'build to' line for most of the Granville Street Building frontages.

5.2.4 Seasonal Structures in Setback Areas

Seasonal structures in locations identified in Figure 3 will be considered within this 3 metre setback (from the bridge drip line) area and below the Granville Bridge, Howe Street on-ramp and Seymour Street off-ramp structures, are subject to the review and approval by Engineering Services and on the condition that they can be quickly disassembled to allow access to the bridge for maintenance purposes.

Seasonal retail structures can provide locations for farmers markets or licensed street vendors. The management of these locations will be the responsibility of the property manager for the site, rather than the City. These locations may also function as secured areas for bike rental, seating and patio areas or public art activity. Permanent or temporary recreation installations for skateboarding or bmx bicycles may be considered on a trial basis in one of these locations where there is minimal impact on nearby residents. In these cases, the property manager of the development should have a strategy for the security and management of these areas.

#### 5.3 Topography

5.3.1 Access and Grade Changes

Any significant changes of the existing street grade should be considered to support convenient pedestrian access to the building, including universal access, and work with the natural slope of the land.

5.3.2 Stepping and Grade Changes Individual sites are anticipated to generally be developed as slab-on-grade "pad buildings." However, a good relationship to street grade should be maintained, while remaining practical for retail use.

#### 5.4 Orientation

#### 5.4.1 Frontages

All facades, which will be oriented to Granville Street, Pacific Boulevard, Beach Avenue or the lanes, should be conceived as frontage. Main entries should be oriented towards Granville Street, Pacific Street and Beach Avenue.

5.4.2 Secondary Entries

Secondary entries will be oriented to the parking areas, east and west of Granville Street.

In such instances, required exits or service access locations should be inviting with glazed sidelights and weather protected entrances as a strategy to ensure visual interest.

#### 5.5 Architectural Character

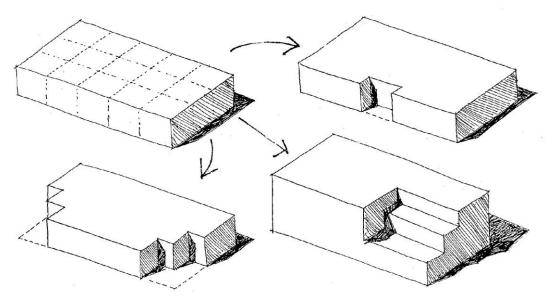
5.5.1 Building Massing and Articulation

While the building footprint potential will be determined by the setback/'build to' lines as outlined in section 5.2, opportunities for articulation of the building mass should be pursued utilizing vertical or horizontal offsets, glazing, canopy and shading systems, as well as exposed structural components (Illustrated in Figure 9).

Massing and building form should be rectilinear and simple as a strategy to combine individual sites into a more cohesive, identifiable precinct character. Greater emphasis should be placed on building articulation, materials and detailing to individualize and distinguish tenancy.

Vertical service elements, such as stair and elevator shafts, that are located at the perimeter of the building, may be used to assist in articulation, as well as express their function

#### Figure 8: Articulation



#### 5.5.2 Transparency

Views into building activities should be provided, especially at-grade levels on Granville St. Pacific St. and Beach Ave.; accordingly, use of non-transparent, mirrored or highly reflective glass is discouraged. High clearance warehouse-type spaces should have windows at the upper storey of the façade.

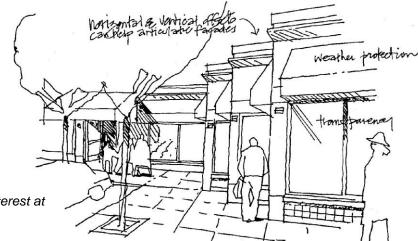
#### 5.5.3 Internal lay-out

Internal uses, should be planned to enhance pedestrian interest by positioning the most visually interesting activities in the front of the commercial spaces adjacent to windows.

#### Figure 8: Transparency



#### Figure 9: Frontages



Comfort and Interest at grade level

5.5.4 Exterior Materials

Exterior building design should reflect the industrial character of the precinct space by utilizing appropriate, durable materials.

Exterior materials that are encouraged include:

- (a) contemporary metal cladding systems;
- (b) heavy timber structural elements;
- (c) glass and steel;
- (d) brick; and
- (e) architectural concrete.
- 5.5.5 Roof Treatment

Roofs visible from the Granville Bridge, including the on- and off-ramp structures, and adjacent residences should be architecturally treated and/or landscaped. Rooftop mechanical equipment should be screened and architecturally integrated into the overall building design.

5.5.6 Weather Protection

All frontages onto Pacific St., Granville St. and Beach Ave. should provide full weather protection. Detailing of these large canopies should consider integrated signage, lighting and display systems and contribute to the centre identity. Canopies should be a minimum depth as noted below:

- (a) Granville Street- The depth of canopy systems on the Granville St. frontages should be maximized (minimum of 3 meters (9.8') to provide weather protection from the under bridge area to the store front.
- (b) Pacific St. & Beach Ave Canopies on the Pacific St. and Beach Ave. frontages can be shallower to a minimum of 1.8m (6').

5.5.7 Outdoor Storage & Display

Outdoor storage areas should be limited and shared with other tenancies where possible. Where necessary, they should be architecturally screened from pedestrians using high quality materials and detailing that is appropriate for the commercial/industrial setting.

#### 5.5.8 Loading/Recycling Area Treatment

Loading, holding, or storage areas that are visible to pedestrians should be well screened.

Utility requirements, including BC Hydro kiosks, should be integrated into loading areas where possible to minimize visual impact. Visual screening should be architecturally designed as an integral component of the exterior wall system and detailing, and contribute to the overall design quality of the commercial centre.

#### 5.5.9 Signage

A creative approach to tenancy signage, including more three-dimensional, iconic designs that ensure tenant identity is encouraged.

Refer to Appendix 2- Character References for examples.

# 5.5.10 Entry Sign

A large scale illuminated sign at the approach to the precinct, such as evident at the entry to Granville Island, should be considered.

#### 5.5.11 Sign Bylaw

The Vancouver Sign Bylaw will regulate sign proposals (Schedule B – commercial and industrial areas).

#### 5.5.12 Billboards and Mobile Signs Billboard and mobile signs are not permitted.

Bindoard and mobile signs are not permitted

#### 6.0 Movement and Infrastructure

The proposed parking and loading strategy presented in Figure 10 (Parking and Loading) indicates the recommended access, parking and loading and circulation.

A more definitive layout that confirms required geometrics/curb locations as well as aisle dimensioning will be confirmed at re-zoning stage once a more definitive form of development for the commercial precinct has been established.

Further, given the pedestrian focus, and anticipated public realm quality for this new locally serving retail node, it is anticipated that all proposed and existing above grade utilities will likely be 'under-grounded'. Strategies for achieving this requirement will be finalised at the re-zoning stage once a more definitive form of development, and public realm design, is identified.

#### 6.1 Vehicular Circulation

6.1.1 Circulation Pattern

The proposed vehicle circulation strategy, indicated by the white arrows is presented in figure 10.

#### 6.2 Parking and Loading

#### 6.2.1 Overall Parking Strategy

The Parking By-law parking and loading requirements as set out for Area 3 of the Downtown District will be the basis of calculating the parking requirement for proposed floor space over and above 7 800 m<sup>2</sup>. However, the availability of 84 parking spaces located on Granville Street, Beach Avenue and under the Howe Street on-ramp and the Seymour Street off-ramp will be used to offset the parking requirement for the development. This surface parking is sufficient to support approximately 7800 m<sup>2</sup> (85,000 sq. ft) of floor space as shown in the Illustrative plan. The proposed parking and loading configuration is represented in figure 10.

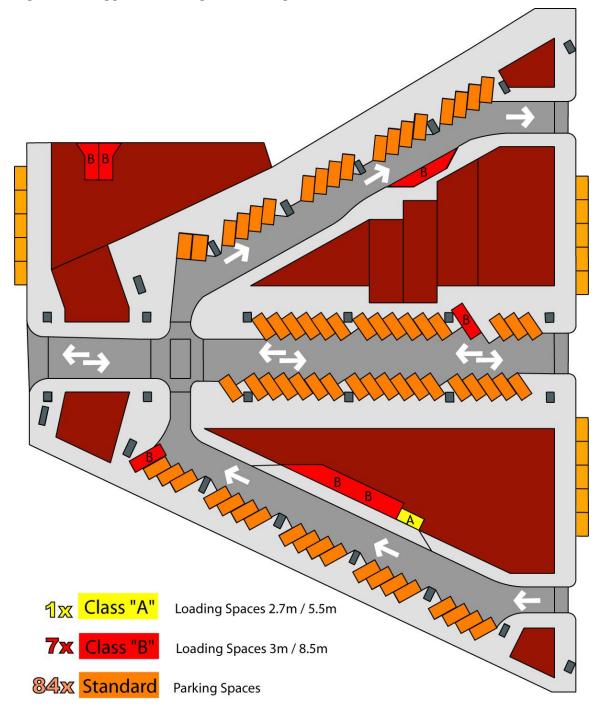
The proposed loading requirements for the building on the east side of Granville Street assumes a two storey building and this will require one Class A and two Class B loading bays, depending on the extent of the additional second storey floor space. The Parking Engineer should be consulted on loading requirements should a second storey be proposed for the easterly building. A one storey building in this location will only require two Class B on-site loading spaces.

The developer may consider additional development if underground parking is provided.

6.2.2 High Street Parking

Angled front-in parking is suggested for the 1400 block of Granville Street, which will reduce the potential of cross street maneuvering to access parking spaces on the opposite side of Granville Street and is the most familiar form of parking space access.

Adequate surface parking to accommodate the uses and development capacity anticipated in the illustrative plan has been located either between the existing columns that support the Granville Bridge and related ramp structures or on-street on abutting Pacific Street and Beach Avenue. The strategy reflects the required provision of parking per the Parking By-law requirements for the Downtown District (Area 3). Any changes to the suggested form of development will also have to comply with the standards set out in the Vancouver Parking Bylaw for the size of parking stalls and manoeuvring aisles. However, where the retention of existing character buildings conflicts with achieving by-law standards for driving aisles and parking spaces, relaxations of the Parking By-Law provisions will be considered.



#### 6.3 Pedestrian Circulation

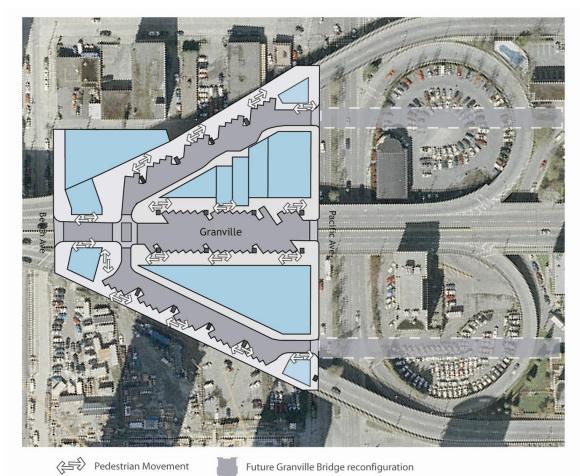
Pedestrian security, comfort, and enjoyment should be maximized throughout the development.

The majority of people expected to access site are projected to do so on foot to this end sidewalk widths should be maximized, and road lane widths should be minimized.

#### 6.3.1 Pedestrian Crossings

Pedestrian crossings of Pacific St. at Howe and Seymour Street will provide access to the area. In the future, the lanes east and west of Granville St., north of Pacific Street can provide pedestrian crossings to accommodate and encourage north/south movements through the site should the Granville Loops be replaced with north/south lanes.

#### Figure 11: Pedestrian Circulation and Crossings



#### 6.4 Bicycles

#### 6.4.1 Provision of Bicycle Parking

The approved precinct plan should meet and if possible exceed the Parking By-law bicycle parking requirements with ample short-term bike parking located in the public realm.

Sites between bridge columns identified in the illustrative plan as seasonal structures may be suitable to provide rental, storage or repair services for bicycles.

#### 6.5 Utilities

#### 6.5.1 Underground Utilities

All proposed and existing above grade utilities will likely be 'under-grounded.' The following Engineering requirements should be followed:

- (a) Utilities require all services to the site to be underground.
- (b) All B.C. Hydro transformation plant including submersible Vista Switches, Pad Mounted Transformers etc, to accommodate a primary service must be located on private property.
- (c) There will be no reliance on secondary voltage from the existing overhead network on the street right-of-way.
- (d) Any alterations to the existing underground/overhead utility network to accommodate the development require approval by the Utilities Management Branch.
- (e) An overview of the immediate area around the site will be completed to determine if there is an opportunity to underground adjacent utilities.

#### 7.0 Public Realm Treatment

#### 7.1 Design and Development

Granville Street will function as the high street for the surrounding neighbourhood. Therefore, the design of the public realm should reflect the street's local predominance.

The proponent will be asked to develop a public realm concept design, generally as described below, that incorporates the policies listed below. The public realm strategy for the neighbourhood commercial district will be required to ensure that the precinct achieves an enjoyable character for pedestrians and visitors.

#### 7.1.1 Execution of the Public Realm Plan

The developer will be responsible for detailed design and construction in the execution of this plan, subject to Council approval and consultation with City staff.

Further discussion with staff will be necessary in the exploration of additional design upgrades including lighting concepts, celebratory structures, and seasonal visual improvements. An example of these seasonal visual improvements could be large scale banners. Seasonal visual improvements should be designed as demountable structures to ensure ease of maintenance.

#### 7.1.2 Pacific Boulevard 'Great Street' Treatment

The Pacific St. frontage will ultimately be significantly improved, guided by the Council approved 'Great Street' treatment. On the frontages adjacent to the commercial centre multi – way design a 5.3m setback is required for Pacific St. frontages to accommodate the approved concept. The precinct's public realm design should anticipate these improvements in surface material selection and detailing as well as storefront design, entry placement, outdoor display, weather protection and street tree placement.

Please refer to Figure 7 for a cross- section of the adopted Public realm treatment for Pacific Boulevard.

#### 7.2 Public Realm Materials

7.2.1 Safety and Quality

The public realm design should meet City standards for safety and maintenance while contributing to the anticipated high quality necessary to distinguish the area as a locally serving commercial centre.

The quality of the public realm design and the choice of materials should reflect a balance of City concerns including seeking high quality materials as well as the cost of maintenance.

#### 7.2.2 Sidewalks and Setback Areas

The development proponent should explore interlocking pavers or other special treatments for sidewalks and setback areas adjacent to all building frontages.

Exploration of appropriate road surface material(s), and demarcation methods for denoting crosswalks and parking stalls, will occur with the successful development proponent, in consultation with Planning staff and in consultation and to the satisfaction of Engineering Services staff.

#### 7.3 Planting

#### 7.3.1 Species Selection

Careful attention to landscape design, particularly species selection and placement, will be required to ensure viability given the limited solar access.

#### 7.3.2 Green Roofs

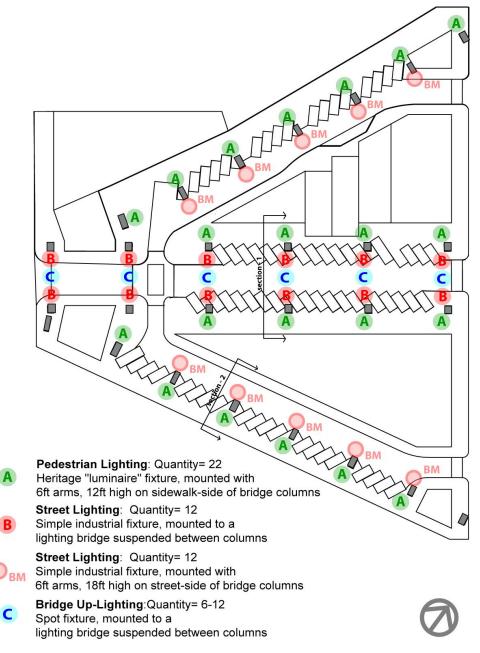
Opportunities for rooftop landscaping should be pursued where possible.

#### 7.4 Lighting

7.4.1 Lighting Layers

Five layers of lighting are prescribed for pedestrian amenity and security, as illustrated in Figures 12 and 13.





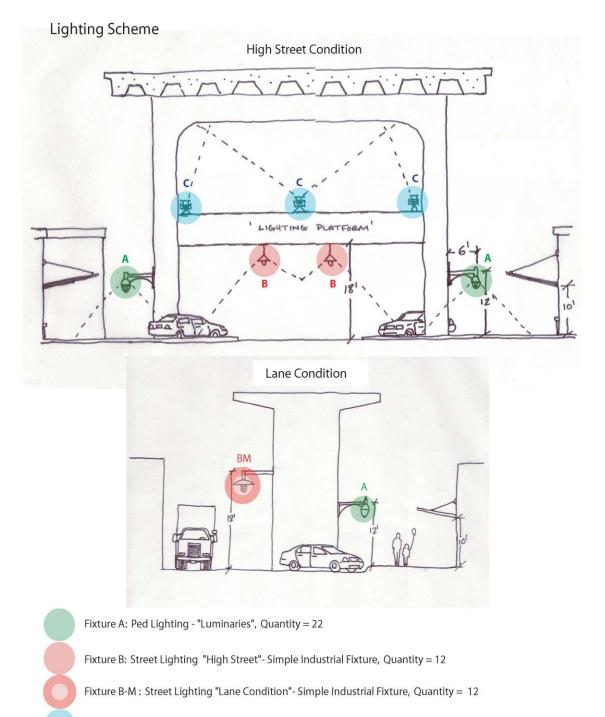
1) *Exterior (Building)* – Individual building(s) or groupings should contribute to the overall lighting quality by highlighting facades, or features. Industrial, or marine, fixturing is appropriate for anticipated precinct character.

- 2) **Interior (Building)** Tenancies should contribute ambient lighting in conjunction with entry and storefront/display systems noting that security screening is not supported. Careful location of interior 24 hour emergency lighting that allows visual surveillance into highly transparent facades should be considered.
- 3) *Exterior (Street)* "White" street lighting character is encouraged as a design strategy in establishing an inviting precinct character and identity.

Selection of fixture type(s) and location will be determined in consultation with Engineering Services and Planning staff. Industrial, or marine design quality for fixturing, of a sufficient size and scale for the under bridge environment, is appropriate. Pole mounted lighting should include cut-off shields to minimize impact on nearby residential properties.

- 4) *Exterior (Pedestrian)* Carefully integrated low level pedestrian lighting into building, planters or other landscape elements will improve the precinct's CPTED performance while highlighting pedestrian pathways to and from the False Creek waterfront.
- 5) **Under Bridge** A "white light" under bridge lighting strategy, developed in consultation with Engineering Services and Planning staff, will be integral to precinct announcement and identity. Careful attention to minimise glare for nearby residents, while highlighting the bridge structure as a public realm feature, is required.

### Figure 13: Light Section



Fixture C: Decorative Up-lighting - Simple Spot Fixtures, Quantity = 6-12

#### 7.5 Public Art

#### 7.5.1 Public Art

While not a specific obligation of the development proponent under the approved CD-1, public art as a form of visual screening, signage, storefront design and display is strongly encouraged.

Public realm elements, such as a benches and bicycle racks, will also present design opportunities for public art expression and will further distinguish precinct identity. The district could also showcase community art projects.

#### 7.6 Open Space and Recreation

#### 7.6.1 Small recreation spaces for youth

Opportunities may be identified to introduce small pockets of permanent, or interim, recreational space for young people, in consultation with City staff and neighbourhood youth and older residents.

Some sites, which could be developed as part of the initial plan, may be considered for small recreation spaces for youth. While residential uses are not permitted within the precinct as described in the illustrative plan, attention should be given to the security and management of recreational open spaces given their proximity to potential adjacent residential development.

#### 8.0 Environment

It is encouraged that the developer of this project will participate in the Green Building Strategy whereby the buildings on civic land would achieve the equivalent of a LEED Silver building, certification not required.

#### 8.1 Water: Surface and Groundwater Protection

Storm water should be recycled on site, if possible, for irrigation purposes to reduce water use, waste water, and runoff.

#### 8.2 Soils: Retention, Cleansing and Replacement

- 8.2.1 Provincial and Associated Requirements Site profiles, Ministry of Environment approvals and legal agreements may be required for all rezonings, subdivision or development applications
- 8.2.2 Soil quality Should be improved where necessary to enhance plant growth and improve water quality.

#### 8.3 Energy: Conservation and Efficiency

8.3.1 Conserve Energy

Building materials, systems and construction methods should be used to conserve energy and reduce long-term operating costs.

#### 8.4 Solid Waste: Reuse and Recycle

#### 8.4.1 Garbage and Recyclables

The management of solid waste, including garbage and recyclables, will be the responsibility of the owner or owner's representative with waste containers being wholly situated within buildings at grade and not on a sidewalk, road or lane.

While vehicle access to waste containers is preferred, small containers that can be manually moved to waste management vehicles are acceptable.

To reduce the number of solid waste containers required to service the businesses and to endorse higher density waste management, it will be encouraged that business operators share containers within each building. Further, the use of shared compactors, instead of containers, will be encouraged to reduce the frequency of waste pick-ups. The operating costs associated with shared compactors can be allocated to users by means of a card reader and pin number system, with businesses being charged on a unit basis. This pay-as-you-throw model of solid waste cost allocation encourages waste reduction and recycling. A board, cooperative or other suitable business organizational structure comprised of area business representatives would be established for the purpose of managing capital costs associated compactors, and the responsibilities associated with tendering and administering shared commercial waste hauler contracted services.

#### 8.4.2 Service Limits

To reduce truck traffic volume and frequency of commercial solid waste hauler servicing the area, Engineering will work with the owner or owner's representative to establish the following limitations, as reasonably practical:

- (a) One hauler for the removal of garbage;
- (b) One hauler for the removal of paper products including, but not necessarily limited to old corrugated cardboard (OCC), mixed paper product (MPP) and old newsprint (ONP);
- (c) One hauler for the removal of used grease products; and, a maximum of two additional haulers for the removal of other recyclable materials (e.g. plastics, metals, beverage containers, wood waste/pallets.

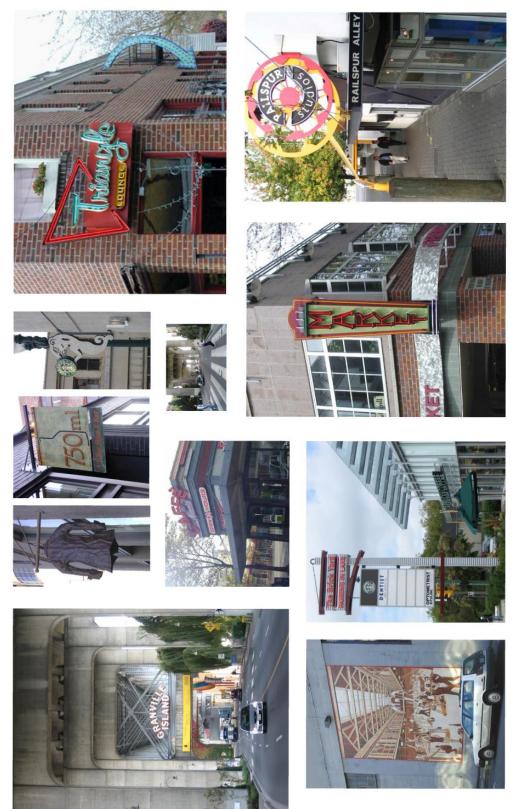
#### Appendix 1 - Local Context



### Appendix 2 - Building References



### Appendix 3 - Character References



#### Appendix 4 - Public Realm References

