

Renfrew SkyTrain Station Precinct Public Enhancements Plan

Draft January 17, 2000

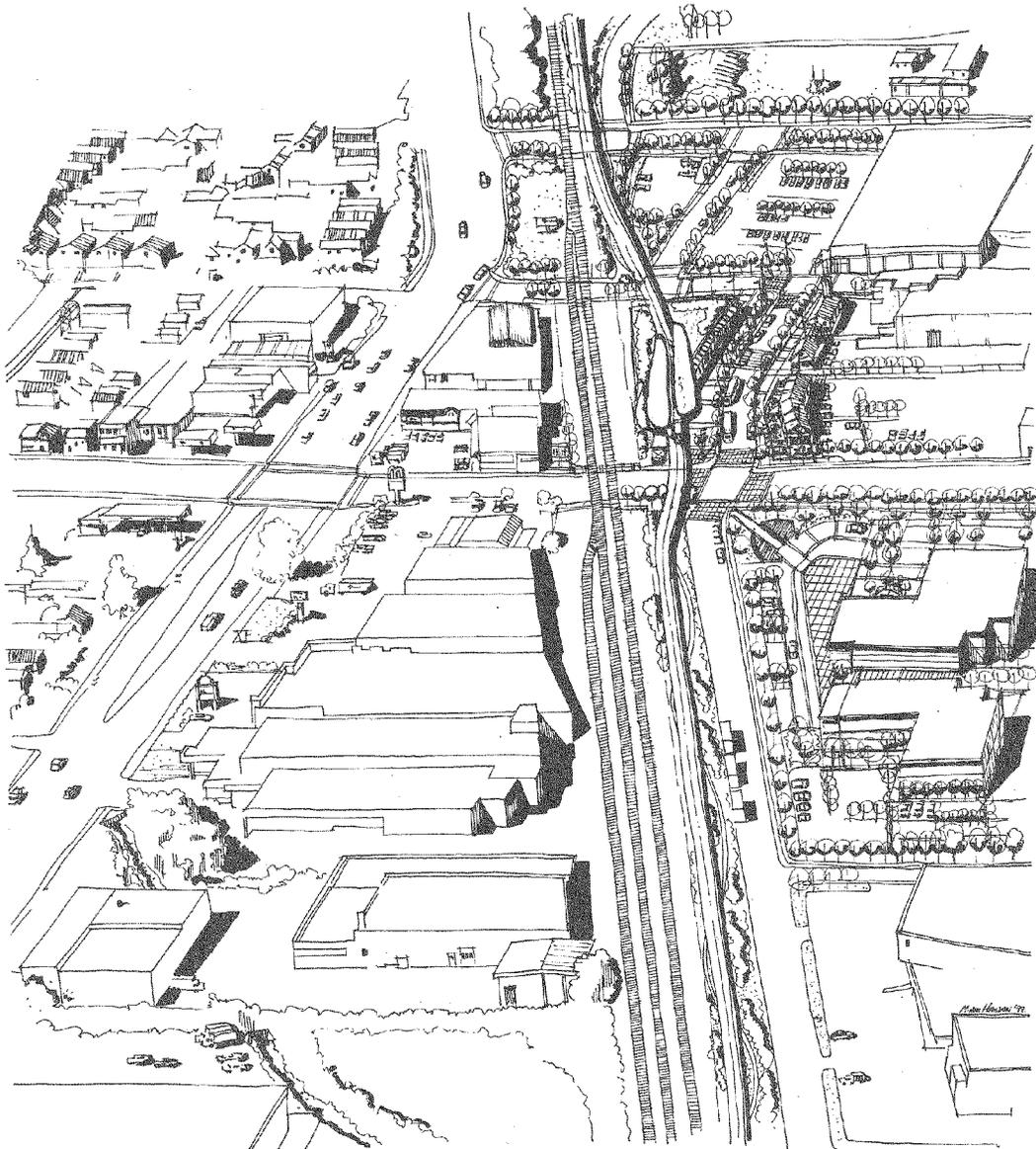


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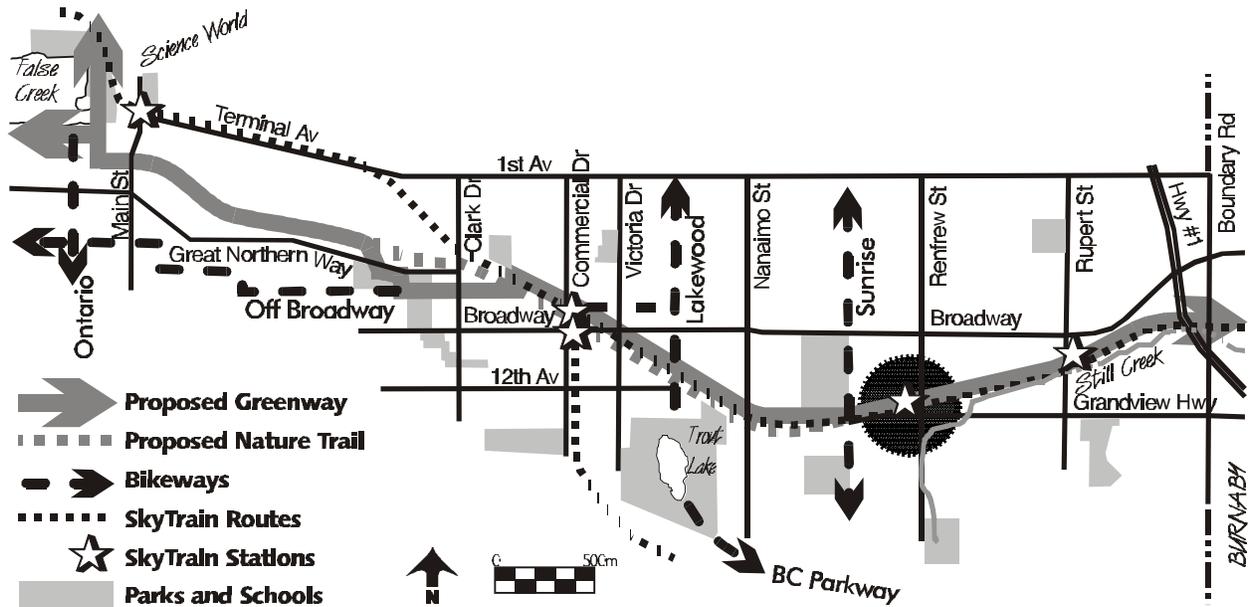
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Figure 1: Station Precinct Boundaries Aerial Photo



Figure 2: Central Valley Greenway/Bikeway



Introduction

1. Purpose and Scope

The purpose of the Station Precinct Public Enhancements Plan is to coordinate improvements with the various agencies and owners involved with the development in the SkyTrain Station Precinct area (Figure 1). The stakeholders include the Provincial Rapid Transit Project Office (RTPO), the City of Vancouver, TransLink and adjoining land owners. The Public Enhancements Plan includes input received from the general public, nearby residents and business owners during various station meetings in 1999 and also responds to the conclusions of the Special Commission SkyTrain Review of May 1999. Both the general public and Special Commission SkyTrain Review emphasized the need for an integrated transit system that creates safe and efficient transfers to other transportation modes. They also emphasized the importance of integrating SkyTrain stations into the neighbourhood.

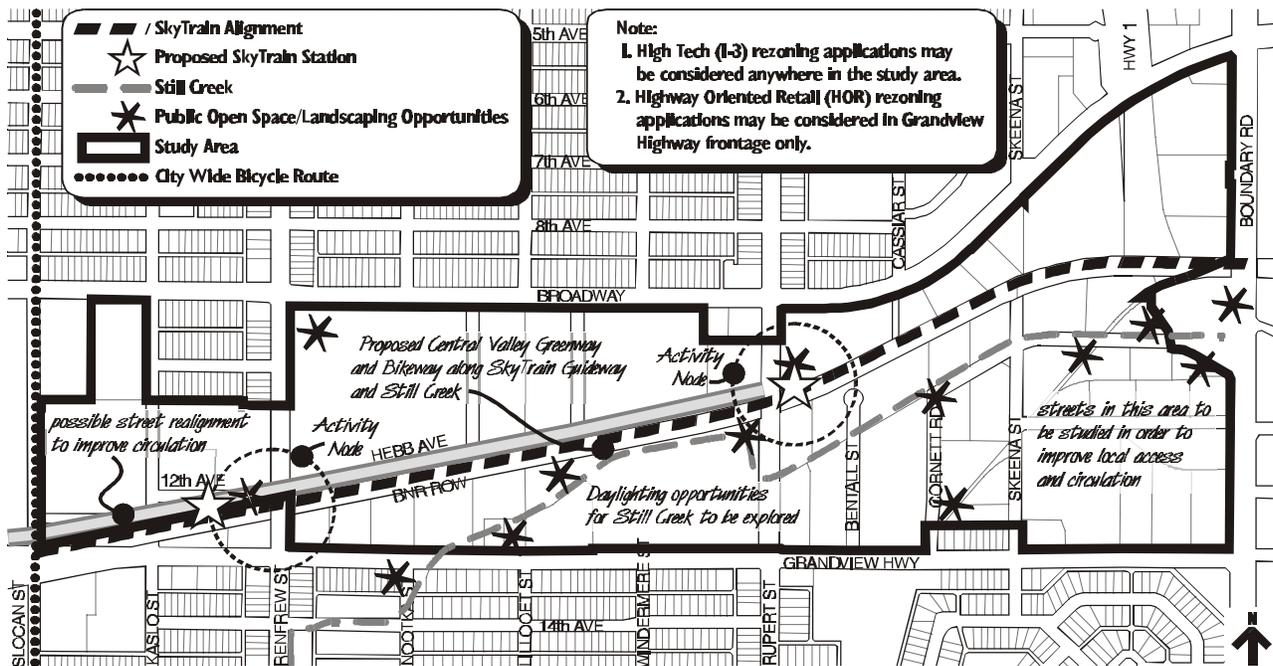
2. Background and Context

- ! **SkyTrain Plans.** In June 1998, the Provincial government approved a 21 kilometer phase 1 extension of the existing SkyTrain including a 4 kilometer Vancouver section that will extend from Boundary Road, via the BNSF Railway right-of-way and the Grandview Cut, to Vancouver Community College. Within the length of the approved guideway, three stations were selected - Rupert, Renfrew and Broadway/Commercial, each station's name reflects its street location along the SkyTrain alignment.
- ! **Area Planning.** Council has approved interim rezoning policies and guidelines to direct owner-initiated rezoning and conditional development applications in the Grandview/ Boundary Industrial area to support high technology uses and station area development. These interim regulations and guidelines will be finalized as part of a longer term area planning process.
- ! **Central Valley Greenway/Bikeway.** The Central Valley Greenway/Bikeway (Figure 2) will run from False Creek to Boundary Road to link into Burnaby's greenways network when it is complete. As an important regional connector for pedestrians, bicycles and inline skaters, it will follow near or under the SkyTrain guideway through both the Renfrew and Rupert SkyTrain Stations. The integration of the Central Valley Greenway/Bikeway into the station designs is an important aspect of the proposed public enhancements and a lasting legacy of the SkyTrain extension.

3. Vision for the Area and Precinct

Area Vision. The Grandview/Boundary Industrial area, which forms the greater context for the Renfrew and Rupert Stations, is intended to evolve into a home for high technology (Figure 3). Traditional industrial uses may remain along with the highway-oriented retail along Grandview Highway. This high tech campus-like environment will be linked by a network of bikeways and greenways to the SkyTrain stations. Grandview Highway will remain the focus of highway retail and mixed use activity, while the other areas redevelop over time to create a concentrated high technology area.

Figure 3: Grandview/Boundary Preliminary Concept Plan

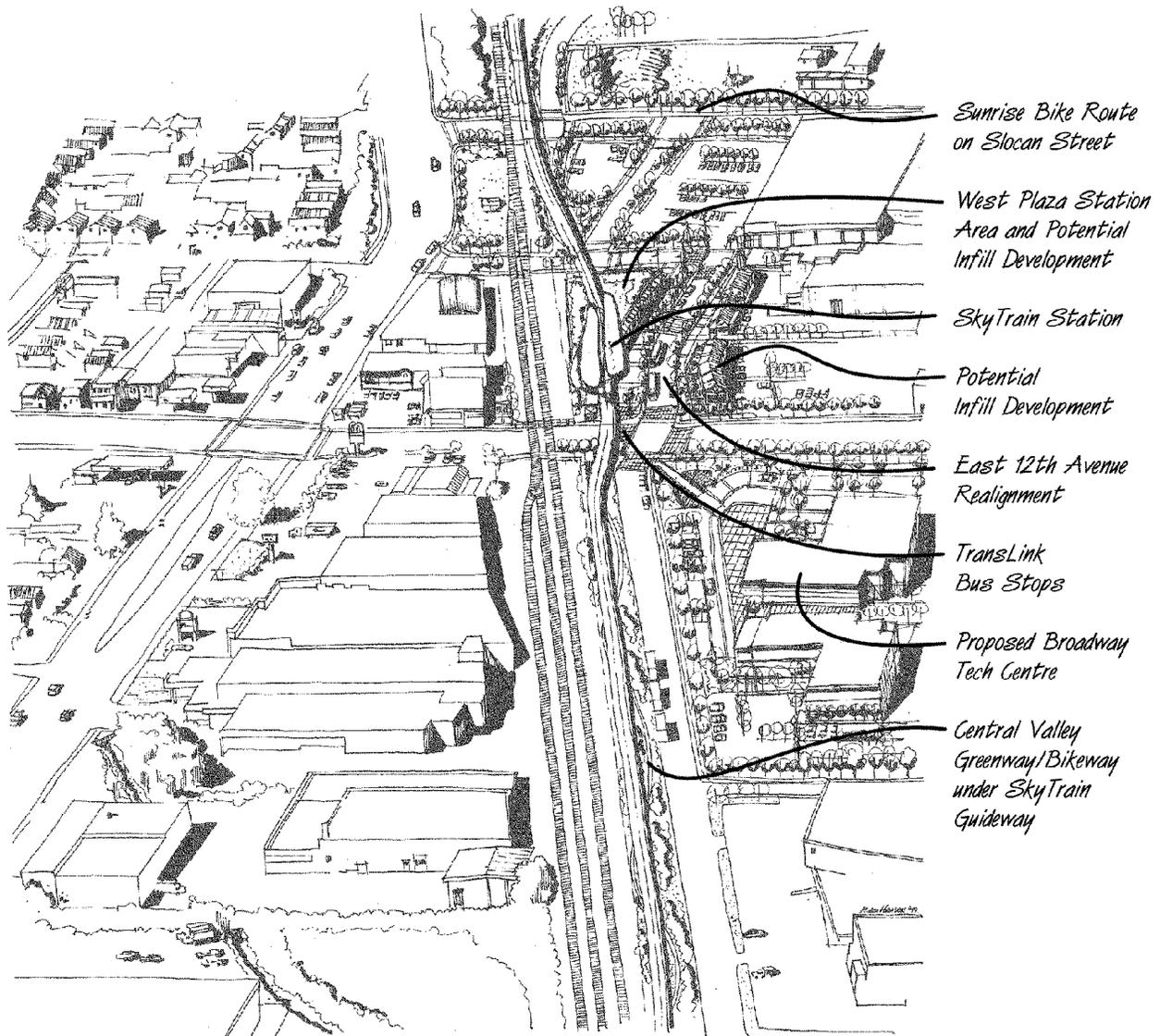


Renfrew Precinct Vision. The vision for the Station Precinct is to create a safe, vibrant and accessible neighbourhood place that is connected with other transit modes and the community around it (Figure 4). The area immediately around the Renfrew Station is presently dominated by vehicle-oriented retail uses, typical of the highway retail activities in the area. The East 12th Avenue realignment offers a unique opportunity to reshape the area adjoining the station with a more pedestrian/bicycle orientation. The proposed Broadway Tech Centre could stimulate the need for supportive neighbourhood commercial uses within the station area. The development of the Central Valley Greenway/Bikeway through the station, and its linkage with the Sunrise Bikeway along Slocan Street, will help make the Renfrew station an accessible transportation hub in the community. The proposed plaza area west of the station house provides an opportunity for the community to gather and hold small events such as a farmer’s market. Associated pedestrian and

bikeway improvements, including sidewalks, lighting, crosswalks and signals, will further connect the station with the surrounding uses. TranLink bus stops will be located along Renfrew, providing easy access and shelter for transit users.

The City supports the provision of commercial space under the guideway immediately west of the station. Infill development across from the station on East 12th Avenue could be developed as consumer demand for local services increases.

Figure 4: Urban Design Concept Plan



4. Key Issues and Challenges

The Renfrew Station development faces a number of issues and challenges - some unique to the station and the surrounding land uses. Given the expected low level of boardings in the short term, as compared to other stations like Broadway and Commercial, the major challenge is to create a comfortable neighbourhood place that is safe and free from undesirable activity.

Issues and Challenges:

- ! ***Street Reconfiguration:*** reconfigure East 12th Avenue to complement the station and adjoining uses.
- ! ***Rail Crossings:*** improve the railway crossings for pedestrians and bicycles.
- ! ***Supportive Uses:*** encourage the development of supportive commercial uses adjoining the station under the guideway west of the station house and across East 12th Avenue.
- ! ***Pedestrian and Bicycle Flows:*** provide a functional and safe route for pedestrians and cyclists through the site as part of the continuous Central Valley Greenway with links to the Sunrise Bikeway on Slocan Street.
- ! ***Connections to Van Tech:*** enhance pedestrian and bike connections to Vancouver Technical High School.
- ! ***Grandview Improvements:*** improve crosswalks at Grandview/Renfrew, Grandview/Kaslo and Grandview/Slocan to better connect the residential communities to the station.
- ! ***Pedestrian Connections:*** enhance the pedestrian walkways and environment to the adjoining residential communities.
- ! ***Bicycle Orientation:*** encourage bike use to access transit by providing on-site bike racks, and secured bike lockers.
- ! ***Safe Neighbourhood Place:*** create a safe environment in and around the station that does not encourage undesirable activities.

Public Enhancements

1. Overview and Components

The plans and maps that follow (Figures 5 and 7) illustrate the location and types of specific public enhancements that are necessary to integrate the Renfrew Station into the community. These enhancements are classified under five sub-areas:

1. Renfrew Station Site;
2. Adjoining Sidewalks and Street Areas;
3. Major Intersections and Connecting Streets;
4. Circulation and Access; and
5. Adjoining Site Redevelopment.

2. Cost Estimates

Cost estimates for the public enhancements are included in Appendix A. The Renfrew Station site enhancements are not included in the cost estimates as they are exclusively the responsibility of the Provincial Rapid Transit Project Office (RTPO). The only exception is the proposed bikeway option south of the station. It is included in the cost estimates, subject to the approval of Burlington Northern Sante Fe Railway (BNSF). Adjoining site redevelopment enhancements are also not included in the cost estimates as they will be part of specific owner-initiated rezonings.

Figure 5: Station Precinct Public Enhancements Concept Plan Index



Precinct Boundary



1. Renfrew Station Site

- a. Street Furniture: bike racks, bike lockers, lighting, benches and litter bins
- b. Landscape/Open Space: public space trees and Central Valley Greenway/Bikeway
- c. Other: public art



2. Adjoining Sidewalks and Street Areas

- a. Realign E12th Avenue & Hebb Avenue, realign Grandview Hwy North
- b. Upgrade (adjust and/or relocate) Renfrew Translink Bus Stops (includes benches; bus shelters, etc.)
- c. Construct new Renfrew and E12th Avenue Intersection (install new signals, upgrading crosswalks and sidewalks)
- d. Realign 12th Avenue at Kaslo Street (includes new crosswalks and sidewalks)
- e. Improve Renfrew sidewalks and rail crossings
- f. Improve Kaslo sidewalks and rail crossings
- g. Review lighting (improve where necessary)
- h. Construct new street boulevards associated with street realignments (includes sidewalks, street trees, etc.)



3. Major Intersections and Connecting Streets

- a. Review Renfrew/Grandview and Renfrew/Broadway intersections
- b. Review Kaslo and Grandview Intersection
- c. Realign Grandview Highway at Slokan Intersection (includes guideway screening and Grandview Cut entry enhancement)



4. Circulation and Access

- a. Construct Central Valley Greenway/Bikeway (includes integration of substation east of Renfrew Station)
- b. Review neighbourhood connections
- c. Intergrate existing Sunrise Bikeway with Central Valley Greenway/Bikeway
- d. Adjust bus circulation (existing bus loop to be relocated)
- e. Implement bus layby zone
- f. Implement short term parking drop off/pick up zone (includes review of parking regulations on adjacent streets)



5. Adjoining Site Redevelopment

- a. Proposed Broadway Tech Centre
- b. Potential Site infill development
- c. Potential Site infill development

 Note: 1 and 5 are not included in Appendix A: Renfrew Station Precinct Public Enhancements Costs

Figure 5: Station Precinct Public Enhancements Concept Plan

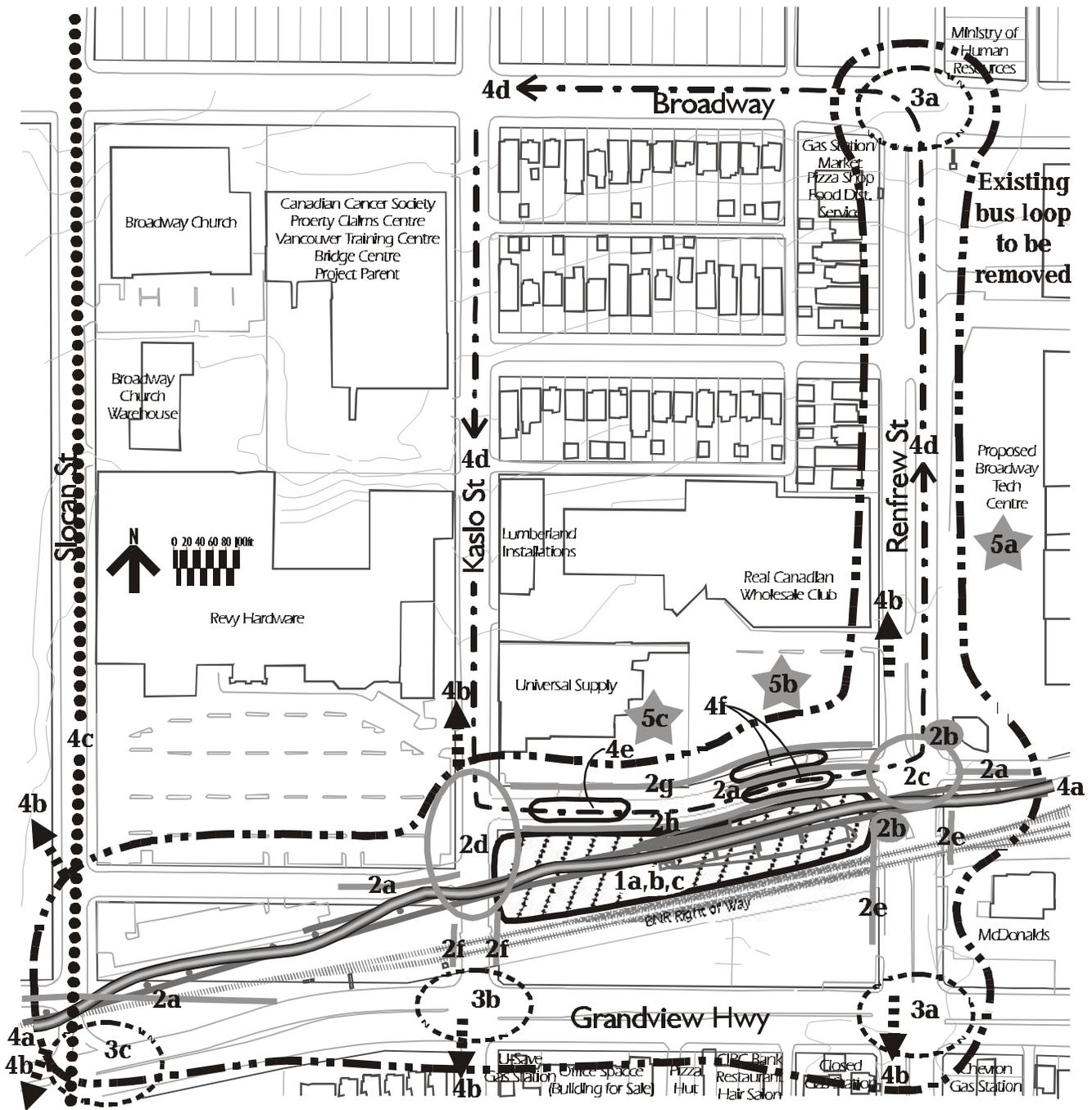
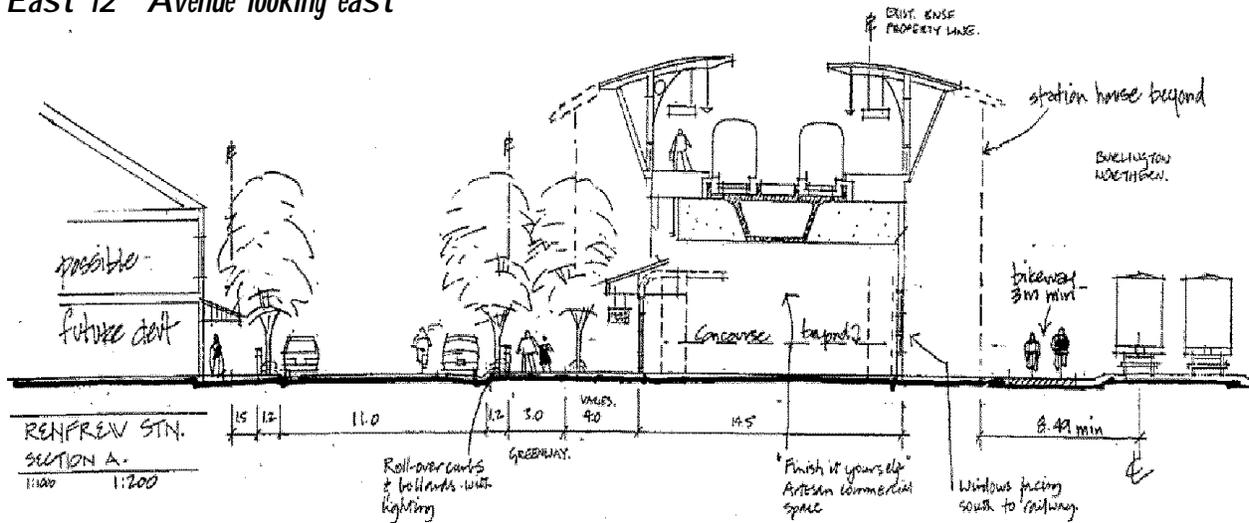


Figure 6: Station, Street and Guideway Sections

East 12th Avenue looking east



Renfrew Street looking south

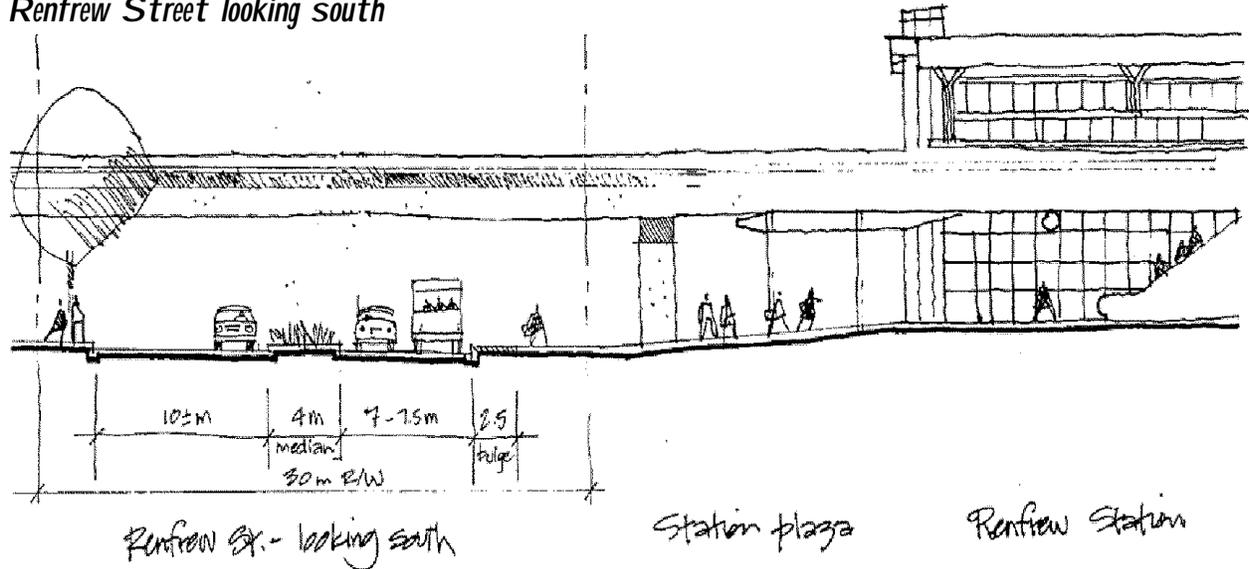
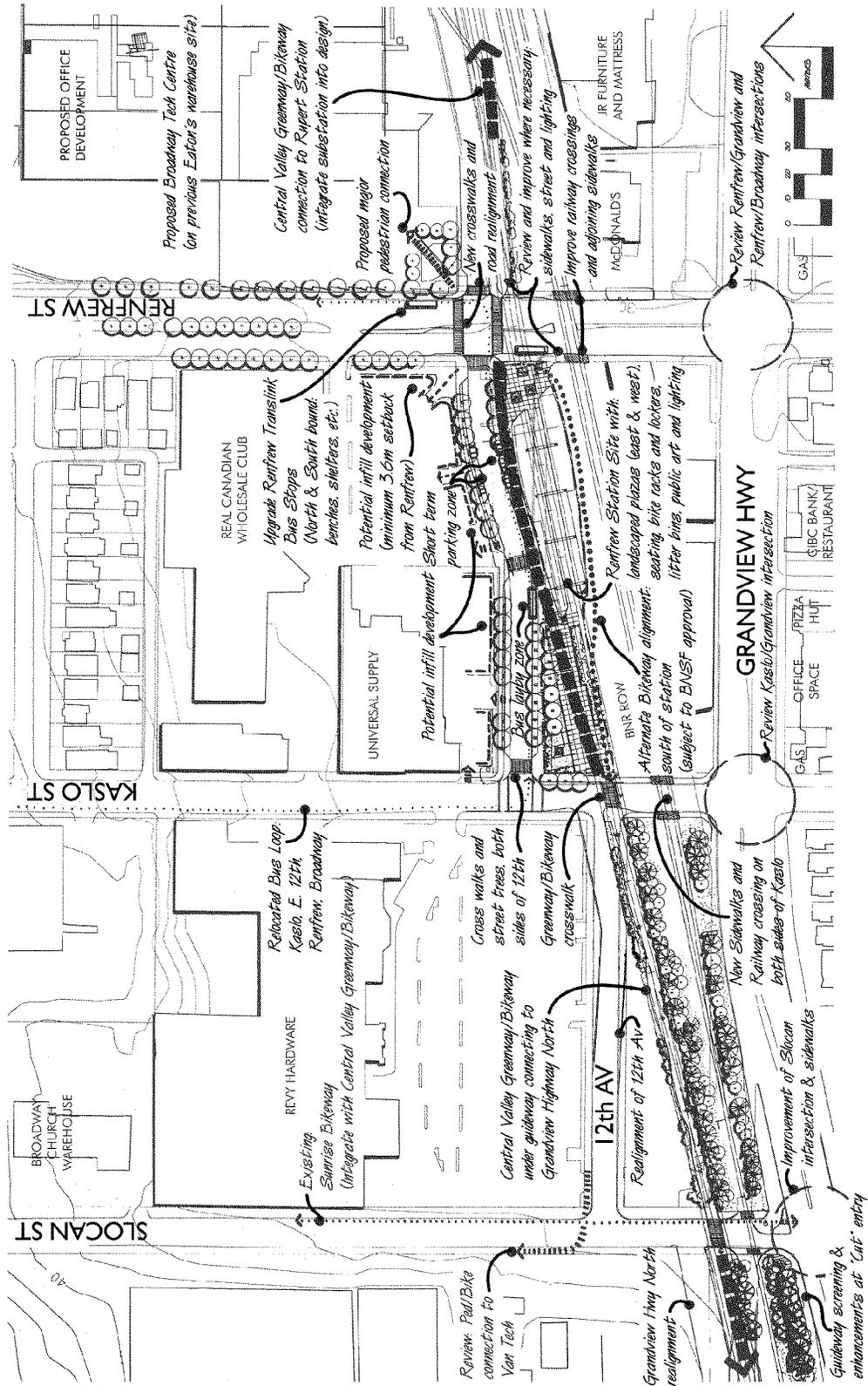


Figure 7: Station Precinct Site Plan of Public Enhancements



Adjoining Land Uses

1. Relationship to Public Enhancements

The land uses surrounding the station and their further development will be important for the creation of a station precinct that blends into and supports the surrounding neighbourhood. Generally, rezonings of adjoining properties will be required to contribute to public enhancements as terms of redevelopment.

Beyond the proposed office uses in the Broadway Tech Centre, supportive commercial uses for the station are encouraged under the guideway west of the station house, across the street on East 12th Avenue on the Real Canadian Wholesale Club site, and perhaps the Universal Supply site. Figure 8 illustrates the potential of the Wholesale Club site along its East 12th Avenue frontage. A mixture of retail and other commercial uses could complement and reinforce the pedestrian orientation of the street.

Figure 8: Potential Infill Development on the Northwest Corner of Renfrew Street and East 12th Avenue



2. Policy Direction and Rezonings

Land owners in the station precinct area should refer to the Grandview/Boundary Interim Land Use and Design Guidelines approved by City Council on July 22, 1999 for direction regarding land use, zoning and design. A specific section within these Land Use and Design Guidelines addresses the requirements within the station precinct area. This section is attached for reference as Appendix B.

Appendix

A. Renfrew Station Precinct Public Enhancement Costs

B. Interim Rezoning Policies for SkyTrain Station Precincts

Figure 9: Expected Standards for Public Enhancements



Paving/Crosswalks/Sidewalks



Public Art



Tree Grates



Tree Planting



Plaza Design



Benches



Bicycle Racks



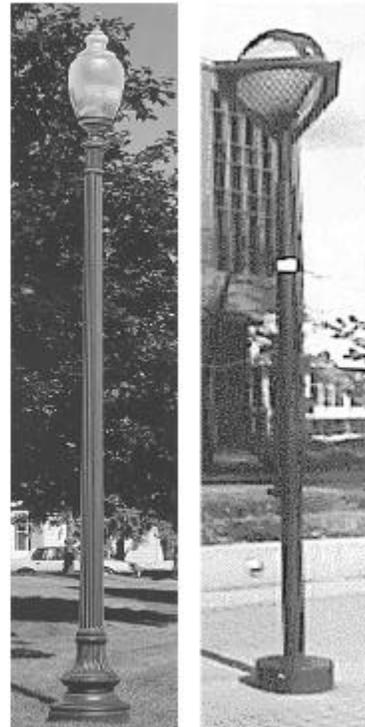
Guideway Column Landscaping



Bicycle Lockers



Bus Shelters



Lighting: Greenway & Station

Appendix A: Renfrew Station Precinct Public Enhancement Costs

Note: The following categories correspond to precinct sub-areas.

1. Renfrew Station Site

The station house site should integrate into the precinct, emphasizing public open space in order to allow ample room for the movement of pedestrians and bicycles through and adjacent to the site. These costs are the responsibility of the Provincial RTPO. The extension of the Central Valley Bikeway will proceed, if possible, south of the station at an additional estimated cost of:

<i>asphalt</i>	<i>42,000.00</i>
<i>lights</i>	<i>21,000.00</i>
<i>trees</i>	<i>10,000.00</i>
<i>landscaping (\$70/m²)</i>	<i><u>28,000.00</u></i>
	\$101,000.00

2. Adjoining Sidewalk and Street Areas

Station integration into the precinct will also be achieved through the installation of special treatment sidewalks, trees, lighting and an open plaza area at the Kaslo Street intersection with 12th Avenue. Pedestrian access to and around the station will be upgraded and a pedestrian signal together with two bus stops will be provided on Renfrew Street. The estimated associated costs for this work are:

<i>bike racks</i>	<i>2,400.00</i>
<i>benches/bins</i>	<i>4,400.00</i>
<i>shelters/bins</i>	<i>5,600.00</i>
<i>crosswalks/signal, sidewalks (50%) *</i>	
<i>(Renfrew St)</i>	<i>127,500.00</i>
<i>crosswalks, sidewalks (Kaslo St)</i>	<i>107,500.00</i>
<i>railway, sidewalks</i>	<i>8,000.00</i>
<i>lighting</i>	<i>60,000.00</i>
<i>sidewalk/trees</i>	<i><u>128,000.00</u></i>
	\$443,000.00

** 50% of the cost of these crosswalks/signal and sidewalk improvements will be the responsibility of the proposed Broadway Tech Centre development. If this development does not proceed, then the full cost will be associated with the other public enhancements.*

Note: In order to construct the station and guideway at this location, a re-alignment of 12th Avenue is required on the north side of the station and the costs associated with this work are not included.

3. Major Intersections and Connecting Streets

A comprehensive review will be undertaken of the major intersections within the precinct, as well as pedestrian connections to adjacent developments. A preliminary review has identified needed improvements at Grandview Highway and Renfrew Street including modifications to the existing curb ramps, sidewalks, and pedestrian push buttons, and a major upgrade to the traffic signal at Renfrew Street and Broadway.

The estimated cost for this work is:

curb, sidewalks	10,000.00	
signal	<u>120,000.00</u>	
		\$130,000.00

Note: The intersections of Kaslo Street and 12th Avenue and Slocan Street and Grandview Highway North will be realigned. Furthermore, some review and redesign may be required at the Grandview Cut entry point. These are assumed to be a direct cost associated with the guideway construction and therefore are not included in the Public Enhancement Costs.

4. Circulation and Access

A review of the neighbourhood connections will be undertaken, including the connection of the Sunrise Bikeway to the Central Valley Greenway/Bikeway, noting that such a connection requires an extension of the Central Valley portion west to Slocan Street. Also, the Central Valley Greenway/Bikeway will be extended east to the Rupert Station and 50% of this cost (remaining 50% is included in the Rupert Precinct), is:

asphalt	260,000.00	
lights	112,000.00	
trees	50,000.00	
landscaping	140,000.00	
benches	<u>12,000.00</u>	
sub-total	<u>574,000 ÷ 2</u>	\$287,000.00

TOTAL Renfrew Precinct \$961,000.00

Note: The westerly extension of the Central Valley Greenway/Bikeway from the Renfrew Station to Slocan Street is estimated at \$130,000.00 (not included in above estimate).

Appendix B: Interim Rezoning Policies for SkyTrain Station Precincts

Intent

The intent of this interim policy is to provide for a range of ground-oriented businesses within and immediately adjacent to SkyTrain stations for the convenience of area workers, transit users, and the nearby community. This will help to create a walkable, comfortable, safe and attractive street environment and public realm conducive to transit use.

Automobile-oriented uses and those requiring extensive loading facilities are discouraged.

Policy 1. Extent of the Precinct Station: For the purpose of these policies, sites within the Grandview/Boundary study area presently zoned I-2 or Still Creek CD-1, and either abutting or directly across a street or railway right-of-way to a SkyTrain station.

Policy 2. Location: Uses subject to these interim policies should be located at grade, either within a station, on a station site, or on street faces on Rupert, Renfrew, Hebb Avenue or East 11th Avenue, directly adjacent to or across from a station.

Policy 3. Uses: Generally small-scale uses which help make a station environment more vibrant and also feel safer, and which do not tend to either generate destination automobile traffic or require large off-street loading facilities. These may include:

- Convenience stores and services (e.g., news stands, local grocery store)
- Small cafes
- Professional/community services and offices
- Light manufacturing
- Artist studio (excluding associated residential component)

Policy 4. Density: The floor area under the provisions of these policies will not exceed 232.2 m² (2,500 sq. ft.) per subject site. However, the total allowable density within a mixed use development comprised of I-3 or HOR uses will be governed by those uses.

Policy 5. Height:

- (a) if as a stand alone use (i.e., if no other I-3 or HOR uses as per these interim policies): 9.2 m (30 ft.);
- (b) if incorporated into a mixed use development with I-2, Still Creek CD-1 or I-3, then as per relevant District Schedule.

Policy 6. Built Form:

- (a) small storefronts with entries facing identified streets
- (b) transparency at grade facing street(s)
- (c) no blank walls exceeding 1.0 m in length
- (d) weather protection on street elevation(s)
- (e) materials: generally as included in I-3 interim design guidelines

Policy 7. Off-Street Parking: None required for floor area developed under Policy 5.

Policy 8. Mixed Use Development: These station precinct policy directions may also be achieved as an integral component of a mixed use development in an I-3, HOR or I-2/I-3 Conditional Use application. In such an event the height and density

limits of the base schedule would apply. Please refer to the applicable policies and guidelines.

Note: Depending on the specific location of the subject site, the application should describe how the Central Valley Greenway and Bikeway, Still Creek, traffic and circulation requirements and utilities are to be accommodated.

Figure 10: Highlights of Zoning Provisions by Zone

ZONE BASE REGULATION	I-2 Industrial	I-3 High Tech	HOR Highway- Oriented Retail	SkyTrain Station Precinct
Land use emphasis	Manufacturing Warehousing Some high technology uses	High Technology light industry, information technology	Large Format Retail Can be combined with I-2 and I-3	Street-oriented convenience shops and services
Ancillary or Conditional Use directions	a) Ancillary retail & office; b) Conditional recreational, educational & institutional cultural	a) Ancillary retail & office b) Limited recreational, educational & institutional cultural	As per I-2 and I-3 Schedules	As per I-2 and I-3 schedules
Location	In I-2 and Still Creek CD-1 zones of Study Area	In I-2 and Still Creek CD-1 zones of Study Area	Grandview Highway frontage, Renfrew to Boundary Road	At grade on street faces near Rupert & Renfrew station entrances
Size and/or Density (FSR)	3.0	3.0	Minimum 929 m ² (10,000 sq. ft.), plus maximum FSR of 0.6 for HOR, 2.4 for other I-2 or I-3 uses, 3.0 max	Floor area exempt from FSR limits not to exceed 232.3 m ² (2500 sq. ft.) for an eligible site
Height : outright	18.3 m (60 ft.)	18.3 m (60 ft.)	12.2 m (40 ft.)	under base provisions of I-3, HOR or I-2/I-3
conditional	30.5 m (100 ft.)	30.5 m (100 ft.)	conditional to 18.3 m (60 ft.) as part of mixed use development	

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