



POLICY REPORT
DEVELOPMENT AND BUILDING

Report Date: January 27, 2014
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RTS No.: 10394
VanRIMS No.: 08-2000-20
Meeting Date: February 4, 2014

TO: Vancouver City Council

FROM: General Manager of Planning & Development Services in Consultation with
the General Manager of Engineering Services

SUBJECT: Great Northern Way Campus Revised Structure Plan

RECOMMENDATION

- A. THAT Council endorse the revised Great Northern Way Structure Plan attached as Appendix A to guide redevelopment of the Great Northern Way Campus Lands.
- B. THAT Council endorse the revised Great Northern Way Guidelines, attached as Appendix B to reflect the new vision for the site and the revised Structure Plan.
- C. THAT Council give authority to the General Manager of Engineering Services and General Manager of Planning and Development Services to negotiate amendments to the existing Services and Open Space Agreement, Soils Remediation Agreement and any other legal agreements relating to the existing Structure Plan, and to report back to Council any financial implications and potential impact on the public benefits relating to the amended agreements prior to the agreements' execution.
- D. THAT with respect to Recommendations A to C inclusive, no legal rights or obligations will arise or be created until execution by the City and Great Northern Way Campus Trust of new or amended agreements based upon the revised GNW Structure Plan to replace the agreements in place pursuant to the current structure plan, all upon such terms and conditions as the General Manager of Engineering Services, General Manager of Planning and Development Services and Director of Legal Services may require or approve.

REPORT SUMMARY

The purpose of this report is to seek Council's endorsement of a revised Structure Plan to guide the long-term redevelopment of the Great Northern Way Campus Lands. In April 2013 Council approved a planning program to develop a revised Structure Plan of roads, open spaces and development parcels so that future development and subdivision proposals can be considered in the context of a coherent and functional framework for the site. Since May 2013, the planning program has been carried out as a cost-recovered Major Projects process.

The revised Structure Plan, attached as Appendix A, presents a creative solution to facilitate the renewed vision for the site as a cultural and creative economic and education district that will include a mix of commercial and educational businesses, a relocated Emily Carr University (ECU) as well as a future SkyTrain station. The report also seeks Council's endorsement of a revised set of Guidelines which reflect the new vision for the site and the revised Structure Plan.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

CD-1 (402) (1999)

Great Northern Way Technology Park CD-1 Guidelines (1999)

Phase 2 Rapid Transit - Commercial Dr West (Beyond the 'B' Line) (2000)

Public Realm Plan for 555 Great Northern Way (2002)

Modified Structure Plan (Thornton Street alignment) (2008)

Vancouver 2020: A Bright Green Future (2009)

Mount Pleasant Community Plan (2010)

Greenest City 2020 Action Plan (2011)

Vancouver Economic Action Strategy (2011)

Transportation 2040 Plan (2012)

Great Northern Way Campus Revised Structure Plan: Planning Program (2013)

Mount Pleasant Community Plan Implementation Package (2013)

REPORT

Background/Context

The Great Northern Way Campus Lands are located within CD-1 (402) which comprises 11ha (28 acres) of land within the False Creek Flats located north of Great Northern Way, east of Thornton Street and south of the BNSF rail yard (see Figure 1). Lot Q, the 'Campus Lands' form a single 5.7ha (14 acre) subarea bounded by Fraser Street and Thornton Street; Lot Q is referred to as 'the Campus Lands' in this Report.

Figure 1: CD-1 (402) and Lot Q boundaries



Approved by Council in 1999, CD-1 (402) reflected the intent of the former owners, Finning International Inc., to develop the site as the Great Northern Way Technology Park. When the Technology Park concept did not materialise in 2001, Finning gifted 80% of the Campus Lands to the Great Northern Way Campus Trust - a consortium of four academic institutions: UBC, SFU, Emily Carr University (ECU) and BCIT. The Trust then paid approximately \$10 million to acquire the remaining 20% interest. The consortium is referred to as "GNWC Trust" for the remainder of this document.

CD-1 (402) permits up to 236,900m² (2,550,000ft²) of floorspace, primarily educational, high-tech, light industrial and office, but also including live-work, retail and hotel (limited to Lot P and the western portion of Lot Q). Allowable building heights vary from 13.7m (45ft) in the eastern portion of the Campus Lands to 45.7m (150ft) in the west. The CD-1 is accompanied by urban design guidelines addressing various aspects of site design and containing an illustrative Structure Plan; a revised set of Guidelines is attached as Appendix B.

Current Uses and Recent Development

Currently on site there are three original low-rise office/warehouse buildings with approximately 15,000m² (160,000ft²) of floorspace (see Figure 2). Two of these buildings provide teaching space and offices for educational institutions, and studio and event space used for arts organizations and community groups. In 2012, the Equinox and Monte Clark Galleries moved into the third building, a newly-renovated former warehouse.

In 2012 the GNWC Trust opened the Centre for Digital Media (CDM) in a new 4,700m² (51,000ft²) building which houses a graduate program jointly operated and accredited by all four of the GNWC Trust's educational partners. The CDM building contains educational space as well as student residences and was envisioned as a catalyst project for the overall

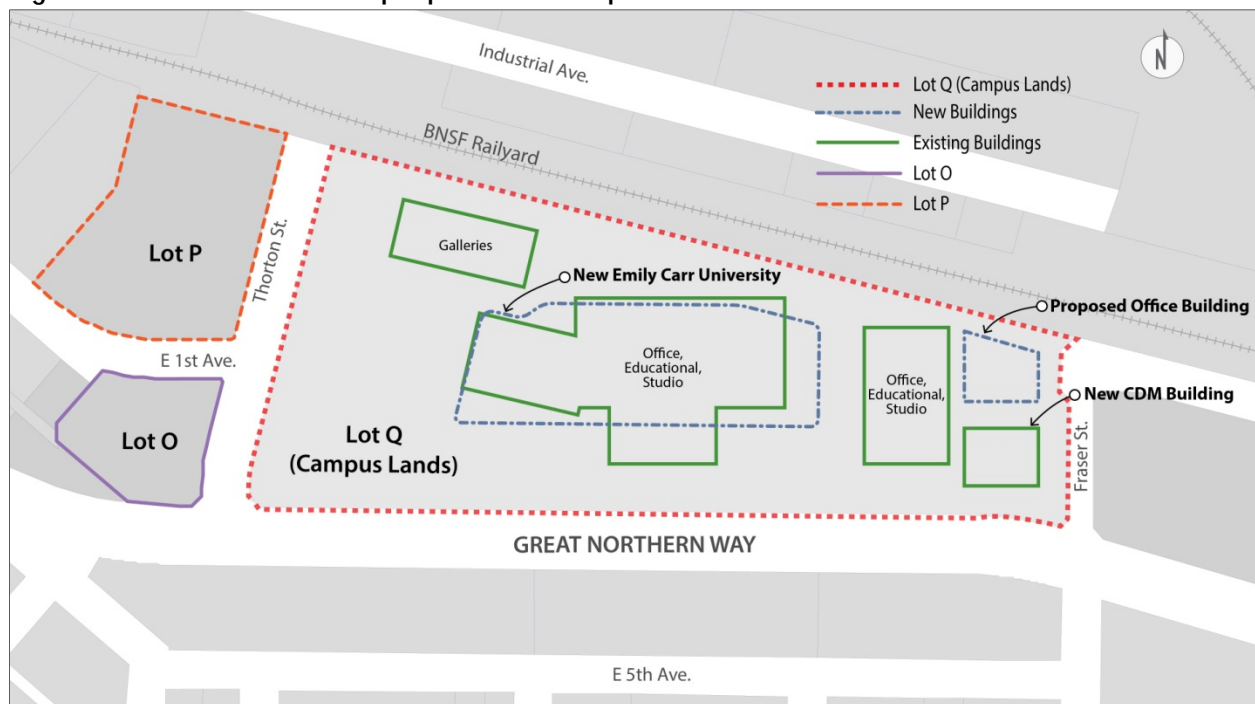
development concept and an anchor for a digital media cluster (see below for an overview of the GNWC Trust development concept).

The GNWC Trust is currently in the Development Permit process to build a new 5,914 m² (63,664 ft²) four-storey office building located at 1933 Fraser Street for digital media tenants. In April 2012, Council amended the Structure Plan to support the development of this project. Amendments included modifying the alignment of a future road between Fraser Street and Carolina Street, and endorsing a modified alignment of the future Broadway Subway (the proposed extension of the Millennium Line from VCC-Clark Station along the Broadway Corridor) across the Campus Lands.

The GNWC Trust previously owned land west of Thornton Street known as Lots O and P. These have been sold to a developer and are discussed in the "Development Concept Overview" discussion below.

Also on the Campus Lands are significant areas of surface parking and vacant land.

Figure 2: Current uses and proposed developments



GNWC Trust Development Concept Overview

The GNWC Trust envisions developing the 14-acre Campus Lands into a revitalized district that stimulates BC's creative economy by co-locating educational institutions, including Emily Carr University, with creative industry tenants. In addition to fostering collaboration between academia and industry, GNWC Trust's goals include job creation, attracting investment, creating a thriving cultural and artistic district, and revitalizing a brownfield site in an environmentally-sustainable manner.

In January 2013, the Provincial Government approved \$113m in funding for the relocation of the Emily Carr University from Granville Island to the Campus Lands. The new and expanded Emily Carr University will be located centrally on the Campus Lands west of Carolina Street, and include 26,600 m² (286,000 ft²) of new floorspace accommodating 1,800 students. In December 2013, Emily Carr University issued a Request for Proposals (RFP) to three teams for the design, construction and financing of the new facility. The RFP follows a public-private partnership model through Partnerships BC, a Provincial body under the Ministry of Finance. Shortly after the selection of a team in 2014, a proposal will be submitted as a Development Permit under existing zoning. The revised Structure Plan supports the relocation of Emily Carr through a viable development parcel, public realm and road network. A Council approved revised Structure Plan will help provide direction to the RFP process and will be required at the time of a Development Permit application.

The GNWC Trust development concept for the Lot Q Campus Lands aligns with the Vancouver Economic Action Strategy and would make a valuable contribution to the City's established policy of increasing and diversifying employment potential in the False Creek Flats, as well as Council's priority to foster creative capital and a growing economy.

In addition to the recently-completed Centre for Digital Media (CDM) building, the proposed four-storey office building at 1933 Fraser Street and the Emily Carr University proposal, GNWC Trust has sold two development parcels to a private developer, the Onni Group (see Figure 2):

- Lot O, for an Artist Live-work project under the existing IC-3 zoning.
- Lot P, where they are advancing a concept for Live-work and student rental housing proposal under the existing CD-1 zoning.

Council Policy

Vancouver 2020: A Bright Green Future (October 2009) and **Greenest City 2020 Action Plan** (July 2011): In October 2009, Council received the Greenest City Action Team's report entitled *Vancouver 2020: A Bright Green Future*. Vancouver 2020 specifically identified the Campus Lands as part of a potential Green Enterprise Zone in the False Creek Flats and the Downtown Eastside, designated to serve as a magnet for the development of green businesses, technologies, products and services. In July 2011, Council endorsed the Greenest City 2020 Action Plan. There are a number of Action Plan goals are relevant to the redevelopment of the Great Northern Way Campus, including:

- Green Economy (Green Enterprise Zone, local employment)
- Climate Leadership (renewable energy, green buildings, green transportation)
- Access to nature (new open space and green space, commemoration of former streams).

Mount Pleasant Community Plan (November 2010): The Mount Pleasant Community Plan covers the area bordering the Campus Lands to the south of Great Northern Way. The Plan contains comprehensive, long-range policy guidance, as well as specific plans for shopping and residential sub-areas. The Plan calls for the potential rapid transit station at the Campus Lands to be located and designed to facilitate easy pedestrian access to and from the adjacent residential areas of Mount Pleasant.

Mount Pleasant Community Plan Implementation Package (October 2013): The Mount Pleasant Implementation Package builds on the Community Plan to clarify and advance policy

directions. The Implementation package was developed through further consultation with the community, and provides more detailed direction to assist plan implementation through a variety of programs and initiatives involving various parties, including the City, senior levels of government, the community, non-profit organizations and the private sector. As part of the package, a Public Realm Plan outlines the St. George Rainway, a community initiative to recognize a historic stream through a stormwater feature which extends from Kingsway to the Great Northern Way Campus.

False Creek Flats Area Plan (June 2013): In June 2013 Council approved a False Creek Flats Area planning program to develop principles and policy directions for the area between Main Street to the west, Clark Drive to the east, Prior/Venables to the North and Great Northern Way to the South. Preliminary background work has begun with a public launch anticipated in 2014. Understanding the larger framework for transportation and land use in the False Creek Flats has been an important component of the Structure Planning Process to ensure integration between the Campus Lands and the surrounding areas.

Vancouver Economic Commission's Vancouver Economic Action Strategy (2011): GNWC Trust liaised closely with Vancouver Economic Commission (VEC) in the creation of its Economic Action Strategy. The GNWC Trust project is well-aligned with the strategy's recommendations, particularly in the areas of promoting innovation, bolstering the creative economy, creating work/live neighbourhoods and a Green Enterprise Zone (which would encompass the Campus Lands), protecting and enhancing job space, and fostering collaboration between the City and post-secondary institutions in Vancouver.

Transportation 2040 Plan (2012): Transportation 2040 is a long-term strategic vision for the city that will help guide transportation and land use decisions for the years ahead. The Plan sets long-term mode share and safety targets and includes both high-level policies and specific actions to support a socially, economically, and environmentally sustainable future. A number of directions are relevant to Great Northern Way Campus, including the following:

- Make streets accessible for all people (W.1.3).
- Safe, well-connected walking and cycling networks, and specifically identifies the False Creek Flats area as a high-priority location for improving connectivity (W.1.5.1, C.1.2).
- A Millennium Line extension serving the Broadway Corridor as a top regional priority that is essential to meet plan targets; this extension will pass through the Campus Lands (T.1.1.1).
- Protecting and improving rail corridors for goods and passenger movement, and implementing the False Creek Flats Rail Corridor Strategy, subject to refinement based upon the False Creek Flats Area Plan and updated plan directions to improve walking, cycling, and neighbourhood circulation (G.1.1.1).
- Locating major trip generators—as well as encouraging a dense and diverse mix of services, amenities, jobs, and housing types—in areas well-served by frequent, high-capacity transit (L1.1, L.1.2). The proposed Millennium Line extension will make the Campus Lands an extremely transit-rich location capable of supporting such development.

UBC Line Rapid Transit Study (2012): TransLink and the Province of BC have completed a technical study evaluating alternatives for rapid transit in the Broadway corridor between Commercial Drive and the University of British Columbia. The study provides strong evidence

that a Broadway Subway is the right rapid transit solution for the corridor, and the Mayor and Council have expressed their support for this project.

The Broadway Corridor is BC's second largest business and innovation area and North America's busiest bus route. More than 200,000 people currently live and work in the area and 50% of the corridor transit riders currently come from beyond Vancouver. Transportation 2040 identified the implementation of the Broadway subway as the City's number one transportation priority.

In 2013, the City of Vancouver and the University of British Columbia released a study showing that employment and population in the UBC-Broadway corridor could grow by 150,000 over next 30 years, and that a fast, high-capacity rail-based rapid transit system - a subway - is needed to meet the corridor's population growth and significant economic potential. Vancouver Coastal Health and BC Cancer Agency operations along the corridor create the largest health care and life sciences precinct in the province. Linking the institutional uses and creative industries emerging at the Great Northern Way Campus with the economic and health drivers in Central Broadway strengthens the relationship of these two areas and supports economic growth in the corridor and the region.

Great Northern Way Campus Revised Structure Plan: Planning Program (2013)

In April 2013, Council endorsed a work program to develop a revised Structure Plan of roads, parcels and open space to guide the long-term redevelopment of the Great Northern Way Campus Lands. Since May 2013 the program has been carried out as a cost-recovered Major Project process through a financial contribution from GNWC Trust.

Strategic Analysis

Since May 2013 City staff have worked collaboratively with the Great Northern Way Campus Trust and Emily Carr University to develop a revised Structure Plan that achieves City objectives while also representing the Trust's new vision for the site including the relocation of Emily Carr.

This section of the report presents the following:

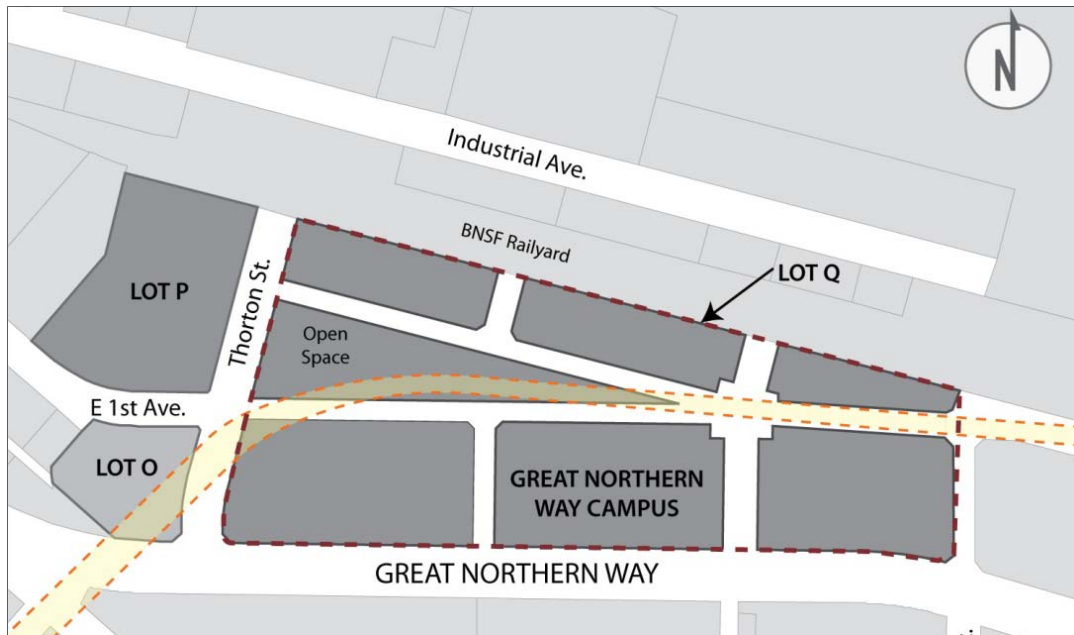
1. An overview of the existing Structure Plan
2. The revised Structure Plan developed through the planning process with an overview of each element

1. Original Structure Plan for CD-1 (402)

The original Structure Plan (see Figure 3) associated with the CD-1 zoning and modified in 2008 to improve the alignment of Thornton Street was based on several assumptions.

1. That the BNSF railroad tracks immediately north of the Campus Lands would be removed and a regularized block pattern imposed.
2. That the rapid transit alignment would be accommodated in an east-west corridor across the middle of the Campus Lands with the entrance to an underground station in the eastern portion of a central open space.
3. That all buildings would be removed.

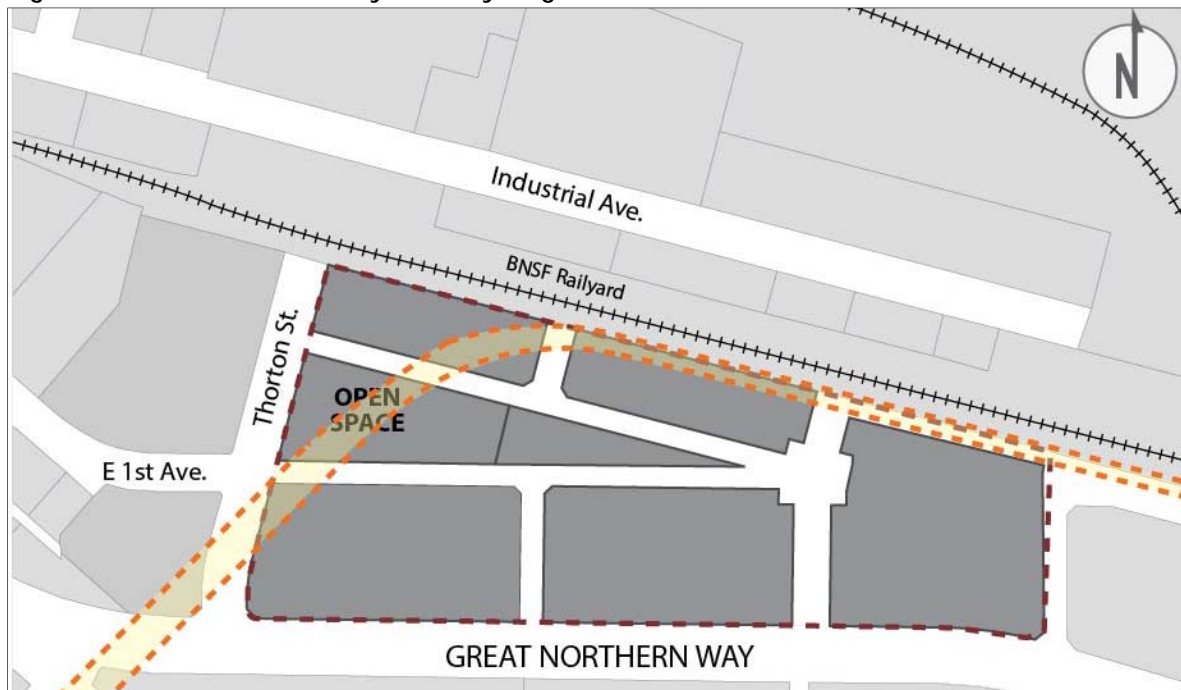
Figure 3 Original Structure Plan



The conclusion of the 2006 analysis of rail operations in the False Creek Flats, commissioned by the Greater Vancouver Gateway Council, was that the BNSF tracks north of the Campus Lands will remain in place over the longer term. The original Structure Plan anticipated their removal and envisioned the creation of regular blocks between the Campus Lands and Industrial Avenue. This resulted in the creation of sub-optimal development parcels along the northern portion of the Campus Lands (the three small parcels adjacent to the BNSF rail yard between Thornton Street and Fraser Street). These development parcels conflict with the large site identified for the relocated Emily Carr University as well as the intention of the GNWC Trust to retain two of their existing buildings in the medium term

In 2012, Council endorsed a modified Broadway Subway alignment developed by TransLink and SNC Lavalin and recommended by City staff. The new alignment is located along the north side of the GNW site and turns southward as it approaches Thornton Street (see Figure 4). The new alignment allows for an improved block layout that is better integrated with GNW's current development and construction phasing plans. The new alignment allows for the preservation of most of GNWC Trust's buildings, improves the redevelopment potential of the Campus Lands, (including the relocation of Emily Carr University), and locates a future station closer to the intersection of Thornton Street, providing good transit visibility and integration with the Mount Pleasant community, and the ability to integrate the station into the future development of the southwest corner of the Campus Lands.

Figure 4: Revised Broadway Subway Alignment



2. Revised Structure Plan

This section summarizes the various elements of the revised Structure Plan.

City staff have worked closely with the Great Northern Way Campus Trust and Emily Carr University to develop a revised Structure Plan that meets City objectives while facilitating the vision and timelines of the City, Emily Carr, and the GNWC Trust. The Structure Plan will guide the consideration of future development and subdivision proposals on Lot Q, the Campus Lands. It offers clear direction and parameters to facilitate the relocation of Emily Carr University while containing enough flexibility to accommodate the incremental development over the remaining lands.

The Structure plan (Figure 5) is intended to offer guidance to the following site planning elements while allowing room for flexibility in the design process and in implementation:

1. Road network and walking, cycling, and motor vehicle circulation
2. Development parcel configuration and phasing
3. Broadway Subway
4. Site grading
5. Open space configuration
6. Servicing
7. Public realm

Figure 5: Revised Structure Plan

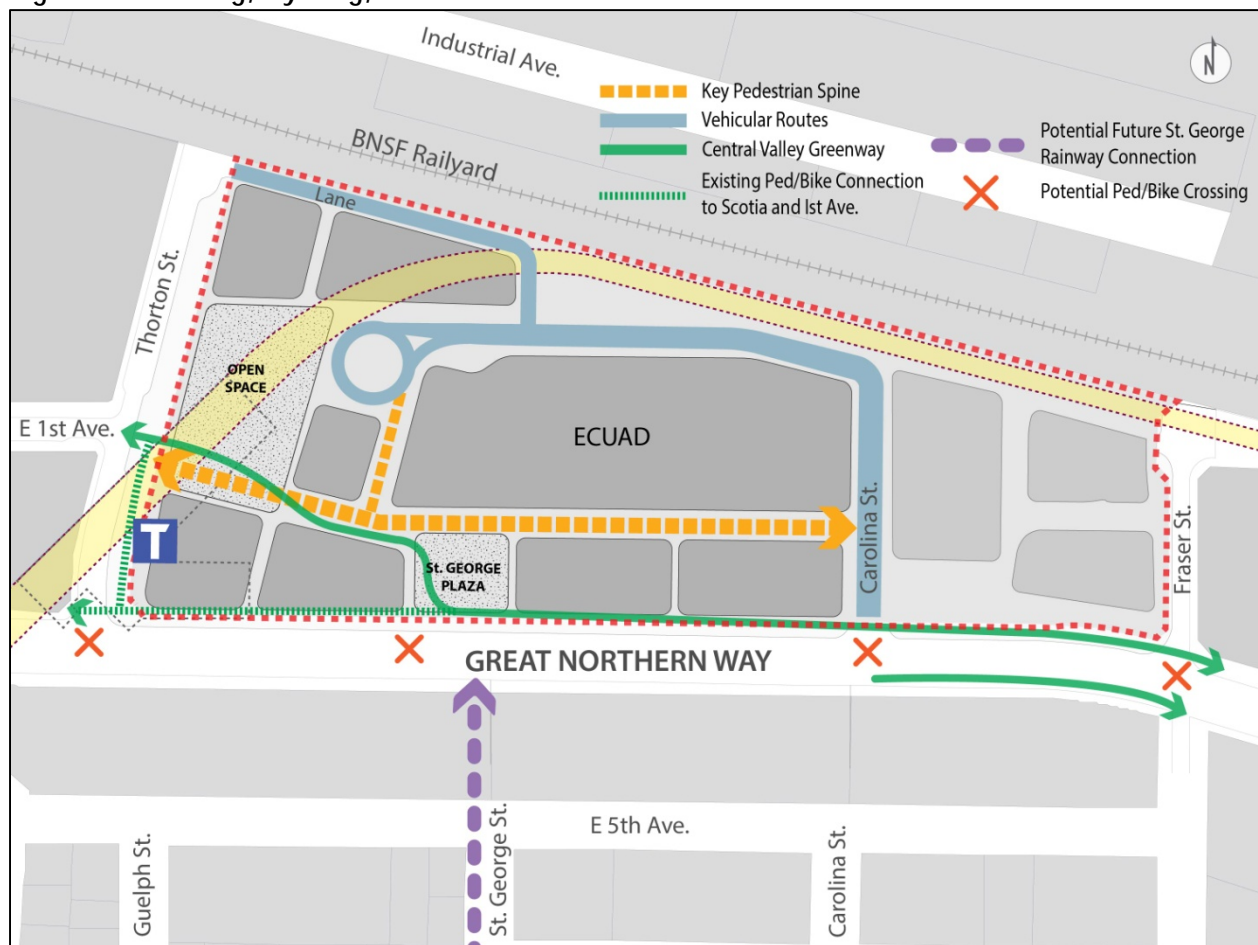


Road Network and Circulation

A single 20m wide road will provide primary vehicular access to the site from Great Northern Way. The road will align with Carolina Street at Great Northern Way. A new traffic signal will be required at the intersection with Great Northern Way to facilitate access to and from the site. A cul-de-sac at the terminus of the road will be used as a vehicle turn-around as well as for student pick up and drop off (see Figure 6).

Along the northern edge of the site, a 9m wide lane will provide secondary access to the site from Thornton Street, and parking and servicing access to the two northerly development sites. It is expected that a traffic signal will be installed at the intersection of Thornton Street and Great Northern Way to facilitate increased walking, cycling, transit and motor vehicle traffic from the site as well as from adjacent Lots O and P.

Figure 6: Walking, Cycling, and Motor Vehicle Connections



Active Transportation Connections

The Central Valley Greenway (CVG) is a 25-kilometre long regional walking and cycling facility that extends from New Westminster to the Seaside Greenway (Vancouver's Seawall) at Science World. Adjacent to the Great Northern Way Campus, the CVG is a shared path located along the north side of Great Northern Way. The grade change along the greenway between St. George and Thornton St. is approximately five meters (15 feet). The path crosses several driveways, which are conflict points with vehicles and some of which have poor visibility. Additionally, staff have frequently heard concerns from people using the greenway about the speed of bicycles coming down the hill, and the need for separation between people walking and cycling.

The revised Structure Plan proposes realigning a portion of the CVG through the Campus Lands, providing a separated sidewalk and cycle path along Great Northern Way and removing several driveways along Great Northern Way. The key outcomes of this are:

- 1) Improved walking and cycling safety by reducing conflict points to locations where they can be controlled (such as at the signalized intersection of Carolina and Great Northern Way).
- 2) Increased walking and cycling comfort by separating the walking and cycling facilities and reducing grade changes.
- 3) Increased comfort at night through the provision of quality lighting and good visibility from streets and other animated areas.

More work will be done when development permits are issued to facilitate cycling access to the different development sites.

In addition to the improvements to the Central Valley Greenway, a central east-west pedestrian spine is proposed through the site. The spine will extend from Carolina Street to First Avenue and will provide a pedestrian-only corridor through the Campus; connecting St. George Plaza, the Central Open Space and the entrance to the ECU building. The pedestrian spine will be designed with grades that meet accessibility guidelines and a high-quality surface treatment that integrates with the surrounding buildings. The pedestrian spine and St. George plaza will be secured with public access rights-of-way but it is not expected that they will be dedicated to the City (see Figure 6).

The current five metre escarpment south of Great Northern Way presents a significant barrier to accessing the Campus Lands, particularly for people in wheelchairs. Fully accessible connections to the Campus Lands from Mt Pleasant for walking, cycling and wheelchair users were an important part of the Mount Pleasant Community Plan and accessibility is a key component of Transportation 2040.

In addition to the two signalized intersections at Thornton Street and Carolina Street, the Structure Plan contemplates exploring the feasibility of a future pedestrian crossing at the St. George alignment. A set of stairs along a public right-of-way down the escarpment would connect the current St. George terminus at Fifth Avenue to Great Northern Way and a pedestrian signal would provide a connection across Great Northern Way to the proposed St. George Plaza on the Great Northern Way Campus site (see Figure 6). This connection will require achieving a public right-of-way down the escarpment.

Opportunities for a fully accessible crossing for walking, cycling and users of wheelchairs and strollers will be explored at either Carolina or Fraser Street through future planning processes.

Through the development process, staff would also seek space for future Public Bike Share stations, including near the future transit station and in locations convenient for Emily Carr students and faculty.

Parking & Loading

The CD-1 bylaw contains site-specific parking and loading requirements which were based on the technology park concept from the original rezoning. These requirements are above current bylaw standards and no longer relevant given the proposed use. Staff recommends removing these standards from the CD-1 bylaw and allowing the Parking Bylaw to govern parking and loading requirements. Staff will bring forward a report at a future date for referral to Public Hearing to make this amendment. As development proposals are brought forward, staff will work with applicants to assess parking demands and to ensure the standard being specified is appropriate for the proposed development.

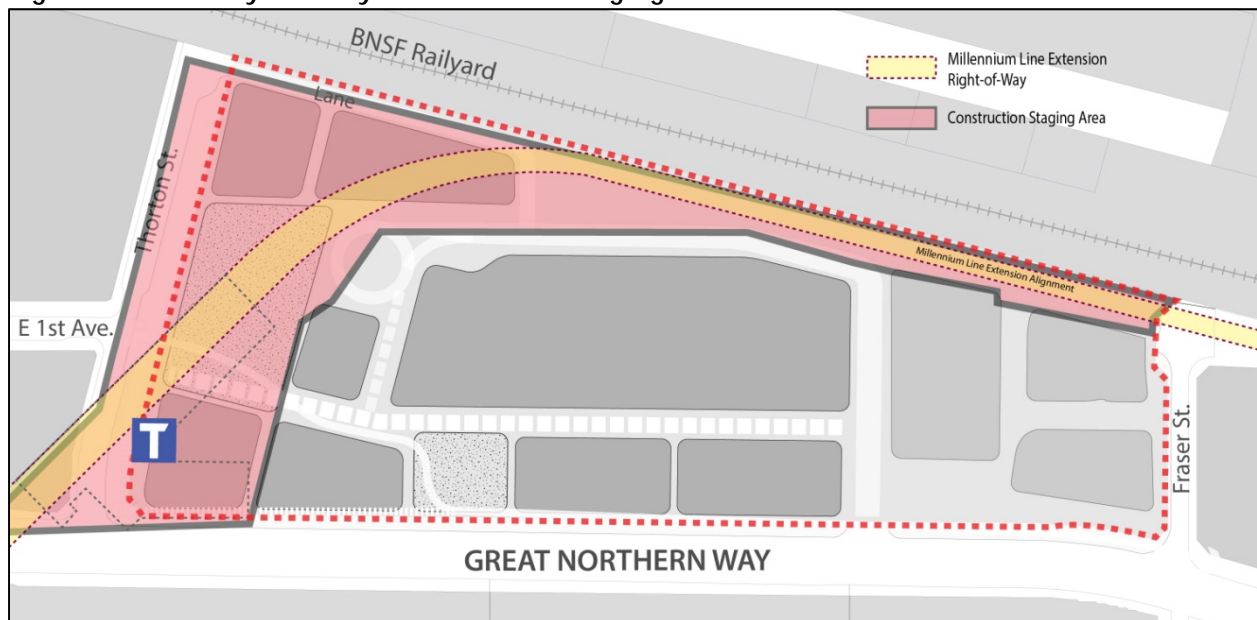
The Parking Bylaw does not specify a specific standard for universities, colleges, and similar institutions, but instead allows the General Manager of Planning and Development Services to exercise judgement in the provision of parking. For the Emily Carr University project, staff will work with GNWC Trust and ECU as part of the ECU Development Permit application and will determine appropriate requirements through that process.

Broadway Subway

It is anticipated that the Campus Lands will be the primary staging area for the tunnel boring machine and associated operations for the construction of the Broadway Subway (Figure 7). In 2011, as part of the evaluation of a new SkyTrain alignment, TransLink identified a staging area required for construction. During the Structure Planning process, City staff along with GNWC Trust worked with TransLink and their consultants to refine the 2011 staging area with site planning and grading options that minimize impacts to both Broadway Subway construction and the development aspirations of the GNWC Trust.

The analysis presented a modified staging area (see Figure 7) and identified impacts to phase one, pre-SkyTrain development sites. The City and the GNWC Trust are currently working together to find a balanced solution which mitigates the impacts of the proposed staging area on GNWC Trust's development program but provides certainty for the successful construction of the Broadway Subway which will extend the Millennium Line westward.

Figure 7 Broadway Subway Construction Staging Area



Development Parcel Configuration and Phasing

The proposed development parcel configuration endorsed through the Structure Planning process accommodates the development aspirations of the GNWC Trust while also providing a parcel for the relocation of Emily Carr University and a viable staging area to allow for the construction of the Broadway Subway line.

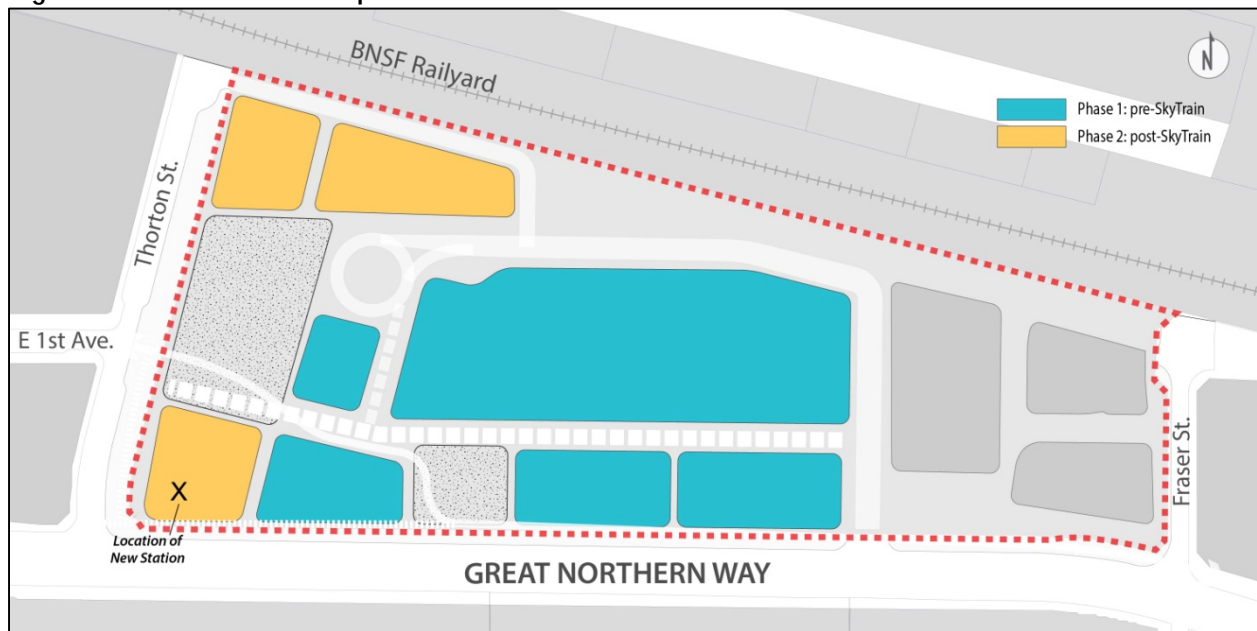
The GNWC Trust proposes to adopt a 'land development' approach whereby it will service and subdivide the Campus Lands into development parcels and facilitate their development through either long-term leases or freehold sale to developers, investors and other partners.

GNWC's financial model envisages that the Campus Lands could be fully developed in 10-20 years (depending on many factors such as market conditions); development will occur in two phases (pre- and post-Broadway Subway completion) and will realize a total of approximately 121,000m² (1,300,000 ft²) of development on the site, significantly less than the 236,900m² (2,550,000ft²) permitted in the CD-1 zoning.

The first phase of development is planned to occur prior to the Broadway Subway construction and will include approximately 65,000m² (700,000 ft²) of development through construction on five parcels, illustrated in Figure 8. Upon approval of the revised Structure Plan, and the new or amended agreements being entered into that are consistent with the revised Structure Plan, the GNWC Trust plans to seek approval by the City of a subdivision plan. This subdivision plan will identify a 26,000 m² (280,000 ft²) parcel which the GNWC Trust will then transfer ownership to Emily Carr in order to begin construction of the new relocated University. The first phase of development will allow for the retention of the existing 525 Great Northern Way building, the newly-renovated 1,100m² (12,000ft²) warehouse which houses the Monte Clark and Equinox Galleries. As this building is a priority for the Trust and aligns with the vision for the site, its retention will be accommodated through a realigned road network and interim grading until construction of the Broadway Subway.

The second phase of development will occur after construction of the Broadway Subway and will include approximately 37,160m² (400,000 ft²) of development on three parcels, illustrated in Figure 8. The southwest building at Thornton Street will incorporate a new station entry for the Broadway Subway.

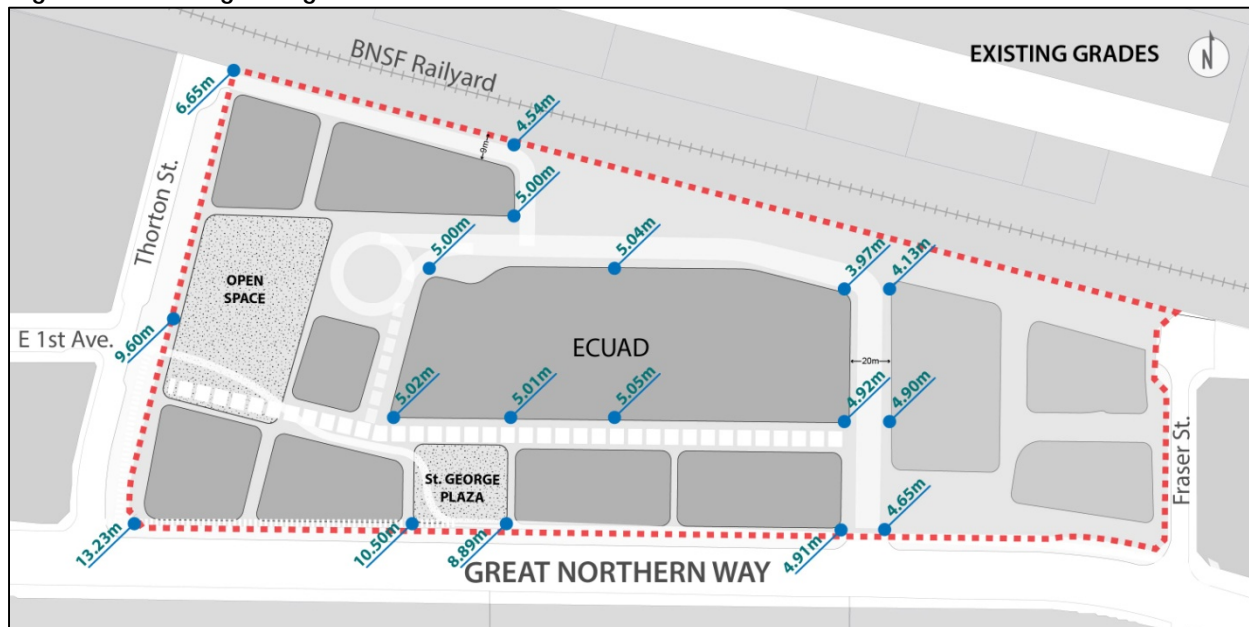
Figure 8 Phases of development



Site Grades

The existing grades of the Campus Lands are essentially flat across the majority of the site with an average elevation of approximately 5 metres (see Figure 9). However, a significant grade change occurs on the southern and western edges of the site, along Great Northern Way and Thornton Street, where the elevation rises to approximately 13 metres (42 feet). This escarpment condition results in the majority of the site being much lower than Great Northern Way and poorly integrated with the surrounding community.

Figure 9 Existing site grades



The Structure Plan proposes raising the grades on the Campus Lands, particularly on the western side, such that the site has a more gradual grade change across it. This will achieve a number of key objectives:

1. Accommodate the below-grade portion of the Broadway Subway and locate the portal along the northern edge of the site.
2. Better integrate the site and building mass with Great Northern Way and the surrounding neighbourhood.
3. Provide the Campus with an improved street presence.
4. Improve pedestrian and cycling accessibility by eliminating several metres of unnecessary grade change along the existing Central Valley Greenway.
5. Ensure accessible and more usable open spaces.

Final site grades will be as generally indicated on Figure 10. Variations of the final grades may be considered if they meet the performance objectives of an improved Central Valley Greenway connection, better site integration and street presence, and more usable open spaces.

Due to the phased development of the Campus Lands, final grades will not be achieved in some places until after the Broadway Subway has been constructed. Prior to that, interim grades will be provided as indicated on Figure 11, which significantly improves upon the existing condition while maintaining access to 525 Great Northern Way (gallery building).

Some buildings will need to respond to both interim and final grading solutions in terms of entries, plazas, roads and pedestrian circulation systems.

Figure 10 Final Site Grades

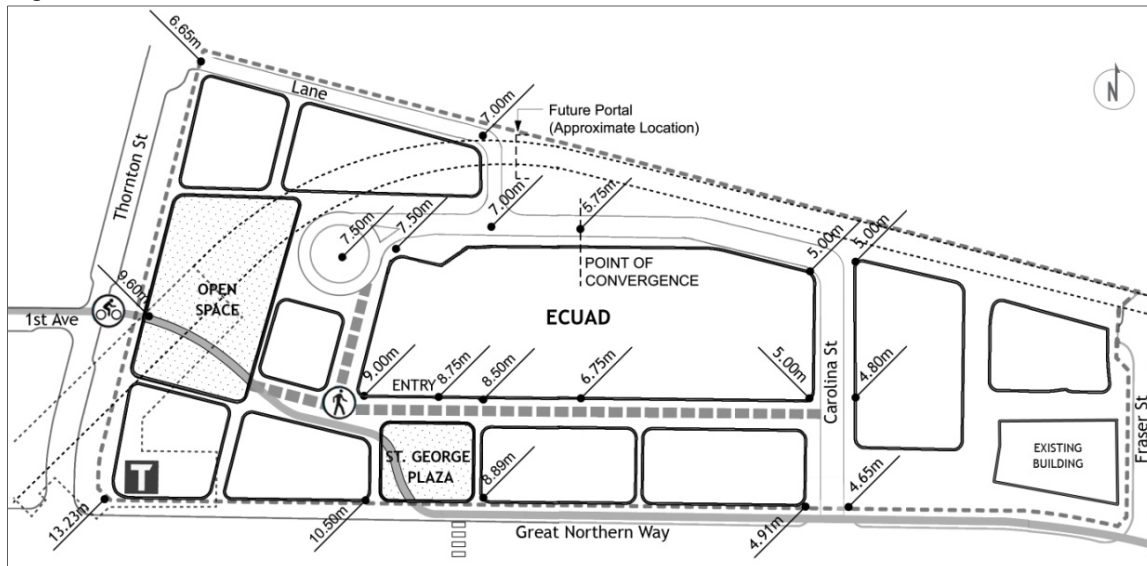
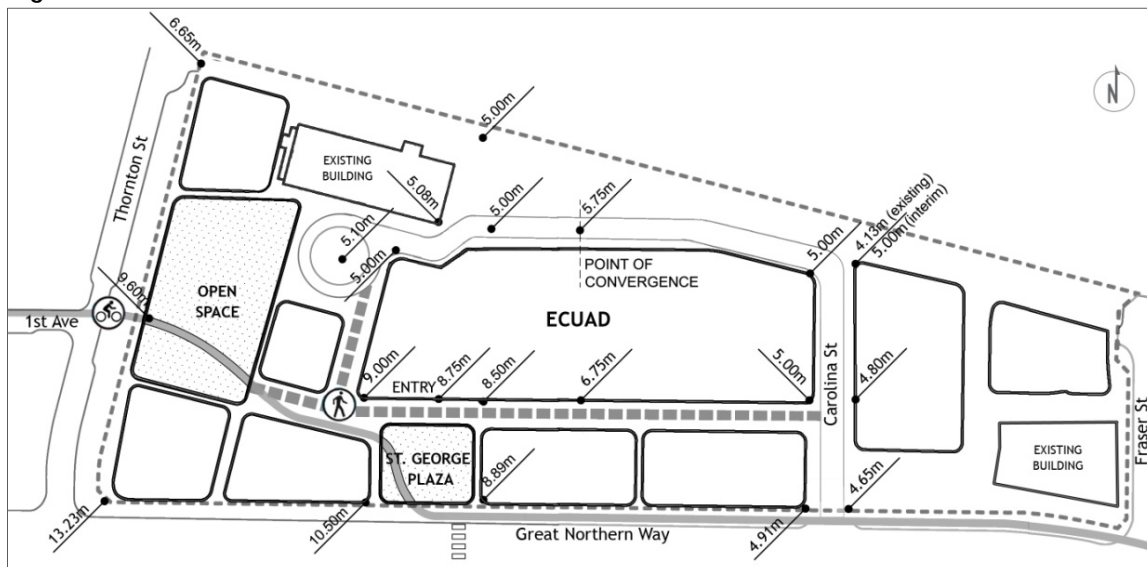


Figure 11 Interim Site Grades



Open Space

The configuration of open space plan is an important organizing element and a principle amenity of the revised Structure Plan. Both a large central open space and a smaller plaza will be provided as part of the redevelopment of the Lands (see Figure 12).

Central Open Space

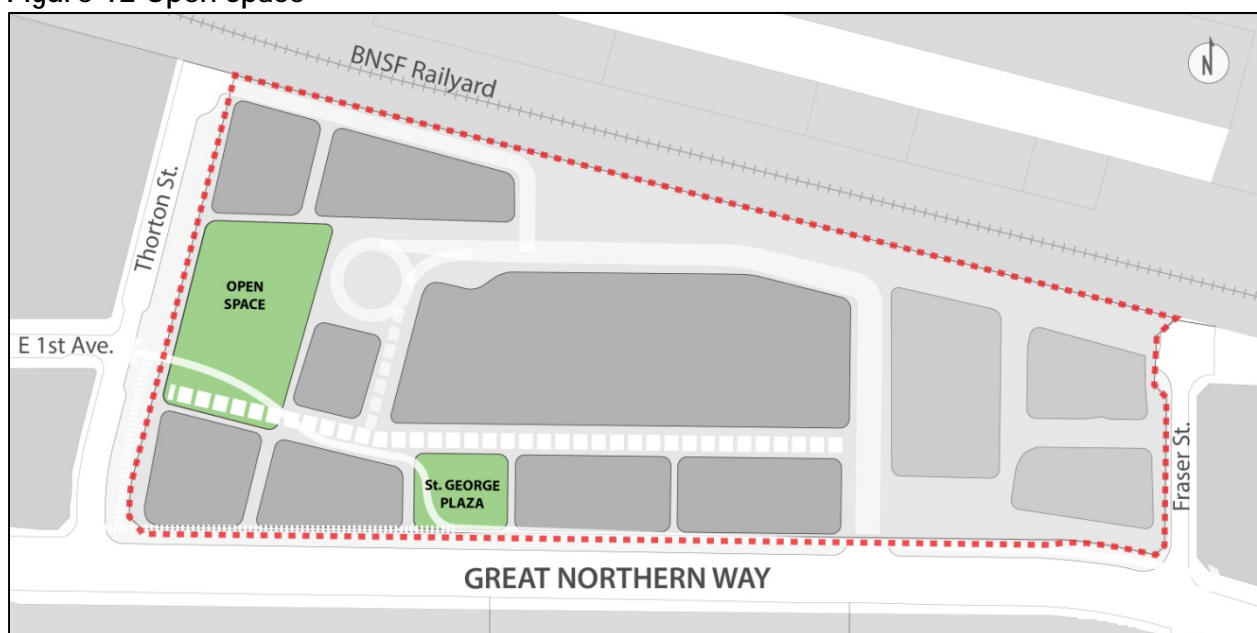
CD-1 (402) requires a 0.49 ha (1.22 acre) Central Space to be provided. This space will be dedicated to the City and will be located to the western edge of the site and bordered by active building faces including the Broadway Subway station along the southern edge. As the

space sits within the SkyTrain construction staging area it will initially be delivered as an interim public green space. Upon completion of the SkyTrain extension it will be completed to finished grades and treatment.

St. George Plaza

An additional open space will be created along Great Northern Way, following the alignment of St. George Street. This plaza will act as the main entry to Emily Carr University and as a public gathering place though it is not expected that it will be dedicated to the City. It will also link to the St. George Rainway, a community initiative of the Mount Pleasant Public Realm Plan which seeks to create a naturalized storm water system in recognition of a historic waterway which extended along St. George Street from Kingsway to the False Creek Flats. The St. George Plaza will commemorate the historic stream through its design and public realm features.

Figure 12 Open Space



Servicing

The current Services and Open Space Agreement (SOSA) registered on the Campus Lands title is based on the former Technology Park land use and phasing plan. A revised Services and Open Space Agreement based on the new Structure Plan will be required to be entered into for the lands on terms and conditions to the satisfaction of the General Manager of Engineering Services, General Manager of Planning and Development Services and Director of Legal Services. The terms of the revised SOSA and any related financial implications and potential impact on the public benefits will be brought to Council for consideration at a future date prior to being executed. The SOSA will include district energy as the lands are within the Southeast False Creek District Energy Bylaw area and all new buildings, where feasible, are required to connect to the system. An assessment of the surrounding municipal infrastructure will also be done to identify any impacts.

Public Realm

Public Realm Plan

CD-1 (402) was accompanied by the Great Northern Way Lands Public Realm Plan, adopted by Council in 2002. The Plan outlined a Public Realm Concept which aligned with the sites previous vision as a technology park and included a detailed component catalogue of site furniture, lighting and landscape species. Through the Structure Planning Process staff have updated and integrated key information from the Public Realm Plan into the amended CD-1 Guidelines. Therefore the CD-1 Guidelines will be the primary guiding document for future development and will supersede the 2002 Public Realm Plan.

Public Realm Phasing

The Central Pedestrian Spine along the western edge of the Emily Carr site will be delivered to final grades and surface treatment at the same time as the development of Emily Carr University in order to ensure a fully functional and accessible site for students, staff and the public.

Great Northern Way

The original Public Realm Plan for Great Northern Way contemplated a wide setback and landscape buffer along the northern side of Great Northern Way. This buffer was intended to provide additional green space as well as the extra width required to achieve a wide median in the centre of the street and enhanced walking and cycling facilities. The design for Great Northern Way would have necessitated major road reconstruction to build the median and shift the northern curb northward into the site.

With the new Structure Plan, a reduced setback and modified concept for Great Northern Way are being recommended. A centre median is no longer being contemplated, in part to reduce the crossing distance for pedestrians. In addition, the new concept for Great Northern Way would only require moving the curb in a small portion of the length, which would create significant cost savings for the project. Reducing the setback would also allow the building footprints to be wider, creating more viable building sites, as well as allowing for the buildings to integrate better into the Great Northern Way public realm.

Currently the Central Valley Greenway on Great Northern Way is a shared walking and cycling path. A separated sidewalk and cycle path is expected on the north side of Great Northern Way between Fraser and Thornton Streets, to reduce conflicts between people walking and cycling; the new sidewalk will be constructed within the 3.0 metre statutory right-of-way. The potential future alignment of the Central Valley on Great Northern Way between Carolina and Clark envisions separate one-way cycle tracks and sidewalks on both sides of the street to improve crossing of the numerous existing driveways on the north side east of the campus lands.

Public Consultation

A number of public consultation methods, both in person and online, were used to seek public input and feedback on the revised Structure Plan.

On Wednesday, October 23rd, 2013 the City hosted a public information open house at the Main Atrium of the Great Northern Way Campus. The open house was advertised through local newspapers, online and through an email listserve of approximately 1,500 people. City staff and representatives from the Great Northern Way Campus Trust were available and approximately 50 people attended. Presentation materials included City information boards explaining the planning context, guiding principles and background about the original Structure Plan and the proposed revised Structure Plan, including details about transportation connections, open spaces and development parcel configuration. The Great Northern Way Campus Trust presented boards describing their vision and intended uses for the site. Both sets of boards were posted on the Great Northern Way project website following the open house.

A comment form was made available at the open houses as well as on the project website. To ensure that a full range of opinions was collected from the local neighbourhood, an additional notification letter about the Structure Planning process was sent to 4,353 occupants in the surrounding area. The letters, dated November 12th, 2013, sought the recipient's input and directed them to the open house presentation materials and questionnaire available on the website. Feedback was generally positive and supportive of the revised Structure Plan. There was a strong desire from the public to see integration of the St. George Rainway and more water features into the open spaces on the site. Input was favourable towards the proposed central pedestrian spine and the re-routing of the Central Valley Greenway through the site (see Figure 6). The general desire was for these modes to be prioritized on campus to complement the future Millennium Line extension. Some concerns were expressed relating to the impact that grade changes may have on existing trees and shadow impacts to open spaces.

Implications/Related Issues/Risk (if applicable)

Financial

As noted in the Strategic Analysis section, staff recommend that the existing Services and Open Space Agreement (SOSA) and other existing agreements relating to the Structure Plan, including a Soils Agreement and various statutory rights of way, be revised. Terms of the revised SOSA and other agreements, and the related financial implications and implications for site servicing and delivery of public benefits, will be brought to Council for consideration prior to the agreements' execution. This will occur concurrent with the consideration of the next development application on the site.

Sustainability

The creation of a revised Structure Plan will facilitate the redevelopment of GNWC Trust from an underdeveloped brownfield site to a vibrant mixed-use district well-served by transit. It has the potential to achieve significant sustainability benefits through intensification of land use on a site in the centre of the metropolitan region, as well as application of green principles in site planning and design. From a green energy perspective, all new buildings on the Campus Lands, where feasible, will connect to the Southeast False Creek Neighbourhood Energy Utility as the result of a 2012 amendment to the SEFC District Energy Bylaw.

Environmental

A Soils Agreement is currently registered on the Campus Lands title, which requires that soils, surface water and groundwater within lands dedicated or transferred to the City be remediated to the City's standard, according to the development phasing plan of the time. This agreement will be updated to reflect the development phasing plan and location of open space and roads within the revised Structure Plan.

Legal

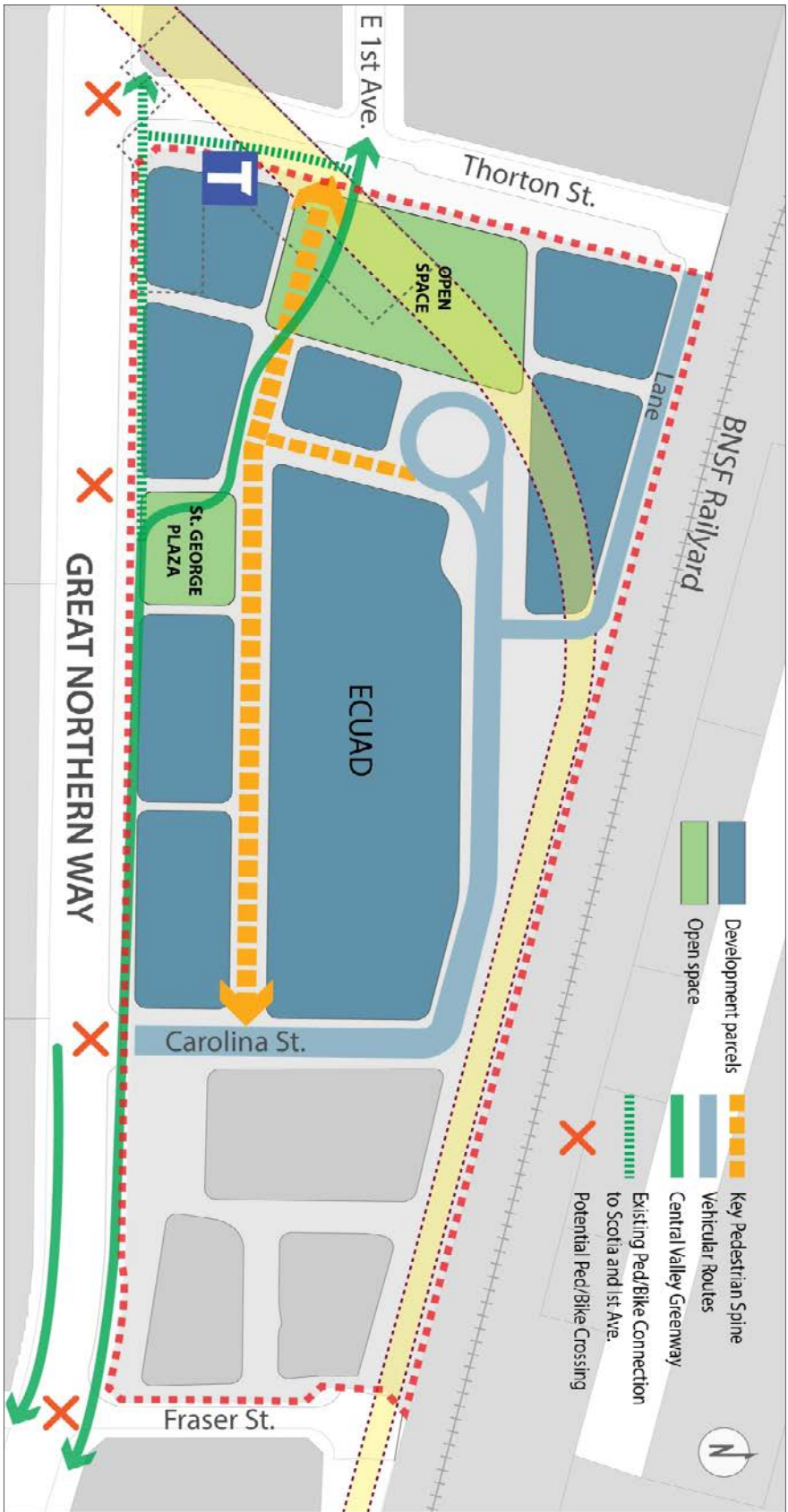
The existing agreements in place related to the current Structure Plan must be amended or replaced with new agreements based upon the revised Structure Plan. These agreements include a Soils Agreement, a Services and Open Space Agreement, various statutory rights of way and other agreements that were applicable to the original land and development configuration. The Director of Legal Services in conjunction with the General Manager of Engineering Services and General Manager of Planning and Development Services will work with the GNWC Trust to revise the legal obligations as needed.

CONCLUSION

The revised Great Northern Way Structure Plan establishes a framework to guide the long term redevelopment of the Great Northern Way Campus Lands through a new system of roads, open spaces and development parcels. It presents a creative solution that will facilitate a new vision for the site as a cultural and creative district with a mix of commercial and educational businesses, a relocated Emily Carr University as well as a future SkyTrain station along the Broadway Subway Line.

* * * * *

Revised Structure Plan





Land Use and Development Policies and Guidelines

Planning & Development Services, 453 W. 12th Ave Vancouver, BC V5Y 1V4

604.873.7344 fax 873.7060

**GREAT NORTHERN WAY CD-1 GUIDELINES
(555 GREAT NORTHERN WAY)**

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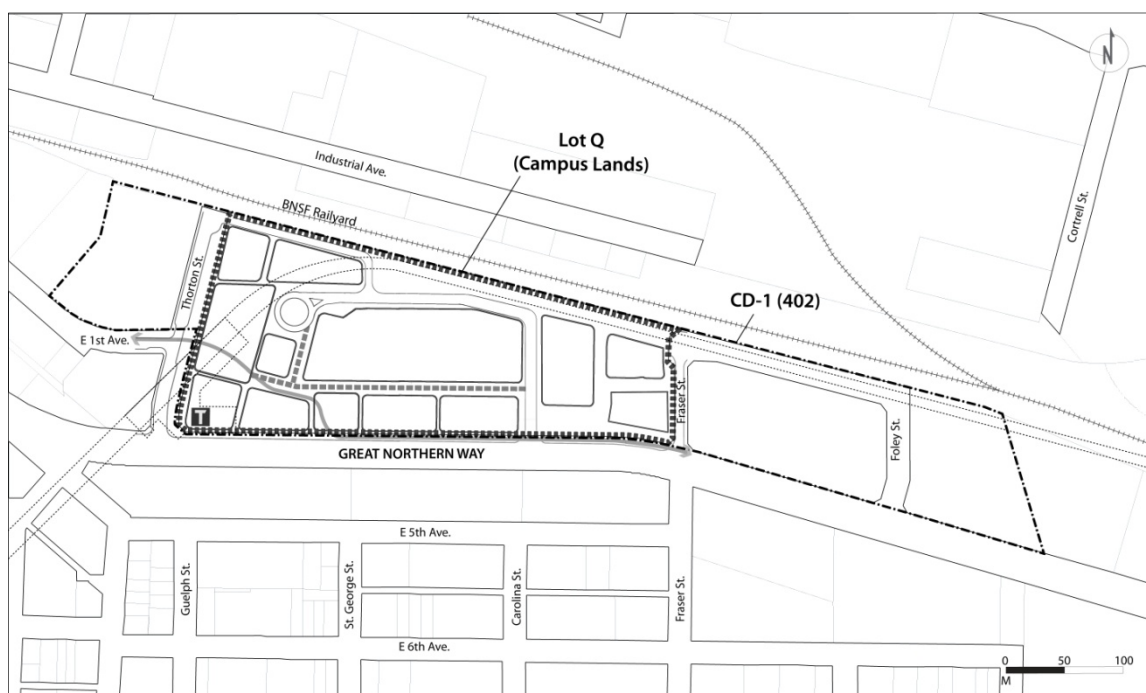
1 Application and Intent

1.1 Application

These guidelines should be used in conjunction with the Great Northern Way CD-1 (402) by-law for 555 Great Northern Way to guide development of the area. As well as assisting the development permit applicant, the guidelines will be used by City staff in evaluating proposed developments.

The guidelines will assist the design of individual developments to ensure compatibility with the overall urban design concept and principles for the Great Northern Way Campus (Lot Q) and adjacent lands (Figure 1).

Figure 1 - Guideline Boundaries



1.2 Intent

The intent of these guidelines is to assist the applicant in meeting the following goals and objectives:

- a) Assist in the creation of a cultural and artistic district that supports both educational and commercial uses.
- b) Integrate existing and future greenways, and walking and cycling connections.
- c) Enhance the False Creek Flats' importance as an industrial area, particularly for new and future industries.
- d) Achieve overall development which demonstrates urban design excellence and innovation in architecture.

1.3 Site and History

The Great Northern Way Lands consist of 10.7 ha (26.5 acres) of land in the False Creek Flats, located between Great Northern Way and the Mt Pleasant neighbourhood to the south and the Burlington Northern Santa Fe Railway to the north. Lot Q, the 'Campus Lands', form a single 5.7ha (14 acre) sub-area bounded by Fraser Street and Thornton Street. Currently located to the east are office buildings, a low-scale warehouse building and the VCC-Clark Millennium Line SkyTrain station. To the west are a series of smaller parcels containing a mix of small-scale warehouse and industrial uses along with an artist live/work studio building.

Historically, the high-water mark of the former False Creek tidal flats ran across the site until the 1910s, when the flats were filled in. Some cutting has also occurred at the western end, rendering the site essentially level in grade. China Creek emptied into the mud flats at the eastern end and is now contained within a culvert in an easement across the site. The mouth of Brewery Creek was near the western end of the site.

2 Urban Design Principles

The concept for this area is to establish a framework for the making of a creative campus on Lot Q, the centre of which will be a facility for Emily Carr University of Art & Design.

The Campus will be organized around a central pedestrian spine, accentuated by two key public open spaces; a newly created St. George's Plaza, as well as a central open space which will support campus life in addition to accommodating the future transit station.

The urban design principles outlined below reflect the vision for the site as a cultural hub and art district featuring an art school campus and other related uses. Key urban design principles guiding development are as follows:

2.1 Site Planning and Buildings

- a) Create a strong sense of place and identity by reflecting both the industrial history and emerging media and arts character through architecture, site planning, design and public realm features.
- b) Create a pedestrian spine within the campus to enhance wayfinding as well as linking buildings to open spaces and a future transit station.
- c) Provide a high degree of amenity - and quality open space such as cafés, for the campus population that also serves neighbouring residents.
- d) Work within existing height limits and preserving view corridors.
- e) Create an enhanced public realm interface with Great Northern Way through buildings that actively address and engage the street frontage.
- f) Establish new grades to better integrate the site into the surrounding community and with Great Northern Way. In particular, raise the ground plane to meet the grade at the corner of Thornton Street and Great Northern Way.

- g) Establish site grades in the context of current defined flood plain levels
- h) Provide interim solutions which facilitate the retention of existing buildings but also anticipates future finished grade conditions.
- i) Create a vibrant community through identifying a viable development site for Emily Carr University along with other complementary projects on adjacent parcels.

2.2 Open Space

- a) Provide 1.22ac. of public open space on the site as a distinctive central feature of the public realm which is a focus for campus activity and surrounded by active uses.
- b) Provide strong visual links to the open space from adjacent streets to invite the community in.
- c) Create a unique sense of place in the surrounding public realm elements that support opportunities for social engagement and public art.
- d) All open spaces should foster social interaction and become neighbourhood meeting places.
- e) Commemorate the historical terminus of St George Creek on site as an element of the St George Rainway through Mount Pleasant.

2.3 Movement and Circulation

- a) Integrate the development with the city by extending the street grid into the site to create physical and visual connections with the adjacent areas. Create rational normalized intersections wherever possible
- b) Provide safe, comfortable, and convenient walking and cycling connections, accessible to all users, between the Campus and Mount Pleasant.
- c) Design streets to prioritize walking and cycling over motor vehicles.
- d) Create or enhance walking and cycling routes to provide both connections for the city-wide Greenways Plan and links to local neighbourhoods, emphasizing connections to the future Broadway Subway station for site users and the greater community.
- e) Minimize slopes on the site to provide comfort for people walking, cycling or using mobility aids.
- f) Design all roads, pathways and public spaces on the site to be fully accessible
- g) Design Great Northern Way to allow safe access and egress to the site for all road users and prioritize pedestrians and cyclists while respecting the street's role as a major traffic and goods movement corridor.
- h) Locate vehicular access and servicing points for all development sites to minimize conflicts and provide a safe environment for all road users.
- i) Allow for a potential future elevated Thornton St connection over the rail yard to the north.

2.4 Sustainability

- a) Design for Green Mobility through transit-oriented design, emphasis on non-automotive transportation, appropriate parking standards for cars and bikes, and enhanced opportunities for public bike share, car-share and electric vehicles.
- b) Create opportunities for sustainable green energy through integration of all new buildings, where feasible, with the SEFC Neighbourhood Energy Utility.

2.5 Servicing

- a) Ensure the on and off-site services (water, sewer, etc.) are adequately sized to accommodate development proposals and, where necessary to allow for existing infrastructure to be upgraded.

2.6 Broadway Subway (Millennium Line Extension)

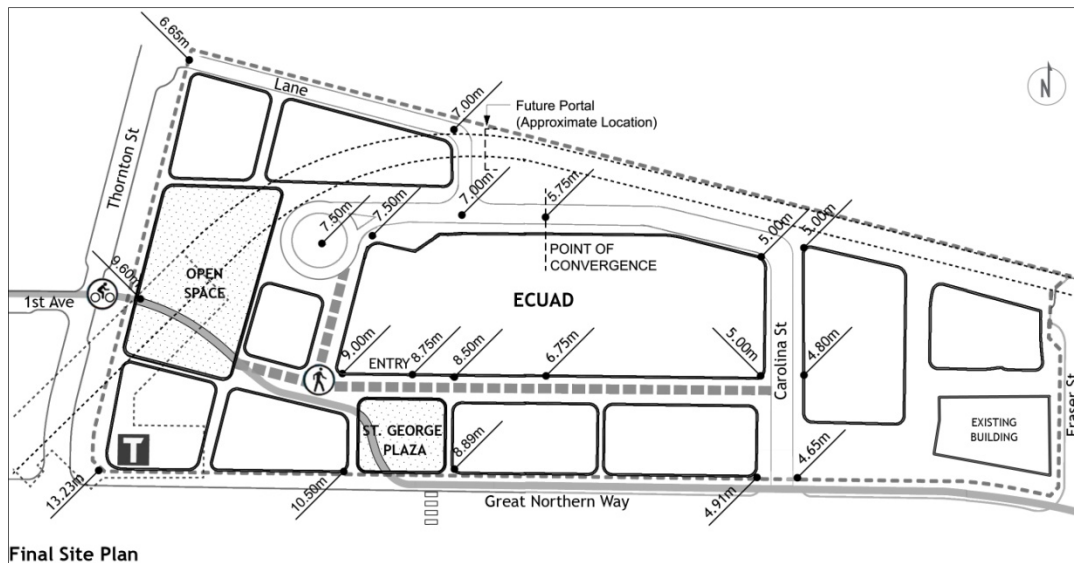
- a) Provide unencumbered access to the proposed Broadway Subway alignment.
- b) Consider Broadway Subway construction access and staging when planning the site and construction phasing.
- c) Design site grading to facilitate integration of the future Broadway Subway into the site, including minimizing the exposure of the portal and the tunnel where the line transitions between above grade and underground.
- d) Use the future transit station as a key organizing principle of the site's design

3 Site Considerations

3.1 Siting

The location of streets, open spaces, development parcels and buildings should generally be as described in the illustrative plan shown in Figure 2. Buildings are to be organized to define streets and to form a vertical and horizontal built-form edge.

Figure 2 - Illustrative Plan including Final Grades



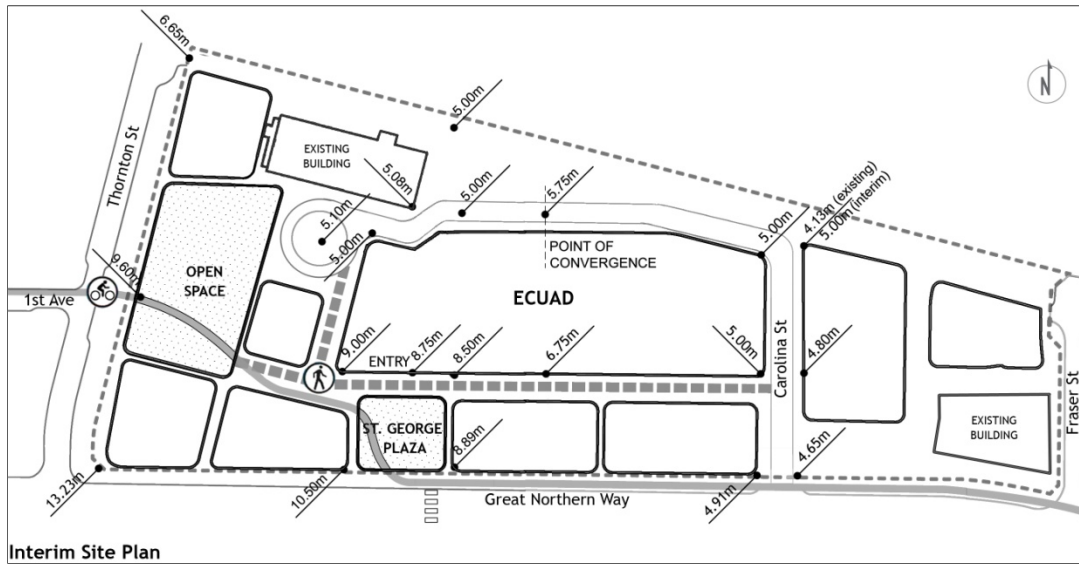
3.2 Setbacks

- a) Provide a 3-m (10-ft.) setback along Great Northern Way, west of Carolina St.
- b) Provide a 9-m (30-ft) setback along Great Northern Way, east of Carolina St, noting that this may be reduced to 3-m (10-ft) where conditions permit.
- c) Provide a 15-m (50-ft.) landscape setback along the westerly and easterly most property lines of the CD-1 boundary to be reserved for the commemoration of China and Brewery Creeks.
- d) Building setbacks from property lines need to be provided and will be analyzed on a site by site basis. Solar performance and other design criteria such as the effect on adjacent open spaces; adjacent building design and use; any other concerns of a similar nature to the foregoing will need to be taken into account.
- e) Parking or loading access is not to be located at or above grade in the landscape setbacks.

3.3 Site Grades

- a) **Existing Grades:** The existing site topography traces back to the historical condition when the site sloped down from the south to the shoreline edge of a tidal flat. The site still reflects the tidal flat condition which from this low point of the site begins a considerable rise toward Great Northern Way, creating an escarpment of eight meters at the corner of Thornton Street and Great Northern Way.
- b) **Final Grades:** Final grading for the site will meet the existing grades of Great Northern Way and slope gradually across the site to the north and to the east, in order to meet the lower existing grades, as generally indicated in figure 2. Final grades will facilitate convenient walking and cycling access into and through the Campus Lands, reflect the natural slope of the land, help visually integrate building massing (and Broadway Subway components) into the landscape and provide adequate soil depth over the Broadway Subway alignment to support robust landscape design.
- c) **Interim Grades:** Interim grading, as generally indicated in figure 3, will be considered as a strategy to allow for the retention of some of the existing buildings on site, as well as to facilitate the construction of a future Broadway Subway and the related station. Some buildings will need to respond to and address both interim and final grading solutions in terms of entries, plazas, roads and pedestrian circulation systems. Creative and innovative methods of soil retention and grade changes will be desired.

Figure 3 - Interim Grading Plan



4 Vehicular Access, Off-Street Parking and Loading Areas

4.1 Parking Facilities

- a) All off-street parking should be located on the site it serves, unless otherwise approved by the Director of Planning in consultation with the General Manager of Engineering. Some interim surface parking may be permitted, subject to landscaped setbacks and acceptable access points as determined by the Director of Planning in consultation with the General Manager of Engineering Services.
- b) No parking or maneuvering is permitted in landscape setbacks.

4.2 Loading Areas

- a) Loading areas should be located within buildings or, where there is lane access, off the lane and away from active streets. Access to these loading areas should be from lanes where possible.
- b) Loading areas should be effectively screened from view of surrounding public spaces, neighbouring properties and from the overlook of nearby residential developments, using architectural elements, such as fencing and trellises, and plant material.
- c) Loading docks and garbage bins should not be visible from the street.
- d) Outdoor storage of goods is discouraged. When necessary, outdoor storage should be incorporated into well screened loading areas.

4.3 Parking and Loading Access

- a) Where possible, access to parking and loading areas should be from the lane. If located along the street, parking and loading should be combined into one entrance and its width should minimize interruption to the streetwall.
- b) Shared parking and loading entrances are encouraged for abutting properties.

- c) Where loading access is taken from the street, trucks must not back in from (or onto) the street and all maneuvering must be done on site.
- d) No insulation, piping or mechanical equipment is to be visible from the street unless dealt with in an architectural manner.

5 Architectural Characteristics

5.1 Building Height and Views

- a) Building height limits are described in the By-law. Height limits vary across the site from 13.7 m (45 ft.) to 45.7 m (150 ft.). Building heights will be measured from the anticipated final grades established within the design of the structure plan.

5.2 Massing and Form

- a) Where building length exceeds 250' massing should be broken down into smaller increments in order to allow views and light through blocks or into courtyards. In blocks which approximate the scale of the existing subdivision pattern to the south, a minimum of one break in the massing should occur. In longer blocks over 180 m (591 ft.) in length, a minimum of two breaks should occur.
- b) Long, continuous building forms should be avoided. Express the individual functional components of a large building complex as a series of interconnected or interrelated massings in order to create identity, rhythm and variety and a reduction of apparent bulk and visual scale.
- c) Respect the incremental rhythm of Vancouver streetscapes typical of mixed-use areas around the downtown. Large, singular building forms should be avoided in favour of an increment and rhythm of building frontage found in typical Vancouver mixed use areas
- d) Shallow articulation of surface elements and materials is generally ineffective in achieving adequate variation in the massing and bolder manipulations of the form should prevail.
- e) Generic building designs that exhibit little facade interest or transparency should be avoided.

5.3 Building Entrances

- a) Building entrances should be clearly identifiable, visible, transparent and accessible from the street.
- b) Pedestrian interest and comfort should be provided at entrances through specifically designed seating, signage, lighting and features that signal the building's use.
- c) Consider atrium spaces with staircases as a means to connect floors and effectively tie the entrance with the upper levels.

- d) Where possible, internal courtyards and landscaped areas should be visible from the street.
- e) Building entrances need to take into account and be attendant to existing, interim and finished design grades related to the overall campus site plan.

5.4 Articulation

- a) Architectural design should be expressive of the building structure of and environmental design considerations. Functional elements, such as stairwells, elevator and mechanical cores, and entrances, should be used to break up the horizontal scale of the building form.
- b) Building materials should be carefully chosen to break up the horizontal scale and accent edges for pedestrian interest.
- c) Glazing with high clarity should be used to encourage visual connections between inside and out. The use of highly reflective glazing is discouraged.
- d) Where street frontages consist of retail and service uses, they should reflect a smaller, more intimate scale and be clear-glazed to enhance openness and pedestrian interest.
- e) Design elements which contribute to energy efficiency and animated facades should be encouraged.

5.5 Weather Protection

- a) Main building entries should provide generous weather protection that is designed to be an integral feature of the building's architectural character.
- b) Weather protection should be considered over walkways which connect interrelated buildings, as an amenity consistent with a campus-like environment.
- c) Canopies and awnings should be built of durable materials, and consideration given to lightness and translucency.

5.6 Materials

- a) A consistent palette of materials should be used throughout the site.
- b) In general, all commercial-grade exterior finishing materials and details appropriate to local climatic conditions may be utilized, provided they contribute to:
 - i. a high-quality image that portrays a sense of permanence; and
 - ii. to the long-term durability of the exterior system, such that its initial integrity, quality, and visual appearance will be retained over the lifespan of the building.
- c) Materials and treatments at grade level, particularly for buildings fronting public spaces, should provide visual interest and enhance the pedestrian scale.

5.7 Roofs and Mechanical Penthouses

- a) Roofs should be designed to be attractive as seen from above as well as from ground level. Large, monotonous expanses of roof should be avoided.
- b) Vents, mechanical rooms and equipment, elevator penthouses, and other rooftop devices should be integrated into the roof architectural treatment or should be grouped and screened with materials and finishes compatible with the building.
- c) Mechanical penthouses and screening enclosures should not cover more than 25% of the roof area or project more than 6 m (20 ft.) above the maximum building height. They should be oriented with the longer dimension in a north-south direction to minimize view impacts to residential developments to the south.

6 Open Space and Streetscapes

6.1 Structural Overview

A hierarchy should be established for the open space system from the public-owned and freely accessed spaces, like the street rights-of-way, to completely private and inaccessible building courtyards. In between are privately owned spaces to which the public may have some degree of access, such as the landscape setbacks. Open space is an important element which will be one of the principal amenities sought by the campus population and the surrounding neighbourhoods. Some general guidelines for open space planning include:

- a) The landscape should be used as a unifying element for the campus with a consistent system of materials and detailing used throughout.
- b) Open space planning and design should consider the neighbourhood context and the needs of Mount Pleasant residents, as well as the campus population.
- c) Open space intended for public use should be clearly identified and designed as such. It should have sufficient openness to be inviting and safe for the public.
- d) Greenways provide important walking and cycling connections to and from the site.

6.2 Streetscape Design

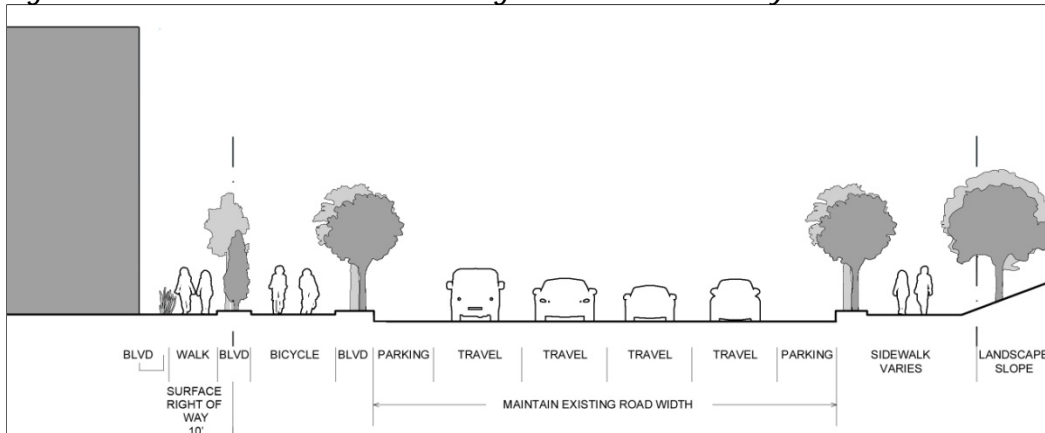
The streets should be designed and built in accordance with Engineering Services standards and requirements. Standard materials should be used on all City streets, however accent features may be accepted where appropriate. There are five types of streetscape treatments, as follows:

- a) **Great Northern Way** - Currently the Central Valley Greenway on Great Northern Way is a shared walking and cycling path. A separated sidewalk and cycle path is expected on the north side of Great Northern Way between Fraser and Thornton Streets, to reduce conflicts between people walking and cycling. The new sidewalk will be constructed within the 3.0 metre statutory right-of-way along Great Northern Way. The potential future alignment of the Central Valley on Great Northern Way between Carolina and Clark envisions separate one-way cycle

tracks and sidewalks on both sides of the street to improve crossing of the numerous existing driveways on the north side east of the campus lands.

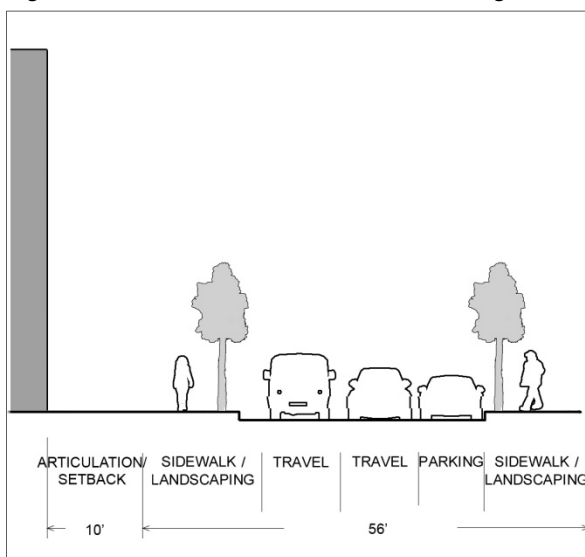
Great Northern Way is to be reconstructed with three signalized intersections, including traffic signals at Carolina and Thornton Streets and provision for a future pedestrian signal at St. George Street. Left hand turn bays will be required at the traffic signals to facilitate safe turning movements. A separated sidewalk is expected on the north side of Great Northern Way, to reduce conflicts with cyclists on the adjacent Central Valley Greenway.

Figure 4 - Potential cross-section through Great Northern Way



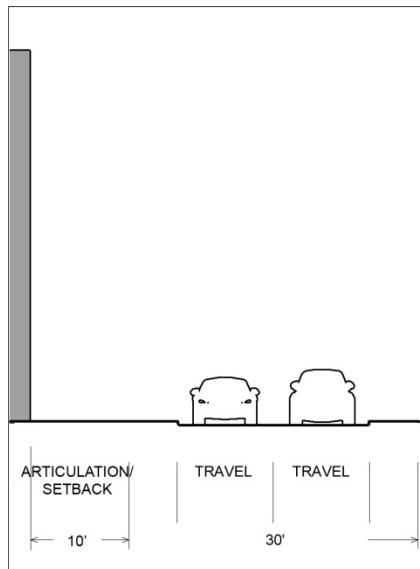
- e) **Proposed Access Road** - A new local road is proposed into the site off Great Northern Way at Carolina Street, which will terminate at a cul-de-sac bulb. The new road will be a local street with provision for on-street parking where appropriate. The road should have landscaped boulevards, street trees and sidewalks and be designed to prioritize pedestrian movements. Traffic calming devices such as curb bulges should be incorporated into the design.

Figure 5 - Potential cross-section through Carolina Street



- f) **Proposed Lane** - A new lane is proposed as a secondary access to the site off the north end of Thornton Street, to be constructed after the Broadway Subway is complete. The lane will be primarily for access to the proposed residential buildings at the northwest corner of the site and is not expected to have sidewalks or significant landscaping. An interim connection should be provided in advance of Broadway Subway construction to serve existing buildings and provide a secondary connection to the site.

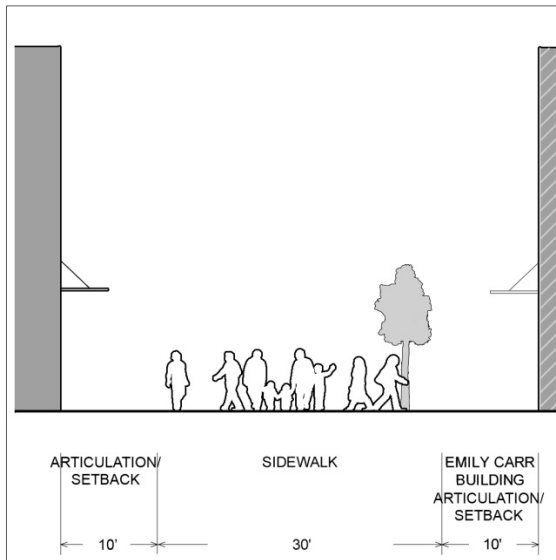
Figure 6 - Cross section through lane



- g) **Central Pedestrian Spine** - The central pedestrian spine is intended to be the central public space for the site. It will contain most of the building entrances and addresses, and be the focus of the pedestrian activity. It will therefore be designed to be highly animated and pedestrian friendly as well as fully accessible. It should have a greater level of detailing and more richness of materials in its design and an area designated for special paving, lighting and planting treatments.

The design of the western portion of the central spine should be integrated with the design of the adjacent open space and with the proposed Subway station, such that design themes, functional relationships, materials and finishes are all coordinated. Likewise, the intersection and corner plazas proposed in the middle of the site should be well integrated with the design of the central avenue.

Figure 7 - Cross section through central pedestrian spine.



- h) **Central Valley Greenway** - The 25-kilometre Central Valley Greenway is the longest walking and cycling facility in the region, extending from New Westminster to the Seaside Greenway (Seawall) at Science World. The design of the Central Valley Greenway through the campus should provide separate, generous, and well-lit facilities for walking and cycling. The site grading should eliminate unnecessary elevation changes. Conflict points with motor vehicles should be minimized, however wherever there is a conflict point with motor vehicles (such as at the Carolina/Great Northern Way intersection), the location should be designed for safe and comfortable walking and cycling crossing, potentially including enhanced paint markings and separate traffic signal phases. Pedestrian crossings of the cycle path should be minimized and marked and treated appropriately, giving pedestrians priority with markings and surface treatments.

6.3 Landscape Setbacks

- a) **China Creek** – The 15-m (50-ft.) wide China Creek easement at the eastern edge of the CD-1 boundary, should be given a soft landscape treatment that commemorates the former Creek. When public access to the north can be achieved, a pathway should be provided along its length, with consideration given to walking and cycling connections. The easement should provide a landscape feature for the adjacent developments which should open onto it in a positive manner. The interface between the development and the easement should be sensitively shaped by terracing and stepping of the building massing, avoiding large expanses of blank wall.
- b) **Brewery Creek** - The landscape design of the 15-m (50-ft.) wide Brewery Creek

setback at the western edge of the CD-1 boundary, should commemorate Brewery Creek in a manner which is in keeping with the commemorative initiatives in the IC-3 District. It should present an attractive overlook for adjacent buildings. A pathway should be provided along its length, with consideration given to walking and cycling connections.

6.4 Central Open Space

The final configuration of the central open space should have a net area approximately equivalent to that originally proposed in the CD-1. (4 937 m² or 1.22 acres was proposed.) The design of this space should:

- a) maintain the primacy of the central open space as a key feature in the planning and design of the campus;
- b) anticipate the interim and final grading plan for the site (Figure 8 and 9);
- c) be open and inviting for the public;
- d) treat the central open space as an “urban room” that is flexible and serves multiple user groups, including workers, visitors, students and local area residents;
- e) set an example of high civic design as a benchmark for future development in the area;
- f) ensure safety and security by allowing for natural surveillance and guardianship from surrounding businesses and residents, and through the use of appropriate materials and equipment;
- g) incorporate diversity through the use of distinctive landscape materials and design;
- h) consider materials, i.e. plants, furnishings and lighting, that are long-lasting and durable;
- i) maximize opportunities for users to enjoy the open space in inclement weather, for example, through dry pathways, fast-drying benches and shelters;
- j) ensure that the space is fully accessible for people of all ages and abilities.

The central open space should be well integrated with its surroundings by:

- a) giving strong spatial definition to the open space by the surrounding building facades;
- b) creating strong connections into the central open space from gateways, along approaching streets and from the surrounding building edges;
- c) Incorporating the open space into the surrounding walking and bicycling systems.

Figure 8 - Interim open space



Figure 9 - Final open space



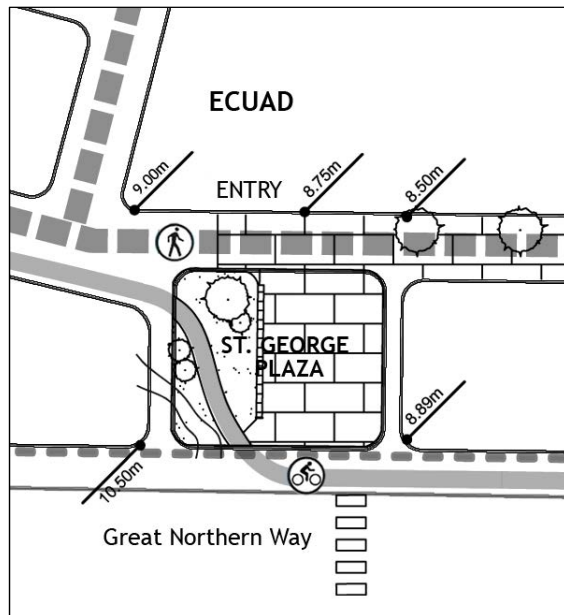
6.5 St. George Plaza

An additional open space, the St. George Plaza (Figure 8), will be established along Great Northern Way. Situated in alignment with St. George Street, this plaza like space will provide a 'front door' to the campus from Great Northern Way. The Plaza will also link to the St. George Rainway, a community initiative of the Mt Pleasant Public Realm Plan which seeks to create a naturalized storm water system in recognition of a historic waterway which extended along St. George Street from Kingsway to the False Creek Flats.

The design of the plaza should:

- d) Provide a terminus for the St. George Rainway and commemorate the historic stream through its design and public realm features.
- e) Accommodate the routing of the Central Valley Greenway through the site to connect to 1st Ave using a gently curving geometry to provide a safe and comfortable experience for everyone.
- f) Be based on the new final site grades (Figure 2) in order to provide a more direct route for the Greenway and eliminate unnecessary elevation changes
- g) Ensure the maximum usability of the open space for a wide range of passive recreational uses.
- h) Utilize design elements such as surface treatments to delineate the greenway and minimize conflict points.

Figure 9 - St. George Plaza Illustrative Plan



6.6 Private and Semi-Private Open Spaces

- a) Provide clear distinctions between public and private open spaces through the use of defined access points and edges, circulation systems, grade changes and the use of plant material, architectural elements and fencing.
- b) Provide a high degree of visual, but not necessarily physical, access into private landscaped spaces (yards and courtyards) through the use of openings in the building form, iron picket fencing, overlooks, etc.

6.7 Plant and Landscape Materials

- a) Use trees of sufficient caliper (minimum 75 mm) and height to create a reasonable impact when planted.
- b) Incorporate seasonal and coniferous planting.
- c) Avoid planting only one species of plant material except in special circumstances.
- d) Use permeable materials and natural drainage processes, including channeling, ponding and percolation.

6.8 Broadway Subway Station and Environs

The Broadway Subway station will be located adjacent the central open space, the following should be considered in the design of the station:

- a) Provide clarity in the relationship between the transit structure and the elevations

- of the street, platform and track levels.
- b) Ensure that above-grade station elements contribute positively to the urban design of the campus (and conversely, that the below-grade elements are buried and out of sight).
 - c) Allow for mixed uses at the future station for a better interface between the station and the open space by giving opportunities for transit riders to pause and linger.
 - d) Minimize grade changes between the street, the central open space and the station entry.
 - e) Ensure a clear distinction, or hard line, between the station area and the adjoining open space, and ensure that there is no erosion of the proposed amount of open space throughout the station's design and implementation.
 - f) The station should have a presence at the urban scale, complementing the park and surrounding buildings.
 - g) The station should be a strong design solution. It should be open, transparent, welcoming, safe, bold and well lit at night.
 - h) Safe and convenient access to a future public bike share station between the transit station and bicycle network that minimizes conflicts with pedestrians.

6.9 Lighting

Exterior lighting should be used to ensure safety and security, and to focus attention toward site and architectural features.

- a) Street lighting should be in accordance with Engineering Services standards and requirements, with a consistent and integrated system used throughout the Campus Lands.
- b) Site lighting should confine the spread of light to within a development's property boundaries. Fixtures should be oriented away from public view. Lighting should be sited and specified so as to minimize direct glare impact on adjacent properties, surrounding streets and nearby residential developments. The use of concealed sources is encouraged.
- c) Short-masted and local area lighting is preferred over high-mounted, general site lighting.
- d) Walking and cycling pathway lighting should be configured to primarily illuminate the walking and cycling surfaces.
- e) Landscape lighting, such as uplighting of trees, backlighting of walls to silhouette trees, underbrush lighting of groundcover, is encouraged.
- f) Accent lighting of prominent site features, such as ponds, fountains and works of arts, is also encouraged.
- g) Entrances to buildings and dramatic multi-storey interior spaces should be illuminated to enhance their visibility and significance after dark.

7 Signage

- a) Signage should be consistent and integrated throughout the site.
- b) A building's signage should be incorporated into its architectural design.
- c) Retail signage should be incorporated in or near the canopy, visible from the sidewalk and street, and of high quality materials.

8 Sustainability

8.1 Trees and Vegetation

- a) A variety of native trees and vegetation should be provided to minimize maintenance, water use and integrate the planting design into the traditional landscape character as much as possible.

8.2 Water

- a) Permeable surfaces should be maximized to reduce stormwater runoff and recharge groundwater.
- b) Consider on-site management of stormwater runoff.

8.3 Soils

Topsoil should be retained, where possible, to provide a rich basis for site planting and landscape development.

8.4 Transportation and Connections

- a) Walking and cycling should be encouraged by linking development to adjacent bikeways, greenways and other pathways.
- b) Design for green mobility through transit-oriented design, emphasis on non-automotive transportation, appropriate parking standards for cars and bikes, and enhanced opportunities for public bike share, car-share and electric vehicles.
- c) Convenient, safe and accessible pedestrian and bicycle connections should be provided to major bus and SkyTrain/subway routes.

8.5 Energy

- a) Buildings should be oriented to maximize solar orientation, taking into consideration building placement and planting design.
- b) Building materials, systems and construction methods should be considered to conserve energy and reduce long-term operating costs.
- c) Create opportunities for sustainable green energy through integration of all new buildings with the SEFC Neighbourhood Energy Utility.

8.6 Solid Waste

- a) A comprehensive waste management plan should be considered among landowners that can provide recycling and reuse in close proximity by the various industrial, retail and high-tech uses.
- b) Recycling facilities should be provided for each development.

8.7 Green Buildings

- a) Buildings should embody green building and passive design. Green elements may include green roofs and terraces, roof top gardens, trees and plantings on upper levels and balconies, green walls, and supports for vertical plant growth.

9 Crime Prevention through Environmental Design (CPTED)

- a) The design of the Great Northern Way site will take into consideration the principles of CPTED appropriate to an institutional and office environment. Each development proposed for the site, and the design of the public realm, should be subject to a CPTED review. Particular attention should be paid to incorporating CPTED principles into the design of the Broadway Subway station and the adjacent open space.

10 Phasing

The Campus Lands will be the primary staging area for the construction of the Broadway Subway Line. To accommodate this, development will occur in two phases (pre and post Broadway Line completion).