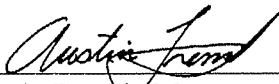


Design Review Committee
August 11, 2011

TO: Chair and Members of Design Review Committee

SUBMITTED BY: 
Austin French, Manager, Planning Services

DATE: July 28, 2011

SUBJECT: Case 17136, Substantive Site Plan Approval – Central Library

ORIGIN

Application by Halifax Regional Municipality

RECOMMENDATION

It is recommended that the Design Review Committee:

1. Approve the qualitative elements of the substantive site plan approval application for the Central Library, including the variances being sought, as shown on the plans identified as Attachment A; and
2. Recommend that the Development Officer accept open space, in the form of the north and south plazas as shown on the plans identified as Attachment A, as a public benefit, thereby allowing the proposed building to exceed the maximum pre-bonus height identified on Map 4 of the Downtown Halifax Land Use By-law.

EXECUTIVE SUMMARY

A new Central Library is proposed at the corner of Spring Garden Road and Queen Street. The project is subject to substantial site plan approval by the Development Officer and the Design Review Committee. The Design Review Committee is specifically charged with:

- considering the project in light of the Design Manual of the Downtown Halifax Land Use By-law;
- evaluating and approving variances that are being sought;
- considering the results of the wind impact assessment that addressed the expected levels of pedestrian comfort that will result with the project; and
- recommending whether a proposed public benefit should be approved to allow the project to exceed the pre-bonus maximum height requirement.

This report provides analysis and a recommendation on these matters to the Design Review Committee. It is noted that while the Central Library poses challenges to some of the criteria that are found in the Design Manual, the project meets the Design Manual's overall intent. Furthermore, it is concluded that the variances being sought are consistent with the Design Manual, the expected wind conditions for pedestrian comfort are acceptable, and the proposed public benefit that is associated with the project is acceptable to allow the project to exceed the pre-bonus maximum height requirement. Upon review of these matters, it is recommended that the site plan approval be granted.

BACKGROUND

Project Description

Major Elements

This application for substantial site plan approval is for the construction of a new library at the corner of Spring Garden Road and Queen Street in Halifax (Map 1) (Attachment A). The project is a modern glass design that includes the following major elements with respect to its exterior design:

- the main part of the building is setback from Spring Garden Road and its southern boundary to create two open spaces, which are referred to as the north and south plazas, features of which are illuminated through a detailed lighting plan (Attachment B);
- the building is five storeys, some of which have differing shapes, thereby creating projections and recesses between the storeys;
- the exterior cladding of the building is largely comprised of glass and glass spandrel panels that have a white frit with a leaf motif and an orange frit comprised of dots;
- the total height of the building is 30.06 metres, which is 2.06 metres above the maximum post-post height allowance;
- in addition to the plazas, there are rooftop amenity spaces;
- there are several flat rooftops where there is rooftop landscaping that is integrated with the amenity spaces or that are established solely as a green roof without public access;
- the uppermost flat roof is designed to collect rain water and is comprised solely of pavers, without vegetation; and

- an entrance to 80 underground parking spaces is provided from a shared driveway that is located at the intersection of Clyde and Queen Streets.

Information about the approach to the design of the building has been provided by the project's architect (Attachment C).

Regulatory Context

The Site and the Land Use By-law

The property as it currently exists, is bounded by:

- Spring Garden Road to the north;
- Provincial lands, that are used for commercial parking, to the south;
- Queen Street to the west; and
- lands and buildings of Dalhousie University's Sexton Campus to the east.

The property will be subdivided into two parcels, with a new property line that will be located along the southern edge of the proposed South plaza. As such, the proposed driveway is to be located to the south of this new property boundary; on a different parcel than the library.

To the east, a strip of land, between the proposed building and the Medjuck Architecture Building, is being acquired from Dalhousie University to allow a distance between the proposed building and the property line in order to meet National Building Code requirements. The parking in this area will be retained but reconfigured.

With the boundary changes that will occur to form the property, the majority of the lands are within the DH-1 Zone of the Downtown Halifax Secondary Municipal Planning Strategy (DHSMPS) plan area. The strip of land that is being acquired from Dalhousie University is partially within the Institutional, Cultural & Open Space (ICO) Zone of the DHSMPS plan area and partially in the U-2 Zone of the Halifax Peninsula Land Use By-law. The building itself will be located within DH-1 Zone and as such, the regulations that relate to this zone are the relevant matters that are to be considered in evaluating the proposal.

The site is within the Spring Garden Road (3) Precinct.

Part of the site is encumbered by a view plane that partially restricts the height of the proposed building (see Map 1).

Substantive Site Plan Approval

In accordance with the Substantive Site Plan Approval process, as set out in the Downtown Halifax Land Use By-law, the Development Officer is responsible for determining if a proposal meets the land use and built form requirements of the Land Use By-law. The role of the Design Review Committee is to determine if the proposal should be approved with respect to the:

- design guidelines in the Design Manual;

- criteria in the Design Manual for the issuance of variances to the built form requirements;
- suitability of expected wind conditions on pedestrian comfort; and
- public benefit that is being proposed in order to achieve the bonus height.

DISCUSSION

The remainder of this report provides analysis and recommendations regarding the following:

- the Design Manual guidelines;
- the variances that are being sought;
- the result of the wind assessment with respect to pedestrian comfort; and
- the proposed public benefit.

The report ends with conclusions about the proposal and how it relates to the overall objectives of the Design Manual.

Design Manual Guidelines

It is important to consider the merits of a project against the whole of the Design Manual; the overall objectives. Nevertheless, an evaluation of it against the applicable individual guidelines of the Design Manual is found in a table format (Attachment D). The table indicates if the project complies with a particular guideline. In addition, it identifies circumstances where there are different possible interpretations of how the project relates to a guideline or where additional explanation is warranted. These matters are outlined in more detail as follows.

2.3c, Canopies and Awnings

The Design Manual calls for canopies and awnings over the sidewalks abutting the project, as a means of providing weather protection for pedestrians are not proposed. With the building's substantial setback from Spring Garden Road, weather protection cannot be readily provided along this street frontage. Along Queen Street however, the circumstance is different, with the building being closer to the right-of-way. It is noted though that the building is a minimum of 4.0 metres from the edge of the right-of-way and within this setback there are features such as steps and ramps. To extend an awning beyond these features and over the pedestrian travelled way is viewed as problematic and would result in a feature that compromises the building's design. This is a matter where different interpretations and weight may be assigned to the canopy and awning provisions of the Design Manual.

2.3d, Prohibit New Parking Lots

The quantitative requirements of the Land Use By-law and Section 2.3d of the Design Manual prohibit surface parking lots in the Spring Garden Road Precinct. There is an existing parking lot to the west of the Medjuck Architecture Building and partially within the strip of land that is being acquired from Dalhousie University. At this time, this parking area is being retained and reconfigured. As a new parking lot is not being created, the retention of the existing parking does not violate the Land Use By-law or the Design Manual.

2.3e, Streetscape Improvements (Capital District)

The Design Manual calls for streetscape improvements that are consistent with the municipality's requirements for the Capital District, as redevelopment occurs. These include the provision of trees and in some cases special pavers. The travelled way features that are shown on the plans and that will be required as the project receives permits are and will be consistent with the Capital District requirements.

2.3f, Spring Garden Road/Queen Street Public Lands Plan

The Design Manual calls for development to be consistent with the Spring Garden Road/Queen Street Joint Public Lands Plan. This plan addresses how public lands are to be developed in the vicinity of these streets. In addition to identifying that a library is to be established where it is now proposed, this plan states that:

- the library should be a signature building and a key anchor for the eastern end of Spring Garden Road;
- public open space should be provide that is capable of accommodating special events, with a substantial setback from Spring Garden Road;
- the diagonal connection that lies in front of Memorial Library should be extended across the site to provide a linkage with Clyde Street; and
- that a 20,000 square foot park should be established on the east side of Queen Street, corresponding with the intersection of Clyde Street, with pedestrian connections through to Dalhousie University.

Of note from these key objectives, is the provision of a 20,000 square foot park. At this time, a complete design of this park area has not been proposed and will not likely be realized until the development of the parcel of land to the south is devised. In the meantime, the south plaza, at approximately 13,000 square feet in area, has been proposed as part of the park area. The driveway, which is to provide vehicular access to the underground parking, is not envisioned in the Spring Garden Road/Queen Street Joint Public Lands Plan. However, its current utilitarian function is viewed as a temporary feature. While it will be retained as a permanent feature, in the future, with the development of the lands to the south, it is to be redesigned so as will promote its use as a shared pedestrian and vehicular passageway that will extend through to Dalhousie University.

The provision of the proposed park area and its adherence with the Spring Garden Road/Queen Street Joint Public Lands Plan can be the subject of different interpretations. Although it is viewed that a comprehensive and complete design of the park area would be beneficial, with the establishment of the south plaza the proposal is found to be consistent with the overall objectives of the Spring Garden Road/Queen Street Joint Public Lands Plan. With the development of the lands to the south, there will be an opportunity to fully reconcile the design of this park area.

3.1.3 and 3.2.1c, Streetwall Height

In most situations in the Downtown Plan Area buildings are required to be built relatively close to the sidewalk (the edge of the right-of-way). With this, the By-law specifies that that a building must have a minimum and maximum streetwall height and at that above that specified height, the building is to

stepback a minimum of 3.0 metres. However, where a building is required to be setback more than 4.0 metres from the edge of the right-of-way, they are not required to have a 3.0 metre stepback. This is the circumstance of the proposed library; it does not have a streetwall stepback facing either Spring Garden Road or Queen Street as none is required.

3.2.1a, Vertical Rhythm of the Façade

3.2.1a states that streetwalls are to, “contribute to the ‘fine grained’ character of the streetscape by articulating the façade in a vertical rhythm that is consistent with the prevailing character of narrow buildings and storefronts.” From a distance the library building has a horizontal rhythm, but it is noted that at a pedestrian scale the building has narrow vertical elements that are expressed by the orientation of the glass frames. It is felt that this is an appropriate response to the guideline.

3.3.1b, High Quality Architecture Respectful of Downtown's Context and Tradition

3.3.1b states that, “Buildings should seek to contribute to a mix and variety of high quality architecture while remaining respectful of downtown's context and tradition.” The proposed building is unlike any other building in Halifax. There is little doubt that it contributes to a mix and variety of high quality architecture. It is subject to a greater degree of possible interpretation about how it responds to the downtown's context and tradition. The submission from the project's architects notes that considerable attention has been placed upon designing the building to meet the downtown and the site's context and tradition (Attachment C).

3.3.3a and 3.4.3g, Emphasis of Entrances

3.3.3a states that entrances are to be emphasized, “with such architectural expressions as height, massing, projection, shadow, punctuation, change in roofline, change in materials, etc.”

3.4.3g from the Civic Character section states, “Ensure entrances are large and clearly visible. Provide a building name and other directional and wayfinding signage.”

No building name or other directional and wayfinding signage is proposed at this time. The main entrance to the proposed building faces Spring Garden Road and has direct access off the north plaza. It is found that in many respects, this entrance is seemingly designed to be minimized, being relatively small and recessed under a low overhang of the proposed building. Furthermore, there are no upper storey elements to help decipher its location. The degree of success that the project has in meeting the guidelines is a matter of interpretation. On its own, the main entrance may not be legible from a distance. However, it is found that the openness of the north plaza coupled with the pattern of the pavers leading to the entrance helps to highlight its location from the plaza itself.

3.4.4c, Landscaping Treatment of all Flat Rooftops

The library site is within Precinct 3 (Spring Garden Road). 3.3.4c states, “Landscaping treatment of all flat rooftops is required. Special attention shall be given to landscaping rooftops in precincts 3, 5, 6 and 9, which abut Citadel Hill and are therefore pre-eminently visible. The incorporation of living “green roofs” is strongly encouraged.”

The proposed building has a number of flat roofs, which, with the exception of the uppermost roof, have a high-level of amenity and landscape materials. The uppermost roof has a simple material comprised of pavers of differing colours. Part of the design includes drains for the collection of rainwater for the building, which is viewed as an environmentally sustainable feature of the building.

With the varied design of the pavers, the Development Officer has determined that the treatment meets the Land Use By-law's definition of *landscaping*. This however is separate to the guideline of Design Manual. 3.3.4c places an emphasis on rooftop landscaping within Precinct 3 and encourages *living* green roofs.

The degree of success that the project has in meeting the rooftop guidelines is a matter of interpretation. It is noted that the intended function of the roof is to collect rainwater, which is viewed as "green roof" in that it is a sustainable feature. It is also noted that there is a high degree of vegetative landscaping across the aggregate area of the flat roofs of the proposed building.

3.4.2, Corner Sites

3.4.2c is in the Civic Character section and states, "Development on all corner sites must provide a frontal design to both street frontages." This is followed by 3.4.2d which states, "Alternatively, buildings may be sited to define the edge of an on-site public open space, for example, plazas, promenades, or eroded building corners resulting in the creation of public space."

The proposed building does not follow the images and photographs in this Design Manual that show how corner sites might be envisioned. The Manual generally foresees corner entrances facing both streets. However, the proposal more closely relates to the condition described in 3.4.2d, with the building being sited and designed to frame and define the edge of the north plaza. This plaza itself will in many ways be the entrance to the building.

3.5.2, Parking Structures

The conditions concerning parking structures are not found not to be applicable to this project. While a parking garage is being proposed, the conditions in the Design Manual generally relate to separate garage structures rather than the provision of underground parking that is generally associated with a development, as is the case with the proposed library.

3.6.3, Surface parking

See 2.3d above.

Variances

Three variances to the built form requirements of the Land Use by-law are being sought. They concern:

- maximum post-bonus height variance;
- projections over lower portions of a building; and
- minimum street wall width requirements.

The application submission provides information about these proposed variances and rationale of why they should be approved (Attachment C). Further discussion from a staff perspective follows below.

Maximum Post-bonus Height Variance

The maximum post-bonus height for the property is 28 metres, whereas the building is proposed to be 30.06 metres. The application submission notes that the additional height, “allows the all the building’s mechanical equipment to be enclosed rather than being placed on the roof and does not result in any additional floor area for the library.” It is important to note that this additional height is not for the entire building; it is for approximately one-third of the overall area of the roof.

It is also relevant to note that the library site is identified in the Design Manual as a “prominent visual terminus site.” On such sites, the Design Manual indicates that buildings should have distinctive architectural features.

The Design Manual provides the following context for considering a maximum height variance:

“3.6.8 Maximum Height Variance

Maximum building height may be subject to modest variance by Site Plan Approval where:

- a. the maximum height is consistent with the objectives and guidelines of the Design Manual; and
- b. the additional building height is for rooftop architectural features and the additional height does not result in an increase in gross floor area;
- c. the maximum building height is less than 1.5 metres below the View Plane or Rampart height requirements;
- d. where a landmark building element is provided pursuant to the Design Manual; or
- e. where the additional height is shown to enable the adaptive re-use of heritage buildings.”

It is recommended that the height variance be approved on the basis that the site is a prominent visual terminus site and that the additional height does not result in an increase in gross floor area.

Projections over Lower Portions of a Building Variance

The proposed building has several twists and projections over its lower storeys. Section 10(5) of Land Use By-law states that, “The mid-rise portion of a building shall not project beyond the vertical plane of the exterior walls of the low-rise portion of the building.”

The Land Use By-law allows section 10(5) to be the subject of a variance application. However, the Design Manual itself does not outline conditions through which such a variance is to be evaluated. Under the circumstance, it felt that it is appropriate to consider if the projections are consistent with the objectives and guidelines of the Design Manual. This matter was discussed in a memo dated December 20, 2010 that was considered by the Design Review Committee on January 10, 2011. The

purpose of the memo and the subsequent discussion was simply to make the Committee aware of matter.

Further to the objectives and guidelines of the Design Manual, it is noted that there is a specific Civic Character section (3.4) that addresses important civic buildings. It states that civic buildings need to be prominent and recognizable, with distinctive architectural treatments. In particular, very important public buildings such as a library are to have a unique landmark design. One of the images in this section, on the bottom of page 22 of the Design Manual, clearly shows a significant projection, similar to situation at the proposed new Central Library.

It is recommended that projection variance be approved on the basis that the projections are unique landmark design elements that are called for in the Design Manual.

Minimum Streetwall Width Variance

The proposed library site is located outside the Central Blocks that are identified in the Land Use By-law. Section 9 of the By-law has regulations concerning the width of streetwalls outside the Central Blocks as follows:

- “(6) On lots other than on Central Blocks, the streetwall width may be reduced to less than 80% of the width of a lot abutting a streetline, provided the streetwall is contiguous.”

With the proposal to establish the north and south plazas, the width of the proposed library' streetwalls occupy less than the required 80% of the width of its lot on both Spring Garden Road and Queen Street. As noted in the applicant's submission, requiring that the building adhere to the streetwall width requirement would cause the proposed north and south plazas to be reduced in size. These open space areas are called for in the Design Manual.

The Design Manual provides the following context for considering a minimum street wall width variance:

“3.6.4 Streetwall Width Variance

Streetwall widths may be varied by Site Plan Approval where:

- a. the streetwall width is consistent with the objectives and guidelines of the Design Manual; and
- b. the resulting gap in the streetwall has a clear purpose, is well designed and makes a positive contribution to the streetscape.”

It is recommended that the streetwall width variance be approved on the basis that:

- open space areas are called for in the places where the north and south plazas are proposed, and therefore they are found to be consistent with the objectives and guidelines of the Design Manual; and
- the north and south plazas have a clear purpose and they are found to be well designed and will result in a positive contribution to the Spring Garden Road and Queen Street streetscapes.

Wind Assessment

A wind assessment has been prepared for the proposed building. The concern with respect to wind conditions is whether the site, and in particular the proposed plazas, and the surroundings, namely the sidewalks, will be comfortable for their intended usage. Wind conditions are rated in terms of relative comfort for different pedestrian activities that include “sitting”, “standing”, and “walking.” In general terms, the intended usage of the plaza spaces would be for “sitting,” whereas the sidewalks would be used for “walking.” A study from Theakson Environmental was commissioned by the applicant to predict levels of wind comfort on and surrounding the site.

An initial study found that some areas of the plazas might only be comfortable for “standing” as opposed to “sitting.” However, this study did not consider the mitigating effects that landscaping would have on the level of comfort. As such, a further letter has been submitted (Attachment E). It indicates that the landscaping plan will improve conditions on the site such that, “comfort conditions on the site will be at acceptable levels pursuant to accepted practices and standards.”

Proposed Public Benefit

The land use by-law specifies a maximum pre-bonus building height and a maximum post-bonus height. Projects that propose to exceed the maximum pre-bonus height are required to provide a public benefit, a list of which are defined in the by-law, that has a value that is the equivalent of \$4.00 for every 0.1 square metres of gross floor area.¹

A calculation of the value of the public benefit for the post bonus height of proposed library has been determined to be \$56,160 (see Attachment F). It is proposed that an equivalent value of public benefit be provided through the establishment of the north and south plazas, which it is estimated will cost a minimum \$670,000 to construct. This type of benefit falls within the land use by-law public benefit category of:

- “(b) the provision of publically accessible amenity or open space, where a deficiency in such spaces exists;”

The Design Review Committee is to review and recommend to the Development Officer whether a proposed public benefit should be accepted by the municipality. It is recommended that directing the required public benefit contribution towards the establishment of plazas be accepted as a public benefit as public open space is called for in the Spring Garden Road/Queen Street Joint Public Lands Plan in the areas where the north and south plazas are proposed. As such, the establishment of these plazas responds to an identified deficiency in open space.

¹ The \$4.00 amount is to be adjusted on a yearly basis, but this has not yet occurred. This is not view as being of consequence given the cost of the open space

Conclusion

The bulk of this report considers how the proposed library relates to the guidelines within the Design Manual. As indicated, there are instances where interpretation and differing weights need to be assigned with respect to the project's adherence with individual guidelines. In looking at both the project in light of the individual guidelines and the whole of the Design Manual, it is concluded that the project should be approved.

BUDGET IMPLICATIONS

The HRM costs associated with processing this planning application can be accommodated within the approved operating budget for C310.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

COMMUNITY ENGAGEMENT

The community engagement process is consistent with the intent of the HRM Community Engagement Strategy and the requirements of the Downtown Halifax LUB regarding substantive site plan approvals. The level of engagement was information sharing, achieved through the HRM website, the developer's website, and a public open house held on April 25, 2011.

ALTERNATIVES

1. The Design Review Committee may choose to approve the application for substantive Site Plan Approval, as submitted. This is the recommended course of action.
2. The Design Review Committee may choose to approve the application with conditions. This may necessitate further submissions by the applicant, as well as a supplementary report from staff.
3. The Design Review Committee may choose to deny the application. The Committee must provide reasons for this refusal, based on the specific guidelines of the Design Manual.

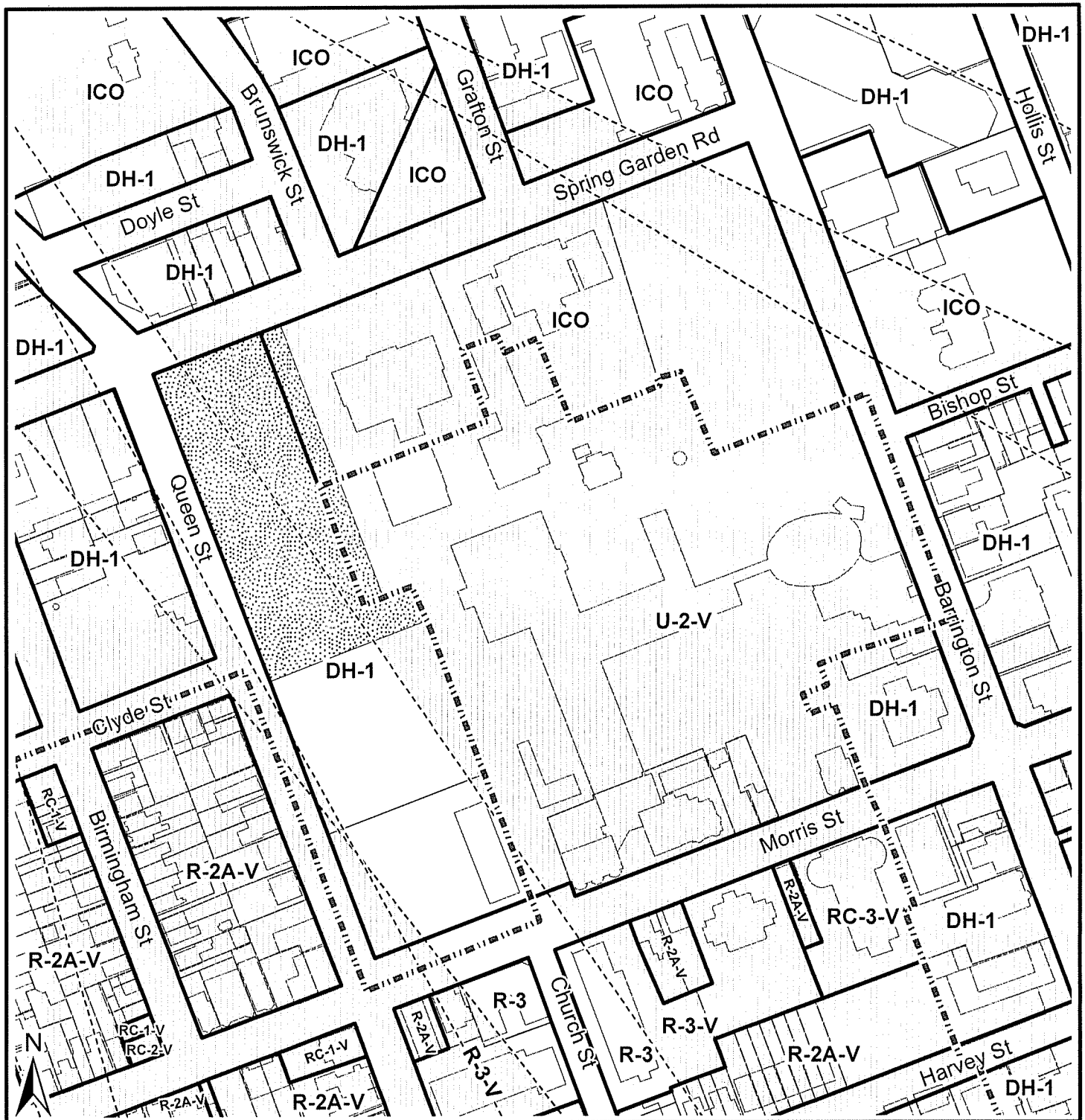
ATTACHMENTS

Map 1	Location and Zoning
Attachment A	Site Plan Approval Plans
Attachment B	Lighting Description

Attachment C	Applicant's Submission
Attachment D	Design Manual Checklist
Attachment E	Wind Assessment Letter
Attachment F	Public Benefit Contribution




A copy of this report can be obtained online at <http://www.halifax.ca/boardscom/DesignReviewCommittee-HRM.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210 or fax 490-4208.

Report Prepared by: Richard Harvey, Senior Planner, 490-5637



Map 1 - Location and Zoning

1477 Queen Street
Halifax

-  Subject area
-  View plane
-  Plan Area boundary

Downtown Halifax Plan Area
Halifax Peninsula Land Use By-Law Area

Zone - Downtown Halifax

DH-1 Downtown Halifax
ICO Institutional, Cultural and Open Space

Zone - Halifax Peninsula (-V = within view plane)

R-2A General Residential Conversion
R-3 Multiple Dwelling
RC-1 Neighbourhood Commercial
RC-2 Residential Minor Commercial
U-2 High-Density University

HALIFAX
REGIONAL MUNICIPALITY
COMMUNITY DEVELOPMENT
PLANNING SERVICES

0 20 40 m

This map is an unofficial reproduction of a portion of the Zoning Map for the plan area indicated

HRM does not guarantee the accuracy of any representation on this plan.

Attachment B – Lighting Description

HALIFAX CENTRAL LIBRARY – EXTERIOR LIGHTING DESIGN NARRATIVE REISSUE FOR SUBSTANTIVE SITE APPROVAL JULY 12, 2011

1.0 GENERAL

The following narrative outlines the exterior lighting design intent for the Halifax Central Library and supplements the exterior lighting drawing. The exterior lighting design incorporates energy efficiency, aesthetics, functional use, light trespass and safety/security considerations.

The design approaches the exterior environment in six primary zones:

- North Plaza
- Queen Street
- South Plaza on the podium
- East property adjacent the Dalhousie University School of Architecture
- Halifax Central Library Driveway
- Building facade

2.0 DESIGN SUMMARY

2.1 NORTH PLAZA

The lighting design for the North Plaza consists primarily of pedestrian scale lighting standards located along the primary pathways from Spring Garden Road to the library main entrance. The main entrance illumination will be enhanced with soffit mounted light fixtures along the majority of the northern soffit. Highlighting of the entrance will be accomplished utilizing illuminated (LED) hand rails located at the main entrance doors. These rails also serve as a mounting location for the power operated door push button operators as well as providing physical protection for persons approaching the entrance doors from the east or west.

Additional low level accent lighting will be provided at the underside of fixed benches. Fixture selection and bench design will be coordinated to reduce/eliminate the appearance of the fixture such that the outcome is a glow on the underside and surrounding ground level at the benches.

2.2 QUEEN STREET

Lighting along the Queen Street side continues the pedestrian scale lighting standards utilized for the North Plaza. This design selection is intended to extend along the extent of the building and stop at the South Plaza podium. This provides a consistent design approach along the two main street fronts.

Illuminated (LED) hand rails will provide additional illumination at the Queen Street entrance stairs.

2.3 SOUTH PLAZA AND PODIUM

The South Plaza includes landscape planters, perimeter planter and open area. The planters are to include fixed benching around all four (4) sides which will incorporate lighting similar to the benching in The North Plaza. Additional landscape lighting will be provided by in-ground LED landscape fixtures located within the planter to up light the underside of the trees providing an inviting low level glow.

The perimeter planter will have linear LED step lighting installed to provide illumination into the Plaza which will supplement lighting levels achieved from the planter bench lighting. In-ground landscape lighting will be provided to up light the underside of the trees similar to the other planters.

The open area adjacent the southern face of the library will incorporate pedestrian scale lighting standards matching the Queen Street and North Plaza design. To facilitate large gatherings or events it is proposed that these lighting standards on the South Plaza be removable.

Illuminated (LED) hand rails will provide additional illumination at the podium stairs along Queen Street

2.4 EAST PROPERTY ADJACENT THE DALHOUSIE UNIVERSITY SCHOOL OF ARCHITECTURE

Lighting along the east of the property will be provided from lighting bollard matching aesthetics of the pedestrian scale lighting standards utilized on the North Plaza, Queen Street and South Plaza areas. The bollards are intended to be installed within the curbed landscaped areas. Installing the bollards in this location will protect them from both vehicle traffic from the Dalhousie property and snow removal equipment.

2.5 HALIFAX CENTRAL LIBRARY DRIVEWAY

Lighting for the Library driveway and parking garage entrance will be provided by recessed fixtures installed in the parking structure concrete wall.

2.6 FACADE LIGHTING

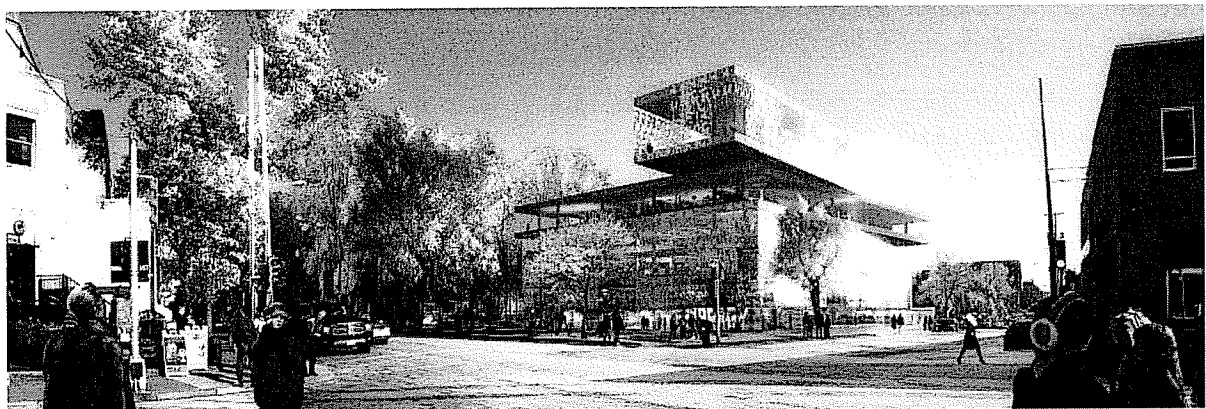
To enhance the nighttime presence of the building's fourth (4th) floor "orange" a façade lighting system will be provided. The system is designed to illuminate the fourth level facade only. Low profile, thin and inconspicuous luminaires with proper lighting performance will be utilized to achieve the desired appearance of the fritted orange glass on this level.

**DOWNTOWN HALIFAX
SUBSTANTIVE SITE PLAN APPROVAL APPLICATION**

THE HALIFAX CENTRAL LIBRARY

Additional Information to Application Form

July 12, 2011



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1 Project Background

Prior to issuing the tender in 2007 for the 'Halifax Central Library - Building Program and Space Requirements,' the Halifax Regional Library Board (HRL) and Halifax Regional Municipality (HRM) commissioned numerous studies outlining recommendations and evaluating building sites. These studies include:

- 1987 A Site Analysis Study (Duffus Romans Kundzins Roundsfell Ltd.)
- 1994 The Halifax City Regional Library Space and Services: Needs Assessment Study (Beckman and Associates)
- 1996 Towards a New Central Library: Use and Limitations of the Spring Garden Road Library and Projected Needs for a New Central Facility (Library Staff)
- 1997 Central Library Study (A.J. Diamond, Donald Schmitt and Company)
- 2001 Structural Engineering Reports (HRM Real Property and Asset Management)
- 2002 Facilities Review and Inventory (HRL & HRM Real Property and Asset Management)
- 2004 Needs Assessment and Master Facilities Plan (Terrain)
- 2005 Capital District Public Facilities Needs and Opportunities (HRM)
- 2006 Spring Garden Road / Queen Street Area Joint Public Lands Plan (Environmental Design and Management Ltd. in association with Urban Strategics Inc.)
- 2009 Pre-Development Assessment - Spring Garden Road / Queen Street Public Lands (Colliers International (Atlantic) Realty Advisors in association with Kassner Goodspeed Architects Ltd, David Archaeological Consultants Ltd., SLR Consulting, Imperial Parking)
- 2009 Halifax Central Library: An Economic Impact Assessment (Canmac Economic Limited)

The 'Halifax Central Library - Building Program and Space Requirements' report, prepared by the HOK Planning Group, builds on the urban design recommendations and guidelines included in the Spring Garden Road / Queen Street Area Joint Public Lands Plan.

It was the public's input from focus groups, public meetings and survey responses that drove the proposed building program and the final theme and vision adopted for the new Central Library - "A Partnership of Learning and Culture."

Following a rigorous RFP process in the fall of 2009 and winter of 2010, Fowler Bauld & Mitchell Ltd., in association with Schmidt Hammer Lassen Architects from Denmark, were selected as the Prime Consultants and Architects for this exciting new project in the downtown of Halifax.



2 The Site

Context

The location for the new Halifax Central Library was confirmed through an extensive public consultation process to develop the "Spring Garden Road / Queen Street Area Joint Public Lands Plan" (Environmental Design and Management Ltd. in association with Urban Strategies Inc.). In scenarios for development tested during the planning process, the Spring Garden Road / Queen Street site was the overwhelming choice by the public. The site was previously selected in the "Central Library Project Study" (A.J. Diamond, Donald Schmitt and Company) prepared in 1996.

The location of the proposed Central Library is on the southeast corner of the Spring Garden Road and Queen Street intersection in the heart of the downtown retail corridor. The site is bounded by Spring Garden Road to the north, Dalhousie University to the east, with the Faculty of Architecture and Planning Building immediately adjacent. The entire west side of the block from Spring Garden Road to Clyde Street has been identified as a unique opportunity for urban redevelopment with the intention that the new Central Library serve as the anchoring cornerstone. Also slated for future redevelopment is the lot immediately to the south, formerly the site of the Halifax Infirmary Hospital.



Significant Site Features

The site offers opportunities for paths and plazas that borrow and blend with the neighbouring buildings and urban fabric to make this a key gathering point in the city. The 2006 Joint Public Lands Plan notes the site as having the following positive features:

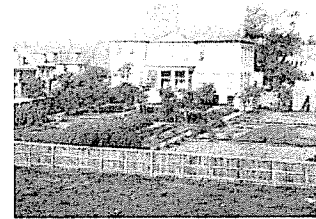
- pedestrian access
- transit access on a major downtown bus route
- local parking and on-site parking potential
- highly visible significant landmark potential
- potential for community focus
- improves the urban fabric of the street and serves as a development catalyst
- compatible functional adjacencies
- enhances public safety/security through extended hours of operation

Furthermore, the site for the new Central Library is located at a critical juncture in the city. It has many significant and unique features and will act as a hub to bring these surrounding areas together.



Historic Background

In 1800 the military constructed a new building on the site that would serve as the Commandant's house and it became known as Bellevue House. Surrounded by trees and beautiful gardens to the south it is believed this may have given the name 'Spring Garden' to the road it fronted. Today, the green belt to the north of the site along Spring Garden Road together with the current library lawn diagonally across the road create a public green space at the opposite end of Spring Garden Road where the formal Halifax Public Gardens are situated.

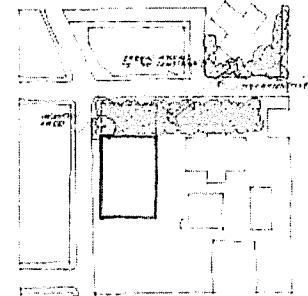


Halifax Harbour and Atlantic Ocean

The harbour and ocean define Halifax as a city and Nova Scotia as a province. The library will make connections to the harbour that has historically connected Halifax to the rest of the world. From the upper storeys of the library there will be views of Halifax Harbour and the Atlantic Ocean.

Citadel Hill

Similarly, the Halifax Citadel, a national historic site, is a prominent feature in downtown Halifax. The upper floors of the new library will make a strong visual connection to the Citadel and connect the Citadel to the harbour. The site is partially restricted by View Plane 8 which has an impact on the overall height and configuration of the upper floors.

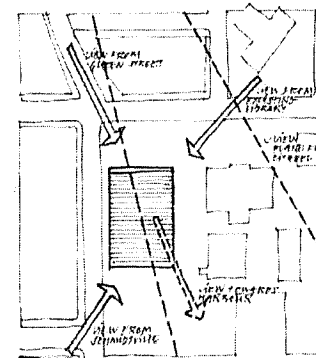


Downtown Business District

Located in the Spring Garden Road downtown precinct, the site is adjacent to the Barrington Street Heritage Conservation precinct and the Upper Central Downtown precinct. It will serve to link all these districts together.

Schmidtville

The site is located immediately at the northwest corner of Schmidtville, the high density historic wooden housing district that is so typical of Halifax's historic neighbourhoods.

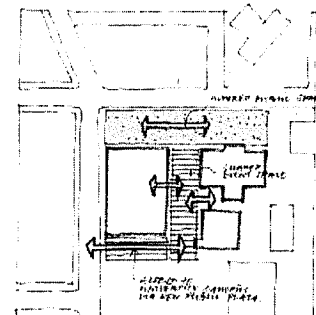


Spring Garden Road

The library fronts onto Spring Garden Road – one of the most animated commercial shopping streets in Eastern Canada.

Sexton Campus

The site interacts with the Sexton Campus of Dalhousie University and has the opportunity to bring the energy of the University to Spring Garden Road and the community into the University. There is a strong desire for the plaza in front of the library to be made continuous along Spring Garden Road and include the space in front of the Faculty of Architecture and Planning Building. The plaza proposed to the south of the library will not only serve the community's needs, it will act as a new 'front door' onto the Sexton Campus.



Public Space

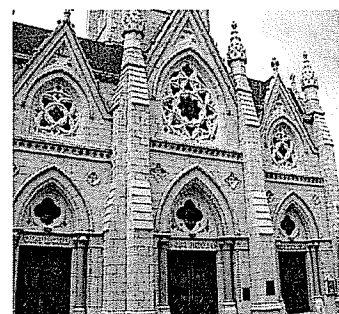
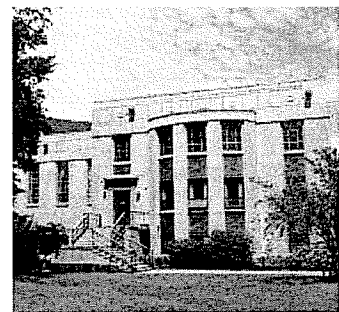
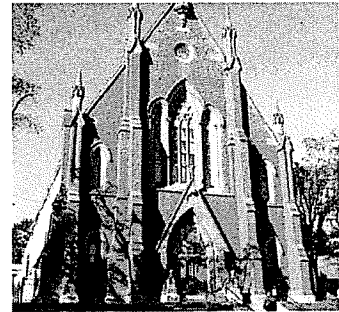
In addition to the ground level public spaces both inside and outside the library, from the upper storeys there will be views of the Citadel, the Public Gardens and the Harbour. These connections to the city's parks and common spaces are important. The library is at one end of Spring Garden Road and the Public Gardens is at the other. This gives the opportunity for delightful, public, non-commercial space to bookend the city's main pedestrian artery.

Monuments

The site is surrounded by the city's civic monuments – the Faculty of Architecture and Planning Building, the Law Courts, St. Mary's Basilica and the Old Burying Ground/St. Paul's Cemetery. The new building respects these structures without imitating them.

Visual Terminus

The site is designated as a Prominent Visual Terminus Site from both Queen Street and Clyde Street. Approaching the library from both these directions will be visually rewarding.

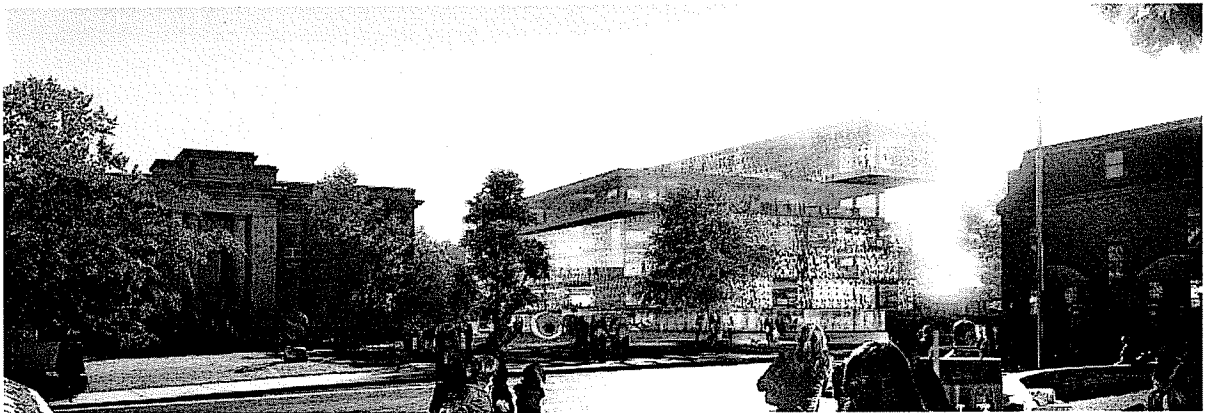


3 Vision

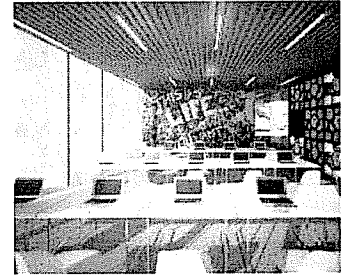
Through an extensive public consultation process and client team collaboration the following guiding principles were set out within the Building Program and Space Requirements Report compiled by HOK in June 2008, as the foundation for the Central Library throughout all stages of design:

- A civic landmark and an open space of inspiration for all residents though the municipality;
- A centrepiece for Halifax, a contribution to the economic revitalization of the City, and a new 'hub' for cultural activities;
- An accessible, inviting and inspiring destination for users of all ages, abilities and cultural backgrounds providing opportunities for social interaction as well as individual use;
- A socially, economically and environmentally sustainable building;
- A rich resource centre for knowledge, learning and personal development;
- An asset to branch libraries by providing resources which assist them in being more responsible to local community needs;
- A flexible building that will be designed to meet the challenging needs of users and accommodate new innovative technologies and new demands.

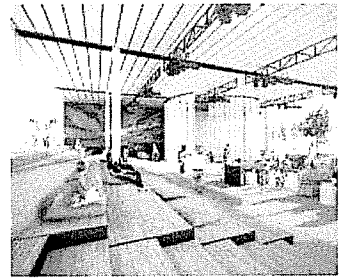
The new Central Library building program calls for a signature building that will be an enduring and instantly recognized Halifax landmark, embodying Halifax's civic values but also conveying a sense of wonder, expectation, and discovery. Through the unified success of its physical design and function, the new Central Library will both encourage and express the richness of Halifax's public, cultural, and intellectual life.



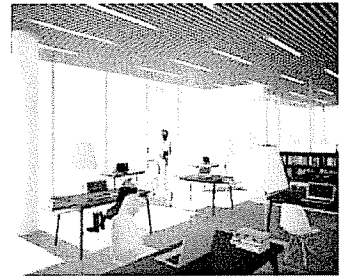
The Halifax Central Library building and the services it offers will represent the desires and vision of the residents of HRM, most of whom are users of the Halifax Public Libraries. It will be a technologically sophisticated and modern building that does not lose sight of Halifax's history and maritime heritage. The building will function as a focal point for the community where groups and individuals will come to attend programs and discussions in one of the meeting rooms, or find a warm and inviting space in which to sit and read or study. It will be a place where lifelong learning is always the primary focus and visitors are introduced to the diverse cultures of the community, and indeed, to the wider world. Residents will enjoy the environment of a welcoming, inviting and completely accessible public building and all that it offers.



The interior of the building will be open, bright and airy, an environment where visitors will feel like they are able to retreat from the complexities of urban life or gather together in community events and social interaction. The building will incorporate and reflect the ongoing creative culture of the HRM community through public art, exhibitions and programming. Special places will be created throughout the facility, allowing people of all ages to enjoy one of the quiet spaces or group areas. All aspects of the building will be universally accessible for all individuals. This is a public building that will service the needs of the community and function as a focal point for the entire Municipality.



The Central Library will be a sustainable and environmentally conscious building. This ideal will be reflected through the materials used for its construction and its furnishings, with the ultimate goal of achieving LEED® (Leadership in Energy and Environmental Design) Gold certification through the Canada Green Building Council. The Central Library will be a flexible space so that it may evolve as needs change and to keep pace with advances in technology but it will remain an efficient, friendly, and functional facility.



4 Public Consultation

The project was initially kicked off in April 2010 where planning for the extensive design process was initiated. Integral to the design process was the Public Consultation component.

The highly successful Public Consultation process was conducted over a 5 month period during the summer and fall of 2010 and reaffirmed the vision and shaped the design of the new library.

The primary purpose of the Public Consultations was to create a highly participative interface between HRL/HRM, the Architects and the Public. It was a highly principled and transparent process that encouraged active and participative engagement of a broad and diverse demographic from the community. It engaged the community in confirming their desires and aspirations for the new library and has since been held up as a example what public participation can be. Not only did it facilitate the public's involvement in the entire design process it also served to build the community around the library.

Methodology was a key element of the Public Consultation process.

Invitations:

In addition to the traditional media such as television, radio, newspapers and posters to advertise and encourage the public to attend, non-traditional media such as 'yarn bombing', sidewalk art, and social media including email, Facebook and Twitter were used.

Venues:

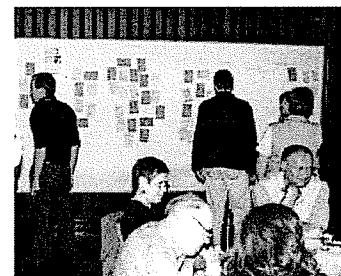
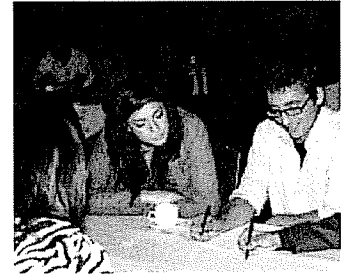
The venues were critical to the success of the consultations. They needed to be in central locations and be able to accommodate between 150 to 250 people at tables and chairs in groups of 6 to 8. They also needed to be welcoming, have additional room for displays and the provision of childcare, as well as facilitate music and poetry.

World Café Format:

The World Café Format was what permitted everyone to truly be engaged and have input. It allowed every individual to feel that their opinions and thoughts were being heard and it prevented individuals from monopolizing the entire meeting. Even the shy were able to express their thoughts when seated at a table of 6 or 8.

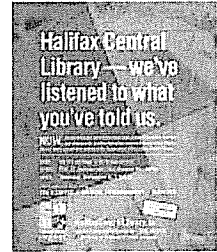
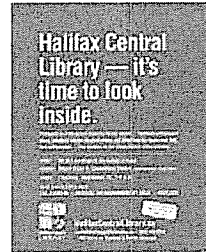
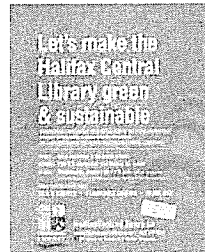
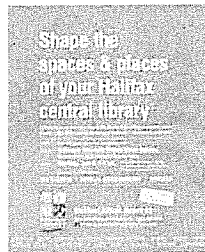
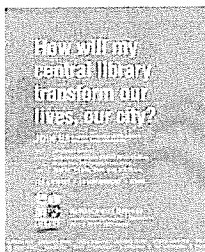
Collective Themes:

Each meeting was focused around a particular topic. At the meeting two or three brief presentations were made by the consulting team and each of these was followed by key questions for discussion around the tables. The results of these participative discussions from the tables were gathered and grouped on a wall. Not only did this capture the collective themes of the entire room it allowed for immediate feedback to the group.



The five Public Consultations and the topics were:

- 1 How will my central library transform our lives, our city?
Thursday, June 10, 2010
Dalhousie University McInnes Room, 250 attendees
- 2 Shape the spaces and places of your Halifax central library
Thursday, July 8, 2010
Dalhousie University McInnes Room, 100 attendees
- 3 Let's make the Halifax central library green and sustainable
Wednesday, August 25, 2010
Pier 21 heritage Hall, 125 attendees
- 4 Halifax Central Library - it's time to look inside
Thursday, September 30, 2010
World Trade and Convention Centre, 180 attendees
- 5 Halifax Central Library - we've listened to what you've told us
Thursday, November 4, 2010
Pier 21 heritage Hall, 250 attendees



Additional Consultations

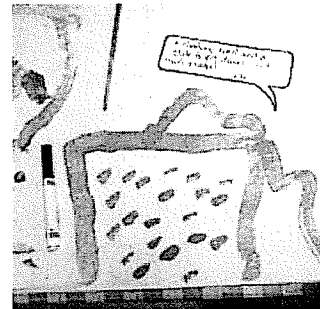
In addition to the five large Public Consultation meetings, the Architects and library staff met with a number of special interest groups to ensure that the voices of as wide a cross-section of library users and citizens as possible were heard.

Focus Groups included:

- Cultural Groups
- Parents
- African Nova Scotians
- First Nations
- New Canadians
- Children
- Adult literacy/Learning Groups
- Universal Access
- Teens

Other special events also solicited input into the new library, including

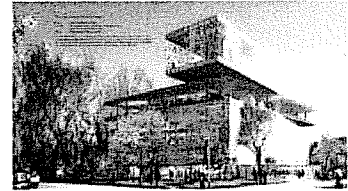
- Graffiti Wall Posters
- Kids Dream Library Art Project
- Word on the Street Festival



In accordance with the Downtown Halifax Site Plan Approval process, the following additional public consultation methods were completed:

Public Kiosk

Unmanned kiosks were set up at the three HRM Customer Service Centres and the Spring Garden Road Branch Library from June 1 to 14, 2011, inclusive. Boxes for written comments were placed at all locations.



Public Consultation Meeting / Open House

On Tuesday, June 14, 2011, between 6 and 9 pm, a Public Consultation / Open House was held at Dalhousie University School of Architecture Exhibition Room, 5410 Spring Garden Road, immediately adjacent to the project site. Approximately 30 people dropped in throughout the evening and responses were generally positive.

Development Proposal signs were installed on the site fencing facing each street frontage for 14 days prior to the Open House.



Website / Online Forum

The Halifax Central Library web site: www.halifaxcentrallibrary.ca

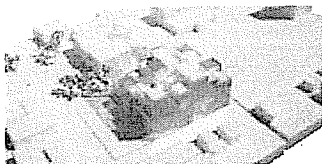
5 Design Objectives

5.1 Program & Conceptual Typologies

In May 2010 the architect team presented the HRL/HRM client team with a series of typologies investigating both different approaches to the site and the organization of the building program.

Each typology aimed to address a variety of issues from various internal organizations, urban and contextual relationships to the site and city, reactions to local building types and vernacular and the desire to create a modern and open public building for the city.

Seven typologies were presented; Grid, Platforms, Monolith/Solid, Roof, Ramp, Organic and Village.



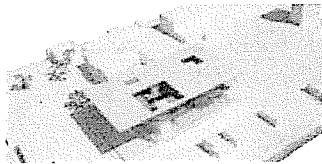
Typology 1/Grid/



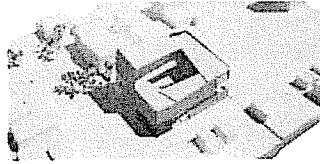
Typology 2/Platforms/



Typology 3/Monoliths/Solid/



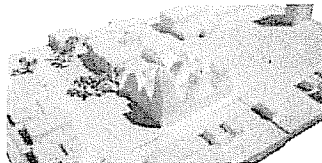
Typology 4/Roof/



Typology 5/Ramp/



Typology 6/Organic/



Typology 7/Village/

Following discussion with the client team and presentation to the public, the Platform, Ramp and Village typologies were discounted due to their lack of flexibility in terms of internal planning. The new library must be future proof, and the separation of programmatic elements in these three typologies did not allow this.

The Roof typology, including a significant cantilevered element and large green roof was chosen as a preferred approach, along with the idea of an overriding grid structure. Although not initially received favourably the Monolith/Solid typology demanded further investigation due to its simplicity and boldness. The need to be new and bold was a strong view received during the public consultation process.

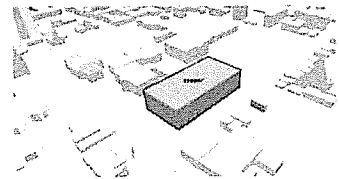
Finally, the Organic typology was also retained for further investigation due to its bold forms and potential to create a landmark.

5.2 Building Form

Twist & Shift

The new central library is envisaged to be bold in its appearance and unique in its form. As the result of a detailed site analysis and a thorough study of building typologies, the proposed design aims to respond to its immediate urban environment with subtle movements and an articulated façade.

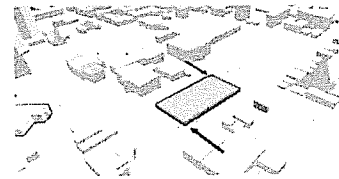
The site on the corner of Spring Garden Road and Queen Street, right next to the Dalhousie University Sexton Campus, allows for a maximum building volume of 9500m³ on a lot of 49x90m.



The main front entrance to the library is set back in alignment with the front face of the Faculty of Architecture and Planning building and opens onto a large urban space - a plaza - along Spring Garden Road.



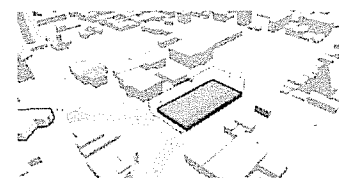
In response to pedestrian movement on and around the site from the University as well as the city centre, the first floor presents a 'push' from the southeast as well as the northwest corner which results in a twist at ground. The southwest corner is oriented toward and defines a sharp corner between the south plaza and the street.



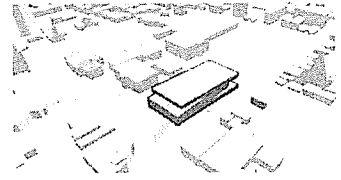
The main, middle part of the building containing the second and third floors is twisted in the opposite direction, toward Citadel Hill.



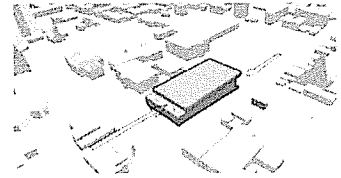
A cantilever, which is 3m at its widest point, provides a covered walkway along a portion of Queen Street and across the full north elevation at the main entry.



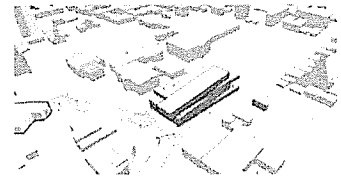
The third floor roof top aligns with the roof of the adjacent Faculty of Architecture and Planning building and thus adjusts to the city's scale.



The twisted outline of the fourth floor aligns with that of the first floor. It holds the largest part of the new library's collection and is articulated in the form of an orange 'disk'. Its green roof recreates the former Spring Garden at the highest possible point and, on one level with the Halifax Living Room, offers an even better view toward the Harbour and the Citadel.



The 5th floor cantilever is located outside the view plane restriction along the west of the building, and aligns with the twist of the second/ third floor – a future landmark hovering over the city.



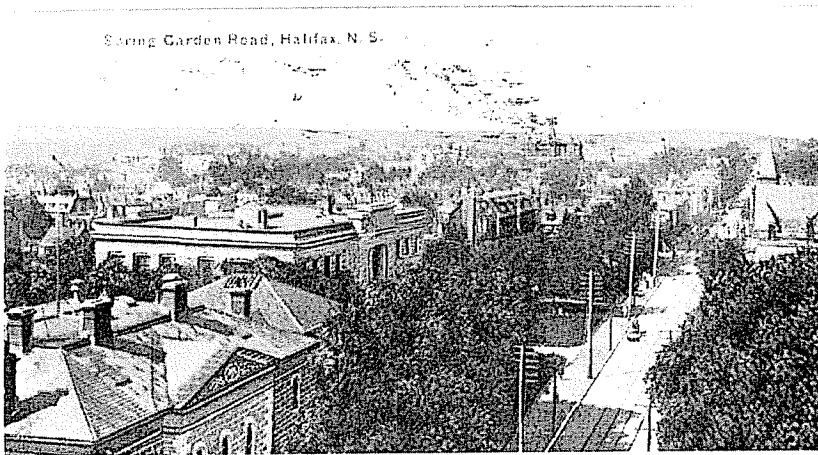
Not only the dramatic overhang, but also the Halifax Living Room in the overhang itself are envisaged to become one of the main attractions in the city.

5.3 Facade Concept

The new Halifax Central Library not only sits on Spring Garden Road, one of the most active urban retail areas within the city, but the actual site itself was historically known as the 'spring garden', because of the large gardens surrounding the Commandant's dwelling, also known as Bellevue House.

These beautiful gardens gave name to Halifax's main street. The site throughout history until today remains lined by trees along Spring Garden Road.

The new Central Library will recall the importance of this "garden" space historically to the city in a number of ways. The facade design is an external reference to this.



Leaf Motif

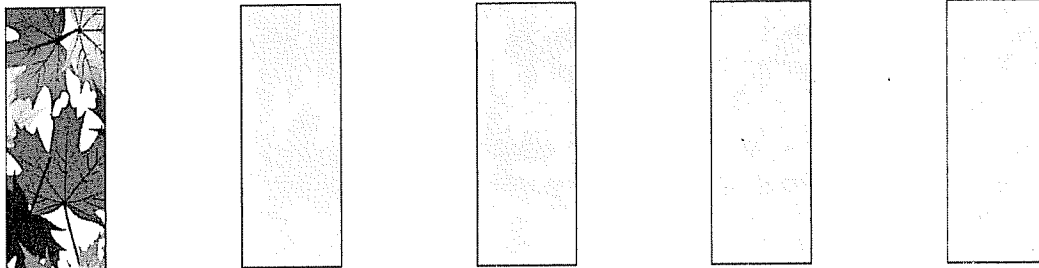
Like the sheltered area to the north along Spring Garden Road, the proposed starting point for the facade motif is that of a tree canopy.

The ability for trees to filter and control sunlight is an interesting match for the facade of a library, typically a building type that has a interesting relationship with light. Natural light is in high demand for library users, yet too much light itself is neither good for books, comfortable for prolonged reading or viewing computer screens.

The concept of a leaf motif or abstraction of a naturally occurring pattern allows not only a figurative representation of the notion of green space, but allows varying degrees of openness and transparency. Like the trees that bound the site to the north lose their leaves during the seasons, the facade motif varies in density depending on the use of the spaces within the library.

Likewise, with the technical demand to include up to 50% solid insulated panels across the glazed facade, the leaf motif attempts to homogenise the four massing elements ensuring the simplicity and boldness of the four stacked volumes is still clearly read.

The leaf pattern is to be created on the facade glass using a solid white ceramic frit pattern over Levels 2 and 3 and the bold Level 5 cantilevered element.



Orange Element

On Level 4, the orange glass will be provided using an even pattern of solid orange ceramic frit dots, at an approximate density of 40%. The outside will appear orange, but from the interior the dots will be a dark colour so that the orange will not be apparent.

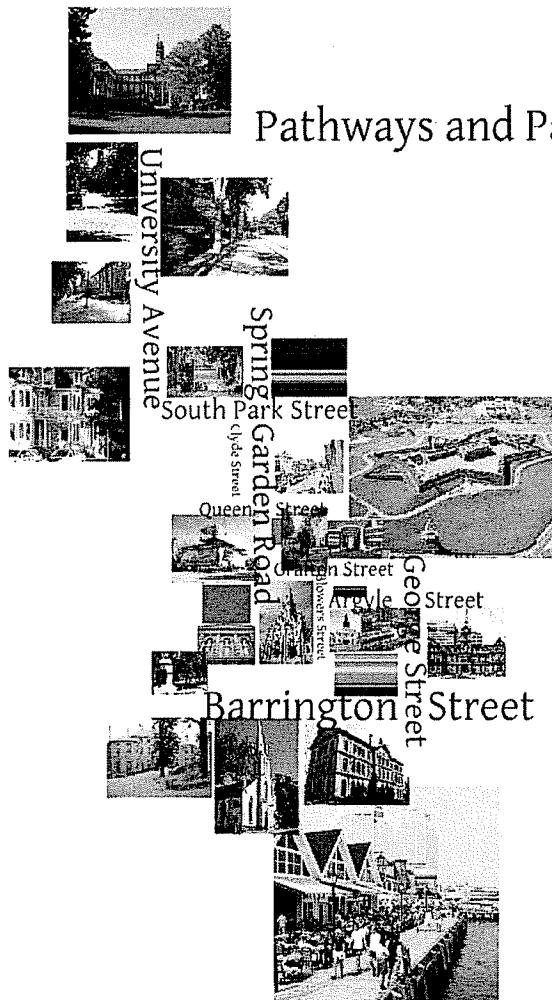
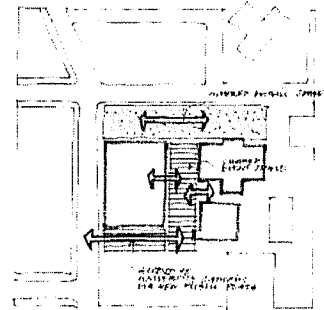
5.4 Public Open Space/Context & Program

The Central Library is located along a well-known path of open spaces extending from the North West Arm through Dalhousie University, along University Ave., across Victoria Park, braiding down Clyde and Spring Garden around the new and old library sites along Grafton and Blowers, Argyle to the Grand Parade and down George Street to the Waterfront. Along this way are a series of key public parks, streetscapes, major public institutions and monuments, entertainment areas and now the New Central Library. In that context the library is a jewel along a string of major and minor public places key to the image and life of Halifax.

Thus, the public spaces around the library need to afford informal and formal gathering and event spaces. Haligonians have rediscovered that it is a pleasure just to come together... spontaneously... and be a community. This is experienced every New Year's Eve in the Grand Parade, during the Canada Games and Tall Ships and, most recently, skating on the Halifax Common.

With over 2 million visits per year, the Central Library open spaces will afford another opportunity to gather, be with friends, bump into others, or be alone in a crowd. To that end the spaces are divided into four areas which flow into one another. Each part is able to be phased and constructed at separate times. The final result will be an iconic building surrounded by public open space in accordance with the Downtown Halifax MPS.

The images on the following pages are suggestive of the feeling and atmosphere intended, not the final finishes, furnishing or landscape.



Pathways and Parks System

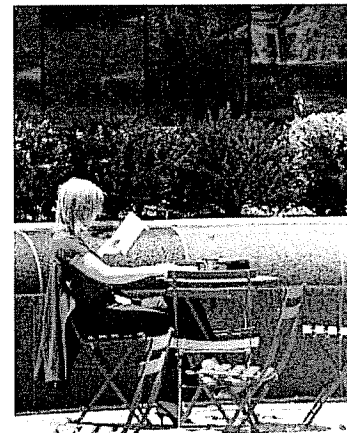
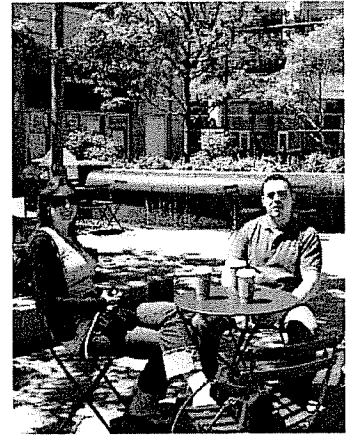
North Space to Spring Garden Road

This space will be the public face of the library. It will provide a forecourt for the library and pedestrian access across the site to the Dalhousie campus. A clear, convenient pedestrian link will provide access from Spring Garden Road and the Metro Transit stop to the main entrance of the library building.

The space will be designed to blend with the area in front of the Faculty of Architecture and Planning building and the old Memorial Library site to respect pedestrian desire lines and create a significant downtown open space. Although it will be necessary to remove some trees which are in the immediate area of the new building, a primary objective will be to maintain the existing tree canopy along Spring Garden Road and preserve as many of the existing mature trees as practical. The well spaced Spring Garden row of trees help articulate the site as separate from the sidewalk while allowing the necessary porosity for good pedestrian flow from the street to the library front door and to formal and informal public gatherings/events in the plaza.

The space is sized to accommodate groups of up to five hundred. The ground surface will be predominantly hardscape designed to protect the root zones for the trees while providing as much durable open space as possible. A series of rectilinear landscape forms and similar paving materials (colours and tones) will create a feeling that the landscape plaza flows seamlessly into the first floor of the library.

A key objective for the Spring Garden District is continued penetration of the sun to the street. This is a challenge to any building on the south side of Spring Garden Road. The large setback afforded by the library building, creating the north plaza, ensures very good sun penetration to the street and sidewalk. Fixed planter walls and benches will be located to create spaces for sitting and social gathering. However, the plaza also will incorporate the use of movable seating to allow flexibility for formal gatherings and to ensure that users can "follow the sun" especially during the shoulder seasons. This is in keeping with the public request for a variety of spaces serving to ensure that people will remain in the space, animating the street in this "see and be seen" place.

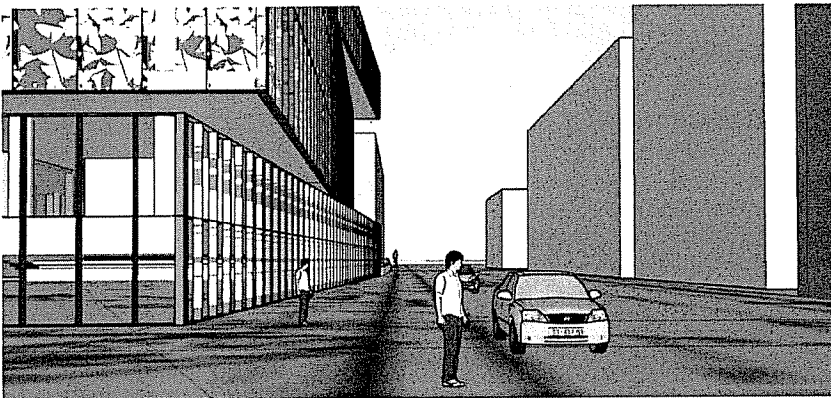


West Space to Queen Street

The requirements of HRM by Design state the need for an increased setback at grade along Queen Street. The Library design solution goes several steps better. The unique angle of the building in relation to Queen Street/Spring Garden Road Corner creates a very important funnel for pedestrians and drivers moving along Queen Street. It also affords an important and generous space on a corner receiving the greatest amount of sunlight at this end of the Library. All are conditions for creating a successful people place.

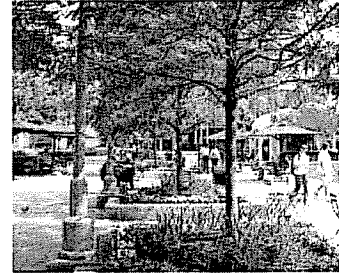
The funnel effect is important to encourage pedestrians along Queen Street and complete the connection to what is planned to be a more prominent Clyde Street, helping to reinforce the expansion of the district. The area will be treated in accordance with Capital District Streetscape Guidelines identified in the Downtown Halifax MPS. The wider sidewalk affords greater ability to successfully plant trees and provide some seating areas.

There is one mature Elm tree which will be preserved. The other existing trees have been compromised by urban stresses and will be removed. The space is also designed to encourage movement and a flow of pedestrians from the north plaza to the south plaza.



South Space

This space is proposed to be a slightly raised open plaza and will function as the primary component of the 2000 sq.m mid-block public open space identified in the Downtown Halifax MPS. The space will also function as the outdoor component of the Library's "City Space" which is on the same grade and another entrance into the Sexton Campus. As a plaza it will accommodate casual use as well as special events. While it is necessary to use hardscape and leave the area open for flexibility of use, the treatment will also incorporate planters and plant material to hearken to the original "Spring Garden".



It will have a direct connection to Queen Street at the southwest corner of the building. Grade changes to the street will be taken up with seating stairs at the southwest corner of the plaza. The space gets fantastic exposure to sunlight for much of the year even with the eventual build out of the Infirmary and Clyde Street lands. It is intended to be a more passive space than the North Plaza but because it accommodates special access to the library from the south and student access to the Sexton Campus it will have moderate activity levels.



HRM's traffic modeling for the area identified the area immediately to the south of the library property, in alignment with Clyde Street to the west, as the most suitable access for underground parking and servicing of the building. An access easement on the property to the south permits driveway access to the library, pedestrian and service vehicle access to Dalhousie University lands and driveway access to the to-be-developed former Infirmary lands in the future. This will be constructed with typical asphalt driveway surface, one sidewalk and landscaped areas as shown. Additional design improvements associated with HRM's Streetscape program may be included at a later date. These improvements are not part of the current proposal and are subject to Council approval of funding. As a 16 meter right-of-way it enables the possibility of a future conversion to a public street.

East Space Between Library and Dalhousie

This area is currently used for Dalhousie University staff parking, and will likely continue to be so in the near future. Minor landscape treatment will occur against the library building itself for the time being. However, Dalhousie has expressed the willingness to enter into future discussions about the public use of the space once the existing parking is reallocated elsewhere.

Thus, while this area is shown as a parking area for Dalhousie for the short term, it will be considered in the longer term as a landscaped pedestrian corridor to connect Spring Garden Road with the south plaza and the heart of the Sexton campus as articulated in the Dalhousie Campus Master Plan.

5.5 Microclimate Analysis/Wind & Snow

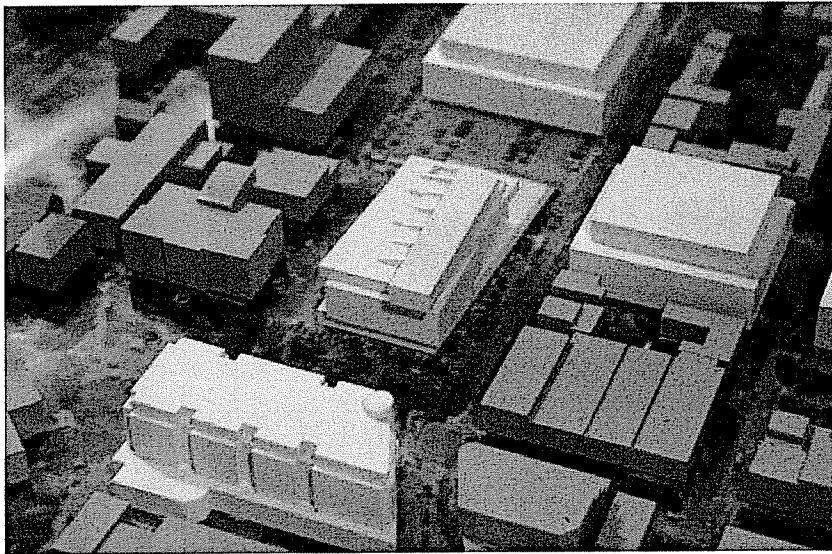
Part of the design development process included a study on the pedestrian level wind and wind induced snow deposition conditions associated with the proposed Halifax Central Library. Theakston Environmental performed these microclimate studies. The full reports are contained in two separate documents dated March 2011.

The study included anticipated forms for future development across Spring Garden Road to the north, across Queen Street to the east and on the parking lot to the south.

Wind Analysis

The proposed Halifax Central Library was assessed for environmental standards with regard to pedestrian level wind velocities relative to comfort and safety. The pedestrian level wind and gust velocities measured for the thirty-eight locations tested were well within safety criteria and most are within the comfort criteria described.

Comfort conditions expected at the proposed Central Library development site are considered acceptable to the surrounding context and extensive mitigation is not necessary. Where mitigation is desired it is achieved through parapet walls, a stepped façade at the podium, overhangs, landscaping and plantings.



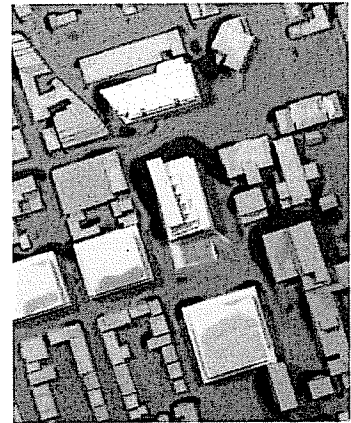
Snow Accumulation

The snow accumulation study assessed snow drifting on and around the proposed Halifax Central Library development providing consideration to the subject and neighbouring grounds, including activity areas such as entrances, sidewalks, plazas, terraces and roads, that might be affected by the proposed development.

The snow accumulation patterns or snowdrifts were recorded photographically for winds most likely to cause drifting around the subject site. The snow accumulation patterns or snowdrifts are the results of microclimatic analysis of the site during the maximum historical snowstorm recorded in a 24-hour period, the storm accompanied, or followed by strong, directional winds. The goal was to present the anticipated worst-case wind induced snowdrift scenario. To this end, silica sand, representative of snow, was applied to a physical scale model of the site and allowed to drift along buildings at streets and immediate surrounds under simulation of winter storm conditions in a water flume. Resulting windward and leeward drifts of significance were observed and discussed for wind directions considered.

Microclimatic analysis indicates that driftable snow on the roof of the proposed Library will, for all intents and purposes, be depleted to the pedestrian level over time. The depletion process will cause minor drifting near objects on the roof that disrupt flow, and at the leeward base of the building.

In summary, anticipated wind and wind-induced snow deposition at the site is not considered problematic with respect to both the proposed Central Library, and surrounding areas during typical or significant snowfall events.



6 Design Rationale

Vision for the Precinct

The site for new Halifax Central Library is within the Spring Garden Road Area Precinct. The vision for the Spring Garden Road area is outlined in the Downtown Halifax Secondary Municipal Planning Strategy, specifically Section 2.3.3 Vision for Precinct 3: Spring Garden Road Area, which states:

This precinct is one of downtown's most appealing and vibrant mixed-use areas centred on the lively Spring Garden Road commercial corridor. With proximity to major health and academic institutional complexes, and surrounded by tremendous green amenity, the Spring Garden Road precinct will play a leading role in defining the image of downtown as a livable, enriching and sustainable place to live, work and play. Intensified small-scale commercial uses and enhancements to the streetscapes will further strengthen the precinct's critical pedestrian function as a link between the downtown and the institutions and neighbourhoods to the west and east.

Residential, office and mixed-uses in mid to high-rise buildings will continue to ensure the critical density of people and activity that lend to the precinct's vitality while providing for greater utility and physical enclosure to the surrounding open spaces. New, large scaled developments will be carefully designed to ensure that pedestrians on Spring Garden Road continue to enjoy sunlight for significant periods throughout the day. Infill opportunities along Clyde Street, adjacent to the historic Schmidville neighbourhood, will reinforce its residential character while providing for buildings along Clyde Street that transition in height from the mid-rise buildings permitted along Spring Garden Road, to the existing low-rise buildings of Schmidville to the south. The mixed use nature of the buildings along Clyde Street will also provide a transition in intensity of use from the active retail required along Spring Garden Road to the primarily residential uses in Schmidville. Infill developments along Spring Garden Road to the east of Queen Street will reinforce the area's distinct qualities characterized by historic civic monuments with generous landscaped setbacks.

Defining landmark developments and improvements will include the enhancement of Spring Garden Road as the key east-west downtown pedestrian connection that links the Public Gardens to the Barrington Street Heritage Conservation District. The former Halifax Infirmary property and sites on the north side of Clyde Street will be infilled with a mix of uses that will serve to fill the major 'gaps' in the precinct while complementing the adjacent established and historically significant neighbourhoods.

Additionally, Section 2.3, Precinct 3: Spring Garden Road Area, of Schedule S-1: Design Manual of the Downtown Halifax Land-Use By-Law, also states in article (f) that developments shall "reinforce a development pattern of "monumental" buildings on Spring Garden Road from Queen Street towards Barrington Street."

These broad goals and vision are met in the proposed design for the Central Library project, specifically:

- As a cultural hub and gathering place for the community it will attract more people to the area, adding to "the critical density of people and activity."
- New and generous open public spaces are being provided in the form of plazas along Spring Garden Road and at the terminus of Clyde Street. Along Spring Garden Road the proposed plaza will be continuous with the space in front of the Faculty of Architecture and Planning building creating an even larger combined public space.
- With a setback to create a new public open space along Spring Garden Road, the design ensures that "pedestrians continue to enjoy sunlight" along Spring Garden Road.
- The new library provides an animated and completely transparent street wall of high quality.
- The historic nature of Schmidville is respected by providing an open public plaza at the diagonally opposite corner that transitions to this low-rise district to the southwest.
- A pedestrian oriented street condition is provided along Queen Street, and weather protection is provided at several areas of the building.
- The proposed library will add to the already impressive civic monuments in the immediate vicinity and specifically meets the vision that "developments along Spring Garden Road to the east of Queen Street will reinforce the area's distinct qualities characterized by historic civic monuments with generous landscaped setbacks."

Civic Character

As per 3.4 of the Design Guidelines, "The downtown's civic character is largely defined by highly visible sites occupying important symbolic locations or that have important public functions." Section 3.4.1 Prominent Frontages and View Termini, states: "These are frontages and sites with exceptional visibility and opportunity for signature or landmark architectural treatments or features." It goes on to say: "The design of these buildings should provide distinctive massing, articulation and architectural features so as to reinforce their visual prominence."

In addition, the library site is identified on Map 1 of Appendix A of the Design Manual as a Potential Civic/Cultural Site. These are sites that have prominent civic frontage, that are "highly visible building sites that front onto important public open spaces."

The new library – a corner building, occupying an important symbolic location with exceptional visibility and opportunity and having an important public function – meets these design guidelines. With its bold, twisted form, cantilevers and its unique orange element at a higher level, it will create a landmark in the city. The distinctive architectural treatment, frontal design to both street facades, and the definition of two plazas as public open space on both sides of the development, the proposal for the Central Library is appropriate for the site and its place in the city.

7 By-Law Compliance/Variations

The site for the new Halifax Central Library is located at the southeast corner of Spring Garden Road and Queen Street in Zone DH-1 (Downtown Halifax 1) and its permitted land uses include Institutional, Cultural & Open Space.

A new library in the city centre with new public spaces to both the north and south, designed to be fully accessible and used by the widest possible range of users certainly fulfills the land use requirements that were envisioned for this site.

The design for the new Central Library is unique. Its bold, twisted form, cantilevers and its unique orange element meet the vision for the library set out in 2008 and confirmed through extensive public consultations during the Schematic Design phase over in the summer and fall of 2010. It occupies a corner site on an important symbolic location and meets an important public function.

The design generally meets the requirements of the Land Use By-Law and Schedule S-1: Design Manual. However, some aspects of the design, specifically the bold, twisted form and landmark cantilevers, will require variances that are within the Design Guidelines: "To enhance the distinction and landmark quality of new buildings in these locations, modest exceptions to setbacks and height restrictions are permitted to encourage massing and design that accentuate the visual prominence of the site."

Building Height

The lower portion of the building to the east falls under View Plane 8 from Citadel Hill and the design meets this requirement.

The higher portion of the building along Queen Street is not restricted by the View Plane. Here the maximum Pre-Bonus Height, as per Map 4 of the Downtown Halifax Land Use By-Law, is 22 meters, and the maximum Post-Bonus Height, as per Map 5, is 28 meters above average grade, pursuant to Section 12.

The building height is defined in plan or elevation and is measured from the average grade of the property, specifically the average of the four corners of the property. Because of the size of the library site and the general slope toward the south and east, the average grade is lower than if the site were limited to the footprint of the actual building only. Due to the desire to provide more public open space to the south and the sloping nature of the site, the design exceeds the 28 meter height limit.

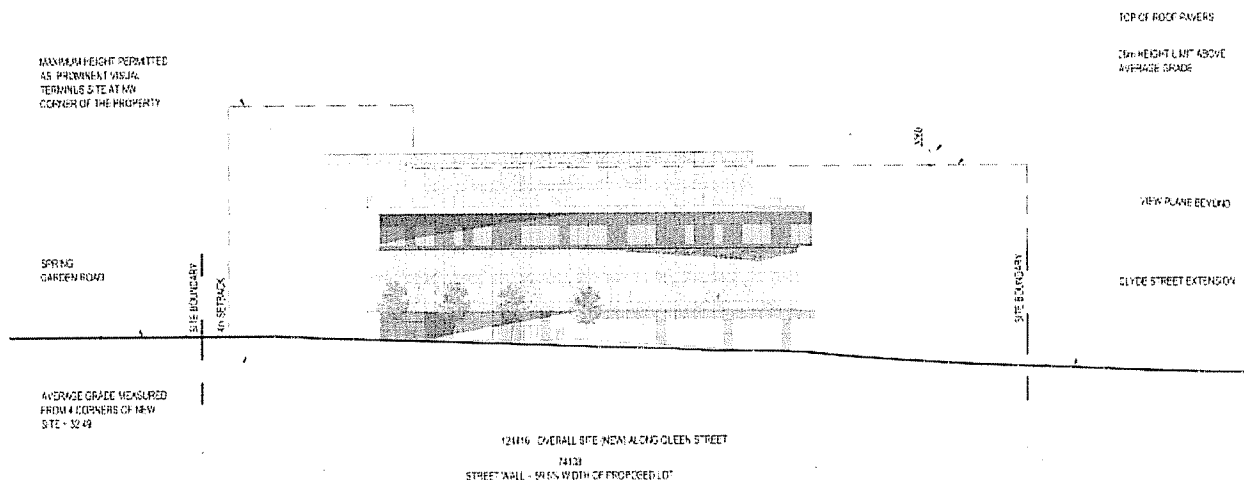
With an average grade of 32.49m plus the building construction, this will result in the top of the roof at 2.060m above the 28m limit and as such a variance is required.

Section 3.6.8, Maximum Height Variance, of the Design Manual allows for height variance where:

- (a) The maximum height is consistent with the objectives and guidelines of the Design Manual; and
- (b) The additional building height is for rooftop architectural features and the additional height does not result in an increase in gross floor area;
- (c) The additional building height is less than 1.5 meters below the View Plane or Rampart height requirements;
- (d) Where a landmark building element is provided pursuant to the Design Manual; or
- (e) Where the addition height is shown to enable the adaptive re-use of heritage buildings.

It is worth noting that this additional height is allowing all the building's mechanical equipment to be enclosed rather than being placed on the roof and does not result in any additional floor area for the library.

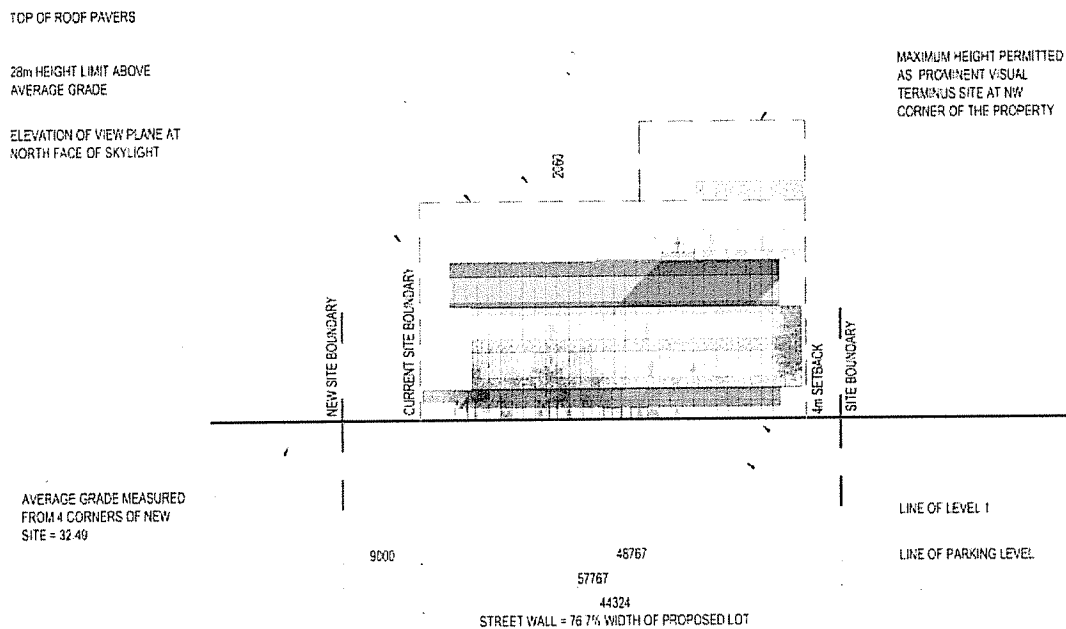
As per Section 8, subsection(9), the height requirements may be exceeded for properties identified as Prominent Visual Terminus Sites. The Library site is such a site as per Map 9 and the height requirements may also be varied where the design is consistent with the criteria of the Design Manual.



As stated in Section 9(5) of the Land Use By-Law, a streetwall should extend the full width of a lot abutting the streetline, except as noted in Subsection (6) that states, "On lots other than on Central Lots, the streetwall width may be reduced to no less than 80% of the width of a lot abutting a streetline, provided the streetwall is continuous." The library site is such a site. However, the streetwall width is less than 80% due to the desire to create public open space both to the north and south of the library building itself and the space being master planned between the Library and the Faculty of Architecture and Planning building.

Variances in the streetwall width are permitted where they are consistent with the criteria of the Design Manual that states, in Section 3.6.4.b, the streetwall width can be varied by Site Plan Approval where "the resulting gap in the streetwall has a clear purpose, is well designed and makes a positive contribution to the streetscape."

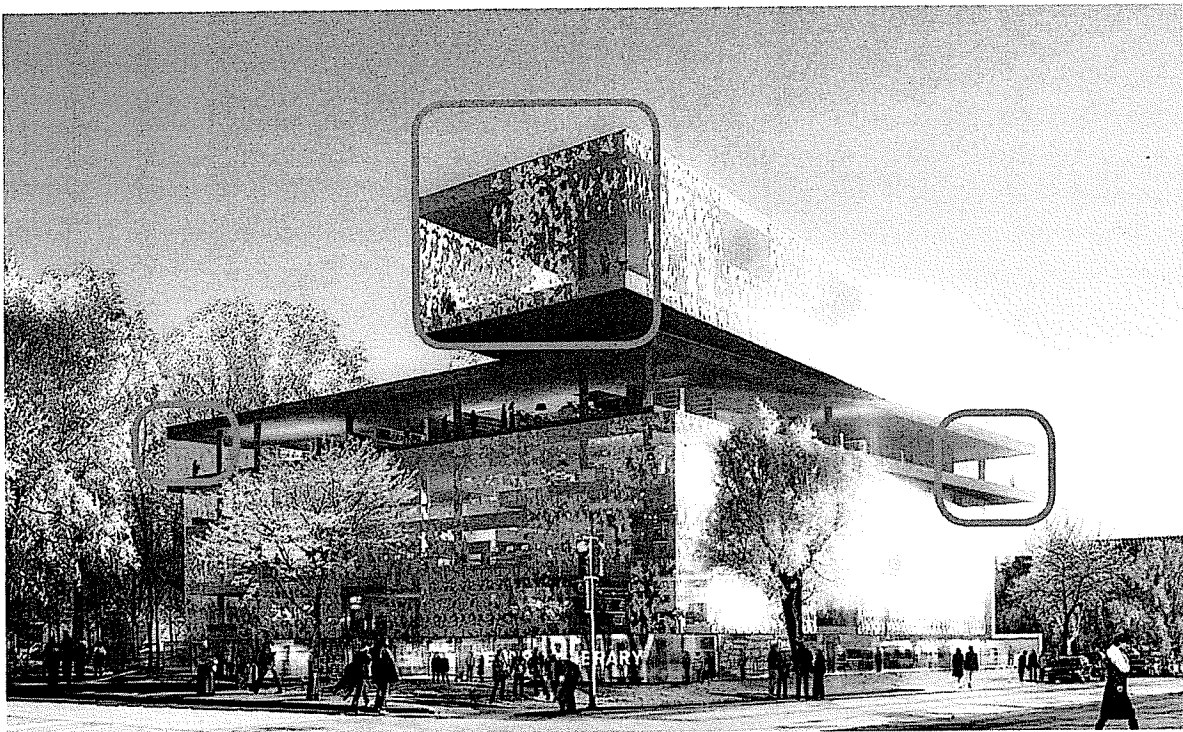
Due to the deep setback from Spring Garden Road to create a public plaza continuous with the space in front of Faculty of Architecture and Planning building, and the desire to create an open public plaza to the south, the new library's West elevation of 124m provides a streetwall width of 59.5% and as such will require a variance. Similarly, the steel wall width of the north elevation along Spring Garden Road is 76.7% and will require a variance.



Vertical Plane Projection Variance

The proposed design for the Central Library provides an entirely open and transparent ground level which is visually distinct from the main middle body of the building by twisted overhangs and setbacks and fritted facade patterns. The 5th floor cantilever is distinguished from the rest of the building and contributes with its unique gesture toward the corner at Spring Garden Road and the quality of the skyline.

These features, unique to this project, do not meet the requirements of Section 10, Subsection (5) which states, "The mid-rise portion of a building shall not project beyond the vertical plane of the exterior walls of the low-rise portion of the building." A variance is required for these landmark features that are unique to the library.



**Attachment D – Design Manual
Checklist**

Attachment D – Design Manual Checklist				
Section	Guideline	Complies	Discussion	N/A
2	Downtown Precinct Guide lines (<i>refer to Map 2 for Precinct Boundaries</i>)			
2.3	Precinct 3 - Spring Garden Road Area			
2.3a	Development shall appropriately frame Citadel Hill, the Public Gardens, and Victoria Park through the provision of consistent, animated streetwalls of superior quality and design.			•
2.3b	Ensure that there continues to be adequate sunlight penetration on Spring Garden Road.	•		
2.3c	Focus pedestrian activities at sidewalk level through the provision of weather protected sidewalks using well-designed canopies and awnings.		•	
2.3d	Prohibit new surface parking lots of any kind.		•	
2.3e	Improve the pedestrian environment in the public realm through a program of streetscape improvements as previously endorsed by Council (Capital District Streetscape Guidelines).		•	
2.3f	Development shall be in keeping with The Spring Garden Road/Queen Street Area Joint Public Lands Plan, including:		•	
	<ul style="list-style-type: none"> ensure that the Clyde Street parking lots are redeveloped with mid-rise development, underground parking, and massing that transitions to Schmidville; 			•
	<ul style="list-style-type: none"> ensure that the existing parking supply on the two Clyde Street parking lots will be preserved as part of the redevelopment of those lots, and that in addition, the redevelopment provides adequate parking for the new uses being introduced; 			•
	<ul style="list-style-type: none"> reinforce a development pattern of “monumental” buildings on Spring Garden Road from Queen Street towards Barrington Street; 	•		
	<ul style="list-style-type: none"> a new public open space, 2,000 square metres minimum, shall be established at the terminus 		•	

Attachment D – Design Manual Checklist

Section	Guideline	Complies	Discussion	N/A
	of Clyde Street, on the east side of Queen Street;			
	<ul style="list-style-type: none"> Clyde Street and Brenton Place to become important pedestrian-oriented streets; 			•
	<ul style="list-style-type: none"> allow for a mid-rise development at the corner of Morris and Queen Streets, and; 			•
	<ul style="list-style-type: none"> to allow tall buildings on the western blocks of the precinct. 			•
3	General Design Guidelines			
3.1	The Streetwall			
3.1.1	<p>Pedestrian-Oriented Commercial On certain downtown streets pedestrian-oriented commercial uses are required to ensure a critical mass of activities that engage and animate the sidewalk These streets will be defined by streetwalls with continuous retail uses and are shown on Map 3 of the Land Use By-law.</p> <p>All retail frontages should be encouraged to reinforce the ‘main street’ qualities associated with the historic downtown, including:</p>			•
3.1.2	Streetwall Setback (<i>refer to Map 6</i>)			
3.1.2a	Minimal to no Setback (0-1.5m): Corresponds to the traditional retail streets and business core of the downtown. Except at corners or where an entire block length is being redeveloped, new buildings should be consistent with the setback of the adjacent existing buildings.			•
3.1.2b	Setbacks vary (0-4m): Corresponds to streets where setbacks are not consistent and often associated with non-commercial and residential uses or house-form building types. New buildings should provide a setback that is no greater or lesser than the adjacent existing buildings.	•		
3.1.2c	Institutional and Parkfront Setbacks (4m+): Corresponds to the generous landscaped setbacks generally associated with civic landmarks and institutional uses. Similar setbacks designed as	•		

Attachment D – Design Manual Checklist

Section	Guideline	Complies	Discussion	N/A
	landscaped or hardscaped public amenity areas may be considered where new public uses or cultural attractions are proposed along any downtown street. Also corresponds to building frontages on key urban parks and squares where an opportunity exists to provide a broader sidewalk to enable special streetscape treatments and spill out activity such as sidewalk patios.			
3.1.3	Streetwall Height (<i>refer to Map 7</i>) To ensure a comfortable human-scaled street enclosure, streetwall height should generally be no less than 11 metres and generally no greater than a height proportional (1:1) to the width of the street as measured from building face to building face. Accordingly, maximum streetwall heights are defined and correspond to the varying widths of downtown streets – generally 15.5m, 17m or 18.5m. Consistent with the principle of creating strong edges to major public open spaces, a streetwall height of 21.5m is permitted around the perimeter of Cornwallis Park. Maximum Streetwall Heights are shown on Map 7 of the Land Use By-law.		•	
3.2	Pedestrian Streetscapes			
3.2.1	Design of the Streetwall			
3.2.1a	The streetwall should contribute to the 'fine grained' character of the streetscape by articulating the façade in a vertical rhythm that is consistent with the prevailing character of narrow buildings and storefronts.		•	
3.2.1b	The streetwall should generally be built to occupy 100% of a property's frontage along streets.		•	
3.2.1c	Generally, streetwall heights should be proportional to the width of the right of way, a 1:1 ratio between streetwall height and right of way width. Above the maximum streetwall height, further building heights are subject to upper storey setbacks.		•	
3.2.1d	In areas of contiguous heritage resources, streetwall height should be consistent with heritage buildings.			•

Attachment D – Design Manual Checklist				
Section	Guideline	Complies	Discussion	N/A
3.2.1e	Streetwalls should be designed to have the highest possible material quality and detail.	•		
3.2.1f	Streetwalls should have many windows and doors to provide 'eyes on the street' and a sense of animation and engagement.	•		
3.2.1g	Along pedestrian frontages at grade level, blank walls shall not be permitted, nor shall any mechanical or utility functions (vents, trash vestibules, propane vestibules, etc.) be permitted.	•		
3.2.2	Building Orientation and Placement			
3.2.2a	All buildings should orient to, and be placed at, the street edge with clearly defined primary entry points that directly access the sidewalk.	•		
3.2.2b	Alternatively, buildings may be sited to define the edge of an on-site public open space, for example, plazas, promenades, or eroded building corners resulting in the creation of public space (see diagram at right). Such treatments are also appropriate for Prominent Visual Terminus sites identified on Map 9 of the Land Use By-law.	•		
3.2.2c	Sideyard setbacks are not permitted in the Central Blocks defined on Map 8 of the Land Use Bylaw, except where required for through-block pedestrian connections or vehicular access.			•
3.2.3	Retail Uses			•
3.2.4	Residential Uses			•
3.2.5	Sloping Conditions			•
3.2.6	Elevated Pedestrian Walkways			•
3.2.7	Other Uses			
3.2.7a	Non-commercial uses at-grade should animate the street with frequent entries and windows.	•		
3.3	Building Design			
3.3.1	Building Articulation			
3.3.1a	To encourage continuity in the streetscape and to ensure vertical 'breaks' in the façade, buildings	•		

Attachment D – Design Manual Checklist

Section	Guideline	Complies	Discussion	N/A
	<p>shall be designed to reinforce the following key elements through the use of setbacks, extrusions, textures, materials, detailing, etc.:</p> <ul style="list-style-type: none"> • Base: Within the first four storeys, a base should be clearly defined and positively contribute to the quality of the pedestrian environment through animation, transparency, articulation and material quality. • Middle: The body of the building above the base should contribute to the physical and visual quality of the overall streetscape. • Top: The roof condition should be distinguished from the rest of the building and designed to contribute to the visual quality of the skyline. 			
3.3.1b	Buildings should seek to contribute to a mix and variety of high quality architecture while remaining respectful of downtown's context and tradition.		•	
3.3.1c	To provide architectural variety and visual interest, other opportunities to articulate the massing should be encouraged, including vertical and horizontal recesses or projections, datum lines, and changes in material, texture or colour.	•		
3.3.1d	Street facing facades should have the highest design quality, however, all publicly viewed facades at the side and rear should have a consistent design expression.	•		
3.3.2	Materials			
3.3.2a	Building materials should be chosen for their functional and aesthetic quality, and exterior finishes should exhibit quality of workmanship, sustainability and ease of maintenance.	•		
3.3.2b	Too varied a range of building materials is discouraged in favour of achieving a unified building image.	•		
3.3.2c	Materials used for the front façade should be carried around the building where any facades are exposed to public view at the side or rear.	•		
3.3.2d	Changes in material should generally not occur at	•		

Attachment D – Design Manual Checklist

Section	Guideline	Complies	Discussion	N/A
	building corners.			
3.3.2e	Building materials recommended for new construction include brick, stone, wood, glass, in-situ concrete and pre-cast concrete.	•		
3.3.2f	In general, the appearance of building materials should be true to their nature and should not mimic other materials.	•		
3.3.2g	Stucco and stucco-like finishes shall not be used as a principle exterior wall material.	•		
3.3.2h	Vinyl siding, plastic, plywood, concrete block, EIFS (exterior insulation and finish systems where stucco is applied to rigid insulation), and metal siding utilizing exposed fasteners are prohibited.	•		
3.3.2i	Darkly tinted or mirrored glass is prohibited. Clear glass is preferable to light tints. Glare reduction coatings are preferred.	•		
3.3.2j	Unpainted or unstained wood, including pressure treated wood, is prohibited as a building material for permanent decks, balconies, patios, verandas, porches, railings and other similar architectural embellishments, except that this guidelines shall not apply to seasonal sidewalk cafes.	•		
3.3.3	Entrances			
3.3.3a	Emphasize entrances with such architectural expressions as height, massing, projection, shadow, punctuation, change in roof line, change in materials, etc.		•	
3.3.3b	Ensure main building entrances are covered with a canopy, awning, recess or similar device to provide pedestrian weather protection.	•		
3.3.3c	Modest exceptions to setback and stepback requirements are possible to achieve these goals.			•
3.3.4	Roof Line and Roofscapes			
3.3.4a	Buildings above six storeys (mid and high-rise) contribute more to the skyline of individual precincts and the entire downtown, so their roof massing and profile must include sculpting,	•		

Attachment D – Design Manual Checklist

Section	Guideline	Complies	Discussion	N/A
	towers, night lighting or other unique features.			
3.3.4b	The expression of the building 'top' (see previous) and roof, while clearly distinguished from the building 'middle', should incorporate elements of the middle and base such as pilasters, materials, massing forms or datum lines.	•		
3.3.4c	Landscaping treatment of all flat rooftops is required. Special attention shall be given to landscaping rooftops in precincts 3, 5, 6 and 9, which abut Citadel Hill and are therefore pre-eminently visible. The incorporation of living "green roofs" is strongly encouraged.		•	
3.3.4d	Ensure all rooftop mechanical equipment is screened from view by integrating it into the architectural design of the building and the expression of the building 'top'. Mechanical rooms and elevator and stairway head-houses should be incorporated into a single well-designed roof top structure. Sculptural and architectural elements are encouraged to add visual interest.	•		
3.3.4e	Low-rise flat roofed buildings should provide screened mechanical equipment. Screening materials should be consistent with the main building design. Sculptural and architectural elements are encouraged for visual interest as the roofs of such structures have very high visibility.	•		
3.3.4f	The street-side design treatment of a parapet should be carried over to the back-side of the parapet for a complete, finished look where they will be visible from other buildings and other high vantage points.	•		
3.4	Civic Character			
3.4.1	Prominent Frontages and View Termini			
3.4.1a	Prominent Visual Terminus Sites: These sites identify existing or potential buildings and sites that terminate important view corridors and that can strengthen visual connectivity across downtown. On these sites distinctive architectural treatments such as spires, turrets, belvederes, porticos, arcades, or archways should be provided.	•		

Attachment D – Design Manual Checklist

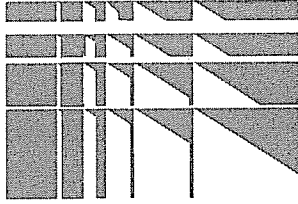
Section	Guideline	Complies	Discussion	N/A
	Design elements (vertical elements, porticos, entries, etc.) should be aligned to the view axis. Prominent Visual Terminus Sites are shown on Map 9 in the Land Use By-law.			
3.4.1b	Prominent Civic Frontage: These frontages identify highly visible building sites that front onto important public open spaces such as the Citadel and Cornwallis Park, as well as important symbolic or ceremonial visual and physical connections such as the waterfront boardwalks, the proposed Grand Promenade linking the waterfront to the Town Clock, and other eastwest streets that connect the downtown to the waterfront. Prominent Civic Frontages are shown on Map 1 in Appendix A of the Design Manual.	•		
3.4.2	Corner Sites			
3.4.2a	Provision of a change in the building massing at the corner, in relation to the streetwall.	•		
3.4.2b	Provision of distinctive architectural treatments such as spires, turrets, belvederes, porticos, arcades, or archways.	•		
3.4.2c	Developments on all corner sites must provide a frontal design to both street frontages.		•	
3.4.2d	Alternatively, buildings may be sited to define the edge of an on-site public open space, for example, plazas, promenades, or eroded building corners resulting in the creation of public space.		•	
3.4.3	Civic Buildings			
3.4.3e	Civic buildings entail a greater public use and function, and therefore should be prominent and recognizable, and be designed to reflect the importance of their civic role.	•		
3.4.3f	Provide distinctive architectural treatments such as spires, turrets, belvederes, porticos, arcades, or archways.	•		
3.4.3g	Ensure entrances are large and clearly visible. Provide a building name and other directional and wayfinding signage.		•	

Attachment D – Design Manual Checklist				
Section	Guideline	Complies	Discussion	N/A
3.4.3h	Very important public buildings should have unique landmark design. Such buildings include transit terminals, museums, libraries, court houses, performing arts venues, etc.	•		
3.5	Parking Services and Utilities			
3.5.1	Vehicular Access, Circulation, Loading and Utilities			
3.5.1a	Locate parking underground or internal to the building (preferred), or to the rear of buildings.	•		
3.5.1b	Ensure vehicular and service access has a minimal impact on the streetscape, by minimizing the width of the frontage it occupies, and by designing integrated access portals and garages.	•		
3.5.1c	Locate loading, storage, utilities, areas for delivery and trash pick up out of view from public streets and spaces, and residential uses.		•	
3.5.1d	Where access and service areas must be visible from or shared with public space, provide high quality materials and features that can include continuous paving treatments, landscaping and well designed doors and entries.		•	
3.5.1e	Coordinate and integrate utilities, mechanical equipment and meters with the design of the building, for example, using consolidated rooftop structures or internal utility rooms.	•		
3.5.1f	Locate heating, venting and air conditioning vents away from public streets. Locate utility hook-ups and equipment (i.e. gas meters) away from public streets and to the sides and rear of buildings, or in underground vaults.	•		
3.5.2	Parking Structures		•	
3.5.3	Surface Parking		•	
3.5.4	Lighting			
3.5.4a	Attractive landscape and architectural features can be highlighted with spot-lighting or general lighting placement.		•	
3.5.4b	Consider a variety of lighting opportunities		•	

Attachment D – Design Manual Checklist

Section	Guideline	Complies	Discussion	N/A
	inclusive of street lighting, pedestrian lighting, building up- or down-lighting, internal building lighting, internal and external signage illumination (including street addressing), and decorative or display lighting.			
3.5.4c	Illuminate landmark buildings and elements, such as towers or distinctive roof profiles.		•	
3.5.4d	Encourage subtle night-lighting of retail display windows.			•
3.5.4e	Ensure there is no 'light trespass' onto adjacent residential areas by the use of shielded "full cutoff" fixtures.	•		
3.5.4f	Lighting shall not create glare for pedestrians or motorists by presenting unshielded lighting elements in view.	•		
3.5.5	Signs		•	

**Attachment E – Wind
Assessment Letter**



THEAKSTON ENVIRONMENTAL
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June 30, 2011

Mr. George Cotaras, MNSAA, MRAIC
Vice President & General Manager
FOWLER BAULD & MITCHELL architecture
P.O. Box 514, Suite 102, 1660 Hollis Street
Halifax, Nova Scotia
B3J 2R7

Dear George:

**Re: Halifax Central Library
Addendum Letter - Microclimatic Studies – Wind - Snow
Theakston Project No. 10757**

We reviewed Architectural Drawings by Gordon Ratcliffe Landscape Architects, dated June 30, 2011, as well as our Report dated March 2011, with regard to the effect of the proposed landscaping on predicted pedestrian comfort conditions. As outlined and noted in our Wind Analysis Report, all of the comfort ratings that were measured at each of the thirty-eight test locations were based upon analysis of buildings as proposed at the time, without landscaping in place.

The original rating of “walking” or “standing” in a few test locations, where activities that require longer exposure times are preferable, was primarily attributable to the setting under test, that is without existing and proposed landscaping in place, and to a lesser degree, the orientation and conformation of the subject building and surroundings. In addition, the downwash off of the building faces, while appreciable, was not a significant contributing factor to the comfort rating.

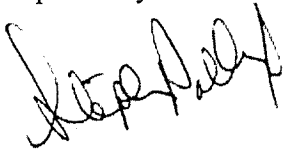
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Further assessment was based on a revised landscape plan, whereby, in addition to existing trees, additional trees, hedges, groundcover, wooden benches and seating/planter walls were incorporated into the design, and assigned to the Knowledge Plaza and Spring Garden Road Courtyard. Individual trees and plantings were strategically placed along the East and West façades of the Library, as well.

Based on our analysis and experience, we submit the proposed landscaping, considered in concert with the existing vegetation both on site, and in the surroundings, indicate an improvement in pedestrian comfort conditions (ratings) predicted at the proposed Development, over those discussed in the aforementioned Theakston Report.

In conclusion, comfort conditions at the site will be at acceptable levels pursuant to accepted practices and standards.

Respectfully submitted



Stephen Pollock P. Eng.



**Theakston
Environmental**

**Attachment F – Proposed
Public Benefit Contribution**

July 12, 2011

Richard Harvey
Senior Planner
Halifax Regional Municipality
PO Box 1749
Halifax, N.S.
B3J 3A5

Richard:

Re: Public Benefit Calculation – Halifax Central Library Project

We have calculated the public benefit contribution associated with this application and I'm pleased to report that the open space / park elements of the proposed library plan significantly exceed the public benefit value of the floor located above the pre-bonus height limitation of 22m above the average grade.

Using these parameters, we have determined the pre-bonus height line lies between the floor and ceiling of level five of the proposed building. Accordingly, we have based our calculation on the gross floor areas of levels 5 and 6 of the structure. We have not included elevator shafts and we have counted stairwells only once as opposed to counting the stairs as floor area for both floors. The resultant floor area is 1404 square meters.

Based on an equivalent public benefit value of \$4.00 per 0.1 square meters, we calculate the total public benefit value as \$56,160.

We estimate the value of the open space treatments in the front, rear and side yards of the proposed library have a value in excess of \$670,000. This includes the soft and hard landscaping features but does not include the value of the property or additional features such as lighting, signage etc.

We hope you find this an acceptable calculation and that you agree this satisfies the requirements of Section 12 of the Peninsula Land Use Bylaw.

Please feel free to contact me if you have any questions.

Respectfully Submitted,

Steven Higgins
Coordinator, Infrastructure and Asset Management

cc Terry Gallagher – Manager of Facility Development
 Michael MacDonald – Project Manager
 George Cotaras – Fowler Bauld and Mitchell, Architects
 Peter Bigelow – Manager Real Property Planning