

# WEST MEMORIAL BUILDING REHABILITATION PROJECT

Issued for City of Ottawa Site Coordination

Project No.: R.086471.405



**REGENERATE 344**  
Moriyama & Teshima Architects +  
Kasian Architecture  
in Joint Venture



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**1.0**

# **INTRODUCTION**

Unoccupied since 2008, the West Memorial Building is being rehabilitated and revitalized to accommodate Federal offices for its long-term use. Its initial function will be to serve as a temporary home for the Supreme Court of Canada. It will be fit-up as swing space, to temporarily accommodate the users' and functions, currently carried out in the Supreme Court of Canada Building, allowing that building to be rehabilitated.

Situated on the south side of Confederation Boulevard, the West Memorial Building is part of the urban edge which defines the Boulevard. It has a distinctive heritage architecture and is mirrored by the East Memorial Building, creating an important civic open space between these two highly symmetric buildings. The two buildings frame the Memorial Colonnade and redirect focus from the building to a National Monument and important civic landmark. The building has a strong visual connection to the Library and Archives Canada Building across the street, the Supreme Court of Canada to the North East, and the Garden of the Provinces to the West. It is adjacent to Sparks Street, a pedestrian street filled with shops, restaurants, and activities further to the South East. The dense urban fabric that surrounds the WMB provides limited opportunity for exterior public spaces for visitors, vehicular drop off zones or landscaping.

The Supreme Court of Canada Building, on the other hand, is situated on a bluff overlooking the Ottawa River West of the Parliamentary Precinct and within the Judicial Precinct. Set-back from Confederation Boulevard by a formal green space, the site is separated from the activity of the street and its neighbouring buildings, creating a "building in a landscape" context. The contrast between the two sites emphasizes the need to enhance the public realm and experience of the West Memorial Building (WMB) to uphold the strength and prominence of a national institution and create opportunity for gathering and an exceptional visitor experience.





**2.0**

# **PLANNING FRAMEWORK**



Zoning Information

**Project Address:**  
344 Wellington Street, Ottawa, ON

**Zoning By-Law 2008-250 Consolitation:**  
Mixed Use Downtown, Schedule 11, MD S11

The following documents are reviewed in this section:

- a) Provincial Policy Statement 2014
- b) City of Ottawa Official Plan
- c) Zoning By-Law 2008-250
- d) Downtown Ottawa Urban Design Strategy 20/20 (DOUDS)
- e) Downtown Move - Transforming Ottawa’s Streets (City of Ottawa, 2013)

Provincial Policy Statement 2014

The Provincial Policy Statement 2014 (PPS) provides policy direction on planning matters for the Province of Ontario. Decisions affecting all planning matters shall be consistent with the Provincial Planning Policies. Applicable policies that must be recognized throughout the redevelopment of the West Memorial Building are outlined below.

1. Section 1.1.1 of the PPS states that healthy, livable, and safe communities are sustained by:
  - a. promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term;
  - b. accommodating an appropriate range and mix of residential [...] employment (including industrial and commercial), institutional [...] and other uses to meet long-term needs;
  - c. avoiding development and land use patterns which may cause environmental or public health and safety concerns;
  - d. promoting cost-effective development patterns and standards to minimize land consumption and servicing costs;
  - e. improving accessibility for persons with disabilities and older persons by identifying, preventing and removing land use barriers which restrict full participation in society.
2. Section 1.2.2 of the PSS states that: planning authorities are encouraged to coordinate planning matters with Aboriginal communities.
3. Section 1.3.1 of the PPS states that planning authorities shall promote economic development and competitiveness by:
  - a. providing for an appropriate mix and range of employment and institutional uses to meet long-term needs;
  - b. providing opportunities for a diversified economic base, including maintaining a range and choice of suitable sites for employment uses which support a wide range of economic activities and ancillary uses, and take into account the needs of existing and future businesses;
  - c. encouraging compact, mixed-use development that incorporates compatible employment uses to support livable and resilient communities; and,
  - d. ensuring the necessary infrastructure is provided to support current and projected needs.
4. Section 1.7.1 of the PPS states that long-term economic prosperity should be supported by:
  - a. promoting opportunities for economic development and community investment-readiness;
  - b. maintaining and, where possible, enhancing the vitality and viability of downtowns and Mainstreets;
  - c. encouraging a sense of place by promoting well-designed built form and cultural planning, and by conserving features that help define character, including built heritage resources and cultural heritage landscapes.
5. Section 2.6.1 of the PPS states that: Significant built heritage resources and significant cultural heritage landscapes shall be conserved.
6. Section 2.6.3 of the PPS states that: Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.



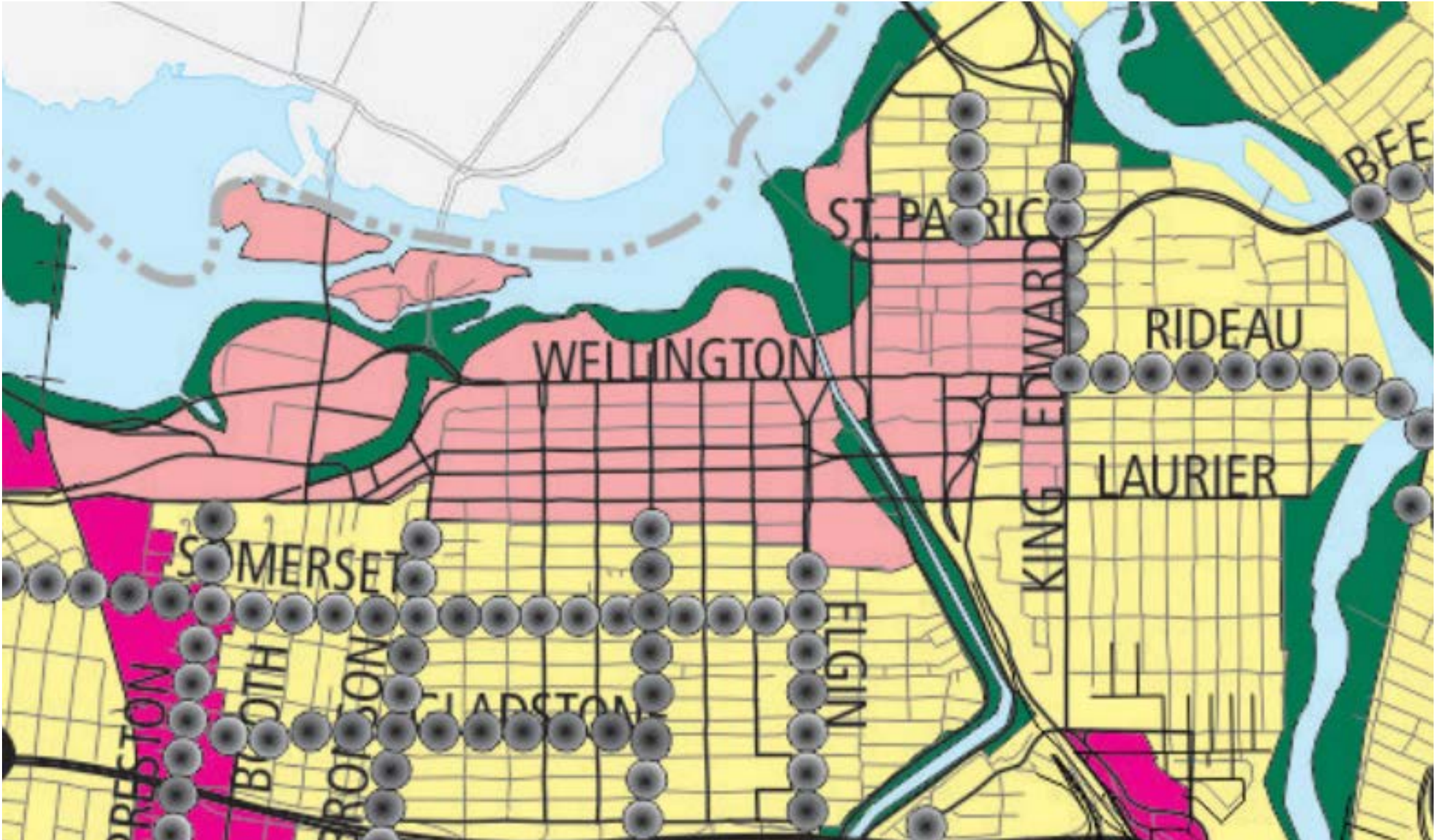
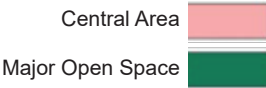
City of Ottawa Official Plan

The site is designated Central Area in the City of Ottawa Official Plan, as shown in the extract of Schedule B – Urban Policy Area on the right.

As per Section 2.5.1, Urban Design and Compatibility, the site falls within a Design Priority Area, as recognized by the Downtown Ottawa Urban Design Strategy (DOUDS). As such, the application would be subject to review by the Urban Design Review Panel (UDRP), which provides design-related feedback on development projects.

As per Section 3.6.6, Central Area, “[t]he Central Area is the economic and cultural heart of the city and the symbolic heart of the nation, based on its unique combination of employment, government, retail, housing, entertainment and cultural activities. It is also the main tourist destination in the National Capital Region, with 5.5 million visitors yearly. These policies promote the Central Area’s vital role in the city, its distinct identity and heritage character, as well as the primacy of the Parliament Buildings and other national symbols. The Plan also aims to enhance the diversity and attractiveness

Heritage policy within the City of Ottawa’s OP is outlined throughout Section 4.6.1, Heritage Buildings and Areas. Though federally managed and regulated through FHBRO, consideration should be given to the City of Ottawa’s policies on heritage management. The policy states that: “[h]eritage buildings and areas are buildings, structures, sites, landscapes, areas or environments which may have cultural, architectural, historical, contextual and/or natural interest, and which may warrant designation under the Ontario Heritage Act, and/or may warrant other means of cultural heritage recognition, for example, by the federal government. Heritage significance does not only flow from recognition but is dependent on a property’s inherent values.”



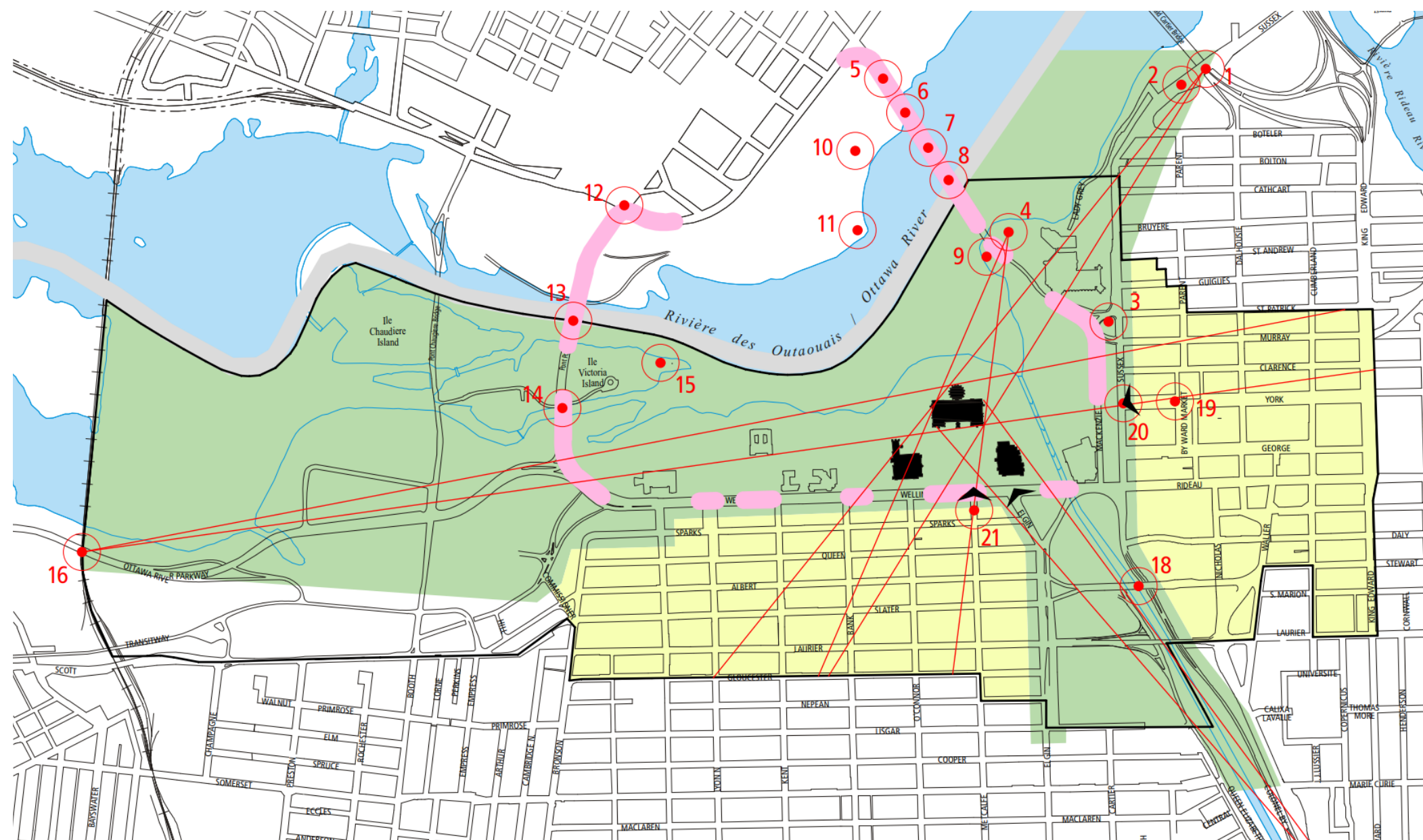
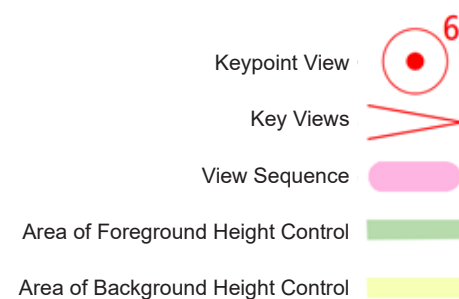
Official Plan - Schedule B: Urban Policy Plan



In addition to heritage conservation, the OP addresses urban design requirement in Section 4.11, Urban Design and Compatibility. The policy states that “[a]t the city-wide scale, issues of compatibility are addressed in the Official Plan through the appropriate designation of land and associated policies that direct where and how certain categories of land use should be permitted to develop. [...] It is recognized that because land use designations such as General Urban Area [...] contain broad use permissions, it will be necessary for the zoning by-law to establish more specific permitted use lists and development regulations within areas and on individual sites in a manner that achieves compatibility among proximate uses and built forms.

At the scale of neighbourhoods or individual properties, issues such as noise, spillover of light, accommodation of parking and access, shadowing, and micro-climatic conditions are prominent considerations when assessing the relationships between new and existing development. Often, to arrive at compatibility of scale and use will demand a careful design response, one that appropriately addresses the impact generated by infill or intensification. Consequently, the issue of 'context' is a dominant theme of this Plan where it speaks to compatibility and design.

Objective criteria that can be used to evaluate compatibility include: height, bulk or mass, scale relationship, and building/lot relationships, such as the distance or setback from the street, and the distance between buildings. An assessment of the compatibility of new development will involve not only consideration of built form, but also of operational characteristics, such as traffic, access, and parking.”



Official Plan - Annex 8A: Central Area Key Views and View Sequences of the Parliament Buildings and Other National Symbols



Central Area Section Plan

The Central Area Sector Plan outlines sector-specific direction for development within the areas defined in the image on the right. Policies within the Central Area Sector plan focus on a high quality of design, protection and conservation of heritage resources, and respect for the visual primacy of the Parliamentary Precinct.

The West Memorial Building falls within the Parliamentary Precinct character area, which is intended to be an area of federal presence, with Confederation Boulevard and Wellington Street acting as the primary avenue to the Capital. The intent of this Precinct is to maintain visual and symbolic primacy of Parliament Hill. As such, building heights are limited, and building are encouraged to enhance the symbolic importance of the area (Section 1.4.1). The retention and improvement of existing built heritage resources is also promoted.

As reiterated through most of the over-arching policy tools, it is important that the West Memorial project respect the views of this important region, as well as the heritage character of the existing building.

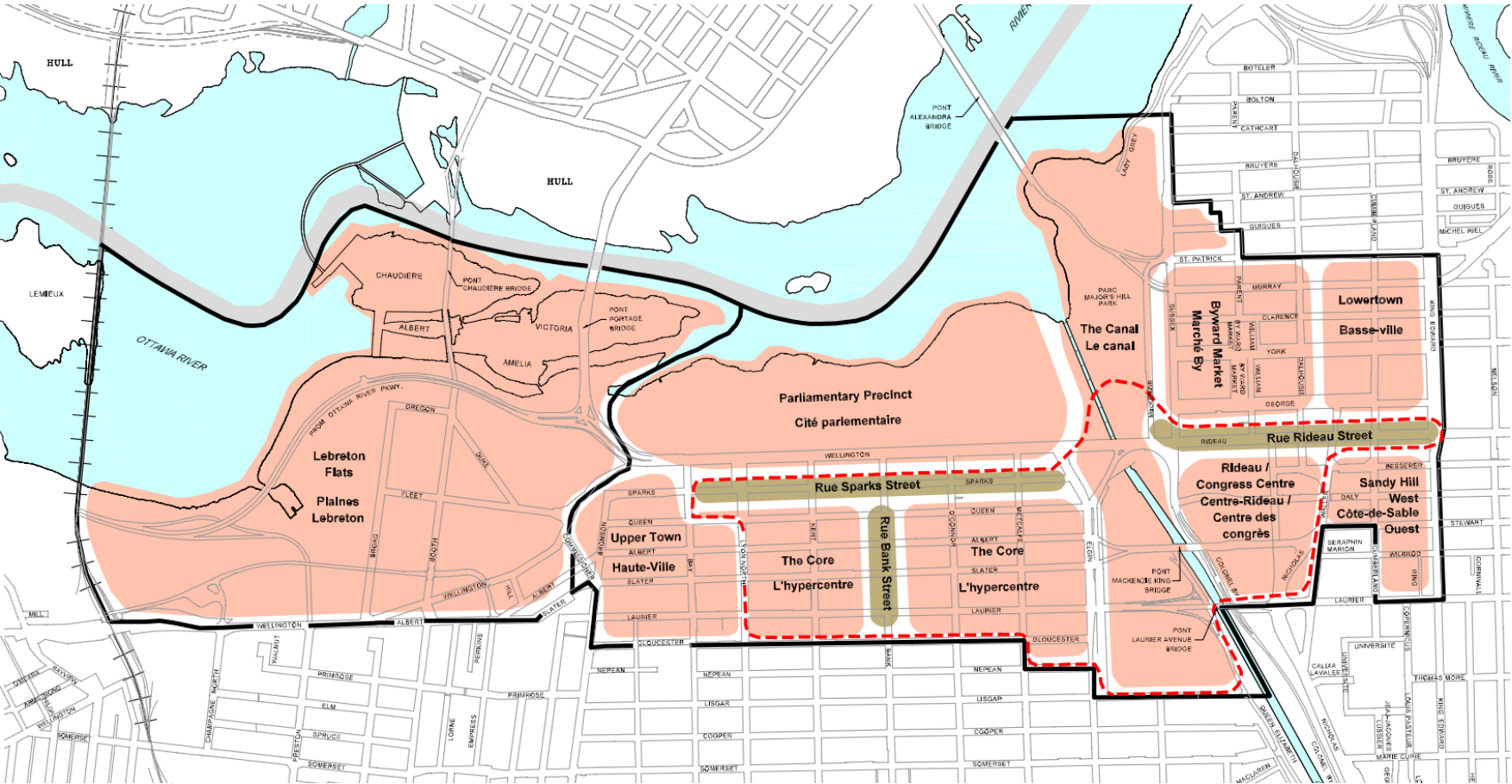
Downtown Ottawa Urban Design Strategy 20/20 (DOUDS)

The goal of the Downtown Ottawa Urban Design Strategy (DOUDS) is to enhance the public realm and urban environment by making improvements to streets, parks, open spaces and special character areas, thereby improving the overall “urban experience”. The document focuses on encouraging good urban design that captures the Civic experience of downtown Ottawa, and protection of historic character and built form.

Appendix A of the DOUDS defines various streetscape styles. Located along Confederation Boulevard, within the block bounded by Lyon Street to the East, Bay Street to the West and Sparks Street to the South, the section of Wellington Street pertinent to the site is considered to be the Business Precinct (see figure below). The Street Category is “Distinct”, with primarily Institutional/National uses.

Specifically, Targeted Precinct Strategy #13 refers to the need for Wellington Street/Confederation Boulevard to reflect a high quality of design and demonstrate the civic importance of this area. The DOUDS highlights the importance of collaboration with the NCC to ensure the streetscape elements and quality of design reflect the street’s importance within the Nation’s Capital. Elements of these guidelines should be incorporated into the rehabilitation of the West Memorial Block.

It is noted that if a federally-owned property is being reviewed through the FLUDA process, then the City of Ottawa Urban Review Panel process does not apply. The same principle applies with respect to designated heritage properties and buildings, where FHBRO process will apply and the City of Ottawa Heritage review process does not apply.



Central Area Character Areas and Theme Streets. (Central Area Sector Plan, Schedule B)



Extract of the Business Precinct mapping from the Downtown Ottawa Urban Design Strategy

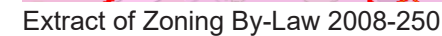


The WMB site is zoned Mixed Use Downtown, Schedule 11, MD S11, and is subject to the Mature Neighbourhoods Overlay.

1. support the Central Area, as designated in the Official Plan, as the central place in the region for employment and shopping while also allowing residential, cultural and entertainment uses;

2. ensure that the Character Areas in the Central Area, namely the Core Area, the Parliamentary Precinct, the ByWard Market, the Rideau/Congress Centre, the Canal Area, Lowertown, Upper Town, Sandy Hill West, LeBreton Flats and the four Business Improvement Areas, Rideau, Sparks, ByWard Market and Bank Streets, continue to serve as primary business or shopping areas and maintain their distinct character;
3. facilitate more intense, compatible and complementary development to ensure that the active, pedestrian-oriented environment at street level, particularly along Bank Street, Sparks Street and Rideau Street is sustained; and
4. impose development standards that will protect the visual integrity and symbolic primacy of the Parliament Buildings and be in keeping with the existing scale, character and function of the various Character Areas and Business Improvement Areas in the Central Area while having regard to the heritage structures of the Central Area.

Zoning Mechanism	Provision
(a) minimum lot area	No minimum
(b) Minimum lot width	No minimum
(c) Minimum front yard and corner side yard	No minimum
(d) Minimum interior side yard	No minimum
(e) Minimum rear yard	No minimum
(f) Maximum building height (see Schedule 11)	North side: 109m above sea level South side: 125m above sea level
(g) Maximum floor space index	Not applicable
(h) Minimum width of landscaped area	No minimum, except that where a yard is provided and not used for required driveways, aisles, parking, loading spaces or outdoor commercial patio, the whole yard must be landscaped
(i) Minimum width of landscaped area around a parking lot (see s.110)	See subsection 6 (surface parking is not permitted)
Table 193 (6)	All parking spaces, whether principal, accessory, required or provided must be located in a parking garage
s. 101 Minimum Parking Rates (Schedule 1A)	No minimum of-street parking required (as per Area Z)

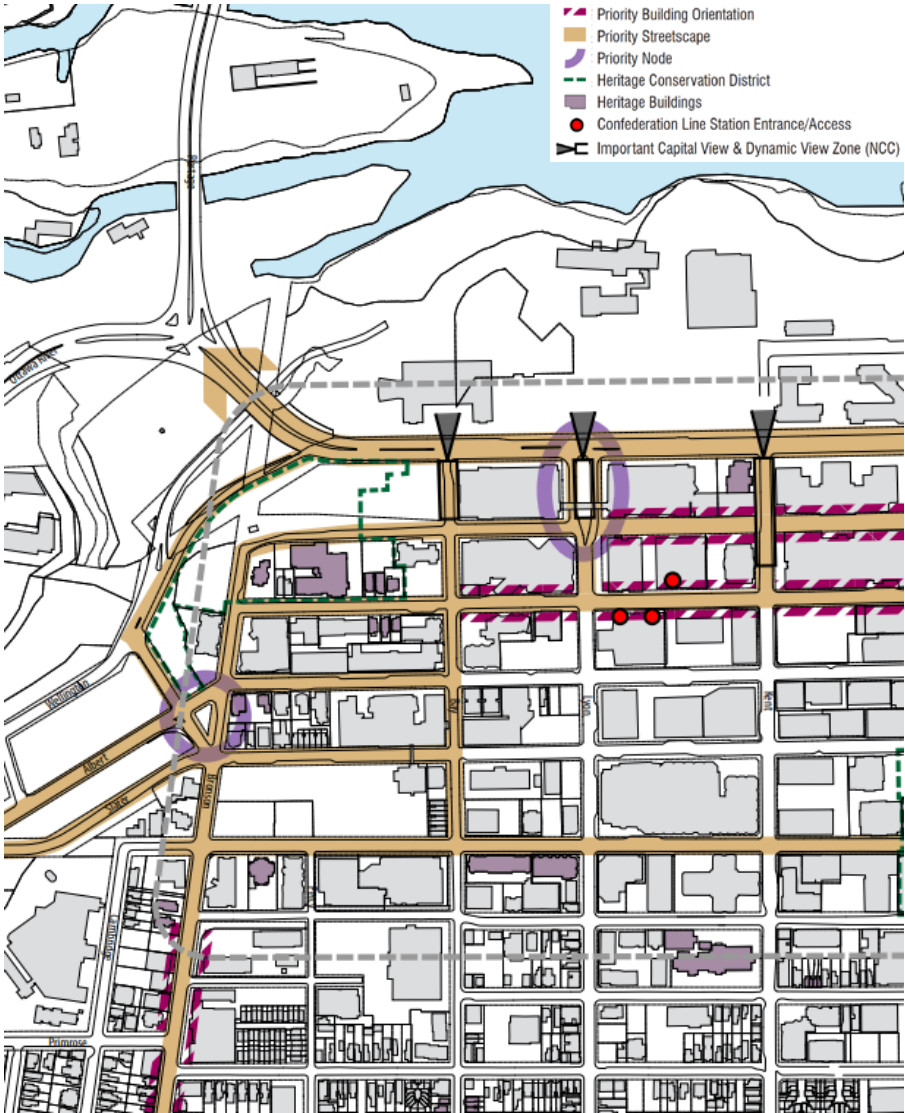




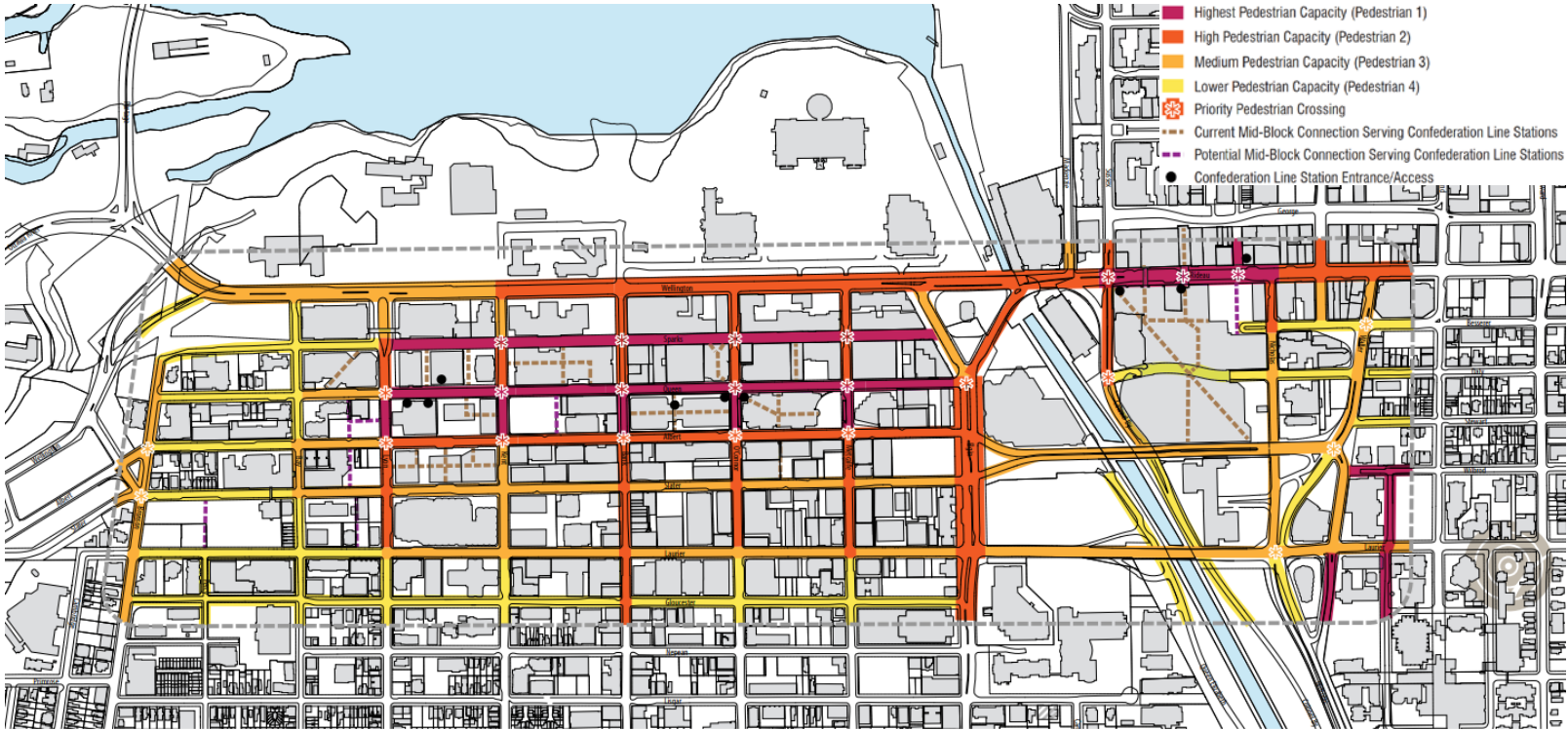
Downtown Moves -  
Transforming Ottawa's Streets  
(City of Ottawa, 2013)

Downtown Moves is an Urban Design and Transportation Study that identifies ways to create more vibrant, inclusive, safe and accessible streets for residents, workers and visitors of all ages and abilities across Ottawa's Central Business District - in particular given the upcoming LRT in the downtown core.

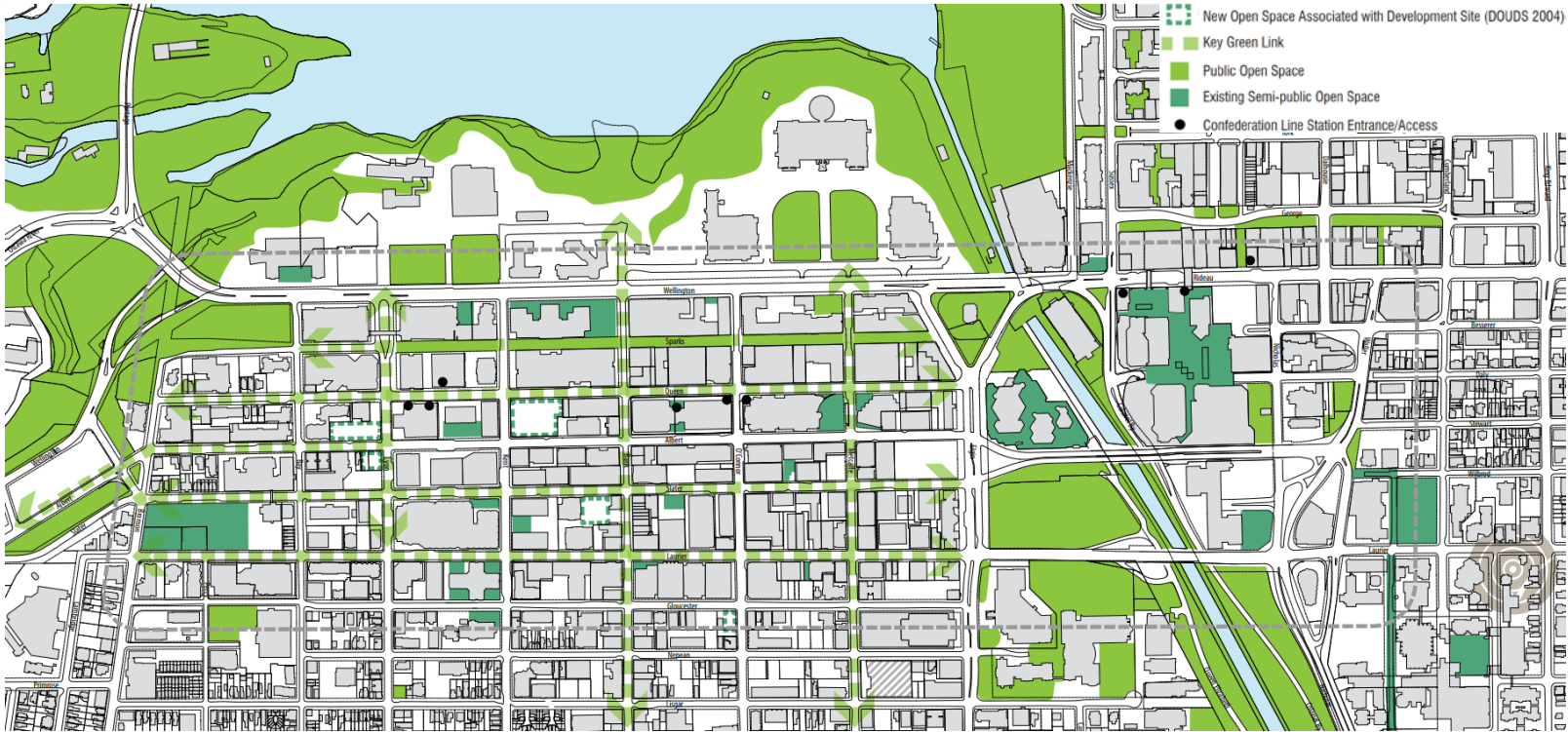
The Study goes into a number of practical details for transportation design for City streets and sidewalks but starts out by defining Vision plans for downtown core of Ottawa highlighting the various major transportation and visions for the streetscape. The Figures highlight a few of these Vision plans as they relate to the West Memorial Building, providing some context on how the City of Ottawa understands the future of the site. This is relevant in particular for Bay, Lyon and Sparks street which do not fall under the Confederation Boulevard guidelines.



Pedestrian Vision Plan 2: Urban Design



Pedestrian Vision Plan 1 - Pedestrian Infrastructure



Pedestrian Vision Plan 3 - Public & Open Space



**3.0**

# **DESIGN BRIEF**

### 3.1 Site Analysis

#### 3.1.1 Historical Overview

The West Memorial Building was constructed from 1954 to 1958, following construction of the East Memorial Building from 1950 to 1954. Designed as a pair, they were originally called the Veterans Memorial Buildings. The two buildings were developed adjacent to the Judicial and Parliamentary Precincts, along what is now Ottawa’s ceremonial route of Confederation Boulevard. The Parliamentary Precinct includes the land North of Wellington Street between the Rideau Canal and Kent Street, and the three blocks on the South side of Wellington Street to Sparks Street, between Bank Street and Elgin Street. The Judicial Precinct comprises the land to the West of the Parliamentary Precinct, North of Wellington Street between Lyon Street and Kent Street.

The West Memorial Building was conceived as part of Jacques Gréber’s 1950 master plan to redesign the national capital, which had been initiated prior to World War II. His plan emphasized the Memorial Buildings’ massing as a pair and envisioned the linking colonnade, which would act as a screen, framing views; a view terminus to the South was imagined as an arts centre, and to the North was planned for underground parking. The plan was not fully realized; however, the design for the Memorial Buildings closely followed Gréber’s vision.

The Gréber Plan also included nearby Confederation Square, which was designed to give focus to the WWI Memorial that was unveiled in 1939, and to which the dates of WWII were added with a rededication in 1982. The Memorial Buildings and Confederation Square thus serve as commemorative nodes bookending the Parliamentary and Judicial Precincts.

The contract for West Memorial was awarded in October 1954 to George Hardy Limited for the construction of building, which was to “provide accommodation for various Departments” and would be seven storeys with a basement, 182 feet wide and 280 feet long, with a concrete foundation, steel and reinforced concrete framing, a stone-clad masonry exterior, and a copper mansard roof” (Department of Public Works Annual Report, 1955, P. 40).

Originally, the Department of Veterans Affairs was centered in the East Memorial Building, with the West Memorial Building housing storage for the Department of Veterans Affairs and also serving as space for the Department of Trade and Commerce, and subsequently by other governmental bodies. The West Memorial Building has been vacant since 2008.

#### 3.1.2 Site Context

The West Memorial Building is a significant building in the City of Ottawa: a prominent Federal building along the South side of Confederation Boulevard and, together with the East Memorial Building, an important urban framing element marking Lyon Street and entry to the City. The EMB and WMB were part of Jacques Gréber’s master plan for the capital. Together with the Memorial Colonnade spanning between, the two buildings form a gateway to the City and focus attention to the Memorial Building’s commemorative intention.

In the NCC’s The Plan for Canada’s Capital 2017-2067, an important aspect of creating “an inclusive and Meaningful Capital” is the emphasis of creating or enhancing National Commemorations. In the City of Ottawa’s Downtown Moves - the Lyon street gateway is an important threshold - a marker in the urban context. The Gateway and the Memorial’s commemorative intention for the building are two of the major characteristics of the site and which will be incorporated as defining principles for any interventions.

Notwithstanding the intention from the original planning, the importance from a commemorative aspect and threshold in the City - the Commemorative plaza and Lyon Street gateway currently appears lacking - the public realm experience is uninviting to pedestrians, largely due to the narrow sidewalks and fast-moving traffic. Along the Confederation Boulevard, as the site is the last building on the South side of the Boulevard before the bridge to Gatineau or the Parkway and Lebreton flats, the characteristic sober landscape consistent with the Memorial Buildings, create the transition from the more pedestrian urban areas to the Garden of the Provinces and Territories, and finally to the Parkway landscape.

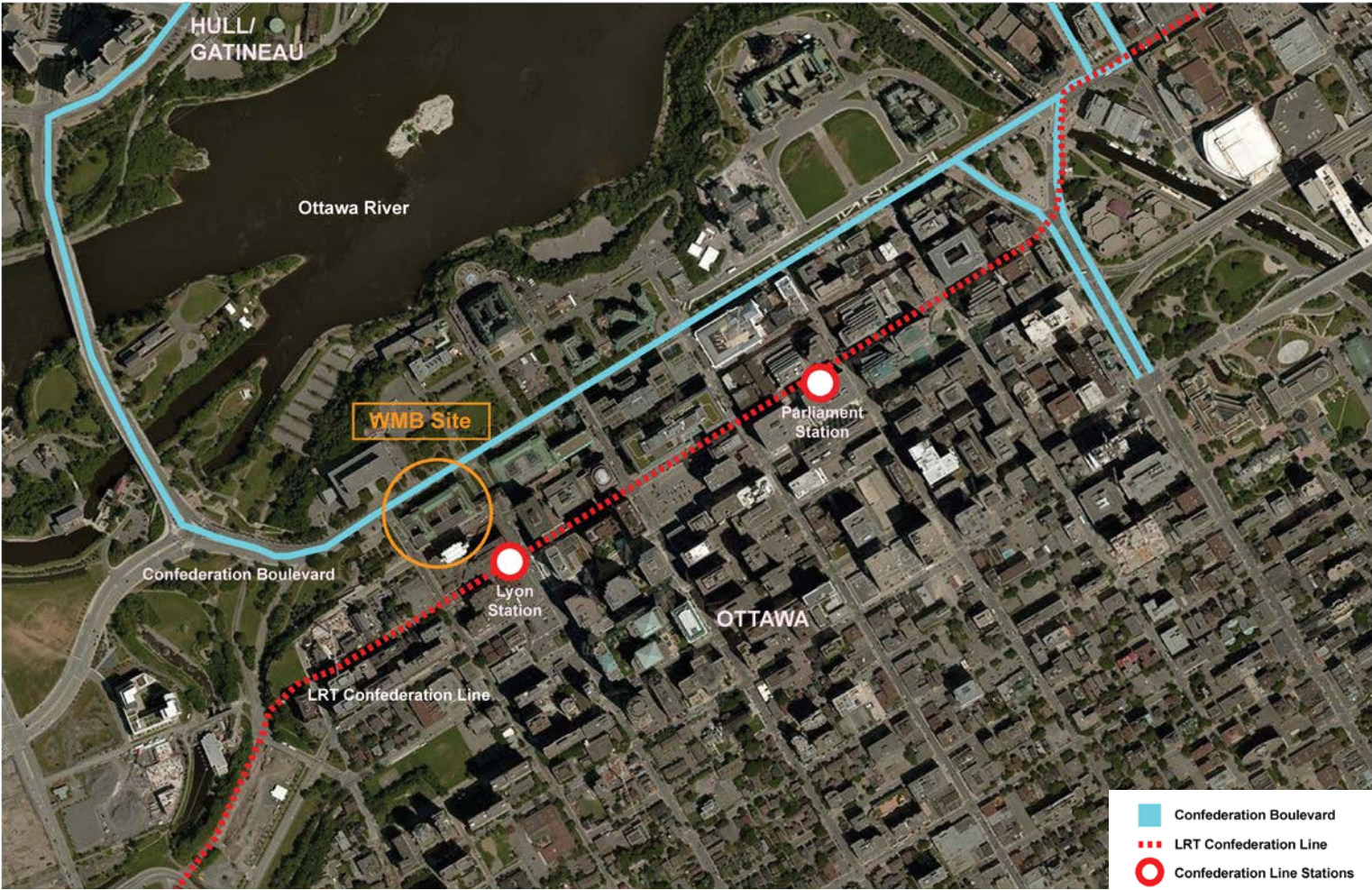
The integration of the Supreme Court of Canada functions into the West Memorial Building require transformation of the public realm to facilitate and support a much more open, inclusive and welcoming public experience. This requires careful consideration given that the site will also be required to incorporate new security measures, including protection from vehicles, that will have a significant impact on the design of the public realm. Rather than lining the site with bollards, protective measures are to be interpreted as design features seamlessly integrated into an open, welcoming and accessible site experience for all. The security transformations are under study for Blocks 1 and 2 along Wellington Street, and the WMB project may be the first project to be constructed with integrated security and landscape strategies, potentially setting the tone for future projects along Confederation Boulevard. Some of these transformations have already been felt along Confederation Boulevard with successful projects such as the rehabilitation of the Bank of Canada Building and its plaza, and perhaps less successfully, the American Embassy.

#### 3.1.3 Site Connectivity

The Supreme Court of Canada is required to accommodate a number of site functions including: public visitors arriving either by foot, private vehicle, public transportation, media trucks, regular business visitors and tour buses which are frequent during the summer months with a bus every 30 minutes. Consideration for the public nature of the program and functional operation of the SCC is a key driver for site planning the WMB project to ensure connectivity between entrances and public flows both inside and out.

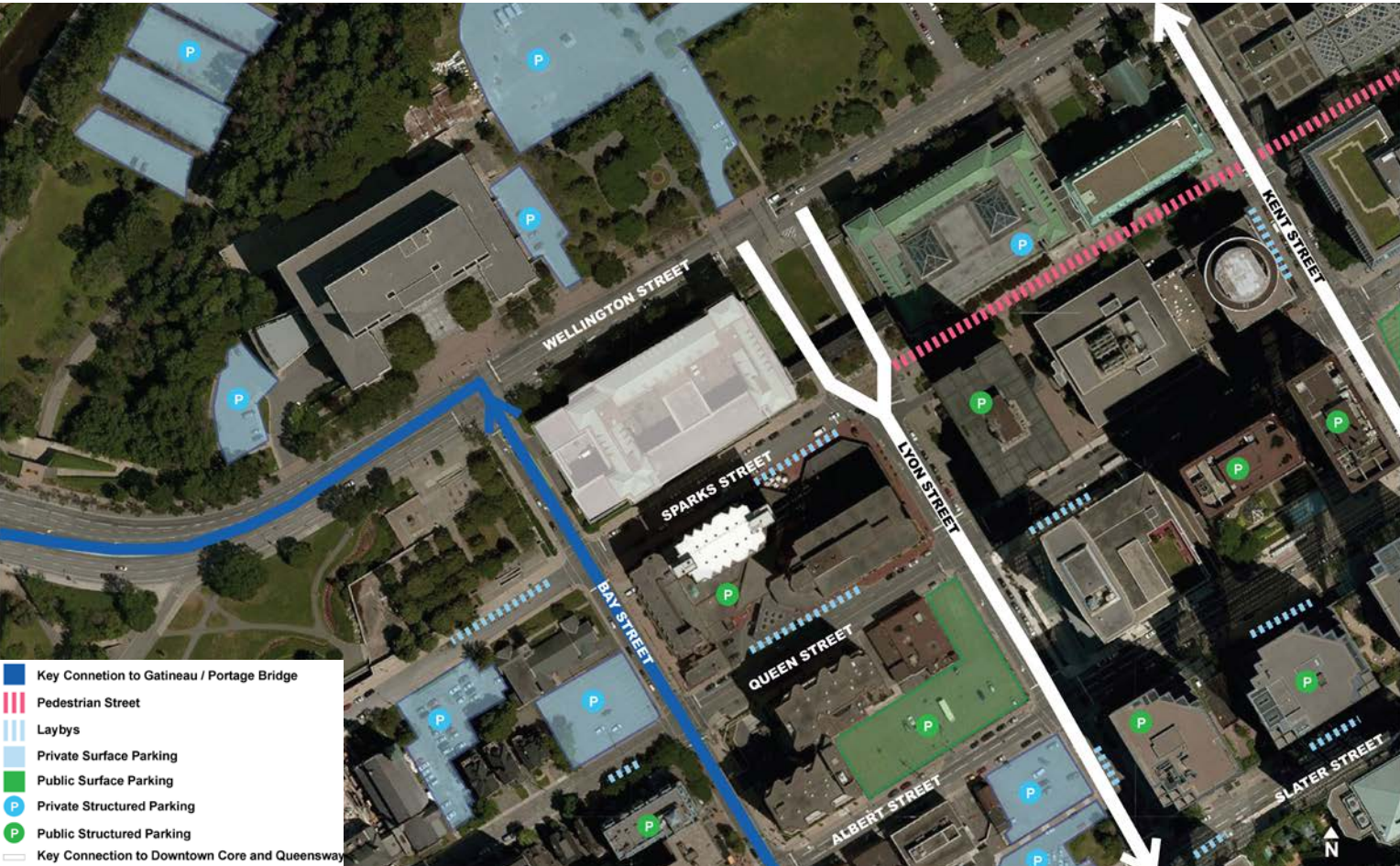
From an accessibility perspective, the WMB is challenging due to the site sloping in two directions relative to the building orientation; consequently, every entrance responds to a different height between sidewalk grade and the respective entry lobby. Sloping site conditions are particularly challenging as one travels South on Lyon toward the North entrances of the building where Lyon Street slopes down significantly to Wellington Street.

The WMB is located one block North of the LRT Lyon Station. The new station positions the SCC within a short distance of a major public transit access. From a vehicular perspective, the WMB is surrounded by a significant street network. Confederation Boulevard / Wellington Street is located to the North of the building directly connecting the WMB with the Parliamentary Precinct. Bay Street is located to the West which is a main connector to Gatineau and the Parkway. Lyon Street is located to the East which is a main connector to the downtown core coming from the West and Gatineau; and finally, Sparks Street is located to the South which is two way and a relatively quiet street. Sparks street currently appears to be the most logical opportunity to provide a lay-by area that will be needed to service the building given that it currently has on-street parking and is relatively quiet. Public parking is available within the downtown core at a short walking distance.



Location plan illustration Confederation Boulevard and LRT line





Vehicular connectivity to WMB



Pedestrian and Cyclist connectivity to site

The future redevelopment of the public realm of Sparks Street by the Sparks Street Mall Authority, which includes the NCC, PSPC, the City of Ottawa and the Sparks Street BIA, is in its initial study phase. Redevelopment of Sparks Street is not planned to extend beyond Lyon Street until Lebreton Flats is redeveloped in the next 20 years. It is the intention of this plan to improve the public realm of Sparks Street such that it becomes a more vibrant area in the downtown core. In particular, the West section of Sparks street will become more landscaped and there is an opportunity to create a visual connection as well as an enhanced pedestrian connection from Sparks Street to the WMB site. This would enhance the connection to downtown and the City with a main pedestrian access to the site. The other main pedestrian connection is the Confederation Boulevard as it connects to a main tourist network and federal buildings.

From a cycling perspective, the WMB is surrounded by a cycling infrastructure. A main connection would be on Bay Street and the Parkway as there are dedicated cycling lanes which connect with the broader cycling infrastructure.

In summary, the site is well connected to all forms of transportation and it is most likely that the majority of pedestrians will be accessing the WMB from the South-East corner due to its connection to the pedestrian Sparks Street, nearby LRT Lyon Street station, and nearby parking structures. The bus lay-by may be situated along Sparks Street if permitted, with the final location adjusted based on the final location of the main entrance which is dependent on the Architectural Option selected.

3.1.3 Landscape

From a heritage perspective, the simple and austere character of the landscape of the West Memorial Building is part of its inherent Classical-Moderne characteristic. Simple grass groundcover and trees define the green spaces. Massive granite steps and terracing walls which help mitigate the grade changes across the site are another key hardscape characteristic of the WMB which define its monumentality along Wellington street.

Landscape areas found in adjoining pedestrian corridors along Wellington Street and Sparks Street exhibit a variety of paving materials, planters, light standards and site furniture. The streetscape along the Confederation Boulevard follows the NCC Confederation Boulevard Guidelines, whereas Sparks street has a mixed palette combining traditional site furnishing designs such as the benches illustrated in the figure below, with some contemporary elements such as the colourful planter pots. The new Bank of Canada Museum has introduced a contemporary aesthetic for its exterior plaza which appears to successfully complement the standards the Confederation Boulevards.



Confederation Boulevard streetscape along Wellington Street



Streetscape elements along Sparks Street



Bank of Canada Museum streetscape upper platform along Wellington Street, with modern site elements



3.1 Site Analysis

3.1.7 Exterior Views



View of East and West Memorial Buildings on Wellington Street



Restrained Landscape Design



Interlocking Terraces at North-East Corner



Stepped Massing and Soft Landscaping



Direct Street Frontage on Sparks

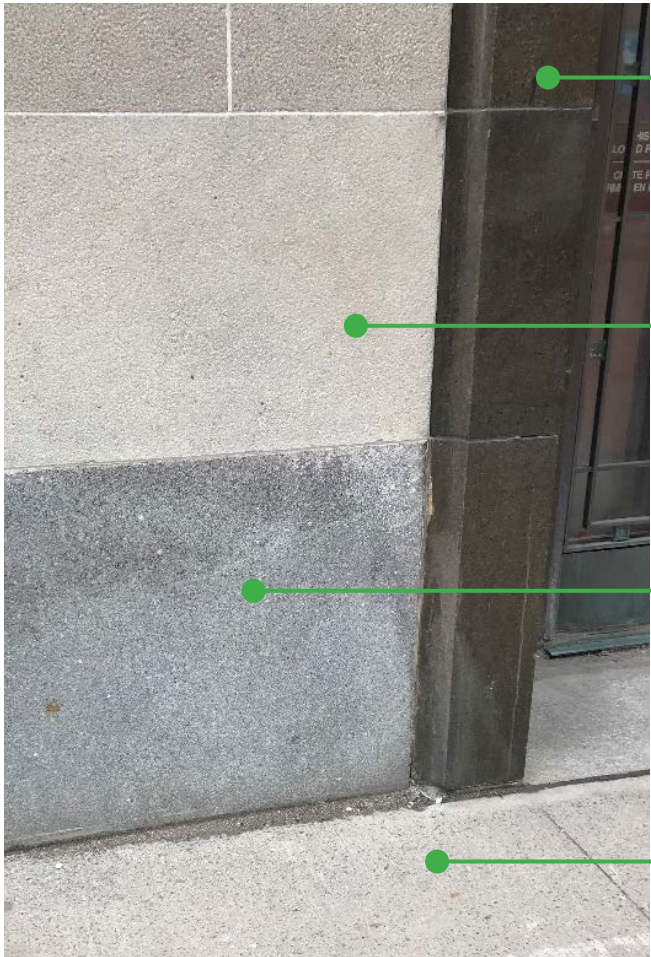


3.1 Site Analysis

3.1.8 Existing Exterior Material Palette



East Facade - Existing Condition



Laurentian Green Granite - Existing Entrance Frames

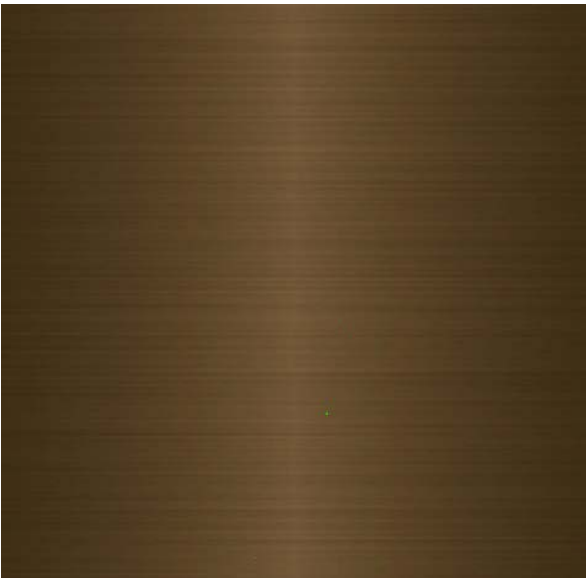
Queenston Limestone - Exterior Masonry

Scottstown Granite - Base of Building, Planter Walls and Retaining Walls

Stanstead Granite - Existing Entrance Steps and Entrance Platforms



Stanstead Grey Granite - Existing Planter Walls



Bronze - Existing Doors and Frames



3.2 Site Design

3.2.1 Overview

The landscape design provides a combination of hardscape and planted areas around the building, utilizing new and existing plants where possible. Softscape elements around the WMB are maintained and are consistent with the heritage landscape character, while new planting materials will help decrease heat island impacts, providing a vegetative edge condition along Wellington Street. The introduction of new seating edges along Wellington Street will help redefine the streetscape at the WMB incorporating additional seating opportunities for staff and visitors waiting to enter through the main security entrance. A planting buffer can be maintained behind this seating area with low groundcover similar in character to the existing grass but more sustainable in character. As there is limited green space around the WMB, there are opportunities for plantings in new planters at the South-West and South-East corners. Planters combined with seating elements will be explored along Wellington and Sparks Street to provide a vegetative buffer and animation along the sidewalk, in addition to addressing security requirements.

Confederation Boulevard remains the principle facade for the building, where the formal gestures and high-quality materials are maintained. The Lyon Street facade maintains a similar formality as Confederation Boulevard as the main threshold into the City, while also responding to the Memorial Colonnade. Sparks Street is quieter, relating more to the City fabric, and seen as an extension of the pedestrian mall. Bay Street is more functional at the grade level, however, incredibly monumental at the upper floors as it relates to key views from the Parkway and the bridge.

Given the scale and importance of the project, there is an opportunity to redefine the spaces and edge conditions surrounding the WMB. These will include improving sidewalk surface conditions, expanding sidewalk spaces to allow for better access and movement of pedestrians and visitors to the WMB, and improving the comfort level by incorporating fixed seating areas, bicycle parking and vegetative shade. The concrete sidewalks around the building will be replaced with new concrete to improve walking surfaces, as these are under the City’s ROW. Sidewalk grades will be maintained as per existing conditions and granite roadway curbs along Wellington Street will be reinstated at their original locations. Tactile Warning Surface Indicators (TWSIs) will be integrated along new sidewalks and at crosswalk locations to improve wayfinding and accessibility around the site. These elements will be consistent with City of Ottawa standards.

On Bay Street, the site design has incorporated a future revised bike path required by the City of Ottawa. Regenerate 344 has requested some modifications to the City of Ottawa’s original plan at the intersection of Sparks and Bay to suit the proposed site design. This corner will be the location of new bike racks, new water filling station and bike repair station, all of which are part of the sustainability approach. The proximity to the City’s cycle-track along Bay Street and its connection to the wider cycling network in the area will offer a sustainable transportation alternative to SCC staff and visitors. The loading area asphalt pavement along Bay Street will be removed and repaved with new concrete for better truck access and accommodations for new security gate and fencing required in the loading section.

Along Sparks Street and at the request of the City, new trees are proposed to provide additional shading and to connect with re-development of the Sparks Street Mall, which will feature more landscaping at the western end of Lyon. The proposed new trees were reviewed with the SCC security who are satisfied they would not pose a major security risk over the duration of temporary use as the Supreme Court of Canada. The trees are also part of the Sustainability strategy.

The City of Ottawa parking lane along Sparks Street will be dedicated for a tour bus drop-off area and media vans with an opportunity for car kiss & ride for SCC staff and local LRT/Transit users. A concrete pavement treatment is proposed for the drop-off area to clearly designate the drop-off as part of the West Memorial Building/Supreme Court site and provide a more welcoming pedestrian approach. The sidewalks at the two corners on Sparks Street will be bumped-out to expand spaces for pedestrians as they arrive at these locations along the south edge of the WMB, and also allows more sidewalk space as temporary gathering areas for the tour bus riders. A portion of the roadway is dedicated for the bus layby, which is made a part of the Sparks Street sidewalk environment by being level with the sidewalk and separated with a line of bollards and trees. The space provides greater pedestrian access when the tour buses are not occupying this lane.



Top: Confederation Boulevard  
Bottom: Bay and Sparks Streets



3.2 Site Design

Increased security measures at the northwest corner will require the introduction of concrete planter retaining walls to protect the corner of the building. These levels will provide additional planting zones and create interest along the west corner of the WMB site. Along Wellington Street, the locations of the planter/seat walls and trees have been rationalized to align with the front façade of the West Memorial Building. The details for the planters include a granite finish on Wellington and Sparks Street. On Sparks Street, the planters are situated strategically to relate to the existing main entrances. Similar to Wellington Street, the trees on Sparks are positioned to align with the fenestration pattern of the West Memorial Building (between windows). Additional bench units will be located along Wellington and Sparks Street to provide added security and pedestrian comfort.

Lyon Street will see the development of a new terrace that provides access to the West Memorial Building directly on the first floor. Ramps from Sparks Street and Wellington Street bring visitors up to the correct level, which addresses the major accessibility issues with the entrances. This new terrace provides the opportunity to create a significant public space near the Memorial Colonnade, thus reinforcing the memorial aspects of this space. The visitor entrance terrace along Lyon St. will include fixed bench units to accommodate this main gathering space at WMB. A new raised planter will provide a vegetative buffer between the terrace staircase and barrier-free ramp from the public sidewalk along Lyon Street.

Measures are to be taken to ensure the protection of trees during and after construction at WMB, including the protection and preservation of significant trees such as the mature elm tree on the northwest corner. The multi-stem trees along the large raised planter along Lyon Street will be removed, as well as trees located in close proximity to the building walls due to security measures. The young maples along Wellington Street shall be removed and potentially transplanted to a PSPC location off-site. However, these shall be replaced with new trees along Wellington Street during landscape construction. All concrete sidewalks, loading area pavement and affected roadway surfaces near the site will be removed and planned for redevelopment. Other site elements such ramps, walls, staircases with granite cladding and bronze guardrails will be removed and restored under the Heritage component of the project.

The plantings around the WMB shall be consistent with the landscape character of the area, while new planting materials will also help decrease heat island impacts and provide a new vegetative edge condition around the site. New Celebration maples will be planted along Wellington Street, to replace the smaller stands that are transplanted elsewhere. The introduction of new street trees, Tatarian Maples, along Sparks Street will provide shade for pedestrians and establish continuity with Sparks Street Mall to the east. Tatarian maples have a narrow, columnar shape canopy that should minimize impacts to site security and heritage impacts to WMB. Low ground cover shrubs, such as Creeping Juniper and Bearberry will be ideal along Wellington Street with a low profile that can minimize interference with site security. Moreover, these shrub varieties are robust, require less maintenance and able to endure the street environment over time. Other grasses and shrubs such as Blue Fescue and Bush Honeysuckle can be planted on fixed planter units around the site for added variety and textures, especially along Sparks Street. The raised planters along the visitor entry plaza on Lyon Street presents an opportunity for seasonal plantings as well.

The design will improve site security measures and will include the introduction of bollards along the edges of the site, or where feasible, integrated with planters. The introduction of new bike parking facilities will help encourage staff and visitors to use of the numerous bike lanes and multi-use pathways as an alternative form of transportation.



Top: Confederation Boulevard - Granite Clad Bench / Planters  
Bottom: Sir John A. Macdonald Parkway Approach



3.2 Site Design

3.2.2 Sustainability

Tree Cell Technology

Tree cell technology is proposed along Sparks Street for new trees to help trees survive root compaction and sidewalk/streetscape environmental stresses. The ability for many street trees to survive in downtown areas will be influenced by the soil structure it sits on, and the way it affects the movement of water, nutrients and air required for street trees to mature in a healthy state. Often times, trees are planted in cramped planting pits and poor subsoil along sidewalks, resulting in poor growth with roots spreading out immediately underneath the paved surface, causing damage to sidewalks. Tree cell technologies offer load-bearing soil cells to create structurally adequate soil systems that are also conducive to root growth of street trees. The tree cell units include an interlocking system comprised of recycled materials that can structurally support loads above (pavement dead weight and continuous foot traffic that compacts the soil) and allow more soil volume for tree roots to thrive. The tree cell open structure design also allows more water, nutrient and air flow for root systems.

Green Roof

The Green roof design would incorporate an extensive green roof system with plants selected for environmental hardiness and drought resistance. Green roof systems offer many benefits to building owners, neighborhoods and cities as a whole. Green roofs can help save energy, reduce neighborhood temperatures, improve the eco-system and protect human health. They can strongly impact and regulate the temperature of underlying roof surfaces and building spaces within, reducing the energy costs needed for building cooling and the results of the urban heat island effect. Green roofs cool through evapotranspiration - the process when plants release water through leaves called transpiration. The process of evapotranspiration helps to lower surrounding temperatures as the sun heats ambient air. The summer surface temperature of a green roof can be significantly cooler than the surface of an adjacent conventional roof at midday. Studies have found that green roofs can reduce the energy needed for building cooling on the floor below the roof by upwards of 50 percent. Green roofs can also help preserve a building’s roof surface as components including plants and soils protect the underlying roof structure from sunlight, thereby reducing its temperature.

The extensive green roof systems may weigh between 10 to 25 pounds per square foot when dry, and the use of an interlocking system of trays is critical to provide good anchoring during high winds. The major benefit of extensive green roofs is that they require very little maintenance, compared with an intensive green roof system. The use of planting materials suitable for the climate will require very little water, and therefore an irrigation system is typically not needed. Occasionally, fertilizers may be required for weed control and periodic inspections needed to confirm that the trays are intact and that the plants are thriving. Extensive roofs are also the least expensive to install and maintain, compared with intensive green roof systems. The variety of plants for the roof will be further developed in the next phase, however the choice towards native plant species would have a soil depth of 60-80mm. This would help minimize demand on roof loading.

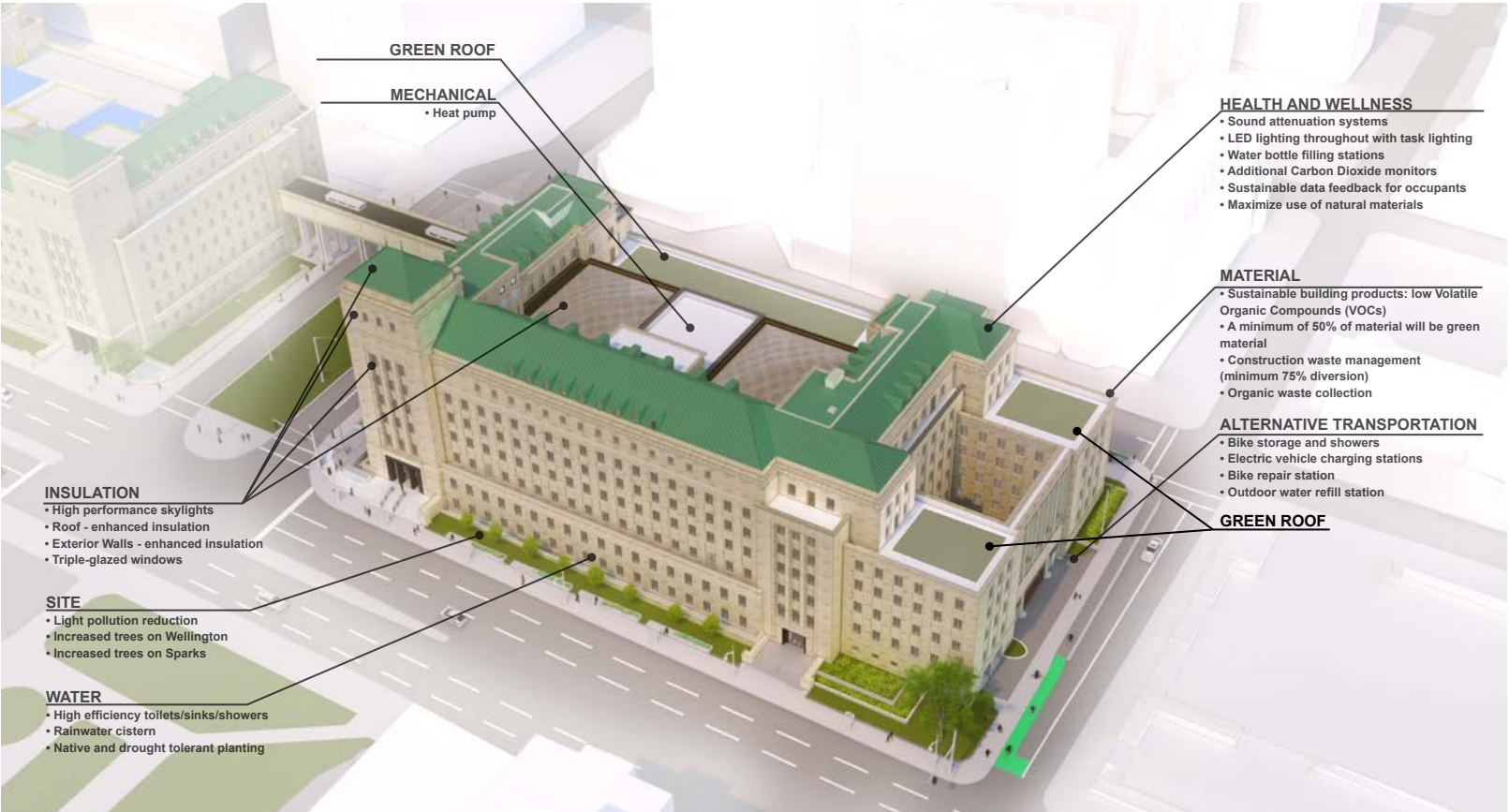
Although it is not yet widely implemented in the downtown core of Ottawa, green roof and podium level plantings have been developed recently at two building locations in the Parliamentary precinct. These include the CD Howe Building and Bank of Canada Museum Plaza. The CD Howe green roof terrace currently includes an Extensive and Intensive roof system, along with a trellis and paved patio area.

Air Source Heat Pumps

Air Source Heat Pumps (ASHP) provide a low greenhouse gas (GHG) source of heating and cooling and the addition of ASHPs has a significant impact on the GHG emissions and energy consumption of the building. The heat pumps (similar to an air-cooled chiller) will be located on the flat roof between the skylights and will extract/reject heat from the air. The heat pumps have been sized to provide heating and cooling for much of the year with cooling for very hot days and heating for very cold days being supplied by the central Cliff Plant.

Typically, ASHPs are very noisy and can transmit noise to the building occupants as well as to adjacent properties. In order to mitigate this, the style of heat pump selected is made up of smaller units that have a low noise generation. In addition, they are equipped with a quiet function that can be used at night to prevent noise transmission to nearby hotels. The units will be installed on vibration isolating curbs on a thicker roof slab to prevent noise transmission through the roof. Skylight and window glass will also be selected to mitigate transmission through the skylight and adjacent windows.

An analysis of the views from the street level and do not find that the ASHP will be visible from the street level. The views impacted from the ASHP would be the upper floors of the buildings located south of the site, as well as some of the offices facing south on the 6th floor. Given the high parapets, only part of the units are exposed.



Top: Sustainable Features Overview  
Bottom: Green Roof



### 3.2 Site Design

#### 3.2.3 Lighting

The exterior lighting of the WMB will be designed not as an individual entity, but rather as an element in the broader scope of the surrounding architectural environment. The building must be understood within multiple hierarchies; the immediate extent of two Memorial buildings, the larger Judicial Precinct, the adjacent Parliamentary Precinct and the full Confederation Boulevard experience. It must also be understood to represent the dignity and prominence of the Supreme Court of Canada at a national level.

Within the Federal District Buildings, the Memorial buildings occupy a position in the middle of the hierarchy of both prominence and detailing. The Parliament buildings must retain the overall hierarchy. Other significant structures such as the Supreme Court should also be featured above the Memorial buildings as it represents, as a single structure, the build identity of the judicial branch of government. In this context the Memorial buildings must clearly take a supporting role. However, among the structures South of Wellington street that have supporting roles, the Memorial buildings have a strong position, with significant scale, a distinct Federal style and the prominence as the Western limit.

The position of the WMB when viewed from the West, marks it as one of the first architectural presentations of the Federal buildings to be viewed. It should be fully illuminated to mark the beginning of this district, with a brightness appropriate to its hierarchy. The exterior lighting presentation will use a palette of warm white light in keeping with the overall recommendations of the 2015 Parliamentary Precinct Exterior Lighting Master Plan and the NCC Capital Illumination Plan 2017-2027, specifically section 4.2.3 of the Capital Illumination Plan: “Generally, white tones are preferred to coloured tones in order to respect the architectural intent and materiality of built-form components. “

The structure is included in “buildings to Prioritize for Architectural Lighting” per the NCC Capital Illumination Plan (page 30) as it sits in the ‘Exterior of Boulevard Loop” and meets the additional listed criteria of the following categories:

- 1. Buildings that house large public institutions
- 2. Buildings that express symbolic, historical or cultural values
- 3. Buildings of outstanding architectural quality
- 4. Buildings with a heritage designation
- 5. Buildings or portions of buildings with a major influence on the visual continuity of Confederation Boulevard (e.g., facades along Wellington Street, Sussex Drive and Mackenzie Avenue in Ottawa, and along Laurier Street in Gatineau).

Considering the strong sense of harmony and unity between the East and West Memorial Buildings, and the ceremonial quality of the space between the two buildings, it is Regenerate 344’s recommendation that the lighting of the East Memorial Building, the West Memorial building, the linking Memorial Colonnade and the landscape should be considered as a single complete presentation. Within this, the memorial aspects of the site need to be highlighted as a central feature. This is recommended in the NCC Capital Illumination Plan, with the following guidelines listed for the Memorial Buildings (page 76):

- 6. Coordinate the illumination of both buildings and the Memorial Colonnade, and integrate them in the nighttime landscape of the Judicial Precinct.
- 7. Establish a soft lighting treatment that seeks to preserve, from a distance, the legibility of the Judicial Precinct.
- 8. Showcase the Canadian Phalanx commemorative monument.

The heritage facades of the building will be softly illuminated with warm white light in a concept that reveals the massing relationships of the building with discrete or hidden light sources. Entrances will be revealed through the glow of heritage glass window and door elements and illuminated façade materials. The sidewalks surrounding the building will be illuminated through the City of Ottawa and Federal street lighting, with no building associated post-top or bollard lighting for all surrounding sidewalks, except for the entrance plaza. Loading dock and parking areas will be illuminated with building mounted LED fixtures, designed to be as discrete and unnoticed as possible while providing sufficient task illumination for security, safe passage and pedestrian interactions.

All luminaires are dimmable LED in a fixed white colour, with controlled optics to minimize light trespass and light pollution. Fixtures will be zoned in small groups to allow for the hierarchy of form to be carefully controlled, and for the lighting intensity to be controlled for context in the Federal District, for illumination over the course of the day, and in response to natural cycles such as bird migration.

Entrances are featured with lighting on the entrance arch details and soffits.

The entrance plaza will be illuminated without the use of posts to keep the view of the building and entrance as clean as possible. The entrance wall façade will be revealed from a distance with ingrade linear uplights, aligned between the windows. These will also under-light the balcony overhang, providing a soft reflection onto the plaza. Relative to the rest of the façade, the entrance area will be brighter to emphasize it. Step lights are provided on the ramp and stairs. They will face West, so that the fixtures are shielded from the prominent view of the plaza from the East (Lyon Street).

Coordination with Heritage Conservation Architects is ongoing to ensure that mounting of fixtures is completed with minimal intervention, such as using only grout lines, and maintains the environmental envelope.

The equipment layout and specifications are not specific to the short-term occupant (SCC) as the lighting design will outlast that specific tenancy by many years. The overall brightness of the building can be adjusted through controls programming if future tenancies affect the hierarchy of the building in the precinct.

Lighting attachments will be designed to be reversible, with special care taken to limit the number of penetrations. All exterior lighting equipment will be selected to be visually compatible with the heritage architecture. They are not decorative in nature and will be selected to limit their overall visibility to keep them from being focal points or detract from the heritage materials. Nighttime mock-ups will be used to test and demonstrate the colour, intensity and distribution of lighting.



Ensemble Night Lighting



3.3 Entrance Design

The main entrance for the Supreme Court of Canada in the West Memorial Building is a major design aspect for the project. The WMB has 5 existing entrances, however none of them are accessible due to the sloping grades in two directions, nor could they accommodate the required security infrastructure without major heritage interventions.

Regenerate 344 explored a number of options, from an exterior pavilion to a variety of different entry points, including reworking existing entrances or creating new ones. Given the importance of the flow of public coming from the south due to the LRT station and the drop off area on Sparks, and the importance of the relationship to Confederation boulevard; Lyon street appeared to be a logical location to situate the new entrance. Furthermore, the urban real associated to this WWII Memorial and threshold into the City is underwhelming and would be enhanced by creating a more public and inclusive public space.

The design iterations were reviewed by FHBRO and ACPDR. ACPDR recognized the importance of the symbolism of this entrance in recognition of the Supreme Court of Canada. It also recognized that given the challenges with the existing entrances (accessibility & security) - this new entrance could potentially have a role for the future tenant fit-up.

The new entrance seeks to connect Sparks street and Confederation Boulevard by creating a new terrace along Lyon street where the current planter is situated. New steps and accessible ramps bring the public level with the main lobby. Glass guardrails allow for transparency and new planters help to soften the space.

The main entrance is expressed by opening the First Floor exterior wall and adding new glazing that allows the connection between the entrance and the exterior public space. Bronze detailing creates a connection with the interior details.



Top: Lyon Street  
Left: View towards Sparks Street  
Right: View towards Wellington Street



3.4 Interior Overview

3.4.1 Grand Hall

As the primary gathering and event space for the Supreme Court of Canada in the West Memorial Building, the Grand Hall is a major public place requiring significant design consideration. The design of the Grand Hall is focused on 3 critical elements: a portal opening and vertical access to the Supreme Court, a new skylight, and a screening element used for scale, acoustic attenuation and building infrastructure.

The proposed new skylight is a diagrid composition which is an efficient, long span structure shaped by diagonally intersecting steel members. The new skylight system is supported by a ring beam tied back through the perimeter stone walls to the existing structural column grid, which is being reinforced.

The Grand Hall will be used for a number of activities, from school tour groups to conferences to receptions – all of which require appropriate acoustics. The design proposes to suspend a central acoustic screening element from the skylights above and above the ceiling of the Third Floor. This new element provides balance to the tall proportion of the lightwell to a more appropriate scale for the visitor experience. The new acoustic feature adds a softening element in the space that is surrounded by stone surfaces and helps diffuse the daylight into the space, bringing a play of light and shadow.

3.4.2 The Supreme Court Room

The Supreme Court Room design is the most significant and complex element in this rehabilitation project. The design needs to visually and experientially communicate the pre-eminence of the Supreme Court of Canada while embodying its fundamental values of equality and justice for all Canadians. It needs to meet a number of functional and technical criteria which at times can be contradictory.

The Supreme Court space is being designed as a “box within a box”, meaning that the shell which separates the Supreme Court Room from the lightwell is sealed to ensure that the acoustic and ventilation of the Court can be controlled. Symbolic of the number of Judges – nine angled arches frame the space and the Judge’s dais. Selected glazed openings between the arches allow for natural light from the skylights above to enter the courtroom, as well as providing views of the surrounding lightwell for the Judges. These arches are clad with acoustic wood panels and conceal a number of devices including the lighting for the broadcast. A raised floor addresses the connectivity requirements as well as the supply of low velocity air.

In plan, the Supreme Court space is larger than the existing Supreme Court space by about one meter in length, two meters on either side, and half a meter in height – allowing planning of the space to address current accessibility requirements. The Supreme Court Judges are elevated onto the dais with a slightly elliptically shaped bench. The wall behind the Judges is natural stone, consistent with the language of the spaces of high architectural value in the West Memorial Building which are natural stone. The remaining space is in wood which recalls the existing Supreme Court space.

3.4.3 Federal Courtrooms

Situated directly adjacent to the Grand Hall, the Federal Courtrooms design uniquely benefits from having one wall of the existing heritage stone lightwell – creating a meaningful connection with the West Memorial Building. The stone wall is further enhanced by the skylight above, which washes it with natural light. The ceilings made of angled acoustic wood panels relate to the vertical arches from the floor above. While the space meets the required ceiling height requirements, these vertical connections to the spaces above enhance and elevate the experience of the courtrooms.

3.4.4 Interior Finishes

The West Memorial Building has an existing material palette which defines its heritage character. This palette has an inherent hierarchy: generally, public areas have natural stone and bronze details; the offices of high importance have wood paneling, and the regular offices and corridors have linoleum floors with dark floor bases and carpet.

This existing palette sets up the context for the new interventions, which follow the Heritage Conservation approach for this project based on the Standards and Guidelines for the Conservation of Historic Places in Canada, which that states that new work shall be physically and visually compatible with, subordinate to and distinguishable from the historic place.

In essence, the material hierarchy for the new palette of material is very similar to the original: stone, bronze and wood for the spaces of high importance such as the public areas, the courtrooms and the Judges’ Chambers. In the offices, a more standard palette of carpet and paint finish is used. Exceptions include the corridors, where epoxy terrazzo is preferred over linoleum in order to address durability concerns – noting that the linoleum has already been removed as it was not the original version. The distinction between the heritage and the new interventions is primarily in the detailing, which is contemporary, and the subtle colour tone variations.

Top: Grand Hall  
Bottom: Supreme Court Room



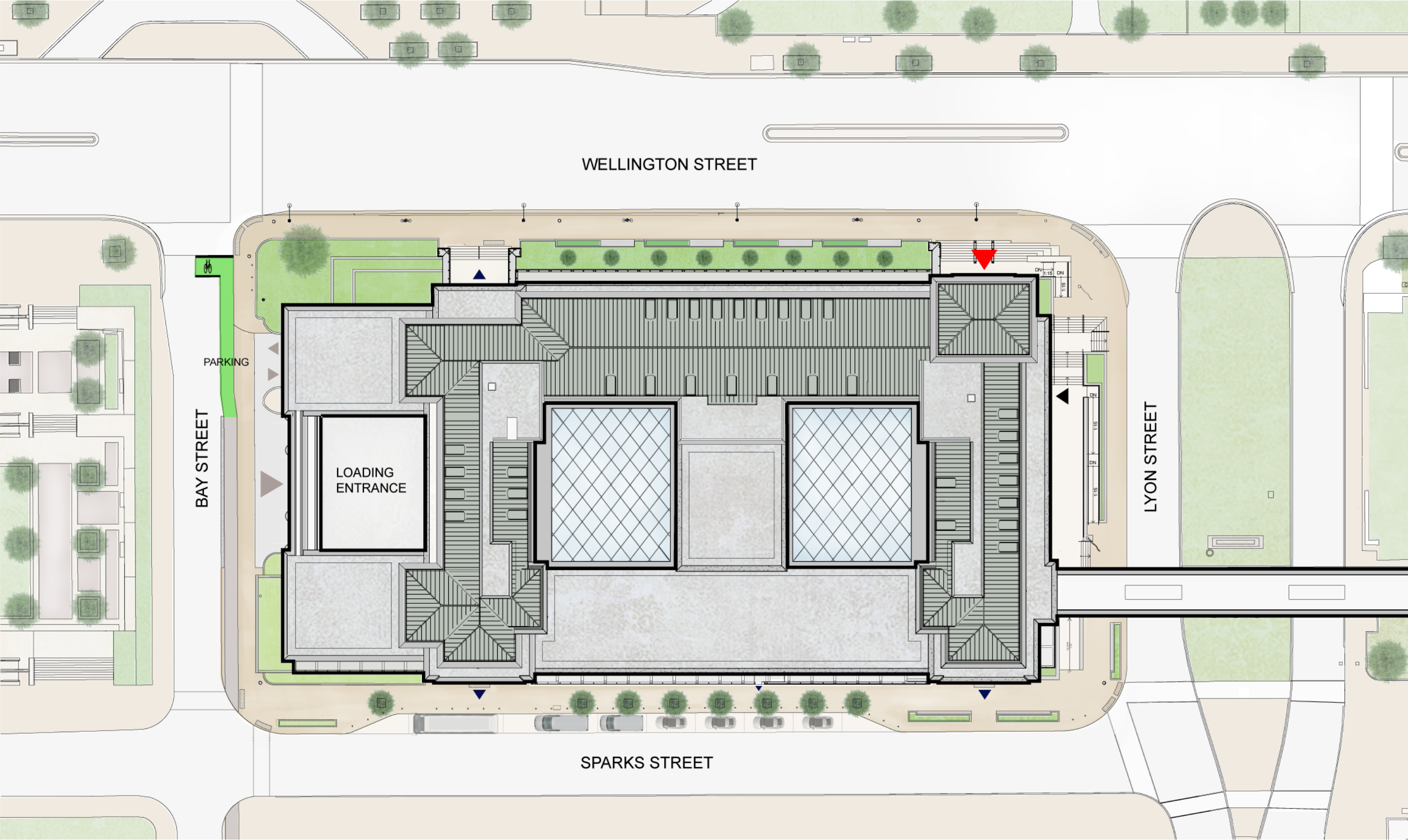


4.0

**PERSPECTIVES**



Site Plan





Site Design  
Confederation Boulevard





Site Design  
Confederation Boulevard





Site Design

Confederation Boulevard - Granite Clad Bench / Planters





Site Design

Sir John A. Macdonald Parkway Approach





Site Design  
Bay and Sparks Streets





Site Design  
Bay and Sparks Streets



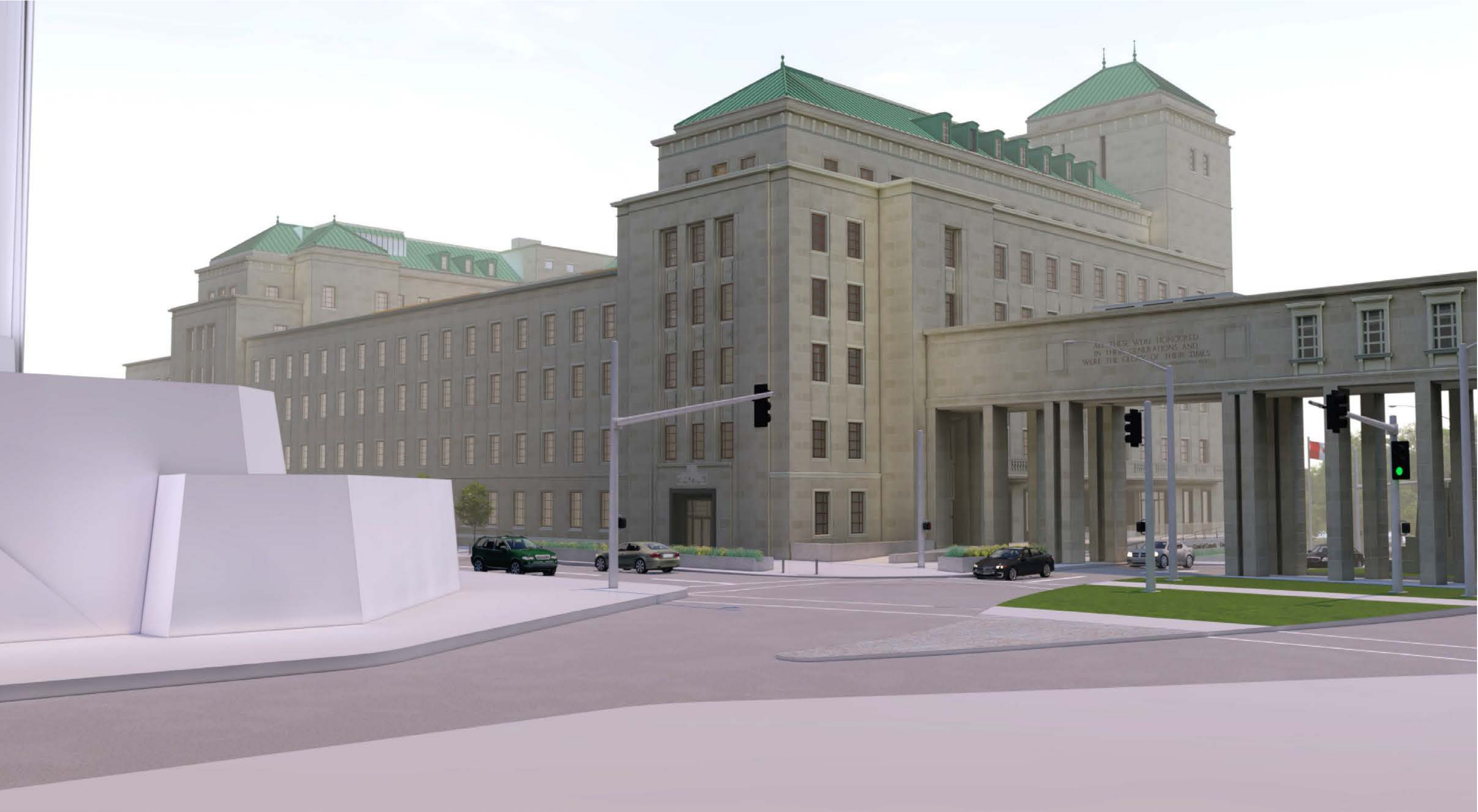


Site Design  
Lyon and Sparks Streets





Site Design  
Lyon and Sparks Streets





Entrance Design

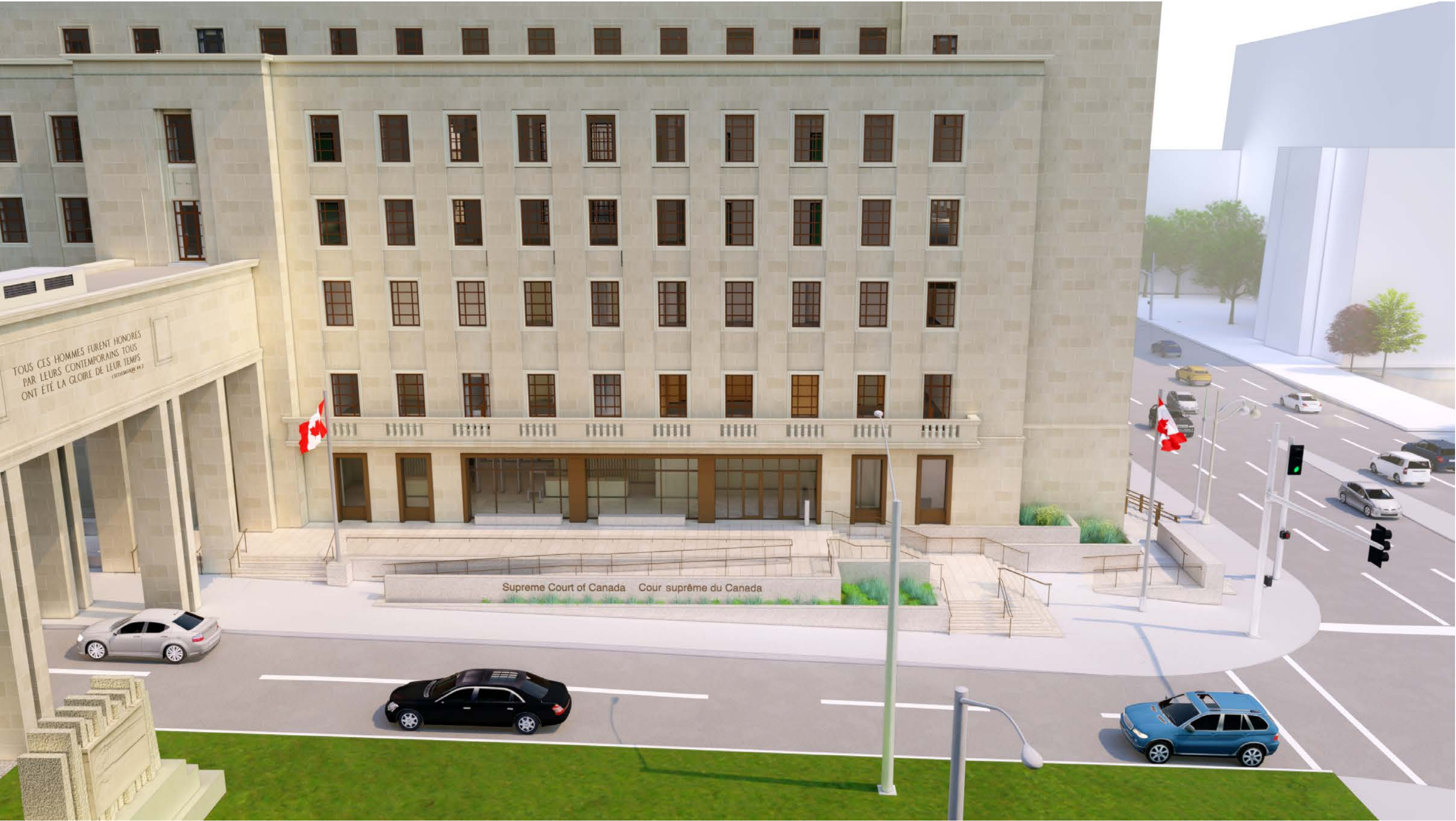
Aerial View





Entrance Design

Lyon Street





Entrance Design

View towards Wellington Street





Entrance Design

View towards Sparks Street





Lighting Design  
Ensemble Rendering





Lighting Design  
South Elevation





Lighting Design  
North Elevation





Lighting Design

East Elevation



West Elevation

