A Cultural Heritage Impact Statement
100 Argyle Avenue, Ottawa

SUBMITTED TO: Colonnade BridgePort
PREPARED BY: Commonwealth Historic Resource Management
Revised 1 January 2019

Image Cover Page: RLA Architecture November 2018

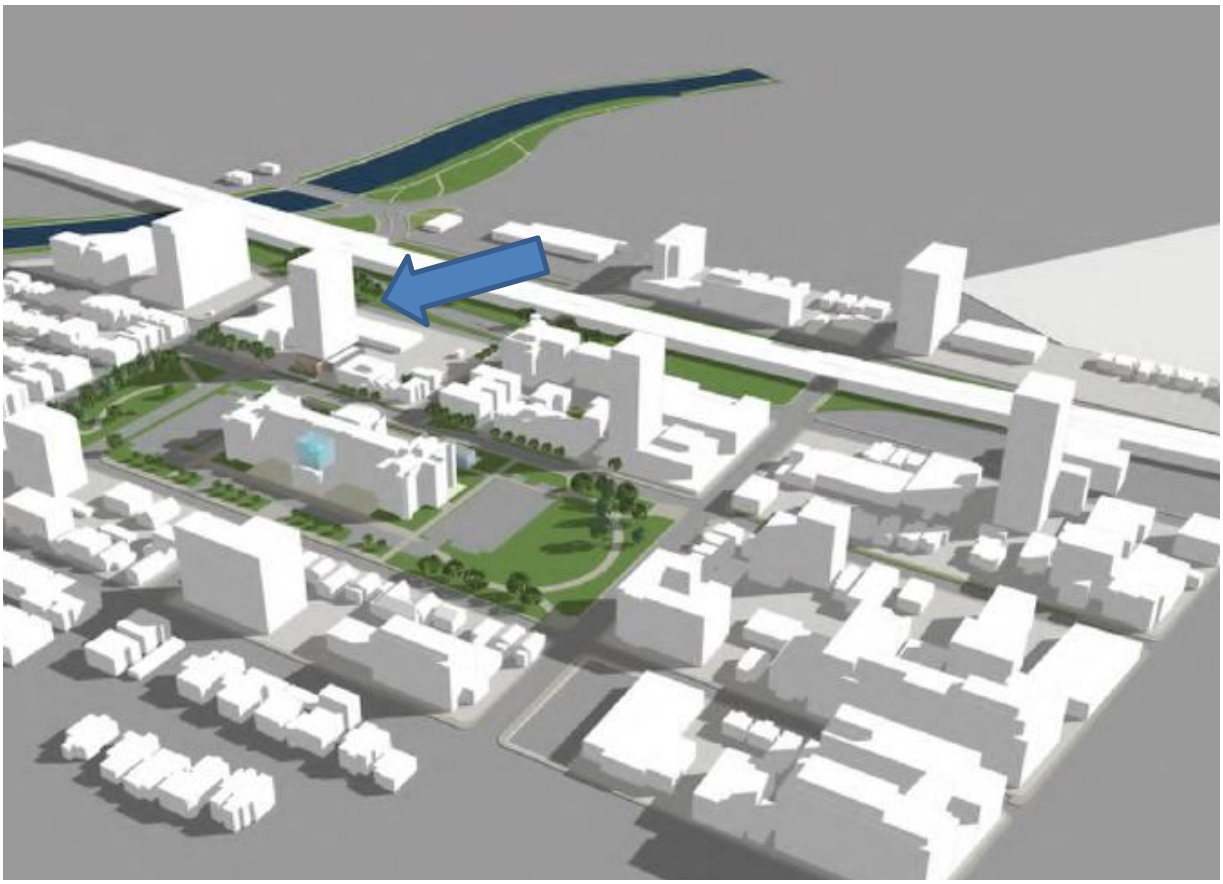

Figure 1: Massing study illustrating lands around the Museum of Nature. 100 Argyle is located to the north. RLA Architecture

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1.0 INTRODUCTION

1.1 Introduction

This Cultural Heritage Impact Statement (CHIS) has been requested by the City of Ottawa. The purpose of the CHIS is to identify the cultural heritage resources and values that may be impacted by the construction of twenty storey residential tower at 100 Argyle Avenue. The proposed development is located in the southeast corner of the Centretown Heritage Conservation District (HCD), which has been designated by the City of Ottawa under Part V of the Ontario Heritage Act (OHA) (By-law 269-97).

This CHIS follows the content outline recommended by the City of Ottawa for Cultural Heritage Impact Statements. The following documents were used in the preparation of this report:
Parts IV and V of the Ontario Heritage Act;
Guidelines for the Preparation of Cultural Heritage Impact Statements, City of Ottawa;
The Centretown Heritage Conservation District Study, 1996-1997.
Centretown Community Design Plan (CCDP), Urban Strategies Inc., Delcan, ERA Architects, City of Ottawa. May 2013;
Centretown Secondary Plan, Official Plan, City of Ottawa;
Heritage Survey and Evaluation Forms 1996 – 100, 114, & 116 Argyle Avenue;
Statement of Heritage Significance, Canadian Museum of Nature, 240 McLeod Street, Ottawa, ON;
Standards and Guidelines for the Conservation of Historic Places in Canada, Second Edition, 2010;
Conservation Assessment & Heritage Integration 100 Argyle Avenue Ottawa. Commonwealth, January 2018: and
Site plans and elevations, RLA Architecture, November 2018.

1.2 Owner and Contact Information

Address: 100 Argyle Avenue, Ottawa, Ontario

Owner and Contact:

Bonnie Chen Development Manager | Colonnade BridgePort
100 Argyle Avenue, Suite 100 | Ottawa | Ontario | K2P 1B6
P. 613.225-8118 x 364 | C. 613.979.6547 | F. 613.225.3898 | (bchen@colonnadebridgeport.ca)

1.3 Site Location, Current Conditions and Introduction to Development Site

The property is located on an interior lot fronting onto the south side of Argyle within the Centretown Heritage Conservation District. The block is bound by Argyle Street to the north, Metcalf Street to the west, Elgin Street to the east, and Catherine Street and Highway 417 (the Queensway) to the south. The property is enclosed by the City of Ottawa Police Headquarters (1983) to the east and south, and private property to the west. Initially developed in the late 19th century with single detached and semi-detached residences typical of the period, redevelopment of the area commenced in the 1950s with the removal of the railway lines and sidings to the south and the completion of the Queensway.
The two and a half storey office building with surface parking to the side and rear of the property was constructed in 1955 (date stone) with an addition in 1960. The building was the headquarters of the

Canadian Labour Congress between 1958 and 1973. The 1960 addition to the building was constructed to the design of Gilleland and Strutt Architects.

The building has been identified as a Group 2 heritage building and is part of the Centretown Heritage Conservation District; it is designated under Part 5 of the Ontario Heritage Act. Directly across from the site is the Museum of Nature. The Museum, constructed in 1912, is a National Historic Site designed in the Gothic Revival/Scottish Baronial style.

The grounds encircling the museum have been identified as an area in Centretown that has a unique sense of place that must be given special attention in order to preserve that character. Infill buildings in the area must demonstrate how they integrate with existing surroundings and contribute to the enhancement of the areas' character. Infill buildings are to have exemplary architecture.

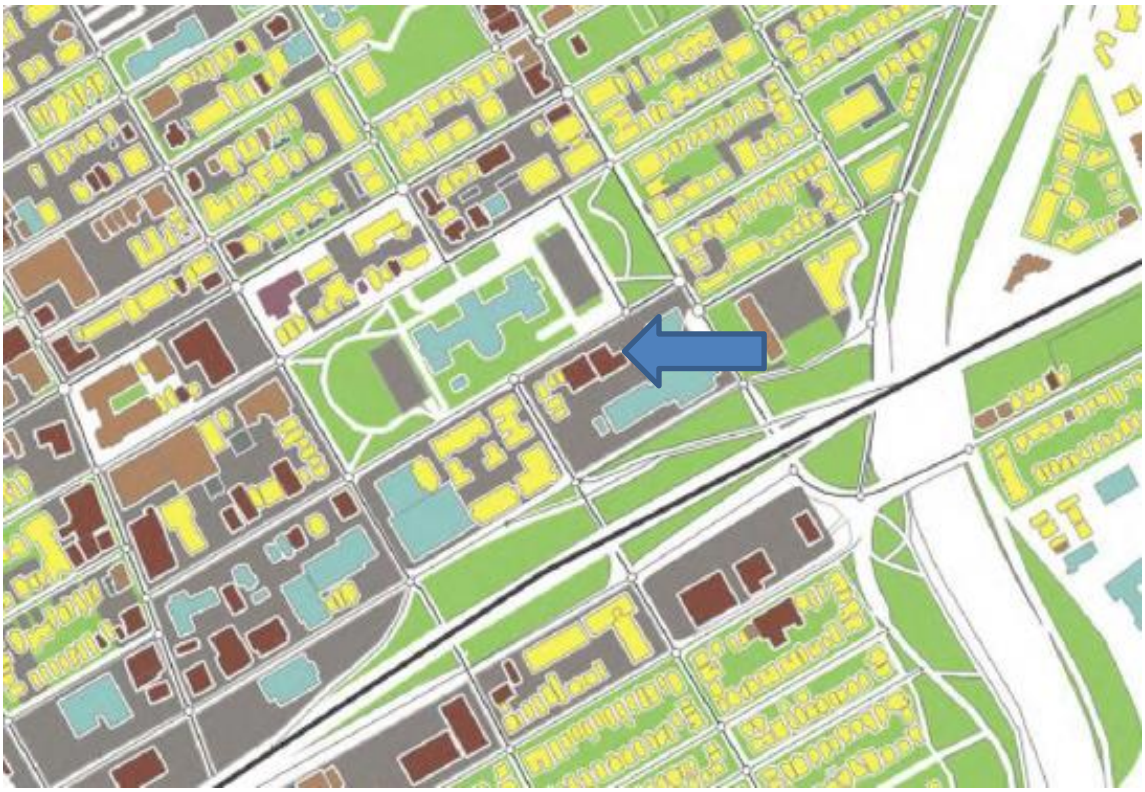


Figure 2: Block plan of the area to the south of the Museum of Nature. Development site arrowed.

1.4 Built Heritage Context and Street Characteristics (Neighbourhood Character)

The south side of Argyle extending from Metcalf to Elgin Street was developed between 1955, with the construction of the CLC building at 100 Argyle, 1966 with the construction of the former Branch 16 of the Legion at 110 Argyle to the west, and the 1983 construction of the Ottawa Police Headquarters to the east and south of the development site. From the corner of Argyle and Metcalf There is a cluster of two brick clad residential form buildings and a three storey brick clad apartment building.

The street characteristics vary and are a reflection of the time in which each building was constructed. The section of streetscape extending along the Ottawa Police Headquarters frontage consists of soft landscape (grass, and shrub beds) and a row of Norway Maples bordering Argyle. The section of streetscape at 100 Argyle consists of asphalt parking with soft landscape (grass, plant, and shrub beds) in front of the building façade. The streetscape at 110 Argyle is a mix of asphalt and grass. The buildings are somewhat set back uniformly from the street with the exception of the police headquarters. Directly across the street is a service entrance and museum parking lot.

Figure 3: Contextual view looking south towards the main entrance of the Museum of Nature. The museum set in a park provides a distinct environment for the buildings surrounding the open space.

The City of Ottawa maintains a Heritage Reference List (HRL) that identifies and categorizes heritage properties. Category 1 properties are highly significant heritage resources registered on the City of Ottawa Heritage Register and may have been designated under the Ontario Heritage Act (OHA) or have been recognized by other levels of government. Category 2 and 3 properties are considered to be contributing buildings as they contribute to the overall heritage character and value of the district. Category 4 buildings are non-contributing to the heritage character of the area. The specific categorization of the buildings within 35m or adjacent to the development site are shown below.

Building Address	Heritage Reference List	Part 5 OHA	Building Type

100 Argyle Avenue	Category 2	yes	Commercial
110 Argyle Avenue	Category 4	yes	Commercial
114 Argyle Avenue	Category 2	yes	Residential / Office
116 Argyle Avenue	Category 2	yes	Residential / Office
122 Argyle Avenue	Category 2	yes	Residential Apts.
240 McLeod Museum of Nature	Category 1, FHBRO Status Classified	yes	Museum

Figure 4: Contextual plan view buildings focusing on the museum.

Figure 5: View of Windsor Arms at 150 Argyle just west of the development site forming part of the streetscape south of the museum. RLA Architecture.

Figure 6: View of 110 Argyle the former Canadian Legion Branch 16. Source: Google Earth

Figure 7: View from Elgin Street looking west on Argyle Avenue. The Museum of Nature is to the left and the building at 100 Argyle to the right. There is a significant grade change between the south side of Argyle and the Museum of Nature lands to the north. Source: Google Earth

Figure 8: Context view of 100 Argyle and the City of Ottawa Police Headquarters. Source: Google Earth

Figure 9: View of 114, 116, and 122 Argyle Avenue to the west of the development site are categorized as Grade 2 heritage buildings. Source: Google Earth

1.5 Relevant Information from Council Approved Documents

Official Plan

The City of Ottawa includes provisions for Cultural Heritage Resources in Section 4.6 of the Official Plan. Section 4.6.1 addresses the requirements for a CHIS when development has the potential to affect heritage resources contained within the development site that are designated under Parts IV and V of the OHA.

Centretown Heritage Conservation District Plan

The development site is within the boundaries of the Centretown HCD, which was designated under Part V of the OHA By-law 269-97. The plan prepared 20 years ago is currently under review.

Centretown Community Design Plan (CCDP), 2013

The CDP provides guidance for the integration of heritage resources into new infill development and guidelines specific to the area encircling the Museum of Nature.

Urban Design Guidelines

Urban Design Guidelines for High-rise Buildings

The City recently revised the urban design guidelines for high-rise buildings in order to reflect the High-Rise building policies currently under appeal within Official Plan Amendment #150. City Council voted in favour of these guidelines on May 23, 2018. They are still subject to approval process for the associated zoning by-law amendment.

1.6 Digital Images of Cultural Heritage Attributes

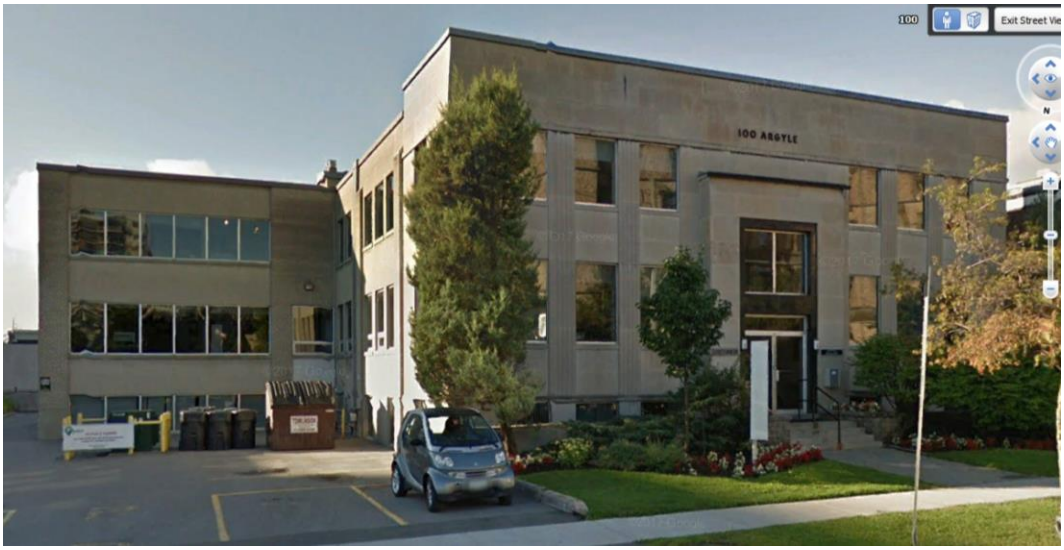


Figure 10: View of the north façade of 100 Argyle. The wing to the left of the main building was constructed as an addition to the design of Gilleland & Strutt Architects and completed in 1960. The 1959 elevation drawings illustrate a stone cladding for the north façade of the addition, which was subsequently substituted with brick. Source: Google Earth

Figure 11: Context view of 100 (left) and 110 (right) Argyle Avenue. The building at 110 Argyle completed in 1966 was known as the Trafalgar House. 110 Argyle was not evaluated in the 1997 Centretown Heritage Conservation District Study. The building is constructed of decorative modular pre-cast concrete units. Source: Google Earth

Figure 12: View of the main entrance to 100 Argyle. The entrance steps, doors, and upper transom are modern replacement units. The original entrance design is evident in the 1959 elevation drawings for the addition. Note the polished black granite entrance surround, street address plate and two sidelights all of which are original architectural features. The plan is to remove the stairs and drop the floor level to the same grade as the sidewalk to provide accessible access. Source: CHRML

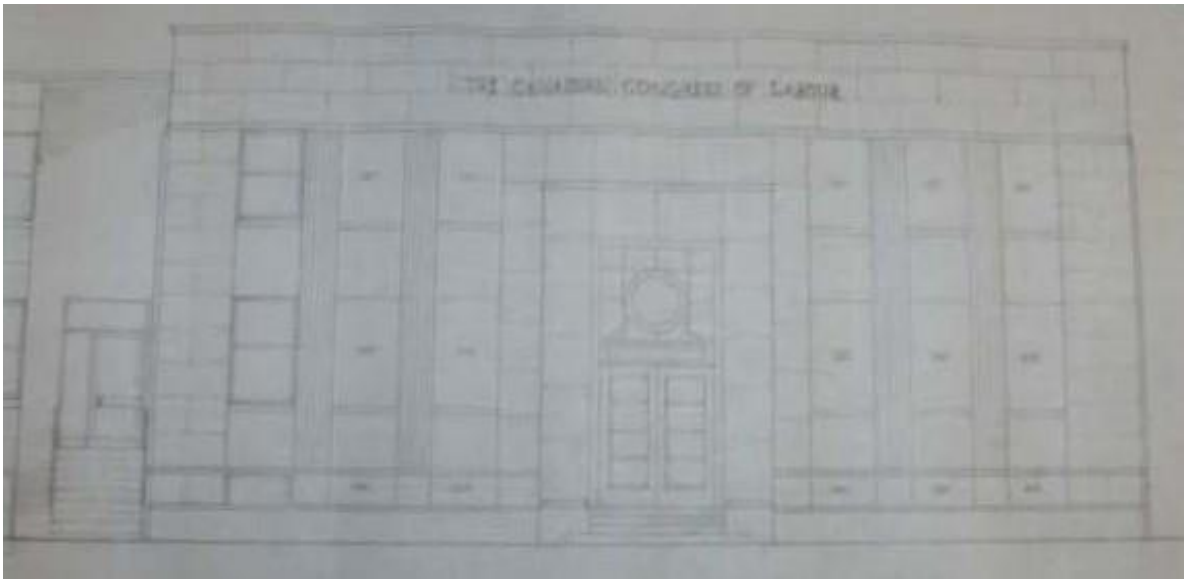


Figure13: Elevation drawing from the 1959 set of drawings for the addition illustrating the original entrance configuration. Source: Library & Archives Canada.

1.7 The History of 100 Argyle Avenue

The building was completed in 1955, and served as the headquarters of the Canadian Labour Congress through to 1973. An addition was constructed in 1959-60 to the design of Gilleland & Strutt Architects. These drawings were the only ones located. They consist of a number of sketch elevations on trace paper; two iterations of the floor plans dated January and February 1959, and two sections. The drawings for the addition note the construction type – load bearing masonry construction consisting of a 4" brick applied to an 8" concrete block back-up wall with steel mesh lath and plaster on the interior face. The floor and roof structures consist of a 4" lightweight concrete slab supported on steel pans, which in turn are supported by steel joists. Steel columns are embedded within the masonry walls to support steel lintels and floor structures where the ribbon windows are located. (Appendix D).

There was no indication in the drawing material that Gilleland & Strutt Architects designed the main building. A review of local newspapers – Ottawa Citizen, Ottawa Journal – dating to 1955 may provide additional information. A textual archive located at the LAC titled 'Headquarters Building' Canadian Labour Congress dated 1945 – 1953 may also identify the architectural firm that designed the main building.

As-Found Recording 100 Argyle Avenue

Commonwealth completed as-found measurements and photograph the building facades. The visual inspection and measurements were undertaken from grade, and the height of the ashlar courses above the second-floor windowsills was estimated based on the height of stone course below the windows. A set of as-found elevations, a plan view, and two sections were developed (Appendix A).

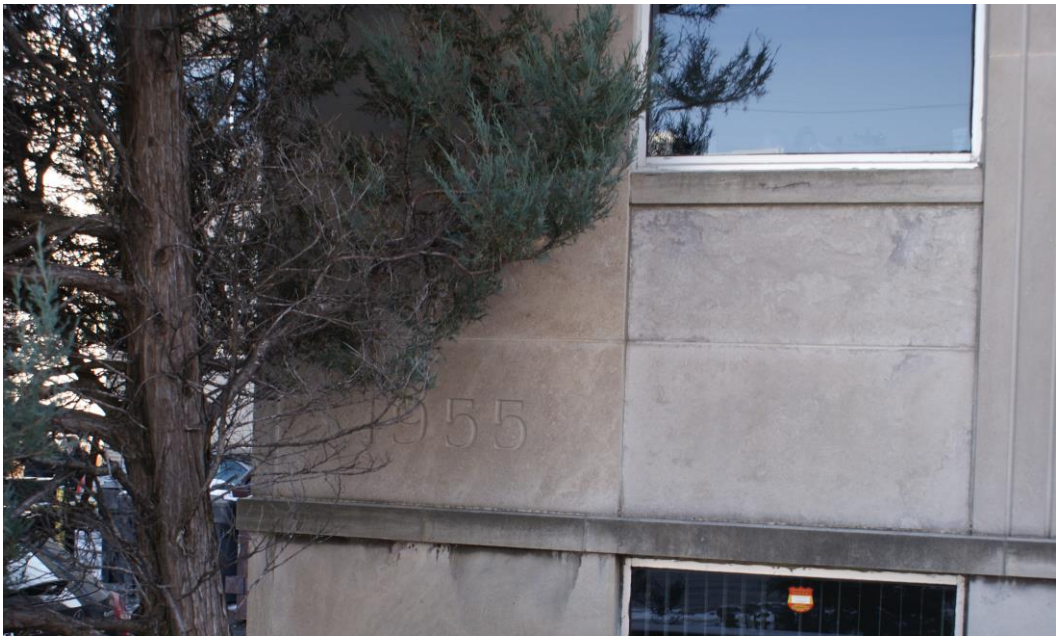


Figure 14: Detail view of stone cladding with the date stone. Note the stone sill course, windowsills, and the recessed stone panels below the windows. Source: CHRML

Figure 15: Detail view of the east-side elevation. The stone cladding returns on the side elevations and the rear portions of the building are clad in brick. The building is a composite construction with steel columns embedded in the walls. Note the stone above the first-floor window extends beyond the window opening and is supported by the masonry below. This suggests a traditional load bearing cladding affixed to a concrete block backup wall. Steel shelf angles are located above the second-floor windows supporting the parapet belt course. Source: CHRML

2.0 HERITAGE RESOURCE DESCRIPTION AND HISTORY

2.1 Neighbourhood History

The history of Centretown is outlined in detail in the 1997 Heritage Conservation District Study. The south side of Argyle was developed with institutional uses after 1955 with the removal of the railway tracks and construction of the Queensway Hwy. 417.

2.2 Development Site History

The block bound by Argyle Avenue, Metcalf, Elgin, and Catherine in the late 19th century had been subdivided into residential lots, and a number of residences were constructed. The removal of the railway tracks and the completion of the Queensway in 1966 spurred changes and brought about redevelopment. The commercial building at 100 Argyle was constructed in 1955 with a 1960 addition. 110 Argyle constructed in 1966 was the former location of the Legion Branch 16. The Ottawa Police Headquarters on Elgin Street was completed in 1983.

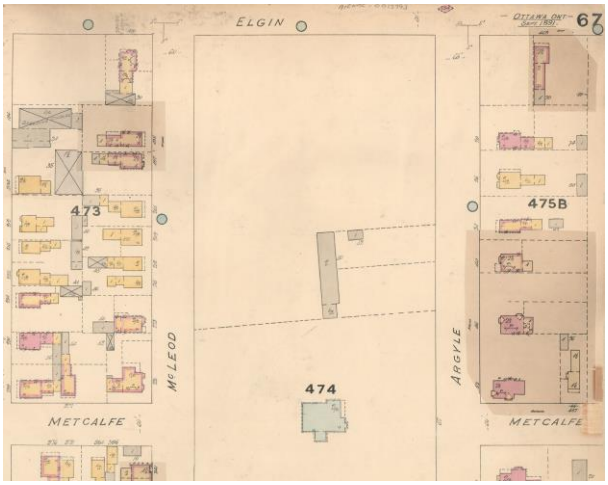


Figure 16: 1888 Revised 1901 Fire Insurance Plan City of Ottawa Sheet 67. The development site in 1901 consisted of single detached two-storey residential buildings. Source: Library and Archives Canada.

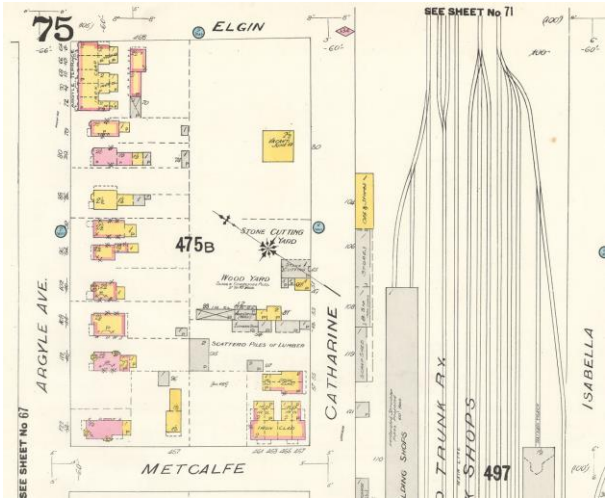


Figure 17: Fire Insurance Plan of the City of Ottawa, Ontario, Volume 1, December 1902, revised June 1912, Sheet 75. Further development of single-family residential properties occurred during the period. Note the light industrial uses along Catherine Street and the railway shops lining the route of what would become the Queensway Site arrowed. Source: Library and Archives Canada

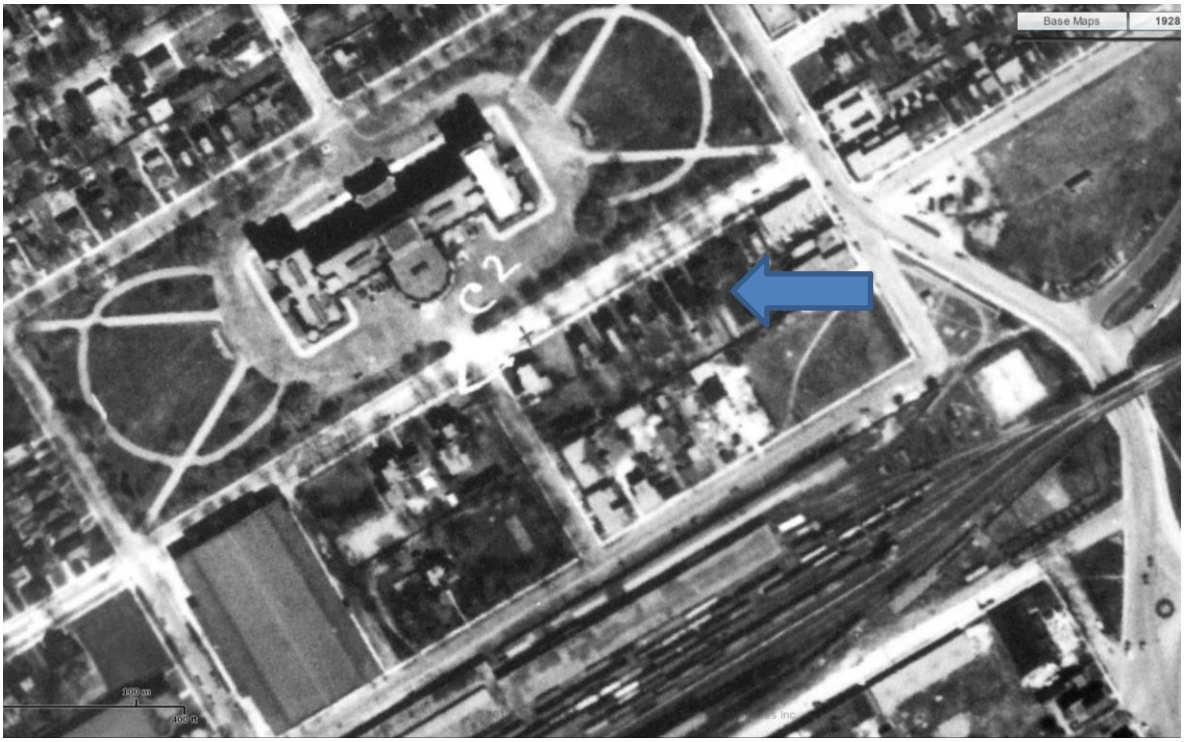


Figure 18: 1928 Aerial view of the site illustrating the development pattern at the time. Argyle Street between Metcalfe and Elgin had been developed with single, semi-detached, and row houses. Site arrowed. Source: GeoOttawa

Figure 19: 1958 Aerial view of the block to the south of the Museum of Nature. The Canadian Labour Congress's new headquarters at 100 Argyle had been completed in 1955 and two other commercial buildings had been constructed to the east. Site arrowed. Source: GeoOttawa

3.0 STATEMENT OF CULTURAL HERITAGE VALUE

The following Statement of Cultural Heritage Value identifies the primary heritage values and attributes of the HCD. Source: Historic Places

3.1 Statement of Cultural Heritage Value

DESCRIPTION OF HISTORIC PLACE

The Centretown Heritage Conservation District is a primarily residential area, with some commercial corridors, within downtown Ottawa. Centretown is a large area in the centre of Ottawa, south of Parliament Hill, to the north of the Queensway corridor and to the west of the Rideau Canal. Since its development, Centretown has served as a residential community serving the government activities of Uppertown and has been home to many of the civil servants and government ministers of Parliament Hill. The buildings in the district were mainly constructed between the 1880s and the 1930s, and the original low to medium residential scale is relatively intact throughout the area.
The District was designated under Part V of the Ontario Heritage Act by the City of Ottawa in 1997 (By-law 269-97).

HERITAGE VALUE

The Centretown Heritage Conservation District is closely associated with the governmental character of Uppertown to the north. The Centretown developed as a desirable neighbourhood for the transient population of government workers and ministers. Centretown still contains a large variety of intact historic streetscapes, reflecting the diverse nature of development that occurred in the area in order to serve the varied population. Throughout its development, the area reflected national politics and priorities of the time.

Centretown dates from the 1880-1940 period. This was a period of mature design and craftsmanship in the Ottawa area, related to the new prosperity of the expanding national capital and the availability of excellent building materials such as smooth face brick of Rideau red clay, a good selection of sandstones and limestones, a full range of milled architectural wood products, and decorative components in terra cotta, wrought iron and pressed metal.

The buildings along Argyle delineate the edge of the district and represent the mid century changes that took place following the removal of the train lines. The south side of Argyle extending from Metcalf to Elgin Street was redeveloped between 1955, with the construction of the CLC building at 100 Argyle, the 1966 construction of the former Branch 16 of the Legion at 110 Argyle to the west, and the 1983 construction of the Ottawa Police Headquarters to the east and south of the development site. While most buildings retain their residential use, many others have been converted for use as professional offices, or small retail or commercial establishments. The most common residential building type is the hip-roofed single family home, with a projecting gabled bay on an asymmetrical façade. 100 Argyle

differed in that it was a purpose-built office building. Along with flat roofed, medium-density apartment buildings, it also played a strong role in defining the character of the District. In addition, a few commercial corridors, most notably Bank Street, run through the area while still reflecting the low scale and architectural character of the rest of the district.

Centretown's landscape is unified by historical circumstance. Both Stewart and the By Estate opened for development in the mid 1870s and developed under consistent pressures. Together they constituted the entire area within the boundaries of Centretown. The idea of a separate residential neighbourhood close to downtown was relatively rare, although the concept became increasingly popular in Canadian cities as the nineteenth century ended. Along with residential Uppertown, Centretown has provided walk-to-work accommodation for Parliament Hill and nearby government offices. As part of the residential quarter of official Ottawa, Centretown was a sensitive mirror of national politics.
Centretown is the surviving residential community and informal meeting ground associated with Parliament Hill. Its residents have had an immense impact upon the development of Canada as a nation.
Source: Centretown Heritage Conservation District Study, winter 1996-1997, City of Ottawa.

CHARACTER-DEFINING ELEMENTS

Character defining elements that contribute to the heritage value of the Centretown Heritage Conservation District include:

- The heritage residential character of the district, featuring low to medium scale development;
- The original grid block layout and plan;
- Relatively intact residential streetscapes;
- Predominant use of Rideau red clay decorative brick veneer with trim details in stone, wood and pressed metal;
- Its varied building types and styles due to the diverse populations of the area;
- It's single family homes executed in a vernacular Queen Anne style, with substantial wood verandas and elaborate trim, varying in size;
- its low-rise apartment buildings with similar detailing to single-family dwellings but featuring horizontal layering and flat roofs;
- its commercial corridor on Bank Street, consisting of low-rise commercial and mixed-use buildings set close to the street;
- Its development during a significant period in the growth of Ottawa as the government centre of Canada;
- Its connection with Uppertown and the governmental activities which occur there;
- Its associations with many people and institutions of national prominence who have played an important role in shaping Canada; and,
- Its historical role as a meeting place for governmental and community groups, clubs and organizations.

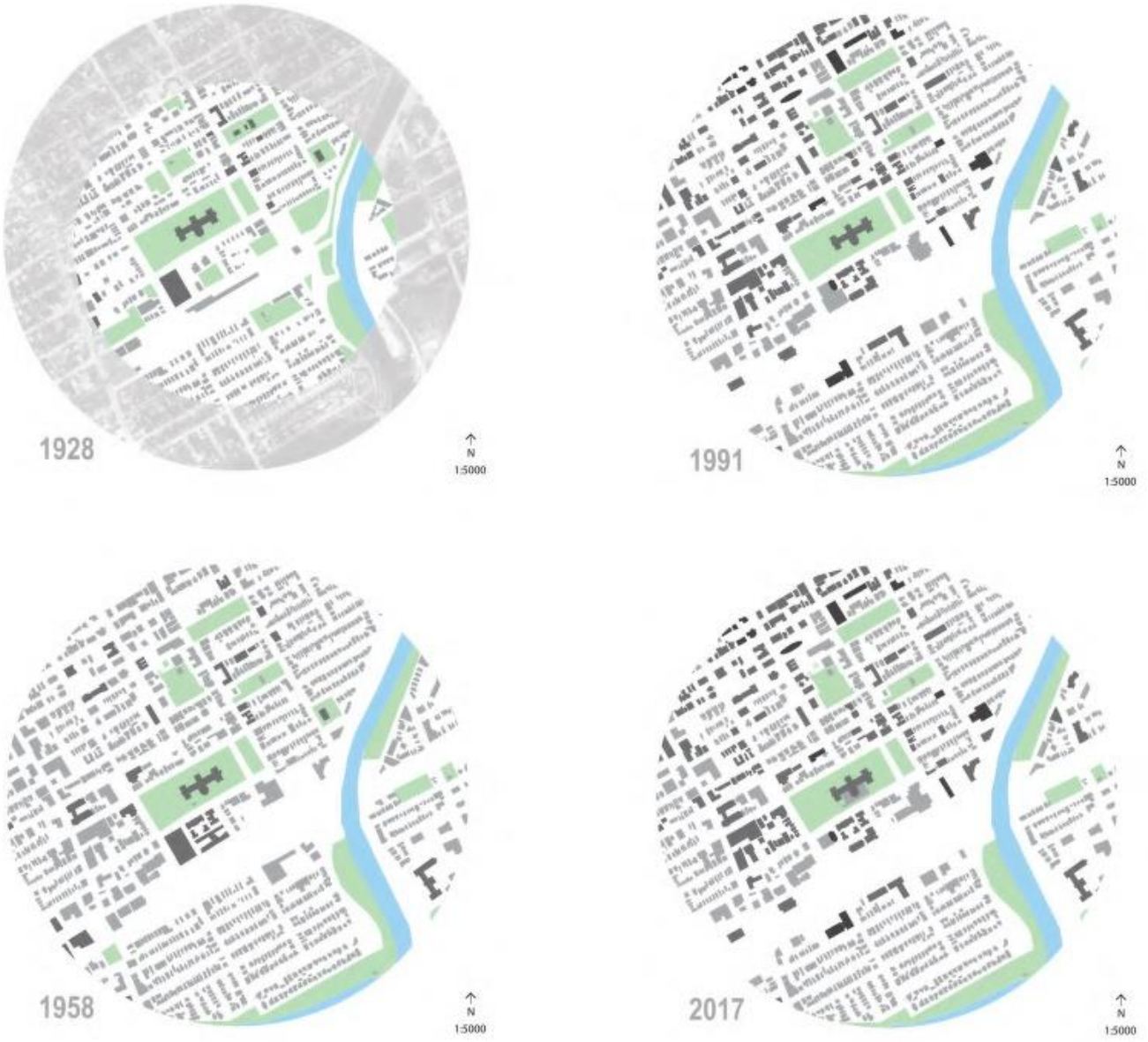


Figure 20: Contextual map views of the area around the museum dated 1928, 1951 1991, and 2017 illustrate a distinct niche character created by the relationship of the buildings surrounding the museum property. Credit: RLA Architecture

4.0 DESCRIPTION OF PROPOSED DEVELOPMENT

4.1 Description of the Proposed Development

The development proposal is to construct a 21 storey residential tower with 62 below grade parking spaces on 2 levels and 12 exterior at-grade spaces. There will be 156 residences, including studio, one and two-bedroom units. The proposal also includes the dismantling and reinstallation of the stone cladding from the existing building and the installation of the cladding on a new back-up wall. The reassembled front portion of the building will form a two-storey entrance lobby to the building.

The limestone clad portion of the original building will be relocated in order to align with the tower and serve as the main lobby entrance and an integral part of the podium. A four-storey podium wraps around the building and provides a solid base for the tower. This shift to the eastern edge of the site responds to the requirement for appropriate building separation of the tower from the neighboring site to the west. As well moving the building as far easterly as possible minimizes the shadowing of the museum. Lastly, the heritage façade set proud will be more visually engaging as part of street wall on Argyle Avenue.

The tower's material expression is that of a delaminating form, with the outer layer utilizing a clay brick that echoes the colour of the limestone cladding of the heritage façade, while the darker inner layer is a contrasting black coloured clay brick. This offset colour change with the major portion of the tower expressed in a colour similar to the limestone of the entrance foyer helps to keep a slender profile to the body of the tower.

The approach to the conservation of the front façade will involve the dismantling and reconstruction of the limestone cladding on a new back-up wall. The first floor structure will be lowered, and a new floor structure inserted approximately 2' below the existing level at the main entrance. This will entail the removal of the limestone doorsill and portions of the wall below to the level of the concrete foundation. The existing entrance steps, which are not original, would be removed and a new entrance assembly installed. A detailed discussion of the material conservation was carried out and is included in the appendix.

Figure 21: View of the south façade illustrating the relationship of the original façade as part of the podium distinct from the main tower. The tower will step back approximately 5.0m from the front façade of the entrance foyer as part of a distinct podium. The east side of the development site has a 3.66m right of way and the west side has a 1.63m right of way.

Plan Concept

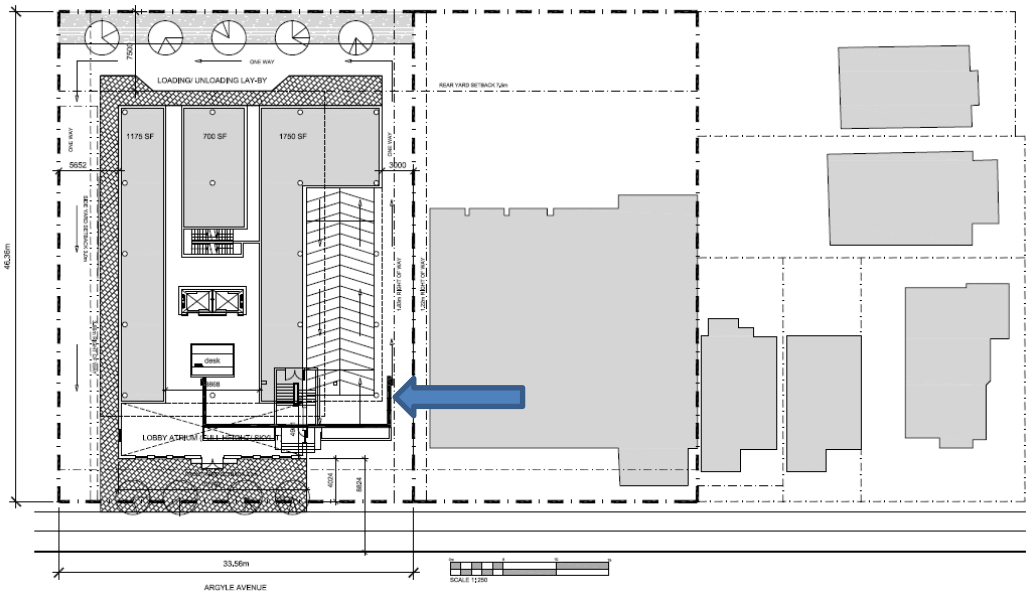


Figure 22: Plan view of the development site illustrating the building setback and the parking spaces. Soft landscape is limited to the front of the building and the sidewalk showing street trees. The main tower is setback behind the façade of the original building allowing it to continue to be interpreted as part of the streetscape. The dark line indicates the original location of the building.

Figure 23 and 24: North and South Elevations of the tower.

Figure 25 and 26: Rendered elevations of the proposed tower looking both west and east are well articulated. The use of tan brick or cementitious board in a colour matching the limestone façade helps to anchor the building and connect it to the upper levels of the tower. The original building is set proud of the main tower and retains it position to the street.

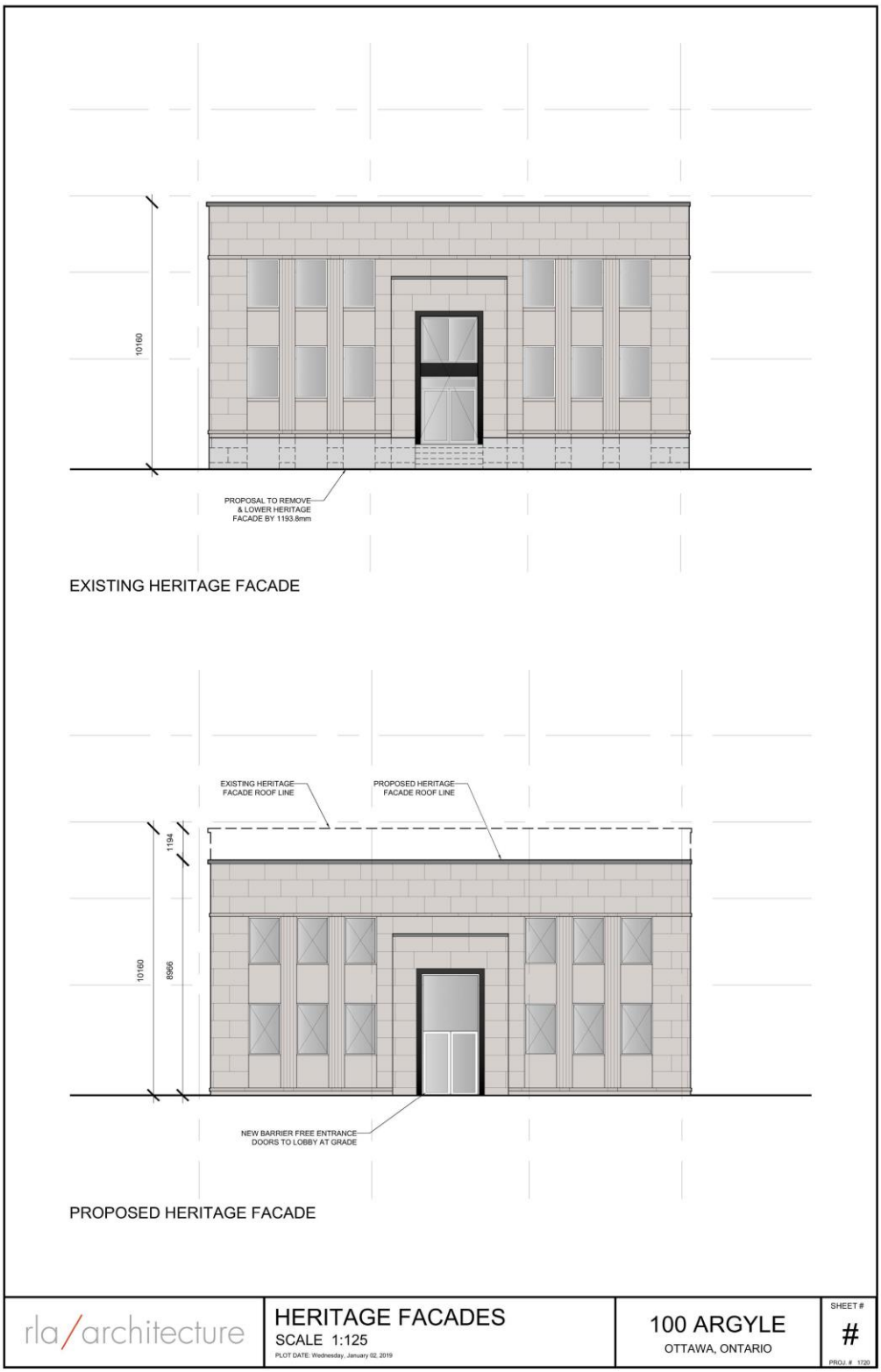


Figure 27: Elevation of existing building and the proposed modifications to the building. RLA/Architecture

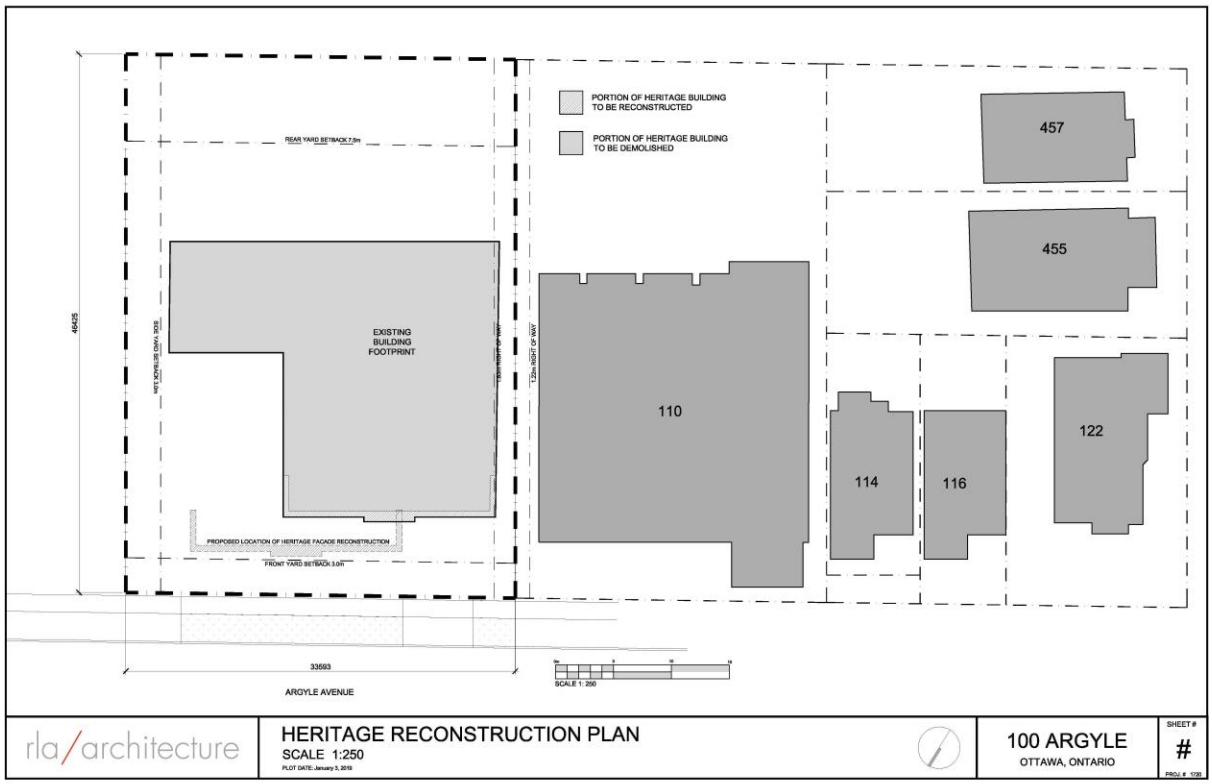


Figure 28: Plan view indicating the extent of building being retained and its siting as part of the new development. Source: RLA/Architecture

5.0 IMPACT OF THE PROPOSED DEVELOPMENT

This section specifically addresses the impacts of the development proposal on the cultural heritage values of the Centretown Heritage Conservation District (CHCD) from two perspectives:

- the impact of a twenty-one storey high rise to the Museum District Special Character Area and broader city plan; and,
- the appropriateness of conserving only part of a listed building designated under Part 5 of the Ontario Heritage Act and integrating it into a high-rise tower.

The heritage attributes of the HCD are itemized in Section 3.0. A number of documents were used to determine the impact. CHCDP was used to frame the discussion along with Centretown Community Design Plan (CCDP, The Museum of Nature Section 6.4.5 of the CCDP, FHBRO, the Heritage Overlay, and Standards and Guidelines. Urban Design Guidelines for High-Rise Housing was also referenced.

5.1 Centretown Heritage Conservation District Study

The 1997 plan has not been updated since changes in the Ontario Heritage Act in 2005. Prior to the update of the act, demolition could only be postponed, not blocked. As a result, there is no discussion related to demolition and/or the integration of an existing building into a new development. Prepared over 20 years ago, the plan offers a broad-brush evaluation of all the buildings within the District and has served Centretown well as a guide to its heritage resources. Over the years, its shortcomings have been addressed through the Heritage Overlay, as well as the CCDP, and Urban Design Guidelines for High-rise Buildings. Updating the Centretown District Plan to meet the current requirements of the Ontario Act is underway.

- *With regard to height, the 1997 Centretown HCD does have a policy regarding the conservation of Commercial and Mixed-Use Infill (VII.5.5). It is limited and does not address high-rise development, recommending heights limited to three or four storeys, with setbacks that match adjacent properties.*
- *With regard to demolition, in VII5.3 of the plan, there is a reference to a building's evolution retaining enough of the original form, material and decorative work to give a strong sense of historical character of the streetscape. The concept that character defining features of heritage buildings can be protected and properly integrated with new development is not explored as part of the study's management strategy. The retention of a portion of the existing building and incorporating it as a feature of a new development goes well beyond what was envisioned.*

5.2 Centretown Community Design Plan (CCDP)

Centretown Community District Plan

The Centretown CDP came out strongly in favor of reviewing the Centretown HCD, including the boundaries and categorization of heritage resources (Group1, 2, 3, and 4). A stated in the CDP, a "finer grain approach would more clearly define where the specific intact groupings of heritage buildings are on a street by street basis. This street-by-street approach would also allow for infill development based on their relationship to their immediate context and the character of their street.

The subject property is designated "Residential Mixed-use" in both the Centretown CDP and the implementing Centretown Secondary Plan and permits a building height of nine (9) storeys. Properties to the south abutting Catherine Street have permitted heights of 25 storeys.

Section 6.5 of the CDP contains Heritage policies regarding integration and context. The CDP states that Group I and Group 2 heritage buildings must be protected and properly integrated with new development. The CDP encourages restoration, reuse or integration of heritage structures into new low-rise, mid-rise or high-rise building development.

When integrating a heritage structure into a high-rise building, the following guidelines apply:

- New development should respect and be sensitively integrated with the heritage building and context and consistent with existing heritage plans and policies. It should be distinguishable and

of sympathetic contemporary design, which does not detract from or overpower the original *building.*

Discussion: *The cladding on the north, east, and west facades differs from the limestone of the original building. An attempt will be made to match the colour of the stone using either brick or cementitious panels*.

- New development should be respectful of key heritage elements. This can include, but is not limited to building stepbacks, cornice lines, façade horizontal and vertical articulations, opening sizes, proportion and rhythm, and building materials. New development should maintain a cornice line consistent with the existing heritage building through appropriate stepback(s).

Discussion: *The reconstructed front and side facades of the building will be retained and incorporated into the new development as part of the building's podium to the proposed tower. This will maintain the existing cornice lines, horizontal and vertical articulation of the façade, opening sizes, proportion and rhythm and building materials all of which are key heritage elements.*

- Where heritage buildings are low scaled, the podium of a new building will respect and reflect the urban grain and scale, visual relationships, and materials of the surrounding historic building(s). Compatible building materials should be used. Creative use of materials is encouraged.

Discussion: *The foyer will consist of the stone cladding. The intent is to dismantle the stone cladding and reconstruct it on a backup wall in a new location within the site. The development respects and reflects the existing urban grain and scale, visual relationships, and materials of the two adjacent buildings (Ottawa Police Headquarters, and 110 Argyle the former Trafalgar House).*

- When adding a new building adjacent to a heritage building or streetscape, the following guidelines shall apply:
  - Use compatible materials.
  - Use stepbacks, front and side, to appropriately transition with adjacent building heights.
  - Minimize the use and height of blank walls.
  - Inform new development with adjacent building ground floor heights and heritage character to enhance the public realm.
  - Modulate façades using vertical breaks and stepbacks in a manner that is compatible with the surrounding heritage structures.

Discussion:

The proposed development incorporates the front portion of the existing 2.5-storey office building, as a residential lobby. The front portion of the building will be dismantled and repositioned to serve as the foyer of the residential tower. Façadism or the retention and incorporation of only the façade of the building is not considered to be good conservation practice. In the case of 100 Argyle, its retention has grounded the building and maintained the relationship to the street and adjacent buildings. The design incorporates similar materials and proportions as the heritage façade, contributing to a cohesive building. The well-articulated podium, recessed behind the foyer fits well into the built-form along Argyle Avenue. Above the fourth floor, the building steps back into a slender residential tower articulated on all four facades. Although not considered good conservation the adaptive-reuse, of the limestone front portion does compliment and links the urban form to the surrounding streetscape.

The entrance to the reconstructed front podium will be set lower than currently exists. The modification of the main entrance level to the building is an acceptable conservation approach within the context of a building 'rehabilitation' in order to meet accessibility objectives. 'Rehabilitation' involves the sensitive adaptation of a historic place or individual component for a continuing or compatible contemporary use, while protecting the property's heritage attributes.

The identified heritage structures on the south side of Argyle are traditional house and apartment form buildings constructed in the early 20th century. The adjacent building at 110 Argyle is a modernist two storey, pre-cast concrete structure, which is most compatible with the modernist limestone clad building that will form the podium to the proposed development.

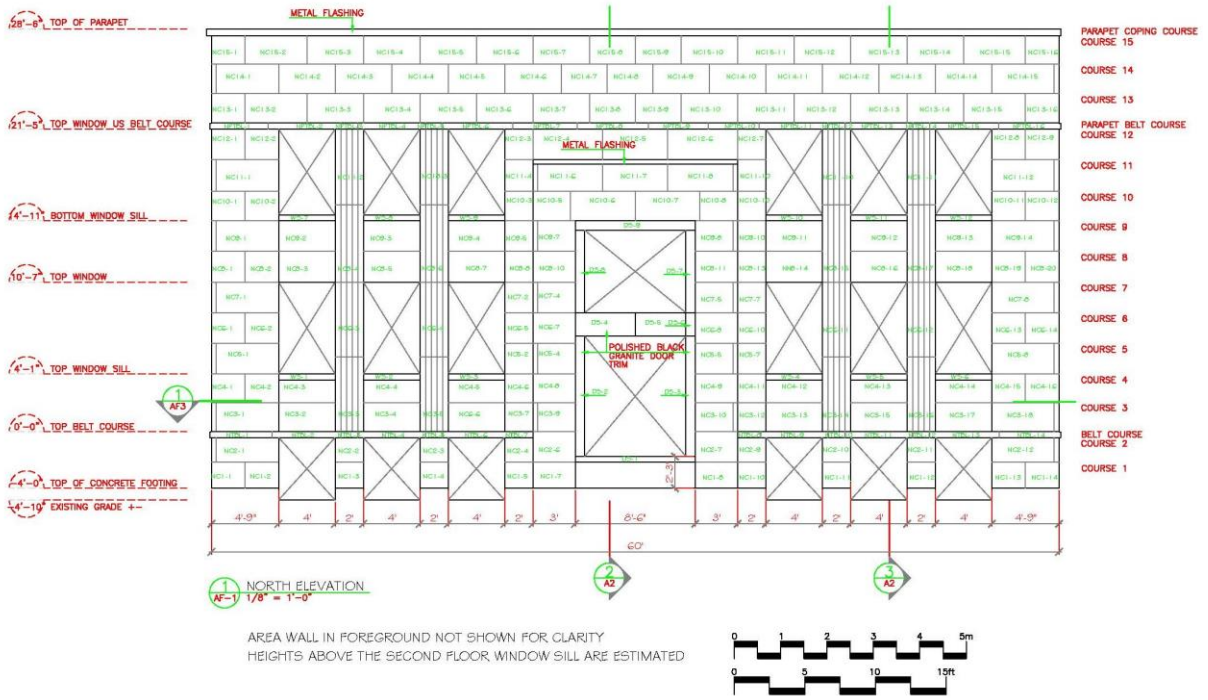


Figure 27: As–found drawing of the front façade with individual limestone units catalogued and their condition noted. Source CHRML

5.3 The Museum of Nature Section 6.4.5 of the CCDP and CHCDS

To the immediate north of the subject property, is the Canadian Museum of Nature and the surrounding park. The District Plan lumps the museum grounds with other public green spaces providing brief references to the Museum on p77 IV.3.2. The plan recommends, "the streets abutting the Museum grounds should be well planted with deciduous street trees, and the streetscape scale should be returned to a pre-1930 scale." CCDP provides a far more useful discussion that captures the concept of the Museum and Metcalfe Street as special places within Centretown. The planning rationale for why it is special is not discussed and as the map indicates, Metcalfe does not extend all the way to Parliament Hill.

The Museum is a National Historic Site of Canada. It has been designated by the City of Ottawa with FHRBO designation as a "Classified" Site. The whole complex was designed as the southern terminus for Metcalfe Street with Parliament Hill serving as the northern end of the barbell. Metcalfe Street continues south from Parliament Hill to McLeod Street where it dissects the east edge of the park between the parking area and the green space.

The Museum is centred on the axis of Metcalfe Street with the front door facing north. The museum itself is a four-storey building, with higher than typical floor heights and projecting architectural features. The museum property includes surface parking areas on the east and west sides, park spaces abutting Elgin Street and O'Connor Street, and a raised outdoor terrace on the south side supported by a concrete retaining wall bordering Argyle Street at a lower level.

The Museum of Nature is identified as a special area and guidelines are set out specific to infill on those streets fronting directly onto the Museum of Nature (portions of Elgin, McLeod, Argyle and O'Connor):

I. Treat infill fronting onto the museum as background buildings with the highest level of architectural articulation, materials and detail.

Discussion: *The CCDP Section 6.2 Building Approach, Maximum Height Considerations Plan pg. 88 identifies the area to the south of the development site bordering Catherine Street to be an appropriate area for high-rises of 25 stories. The development site will be in the foreground of views to the south from the east grounds of the Museum of Nature. Distinguishing between landmark and background buildings this new development can be considered a background building given that it frames, respects, and enhances the existing context of the Museum of Nature without dominating it. The tower is expressed as a slim two-coloured tower with a clearly defined base, middle and top.*

II. Select materials such as stone, brick or glass as the dominant materials and integrate the palette of materials to create a harmonious whole. Stucco is discouraged.

Discussion: *The original limestone heritage building adds authenticity and character to the ground floor frontage and acts as a defining element of the overall building. The building design employs a combination of exterior materials that take their cue from the building. This frontage is accentuated by recessed, lighter coloured masonry for the remainder of the podium, which will provide a backdrop to this feature. The proposed building is a point-tower building design, which is appropriate given the lot orientation and planned context. The tower itself carries a similar limestone coloured brick with a contrast dark coloured masonry. Next door to the east, the Ottawa Police Service Headquarters building features concrete panels interspersed with windows.*

III. Plant large canopy trees within the landscape setback associated with each new development to strengthen the park setting.

Discussion: *The site plan shows four street trees planted in the landscape setback from Argyle Avenue. The design approach of the podium and heritage façade, and the recessed and slender residential tower contribute to minimal shadowing impacts of the east surface parking lot of the Museum lands.*

5.4 Federal Heritage Buildings Review Office (FHBRO)

The FHBRO's heritage character statement provides further direction in looking at the broader urban planning issues as they relate to the Museum and its interface with neighbouring properties. It places emphasis on the principle of axial symmetry, which should govern all relationships on site. It notes that the features of the town planning scheme, including the scale and elevations of the properties bordering the property and processional approach towards the main entrance are integral.

Discussion: *The FHBRO's emphasis on axial symmetry and the broader features of town planning are supported as part of the new development's relationship to Metcalfe and the Museum. The 100 Argyle tower represents a logical transition with the existing high-rise building to the west of the site at 180 Argyle, the 16 storey YMCA-YWCA building. The new tower adds balance to the axial symmetry. The two towers flank the Museum property providing definition to the neighbourhood and re-assert the axial symmetrical town planning scheme.*

The axial symmetry of the landscape plan for the Museum emphasizes a processional approach towards the main entrance as integral. The plan also establishes a distinct front/back to the layout with Argyle Street serving as back-of-house. The planned development will strengthen the park setting along the south property line. The proposed building is not immediately abutting the Museum building, but assists in framing Museum lands and in particular, the void of the parking lot, all of which, will contribute to an enhanced streetscape along Argyle Street.

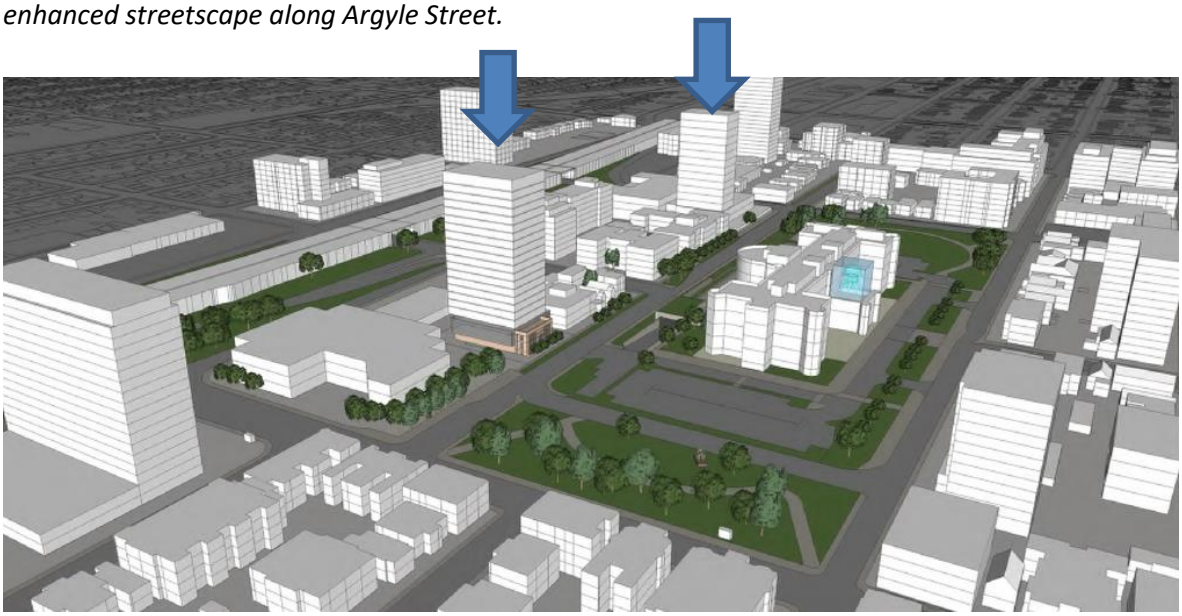


Figure 28: Massing model of the area around the museum with the new development. The new tower adds balance to the axial symmetry. The two towers at 100 and 180 Argyle flank the Museum property providing definition to the neighbourhood and re-assert symmetry of the town planning scheme connecting the Museum to Parliament Hill. Extending the street tree planting in front of the building will reinforce the pedestrian realm. Street trees along the north side of Argyle would help unify and integrate the museum, which presently treats Argyle Avenue as a rear façade and service access.

5.5 Heritage Overlay

Section 60 of the zoning by-law refers to the heritage overlay, which affects the subject property. The intention of this section is to protect the character of heritage areas and significant heritage buildings.
Discussion: *The dominant character defining element of the existing building, being the modernist limestone frontage, is being preserved and incorporated into the design. The building is further being designed to celebrate and accentuate this feature through massing and choice of material. As it is noted in the proposed zoning by-law amendment, relief from section 60 is being requested.*

5.6 Standards and Guidelines

Standards and Guidelines for Conservation of Historic Properties in Canada were reviewed to determine if the proposed development could be assessed using these guidelines. Given that, only a portion of the existing building is being retained (front façade and 14' of the sidewalls), and that it will be dismantled and reassembled on a different part of the site, raises the question of whether this could be considered a conservation exercise.

As part of a redevelopment plan, the owner asked to clarify what steps would be necessary to retain parts of the façade and to determine the most practical approach. The analysis focused on how much of the building would be retained, whether the building façade would remain and the new construction built around it, or whether it could be dismantled, stored and reconstructed as part of the new build.

As per the General Standards (all projects)

1. Conserve the character defining elements of a historic place. *The limestone façade and the side wings were considered character defining. The entrance door had been replaced and possibly the windows. Archived drawings of the main door provide an indication of its appearance.*
2. Do not move a component of a historic place if it is determined that the current location is a character defining element.
   Construction of the tower required the relocating of the historic building. The new location maintains the relationship to the street and aligns with the new build.
3. Find a use for a historic place that requires minimal changes to its character defining elements.
   The front portion serves as the entrance foyer to the development. The major change will be the lowering of the entrance grade with the removal of the entrance steps and a portion (approximately 2'-4") of the wall below the entrance doors. This was done to provide an accessible entrance.
4. Evaluate the existing condition of the character defining elements to determine the appropriate intervention needed.
   Following conservation practices, the history of the building was documented and a detailed as-found recording prepared as well as a material assessment of the building's condition, a methodology for dismantling and storing was drafted.

5.7 Development Impacts

Positive impacts of the proposed development on the cultural heritage values of the Centretown HCD and Argyle Avenue include:

- The form and materiality of the modernist building will be retained, and a conservation plan outlining dismantling, storage and reassembly is included as part of the development;
- The limestone clad window well and lower windows will be reinstated as it is a character defining feature of the modernist building forming a foyer as part of the podium;
- The new development provides a sense of enclosure to the south side of Argyle Street something that is lacking in its present configuration, which consists of a large asphalt parking lot on the east side of the lot extending to the street property line, set next to a right-of-way and an access driveway to the police headquarters. Directly across the street is the service entrance and parking lot to the Museum;
- The additional height along Argyle will help frame and provide a backdrop to the museum, and separate the area from the Queensway.
- The proposed tower represents a logical transition with the existing high-rise building to the west of the site at 180 Argyle, the 16 storey YMCA-YWCA building.
- The new tower adds balance to the axial symmetry. The two towers flank the Museum property providing definition to the Centretown neighbourhood and re-assert the town planning scheme connecting the Museum and Parliament Hill.
- The relocated façade closer to the street makes it more visible and helps to define it as a distinct feature.
- No views or vistas are affected by this proposal. The new tower is located within a view plane of the Museum of Nature and will contribute to the axial symmetry.
- The Argyle Street lands establish the southern edge of the conservation District. Visually, the street is segregated from the larger area to the north by the Museum. As well, the street's elevation is distinctly lower than MacLeod and the Museum creating a greater synergy to the lands along the Catherine Street corridor. This development will help to relink with the Centretown District.

Adverse impacts of the proposed development include:

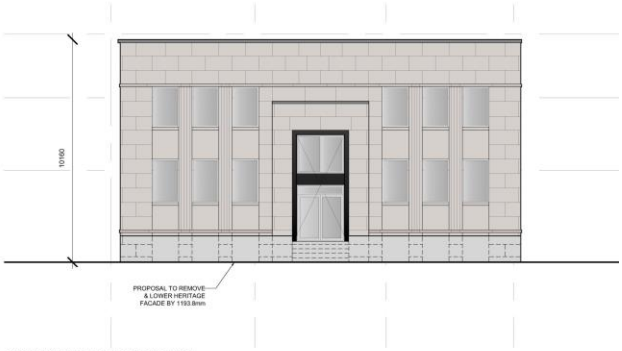
- The loss of a mid-20th century office building (Category 2 listed building) designated under Part 5 the Ontario Heritage Act.
- The lowering of the entrance grade with the removal of the entrance steps and a portion (approximately 2'-4") of the wall below the entrance doors;
- The dismantling of the façade and removal from the site during construction diminishes the intrinsic value, as does the relocation from its original position on the site.
- The replacement of limestone with lesser materials on the lower part of the podium.
- The introduction of a high-rise development adjacent to the Museum and its potential precedent for other developments. The unique opportunity that this tower completes an important cityscape can be appreciated as mitigating.

6.0 ALTERNATIVES AND MITIGATION STRATEGIES

6.1 Alternatives

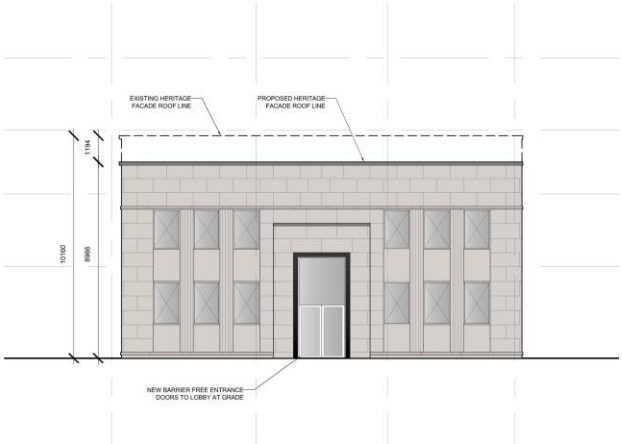
As part of the conservation plan, the following items need further design development to assess their potential for integrating into the new development:

- The use of the black brick sets up a distinct contrast with the grey masonry of the original building and the Museum as well as the concrete of the police station. Consideration should be given to using a contextual approach.

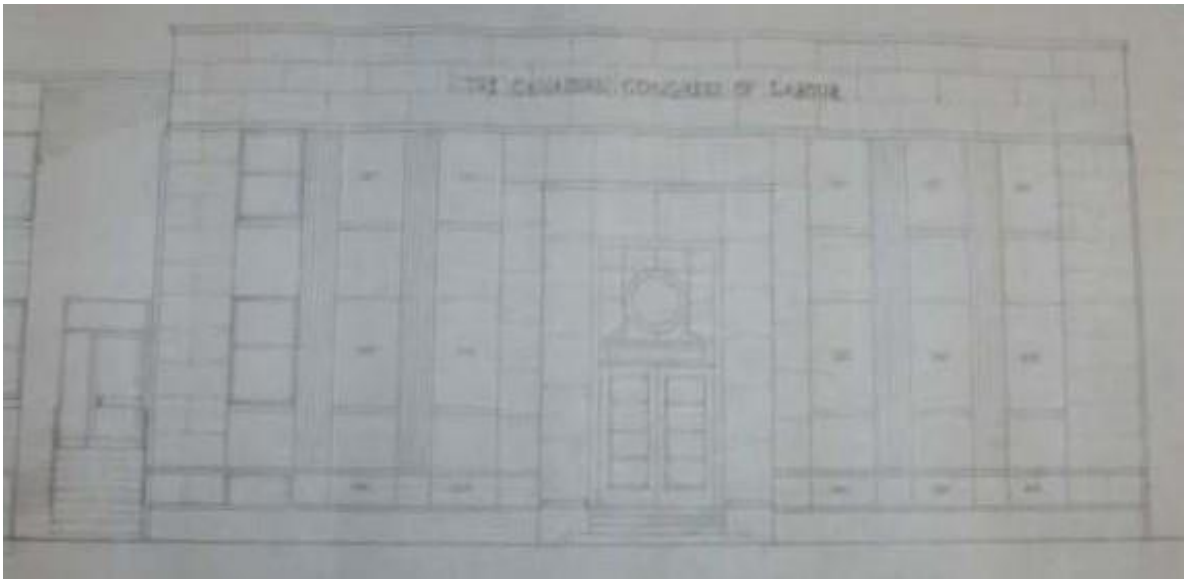


EXISTING HERITAGE FACADE

- Visually, the entrance door will be lowered to grade. From the exterior, it should not appear that the building has been lowered. This will require adjustment of the floor level but retention of the lower windows and the window wells on either side of the entrance.



PROPOSED HERITAGE FACADE



- The 1959 drawings of the addition to 100 Argyle provide sufficient information for the replacement of the door and transom. Consideration should be given to reconstructing this feature.
- The planting of street trees along the northern boundary of the museum property would help to integrate the heritage character of Argyle Avenue with the Centretown HCD, and more specifically the areas surrounding the Museum of Nature.

6.2 Mitigation measures

Mitigation measures are specific to the reintegrated façade as part of the new development. There are a number of repairs and work required before the building façade is reinstalled. The *Conservation Approach and Methodology* provides a detailed discussion of the work required and outlines a methodology. (Appendix A)

A more comprehensive treatment of the Museum landscape should be considered by the City, and the Museum, including: screening of the service entrance and parking directly across from 100 Argyle; the closing and landscaping of Metcalfe Street where it dissects the east landscape; canopy trees along the boundary, a more sensitive treatment to the retaining wall running along the south boundary, and an integrated interpretive strategy that encompasses the neighbouring properties as well as the museum lands.

6.3 Conclusions

Commonwealth has worked with the development team to ensure that the development supports the concept of protection and reuse of a valuable heritage resource. The new build is compatible with the Centretown Heritage Conservation District and its expectations. The development respects the defined values of the urban grain, introduces a scale and visual relationship to the Museum landscape, and reflects the forms and materials of the two adjacent buildings (Ottawa Police Headquarters, and 110 Argyle the former Trafalgar House).

The FHBRO's emphasis on axial symmetry and the broader features of town planning are supported as part of the new development's relationship to Metcalfe and the Museum. The 100 Argyle tower represents a logical transition with the existing high-rise building to the west of the site at 180 Argyle, the 16 storey YMCA-YWCA building. The new tower adds balance to the axial symmetry. The two towers flank the Museum property providing definition to the neighbourhood and re-assert the town planning scheme.

The new development is distinguishable and of sympathetic contemporary design and demonstrates a sensitive integration with the heritage building and its context.

7.0 BIBLIOGRAPHY / PEOPLE CONTACTED.

Bibliography

- Parts IV and V of the Ontario Heritage Act;
- Guidelines for the Preparation of Cultural Heritage Impact Statements (City of Ottawa)
- Site plans and elevations, RLA Architects, September, 2018;
- Pre-Application Consultation Meeting Minutes, City of Ottawa Planning Department.

8.0 AUTHORS QUALIFICATIONS

Commonwealth Resource Management is an integrated consulting and management firm that offers a range of professional services related to conservation, planning, research, design, and interpretation for historical and cultural resources. A key focus of the practice is planning and assessment of heritage resources as part of the development process.

John J. Stewart, B.L.A., O.A.L.A., C.S.L.A., CAHP, a principal of Commonwealth is a specialist in the planning and design of cultural resources, building conservation, and commercial area revitalization. A graduate of the University of Guelph, he received additional training at Cornell University (USA) and Oxford University (UK) and holds a diploma in the Conservation of Monuments from Parks Canada, where he worked as Head, Restoration Services Landscape Section. Before Commonwealth's formation, Stewart served for four years as the first director of Heritage Canada's Main Street Program.

Stewart is a founding member of the Canadian Association of Heritage Professionals. He has served as the Canadian representative of the Historic Landscapes and Gardens Committee of ICOMOS and the International Federation of Landscape Architects. Stewart is a panel member with the Ottawa Urban design Review Panel and a board member of Algonquin College Heritage Carpentry Program.

Commonwealth has completed a number of Cultural Heritage Impact Statements for the private and public sectors including the following:
185 Fifth Avenue, Mutchmor Public School Addition, Ottawa, Ontario.
2489 Bayview Avenue, CFC Canadian Film Institute, Toronto, Ontario.
1015 Bank Street, Lansdowne Park, Ottawa, Ontario.
Algoma District Wind Farm Proposal, Lake Superior Shoreline, Ontario.
1040 Somerset Street West, Ottawa, Ontario.
Laurier Friel Redevelopment Sandy Hill, Ottawa, Ontario.
Cumberland /Murray Streets, Lowertown West, Ottawa, Ontario .
1120 Mill Street, Manotick, Ottawa, Ontario.

Ontario Place, Waterfront Park and Trail Toronto, Ontario.
Fort William Historical Park, Thunder Bay, Ontario.
Allen/Capitol Theatre 223 Princess St., Kingston, Ontario.
101-109 Princess Street and 206-208 wellington Street Kingston, Ontario.
Greystone Village, Oblate Lands Redevelopment, 175 Main Street Ottawa, Ontario.
Bradley/Craig Barn 590 Hazeldean Road, Ottawa, Ontario.
LeBreton Flats, IllumiNATION LeBreton Redevelopment, Ottawa Ontario.
Tunney's Pasture Redevelopment Plan, Ottawa Ontario.
Napean/Lisgar Mixed Use Development, Ottawa, Ontario.

APPENDIX A CONSERVATION PLAN

SUBMITTED TO: COLONNADE BRIDGEPORT
PREPARED BY: COMMONWEALTH HISTORIC RESOURCE MANAGEMENT
January 2018

Table of Contents

1.0 INTRODUCTION

1.1 Background

The property 100 Argyle is located within the Centretown Heritage Conservation District across the street from the Museum of Nature, which is a 'Classified' federal heritage building. Within the context of the Centretown Heritage Conservation District, the two storey stone clad building at 100 Argyle was identified as a Group 2 building of heritage significance. The Heritage Survey and Evaluation Form prepared by the City in 1996 as part of the district study notes the building was constructed between 1949 and 1956. Research has narrowed the date of completion to 1955 and identified the Canadian Labour Congress as the prime tenant of the building when constructed. A two-storey addition was completed in 1960 to the design of Gilleland & Strutt Architects (LAC James Strutt Collection). The CLC occupied the building through to 1973 when a new headquarters was constructed on Riverside Drive. It is not known if Strutt designed the original building.

The building is load bearing masonry construction type consisting of a 4" coursed limestone ashlar blocks affixed to an 8" concrete block backup wall with steel supporting concrete floor and roof slabs. The building has a flat roof with parapets. Traditionally, the stone cladding was laid-up and plumbed first using spacers followed by the back-up courses. The coursed ashlar limestone is supported on steel angles at the base of the parapet extending the width of the north facade. Steel angles are also evident at the head of the basement, ground, and second floor windows suggesting a traditional load bearing masonry wall construction.

A redevelopment plan is being considered for the property. As part of that consideration the owner has asked to clarify what steps would be necessary to retain parts of the façade and to determine the most practical approach. The question whether the building façade would remain and the new construction built around it or whether it could be dismantled, stored and reconstructed as part of the new build should be addressed?

The Report assesses the feasibility of retaining and incorporating portions of the façade as part of a proposed infill development being planned for 100 Argyle Avenue. The approach to the partial retention could take several forms:

- Retention in-situ of the front portions of the exterior walls and two returning walls that are clad in limestone, and incorporating it in the new development. As part of this option, a review of the implications of removing the first floor including entrance steps so that the entry is at grade; and,
- Documenting and dismantling the ashlar limestone from the front portions of the building and reassembling the stone in its original configuration on a new back-up wall in a location that suits.
- Retaining all or part of the façade as an architectural fragment and installing it in the newly developed space.

The approach or strategy to achieve the outlined goals included:
Research into on-line sources and at Library and Archives Canada in the Lithwick collection of architectural drawings.
Base documentation in the form of as-found drawings consisting of plans, elevations, sections, and details necessary to understand the technical aspects of the proposed approach(s).
Developing a set of annotated masonry conservation drawings where the deterioration patterns and proposed conservation methods and treatments, are outlined.
A conceptual approach outlining the dismantling, storage, and reassembly sequence option and or preservation in-situ option; and
An order of magnitude cost estimate.

1.2 History

The building was completed in 1955, and served as the headquarters of the Canadian Labour Congress through to 1973. An addition was constructed in 1959-60 to the design of Gilleland & Strutt Architects. These drawings were the only ones located. They consist of a number of sketch elevations on trace paper, two iterations of the floor plans dated January and February 1959, and two sections. The drawings for the addition note the construction type – load bearing masonry construction consisting of a 4" brick applied to an 8" concrete block back-up wall with steel mesh lath and plaster on the interior face. The floor and roof structures consists of a 4" lightweight concrete slab supported on steel pans, which in turn are supported by steel joists. Steel columns are embedded within the masonry walls to support steel lintels and floor structures where the ribbon windows are located. (Appendix D).

There was no indication in the drawing material that Gilleland & Strutt Architects designed the main building. A review of local newspapers – Ottawa Citizen, Ottawa Journal – dating to 1955 may provide additional information. A textual archive located at the LAC titled 'Headquarters Building' Canadian Labour Congress dated 1945 – 1953 may also identify the architectural firm that designed the main building.

1.3 As-Found Recording 100 Argyle Avenue

Commonwealth completed as-found measurements and photograph the building facades. The visual inspection and measurements were undertaken from grade, and the height of the ashlar courses above the second floor windowsills was estimated based on the height of stone course below the windows. A set of as-found elevations, a plan view, and two sections were developed (Appendix C).

2.0 Masonry Components

The masonry components that are included in this conservation assessment include:

Coursed ashlar limestone facing, belt courses, and door and windowsills
Coursed ashlar limestone area wall facing and coping extending the length of the building's principal façade and, polished black granite door surround at the main entrance.

2.1 Description

The coursed ashlar limestone facing is 4" thick and is secured to a concrete block back-up wall – the specific method and type of anchor has yet to be determined. However, a steel angle is evident below the parapet at the head of the second floor windows as well as at the head of the first floor and basement windows. The coursing of the stone corresponds with the top and bottom of the windows on the three floors suggesting a relatively simple attachment method consisting of typical anchors of the period – metal rod anchors, cramps, and clips (Figure 3) that may have been used to secure the limestone ashlar block to the concrete block back-up walls.

The coursed ashlar facing consists of four (3-3/4") inch thick limestone blocks with a coursing height of 2'-0" +- (corresponds to the height of 3 concrete block courses) with a 3/8" mortar joint. The height of the stone courses varies, for example: the first two courses 1 & 2 at the base of the wall measures 22" in height with a 5" limestone belt course. The next two courses 3 & 4 measure 24-1/2" in height, and the height of the next three courses 5, 6 & 7 measures 26". The height of the ashlar blocks varies depending upon decorative features such as belt courses and the location of the floor structures. The length of the units vary from 1'-6" to 5'-5", with most in the 4'-0" range. The coursing between the ashlar blocks consists of an offset of half the length of the units between successive courses. The location and number of anchors can be determined with a metal scanner.

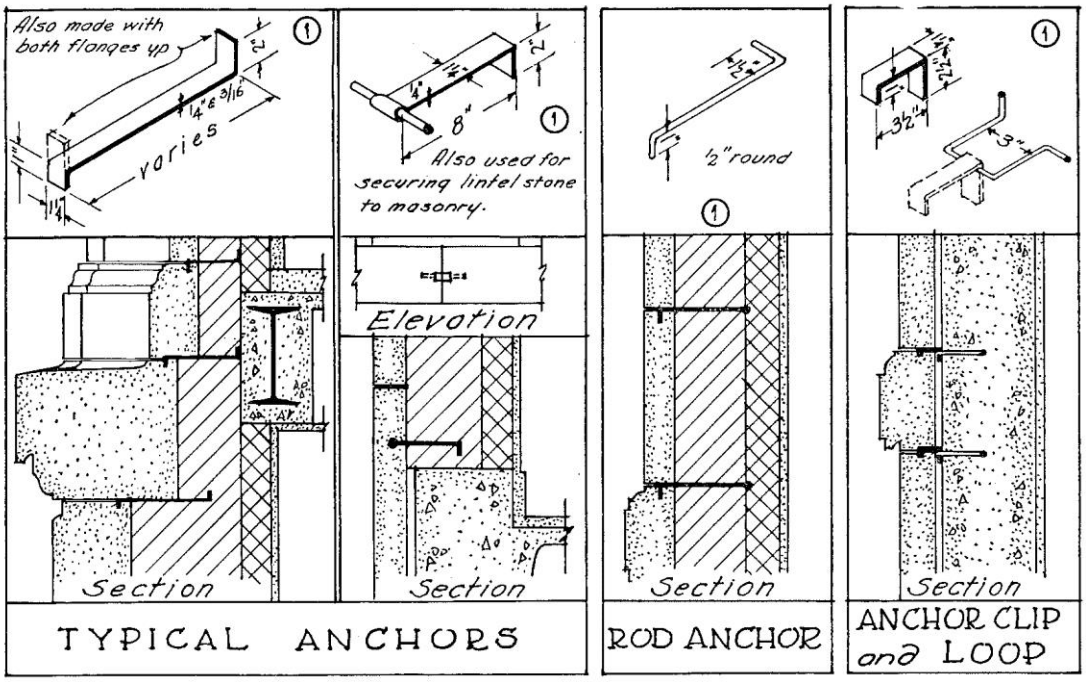


Figure 1: Typical anchors used to secure cut stone facing to an assortment of back-up walls. The flat steel bar with upturned or downturned ends to the left the image, and the rod anchor would both be suitable

to the relatively simple stone application on the facades. Source: Traditional Details for Building Restoration, Renovation, and Rehabilitation. 1932-1951 Editions Architectural Graphic Standards pg. 63. Ramsey Sleeper. John Wiley and Sons Inc.

The belt courses and sills consist of shaped limestone blocks five (5") inches in height and six (6") inches in depth with an integral drip. The area wall and parapet are capped with a simple rectangular limestone coping. The vertical stone pieces between windows on the main façade are finished with what is termed 'reeding' – a surface made up of closely spaced parallel flat and V shaped profiles.

2.2 Ashlar Limestone and Granite Condition

The ashlar limestone facing is for the most part in good condition with the exception of a few stones. The limestone is a brownish buff colour with a 'chat sawn finish,' which was a common finish for ashlar blocks. The source of the limestone is not known, however, there are a number of quarries in the Owen Sound area that supply 'Indiana' limestone similar to the material used on the building façade. Another possibility is the Deschambault Quarries near Quebec City. The black granite door surround is in good condition.

Figure 2: Detail view of ashlar limestone blocks. Not the voids or vugs in the unit to the left. Note the shell fragments in the block to the left. Source: CHRML.

2.3 Documenting the Condition and Conservation Approach

The limestone contains calcite spots (white inclusions), some fossils, pit holes or vugs, and grain change. A number of the limestone units exhibit a range of deterioration patterns. These are briefly discussed and a conservation approach outlined. The As-Found drawings identify each unit with a number and any conservation required will be specifically noted to each unit. Below is a discussion of the types of deterioration found with supporting images to help illustrate.

Blistering - of masonry leading to loss of the stone surface typically associated with de-icing salts. There are a very limited number of stones affected on the three facades.
Conservation Approach; Selective retooling of the surface to remove disaggregated material;

Delamination - Delamination corresponds to a detachment following the bedding or schistosity planes of a stone. This is a relatively common problem with the stones on the three facades, being more common on the two secondary or return walls where the mason chose to place the poorer quality material.
Conservation Approach; Selective retooling of the surface to remove loose and scaling material. Complete replacement of stone face units with more severe surface delamination.

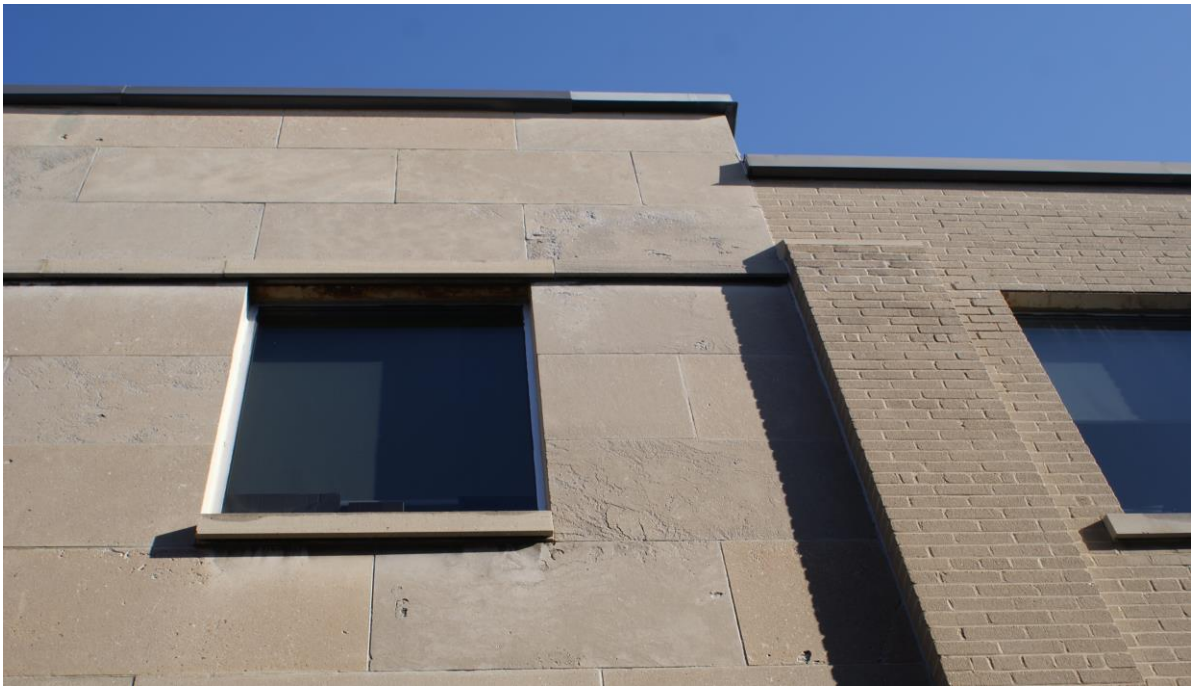


Figure 3: Detail view of a portion of the west façade. A delaminating stone is located to the bottom right of the window, as well as the face stone to the right of the window above the belt course. There are also a number of vugs or inclusions evident in the face stones. Source: CHRML.

Vugs or Inclusions - A cavity in rock; sometimes lined or filled with either amorphous (calcite) or crystalline material; common in calcareous rocks such as limestone. The calcite inclusions are for the most part small and inert and have no deleterious effect on the serviceability of the units. The larger inclusions, of which there are a number scattered throughout the façade are of more concern as they tend to be larger and trap moisture, which, freezes, leading to further disaggregation of the stone.
Conservation Approach – Selective retooling and removal of loose or disaggregated stone. Application of a repair mortar such as Jahn M70 Limestone custom coloured to match the stone.

Impact Damage - Loss of stone material due to a mechanical action.

Conservation Approach – Varies depending upon the location, size and visibility. If small and out of sight the stone can be left as-is. Where the damage is more extensive, a stone Dutchman will be inserted.

Soiling - Deposit of a very thin layer of soot or other particles giving a dirty appearance to the stone surface. The soiling on the stone surfaces is fairly uniform and light on most of the face stones. Soiling is more evident below the belt courses and window sills that are protected from the cleaning action of rain water.
Conservation Approach – Clean the surface of the stone.

Fracturing – Delamination of a stone at a bedding plane that has different material characteristics. This is more common with the stones in the belt courses, and windowsills.
Conservation Approach – The options in regards to the stone windowsills are to replace defective units. This would entail a minimum of effort in that the slip sills are not tied into the adjacent walls. The course of action in regards to defective stones in the belt courses is too replace the units by cutting out the mortar joints and removing the stone. If the fracturing is more cosmetic and has no impact, on the weathering or water infiltration the stone can be left.

Figure 4: View of a stone in the belt course (left) that is in the process of fracturing at a bedding plane that has different material characteristics. Source: CHRML.

Cracking – A very limited number of stones in the belt course, one face stone, and a doorsill have cracked.
Conservation Approach – Varies from complete replacement, to inserting stainless steel pins and applying a repair mortar such as Jahn M70 Limestone, custom coloured to match the stone. Alternately, if left in-situ, leave the stone in place and do nothing depending upon its visibility.

Compression Chipping - Small chips detached from the stone at masonry joints due to settling or deflection of the wall due to loading. This is evident in four of the reeded stones at the top of the first floor windows on the east side of the north façade (See Figure 11).
Conservation Approach – Remove chips and retool the area. Review structural loading conditions that caused the deflection.

Figure 5: Detail of east elevation at the basement level. The stone belt course is cracked at the approximate mid-point of the window, and the face stone at the lower left below the window has sheared at an external corner. Source: CHRML.

Figure 6: Detail view of north elevation. Note the vertical reeded blocks, and the recessed panels below the first and second floor windows. Source: CHRML.

Figure 7: View of limestone clad area wall and coping. Note that the basement windows are set into the foundation wall. Source: CHRML.

Figure 8: View of the projecting entrance bay. Note the reeded panel to the left and recessed panels below the first floor window. Source: CHRML.

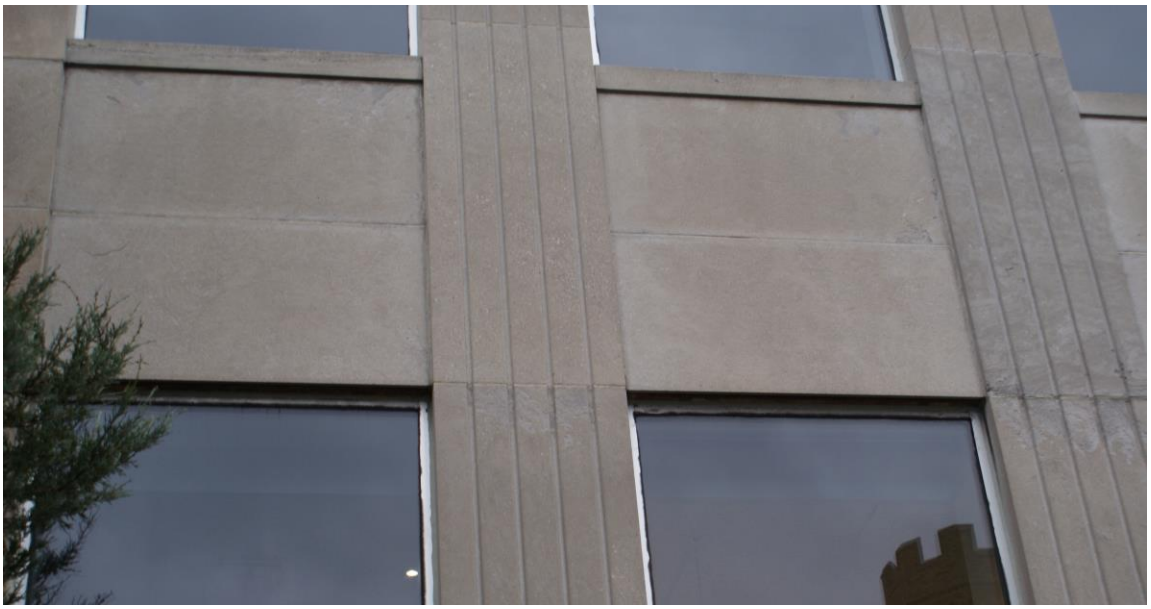


Figure 9: View of reeded stones where they meet at the top of the first floor windows. Note the chipping and scaling of the stones where they meet which may be due to compression failure. Source: CHRML.

Figure 10: Note the rusting steel angle below the parapet belt course and the first floor window. There are indications on the north façade that the shelf angle below the parapet belt course is continuous. If this is the case, there is a high probability that the steel angle is secured to steel buried behind the wall (See Figure 13). Note the delaminating stone to the left of the second floor window and the discoloured stone below the window sill, which is an indication that the stone is being saturated by water from defective caulking. Source: CHRML.

Figure 11: View of the east façade of the building. Note the lintel stone above the first floor window that overlaps onto the adjacent stones indicating a traditional load-bearing application. Note the projecting brick pilaster and its termination at the top. A steel column is likely buried behind the pilaster. The beam may support additional horizontal steel beams that would support the parapet, which the continuous shelf angle evident below the parapet belt course would be attached. Source: CHRML.

3.0 Conservation Approach & Methodology

3.1 Options

Three options were developed as a means of weighing the pros and cons of reusing a portion of the existing building. Option 1 is the retention in-situ of the north wall and the two return walls (east and west) that are clad in limestone. Option 2 is the dismantling, storage, reassembly, and repair of the limestone facing on a new back-up wall in a location that suits. Option 3 is a variant on Option 2 and would follow the same approach to dismantling, storage with reassembly as an architectural fragment.

Option 1 Retention On-Site.

This option retains in-situ the north, east, and west walls that are faced with ashlar limestone blocks including the concrete block back-up walls. The first floor structure would be removed and a new floor structure inserted at a level corresponding to the top of the existing concrete footing approximately 2' below the existing first floor level at the main entrance. This option would entail the removal of the limestone doorsill and portions of the wall below to the level of the concrete foundation. The existing entrance steps, which are not original, would be removed

This option would include the re-insertion of the limestone doorsill on top of the existing concrete footing, and the insertion of matching black granite pieces in the door surround both sides of the entrance extending to the level of the relocated doorsill.

Comment: Based on the requirements for below grade parking retaining the building on site would be difficult to achieve. The need to set the main tower as far as possible to the east side of the site would mean that the limestone façade could not be adapted ion a meaningful way. The modification of the main entrance level to the building would be an acceptable conservation approach within the context of a building 'rehabilitation' in order to meet accessibility objectives. 'Rehabilitation' involves the sensitive adaptation of an historic place or individual component for a continuing or compatible contemporary use, while protecting the property's heritage attributes.

Option 2 Dismantling, Storage, and Reassembly

Option 2 is the dismantling and reconstruction of the limestone cladding on a new back-up wall. The intention would be to dismantle the stone facing, sills, belt-courses, parapet coping, and area wall components. A detailed methodology follows.

Devise a numbering system based on (See Elevation Drawings Section 4.0):
The elevation – east, north and west;
The number of courses – a horizontal range of stones running the length of the building – that is fifteen (15) in this particular case;
The window sills would be numbered with their corresponding window number; and,
The belt courses and coping stones would be numbered similarly to the stone panels.

The numbering system would look something like this E – C1-1, E – C1-2 etc. The E denotes the elevation, C – denotes the course 1 – 15, and the final number represents the sequencing 1, 2, 3, etc. The original vertical orientation of the units should also be marked on the back of the stones with an arrow for up.

Begin dismantling the exterior cladding from the top down:
Remove the metal flashing from the parapet;
Dislodge the parapet coping stones using a rubber mall, mark and identify each stone and note orientation, and condition(s) of each unit;
Locate and cut the metal anchors along the top of the uppermost stone course 15;
Dislodge the stones successively using a rubber mall, mark and identify each stone and note orientation, and condition(s) of each unit;
Repeat until all of the material has been removed;
Stack the material vertically on wooden pallets. Use wood spacers between stones; and
Ship to a storage location.

Option 3 Architectural Fragment Dismantling, Storage, and Reassembly as a Sculptural Element

This option is a variant on option 2 and would follow the same approach to dismantling, storage with reassembly within the lobby space.

Comment: Either Option 2 or 3 would appear to be more feasible and allow for the integration of the façade as part of the development. The work required to clean up and repair the existing limestone could be undertaken while the new build is underway.

Figure 12: An example of Option 3 Sculptural Element is The Centre Hospitalier de l' University of Montreal incorporates fragments of two structures within the public spaces of new complex. Credit Adrien Williams.

3.2 Reassembly

The assumption is that the stone cladding will be secured with metal anchors to a concrete block back-up wall in a manner similar to the existing installation method. Weeping holes will need to be installed to meet current building codes. Continuous weepers could be placed below the shelf angles that occur every third course.

Determine which stones need to be replaced. Fabricate new units to the form, dimensions, and colour of the replaced unit. There are approximately 350 pieces in the three facades including belt courses, and window and doorsills. A number of assumptions have been made in regards to the work, including securing the ashlar limestone blocks to a back-up wall in a manner similar to the existing installation; and, that the ashlar limestone blocks in the area wall enclosure will be used to replace any units that need to be replaced on the façade of the building.

3.3 Conservation Methodology

The majority of the conservation treatment noted in Section 2.2 for both options 1, 2, and 3 would be undertaken - descaling of delaminated stones and cosmetic filling of inclusions or vugs. Where stainless steel pins are required to stabilize a stone that has cracked, the work will be completed when the stone is installed in its final location in option 2. Cleaning of the stone would occur prior to the completion of the finish pointing.

3.4 Conclusions

The retention and reinstallation of the north wall and two return walls in a new infill development is an accepted conservation approach. The lowering of the entrance to a level closer to the existing grade is also an accepted conservation approach in order to meet other project objectives including universal accessibility. The relocation of the building from its original location is discourage.

In order to move forward with the dismantling the following elements need further investigation:

- Selectively remove the interior finishes at the floor and ceiling levels to determine how the floor levels are supported at the exterior walls. The archival drawings for the addition show the floor structure extending into the concrete block back-up wall. This may have implications when the floor structures are demolished;
- Steel columns and beams embedded in the exterior walls need to located;
- Scan representative ashlar panels to determine the placement of metal anchors securing the ashlar veneer to the concrete block back-up wall and or embedded steel; and,
- Remove interior finishes from the entrance bay to determine how the black granite door surround is secured and supported.

3.5 Building Stone Glossary

A glossary of terms used to describe building stone as a building material is available from **Building** Stone Glossary *http://www.buildingstoneinstitute.org/technical-stone-information/rock-knowledge/glossary-of-terms/*

3.6 As-Found Drawings

Commonwealth completed as-found measurements and photograph the building facades. The visual inspection and measurements were undertaken from grade, and the height of the ashlar courses above the second floor window sills were estimated based on the height of stone course below the windows. A set of as-found elevations, a plan view, and two sections were developed with each of the blocks number.

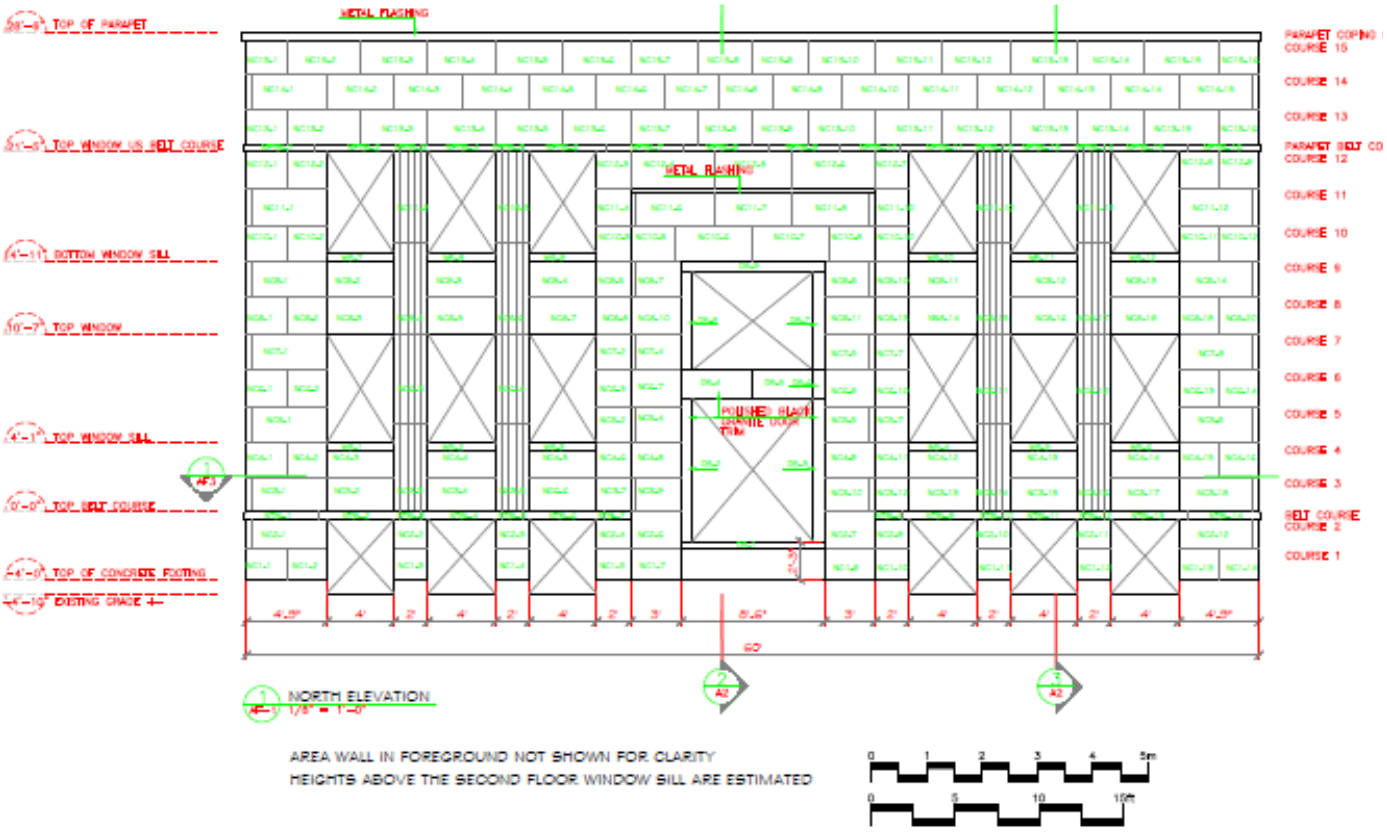


Figure 13: North Elevation As-Found drawing AF1 credit: Commonwealth.

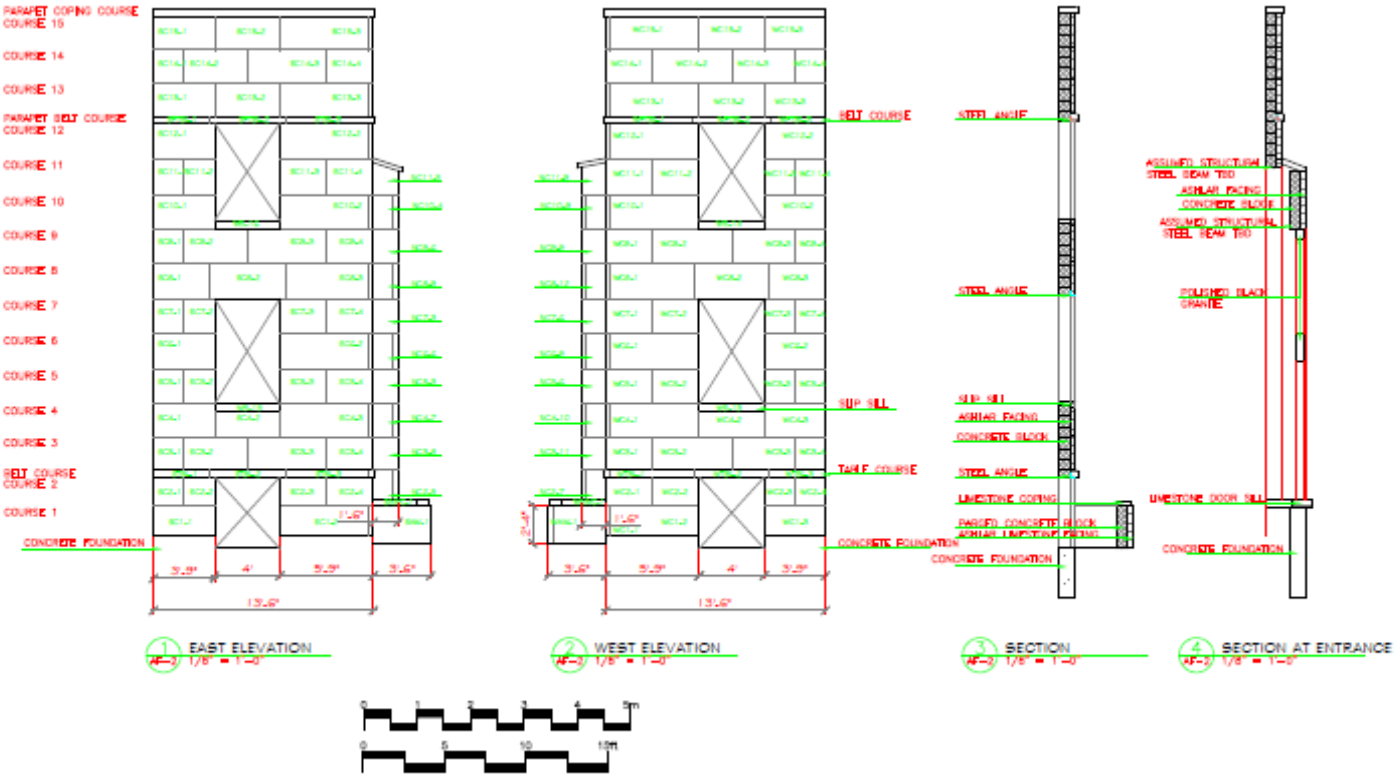


Figure 14: Side Elevations and Sections As-Found drawing AF2 credit: Commonwealth.

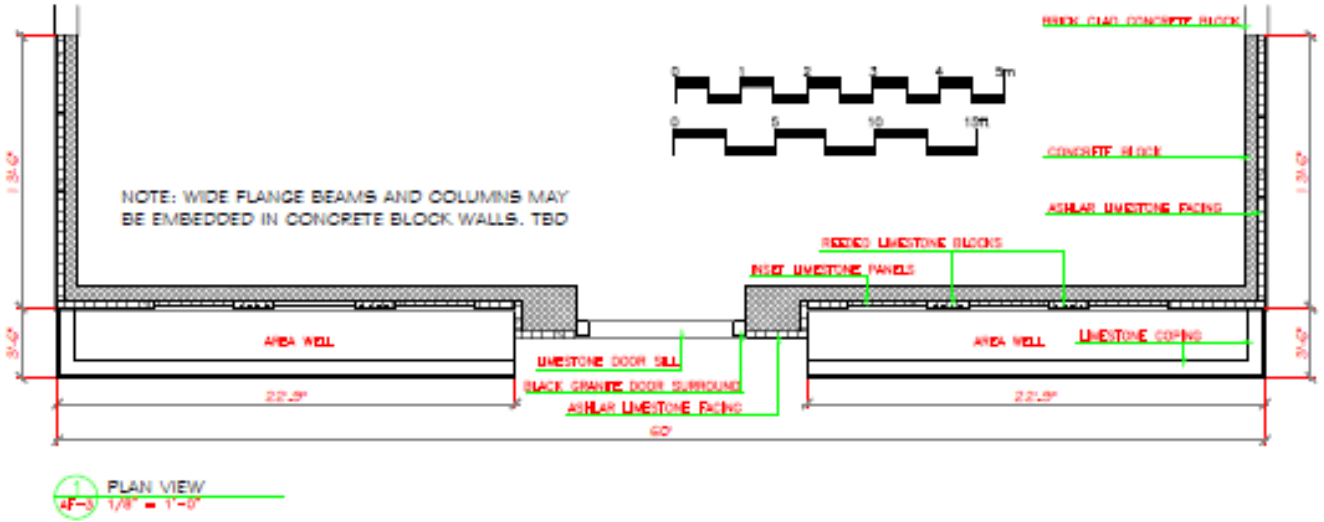


Figure 15: Plan As-Found drawing AF3 credit: Commonwealth.

Archival Drawings

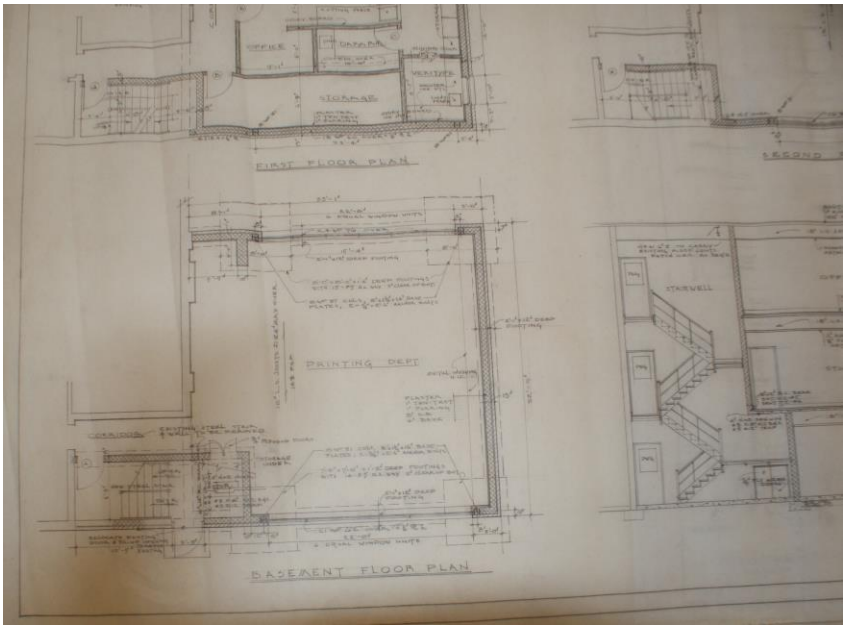


Figure 16: Partial drawing for the 1959 addition. The addition and the main building were completed within 5 years of each other. The likelihood is that the same construction methods and techniques were used in the main building and the addition. Note how the floor slabs are shown penetrating the interior concrete back-up wall, which should be documented during the demolition of the floor plates. Similar wide flange steel beams specified in the 'Notes' may have been used in the main building to support the masonry above the main entrance and other locations. Source: LAC Lithwick Collection Mikan No. 4002312.

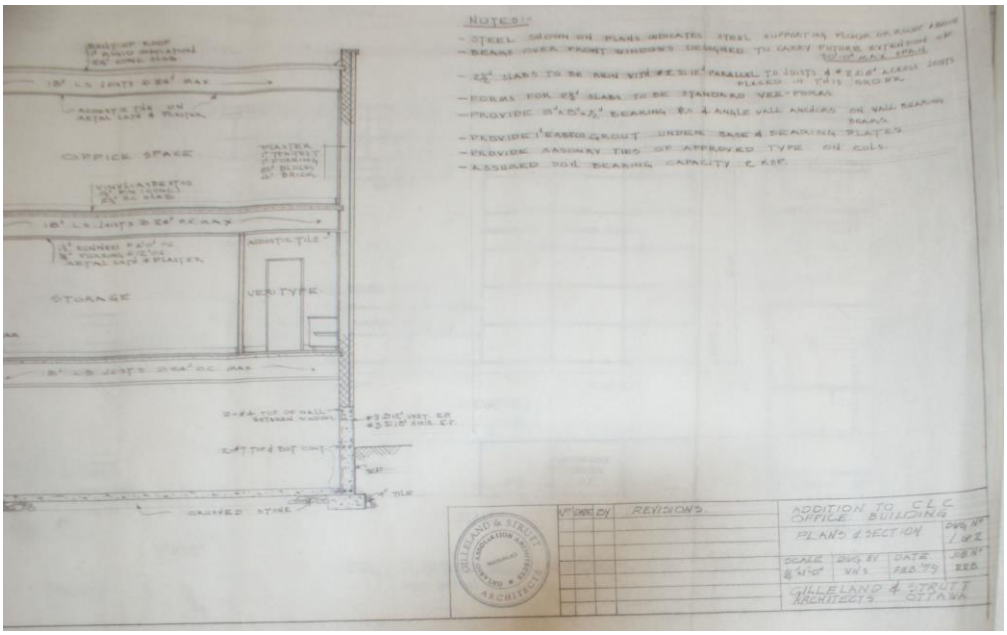


Figure 17: Partial plan and section of the 1959 addition. Note the steel columns embedded in the concrete block walls. Additionally, note the wide flange beams sizes supporting masonry walls above fenestrations as well as other locations. Source: LAC Lithwick Collection.