



P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 2

Halifax Regional Council
March 24, 2015

TO: Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY: Original Signed by Director

Jane Fraser, Director Operations Support

DATE: March 3, 2015

SUBJECT: Supplemental Building Information: 1588 Barrington Street

SUPPLEMENTAL INFORMATION REPORT

ORIGIN

Motion of Regional Council at September 9, 2014 meeting:

MOVED by Councillor Mason, seconded by Councillor Watts that 1588 Barrington Street be removed from the disposal of surplus property list pending consideration of the following information:

- 1) A staff report to Council on facility condition and renovation costs of 1588 Barrington; and
- 2) A staff report to Regional Council on the arts incubator pilot established by the Regional Council motion on August 10, 2010.

LEGISLATIVE AUTHORITY

The Municipality's powers with regard to real property are under Section 61, 63, and 64 of the HRM Charter.

BACKGROUND

The Khyber Building was designed by architect Henry Busch and was constructed as the Church of England Institute in 1888. The building was recognized as a Municipal Registered Property under the Heritage Property Act on September 30, 1981.

The primary building material on the exterior is red brick with sandstone detailing. The main entrance fronts onto Barrington Street and consists of two exterior and two interior wood doors with glazing and glazed transoms. A secondary entrance/exit door is located on the partial south elevation and consists of a solid metal door in a metal frame. The pedestrian exit route to Barrington Street is provided by an easement on the adjacent property. Roofing for the building consists of a conventional Built-Up Roof (BUR) membrane with a perimeter slate mansard roof.

While the existing exterior walls are in an original state, the historic detailing in the interior has been completely lost. Renovations to date on the interior have not been sensitive to the scale, use of materials

and finishes. The most significant interior feature is the central stair. Although, in need of substantial repair work, the feature stair is still largely as it was originally constructed.

History of Use

Over the past 126 years the building has seen a variety of tenants and housed a variety of activities. From its' initial construction as a building to serve the congregation of the Church of England, the subsequent uses have included the Boy Scouts of Canada, squash courts, Naval Fire Fighters, Halifax Youth Clinic, Heritage Trust, Wormwood Theater and most recently, the Khyber Arts Centre.

General

The building is three storeys with a basement and is constructed right against the sidewalk. The table below outlines the existing area of each floor and the net to gross per level. The building has a very low net to gross due to small footprint and the requirements of stairs and internal circulation (corridors). With the addition of an elevator, improvements to the washrooms and building code upgrades the net to gross would fall even further.

Existing	Gross	Net (rentable)	stairs, washrooms, corridors, mechanical	Net to Gross *
Basement	1,940	1,130	810	58%
Main floor	3,015	1,460	1,555	48%
Second floor	3,035	2,055	980	67%
Third floor	3,110	2,035	1,075	65%
Total	11,100	6,680	4,420	60%

- Note: Net to gross is a method to determine the efficiency on the layout of a floor plan. Typically a net to gross efficiency would be expected to be between 80 to 85%.

This report provides information on the facility condition and renovation costs. A separate report presented at this meeting entitled "Status of Arts Incubator Pilot at 1588 Barrington Street" provides information on the arts incubator pilot (part 2 of the September 9, 2014 motion of Regional Council).

DISCUSSION

Facility Condition

HRM staff engaged Capital Management Engineering Ltd (CMEL) to prepare a building condition assessment of the building. This was a non-destructive visual inspection that gives a high level opinion on the state of the building. At this stage in the project, invasive testing is not usually conducted and furthermore due to the number of renovations to the building, sampling would not provide conclusive evidence that would be reliable. In this report CMEL have commented on the overall condition of the building and the cost to address particular elements.

The Building Condition Assessment calculated a very poor Facility Condition Index (FCI) at 50 percent. This indicates that a significant financial investment is required to address deferred maintenance, building code, energy, environmental and accessibility issues. Facility Condition Index FCI is calculated by dividing the Accumulated Deferred Maintenance divided by Current Replacement Value. An FCI of between 0 – 5 percent is considered excellent condition, between 5 and 10 percent is considered good condition, and over 10 percent in poor condition. This facility is currently the second worst condition building in the HRM property portfolio.

Highlights of the report include \$350,000 for exterior wall repairs, \$40,000 for roof repairs, \$200,000 for structural repairs and \$1,183,000 for interior renovations. To address the environmental risks of lead paint and asbestos a complete mitigation is proposed (due the failed state and presence of lead paint and asbestos in the plaster).

National Building Code

The existing building does not meet current National Building Code (NBC / NSBC), National Energy Code (NEC) requirements and the CSA Standard for Accessibility. These codes govern the construction of commercial buildings and due the occupancy tend to be more stringent than for residential buildings.

To bring the building 'up to code' the following renovations are required:

- Fire rated exit stairs with direct corridor access to the street or to the south side exit door.
- Fire rated and non-rated separations.
- An elevator to provide accessibility to each floor level.
- Washrooms including barrier free washrooms to suit floor levels and occupancy.
- Building envelope upgrades (windows, insulation) to meet the National Energy Code (NEC).
- Mechanical and electrical systems to meet current code.
- Energy modelling to demonstrate compliance with NEC.

It is anticipated that the additional space to be compliant with the National Building Code plus the required space for corridors, stairs, and washrooms would add up to approximately 50% of the gross floor area. Therefore, there would be less program space in the renovated building than what currently exists and 50 percent net to gross would be considered to be very high and typically not economical.

Structural

In March 2014, HRM staff engaged BMR Engineering Ltd to conduct a structural review of the building. The review outlined the construction on the building and noted that the building foundations are constructed from cast-in place concrete and rubble on bedrock. The floors are framed in wood timber joists and beams supported by load bearing exterior walls, cast iron columns or load bearing interior wood stud walls.

The structural analysis of the floor framing calculated that the existing structural loading based upon the size of the wood joists is the equivalent of 50 pounds per square foot. This structural capacity is 50 percent of the loading required for many of the occupancies and uses the building has been used for.

Most notably the report identifies areas of concern related to the many renovations to the building since 1888, namely "It appears there have been many modifications to the building over its life. The placements of the steel columns do not align vertically and there is no evidence that transfer beams or other elements were added to distribute the loads within the framing" and "There is significant sagging of the second and third floor framing in the areas in front of the bars on the 2 levels. Given the staggered column placement it appears that the supporting members have been removed or relocated.

Mechanical/Electrical Systems

Heating for the building is provided by two oil fired hot water boilers that supply hot water heating to radiators located throughout the building. The building does not have a ventilation system and many of the building rooms do not have windows to provide natural ventilation. The lack of a ventilation system restricts the activities in the building.

The building electrical system was installed in the building several years after the building was opened in 1888. Successive renovations to the building have added to the electrical system although this has not been documented with 'As-Builts' drawings. It could be assumed that the existing system is not code compliant.

Accessibility

The building main floor is approximately 36 inches above the sidewalk on Barrington Street which presents an accessibility challenge. Due to the elevation of and main floor and the lack of distance from the sidewalk; it is a challenge to make the front entry accessible. Substantial improvements to the building entry will be required to construct an accessible entry that is sensitive to the building historical features that does not compromise barrier free requirements.

The building is not compliant to the Barrier Free sections of the National Building or the public expectations related to accessibility. Specific examples of the accessibility deficiencies include:

- Front step access at street to entry doors
- No accessible parking spaces
- No on-street lay-by / drop off opportunities
- Elevator
- Accessible washrooms

Functionality

To realize the asset potential, the issues concerning the functionality of layout would need to be addressed. This would improve the long term service potential and support long term cash flow projections related to the maintenance of this asset. The following itemizes the proposed improvements that would be required:

- Provide new foundation extension at the west side, new foundation support at the remaining sides, new steel frame structure and new secondary structure with floor framing.
- Provide new exit stairs, elevator, and associated circulation areas.
- Provide new washrooms, kitchenettes, and janitor closets.
- Provide new M&E support installations (communication closets, electrical risers, HVAC risers).

Functionality will still be limited by the following existing conditions which cannot be modified:

- Lack of accessible parking, and front door drop off opportunities.
- Minimal net area (+/- 50 percent), street access, and daylighting.
- Minimal commercial storefront presence on the street.

Hazardous Materials

HRM staff have had prepared by consultants two reports that indicate the presence of hazardous materials in the building. The SLR Consulting (Canada) Ltd report dated August 2012, confirmed asbestos, lead paint, mercury thermostats and water penetration that possibly could lead to mold contamination. The Stantec report of February 2014, reconfirmed the presence of asbestos in building materials.

It is difficult to address one deficiency without impacting another deficiency in this building. For example, in order to construct a new elevator, you would also have to deal with structural issues, asbestos, lead paint, foundations and electrical capacity. To install an elevator and only address the deficiencies where the elevator is being constructed would perpetuate the past practise of piece meal renovations and increase the total cost of recapitalization over the life of the building, and still have outstanding code issues.

Renovation Costs

The following table gives an indication of the Estimated Total Project Cost by element for a complete recapitalization. This was divided by the gross area to arrive at a cost per square foot of \$360. This amount would be considered within the normal range of an estimate of a historic renovation.

Cost element	Value	Source
Building Condition Assessment	\$2,000,000	See, BCA, Capital Management Engineering, includes as allowance for demolitions, accessible entry, new partitions and finishes for the interior.
Restoration of east and south exterior wall	\$250,000	See, BCA Capital Management Engineering, includes as allowance for new partitions and finishes for the interior.
Elevator	\$300,000	Based on City Hall and other facility solutions for adding an elevator.
Mechanical upgrades	\$200,000	Based upon a cost per square foot
Electrical upgrades	\$200,000	Based upon a cost per square foot
Structural upgrade floor framing to 100 pounds per square foot loading and remedial work to foundations	\$50,000	Allowance
Sub-total	3,000,000	
Design and Construction contingency	\$500,000	Allowance
Sub-total Hard Costs	\$3,500,000	
Soft Costs	\$500,000	Includes consulting fees
Total Project Costs	\$4,000,000	

Note:

- The Total Projected Costs are a mixture of allowances and Class D estimates. As it is difficult to provide a high level of accuracy of the cost estimate until a revised floor plan is prepared. It is difficult to define a firmer estimate without clarity on re-purpose and decisions regarding HVAC, inside layout, and more detailed design. The Total Project Costs should be considered an order of magnitude estimate. The estimated costs presented assume all the work will be concurrent and not phased over multiple phases.
- The key driver to the structural costs is the structural design load for the floors. The current design load is estimate at 50 pounds per square foot. Assembly occupancy would require a minimum loading of 100 pounds per square foot. Excavations to construct the adjacent building to the north indicate that the foundations are not adequate.

FINANCIAL IMPLICATIONS

Financial considerations of possible future alternative action to declaring the property surplus to municipal needs are discussed throughout this report.

COMMUNITY ENGAGEMENT

Not applicable

ATTACHMENTS

None

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.php> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Terry Gallagher, Manager Facility Design and Construction, Operations Support (476-4067)

Original Signed by Director

Report Approved by

Brad Anguish, Director, Parks & Recreation (490-4933)
