



Hamilton City Hall: The Changing Face of Business / Heritage

Adaptation and Reinvention:
Technical / Adaptive Solutions for Large
Projects

Heritage Canada The National Trust
Conference
Charlottetown, Prince Edward Island
October 4, 2014

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+VG Architects



Hamilton City Hall, 1960

- Located at 71 Main Street West, Hamilton, Ontario.
- Designed by Stanley Roscoe, Canada's first municipally-employed architect for the City of Hamilton and first recipient of the 'design award,' for Hamilton City Hall, established by the Hamilton Chapter of the OAA in 1961.
- Designed in the International Style, due to its rectangular plan, angular edges, point supports, plain surfaces without ornament, glass curtain walls, flat roof, finishing materials of steel, concrete and marble, and free interior plan without boxed rooms.
- Built by Pigott Construction Co., noted Hamilton construction company at a total cost of \$9.3 million.

Hamilton City Hall, 2005

One of few buildings from the 1960s to receive heritage designation under the Ontario Heritage Act.

Core elements of the International Style found in the design of Hamilton City Hall include:

- Building Orientation;
- Massing and Juxtaposition of Volumes;
- Geometrically Shaped Plan;
- Structural Grid System and Curtain Walls;
- Flat Roof;
- Ornament Versus Art;
- Symbolic and Social Function;

Hamilton City Hall, 2007

The business of city hall had slowly changed, especially with respect to customer service.

City council considered:

- Tearing the building down and reconstructing on the same site;
- Moving to an alternate location and;
- Major renovation of the interiors.

Hamilton City Hall, 2007

City council elected to update Roscoe's design to:

- Create a civic centre for the amalgamated municipality;
- Improve the building's energy performance;
- Enable physical accessibility for all citizens and;
- Meet contemporary technological and service requirements.



Hamilton City Hall, 2008

Challenges faced during the renovations and upgrades:

- Relocation of services to the main floor to provide greater ease of access for the public;
- Provision of insulation for exterior walls and installation of high-efficiency mechanical and electrical systems;
- Upgrades to meet current OBC requirements, including accessibility and;
- Multiple heritage permits processed by the City of Hamilton.

Multiple heritage permits processed by the City of Hamilton

2009.06.24 – Removal of additional washroom walls with glass tiles due to asbestos and retention of walls no longer required to be removed.

2009.11.23 – Upgrade of elevator control switches.

2009.11.23 – Removal of rubber matting at entrances and replacement with new Pedimat System.

2009.11.23 – Extension of wall tile in men's ground floor washroom.

2009.11.23 – Revisions to elevator core finishes due to previous repair work.

2009.11.23 – Revisions to south vestibule east wall finishes due to deteriorated materials.

2009.11.30 – Interior signs

2009.11.30 – Additional exterior signs for wayfinding and barrier-free accessibility.

2010.01.25 – Installation of AV components and information kiosks.

2010.01.25 – Revisions to Mayor's office, washroom and adjacent work area to relocate the universal washroom.

2010.01.25 – Installation of stainless steel corner guards in male washrooms at elevator core walls.

2010.01.25 – Installation of acrylic coating system over exposed concrete of wishbone bridge and adjacent overhang.

2010.02.19 – Sprinkler installation below main central stair.

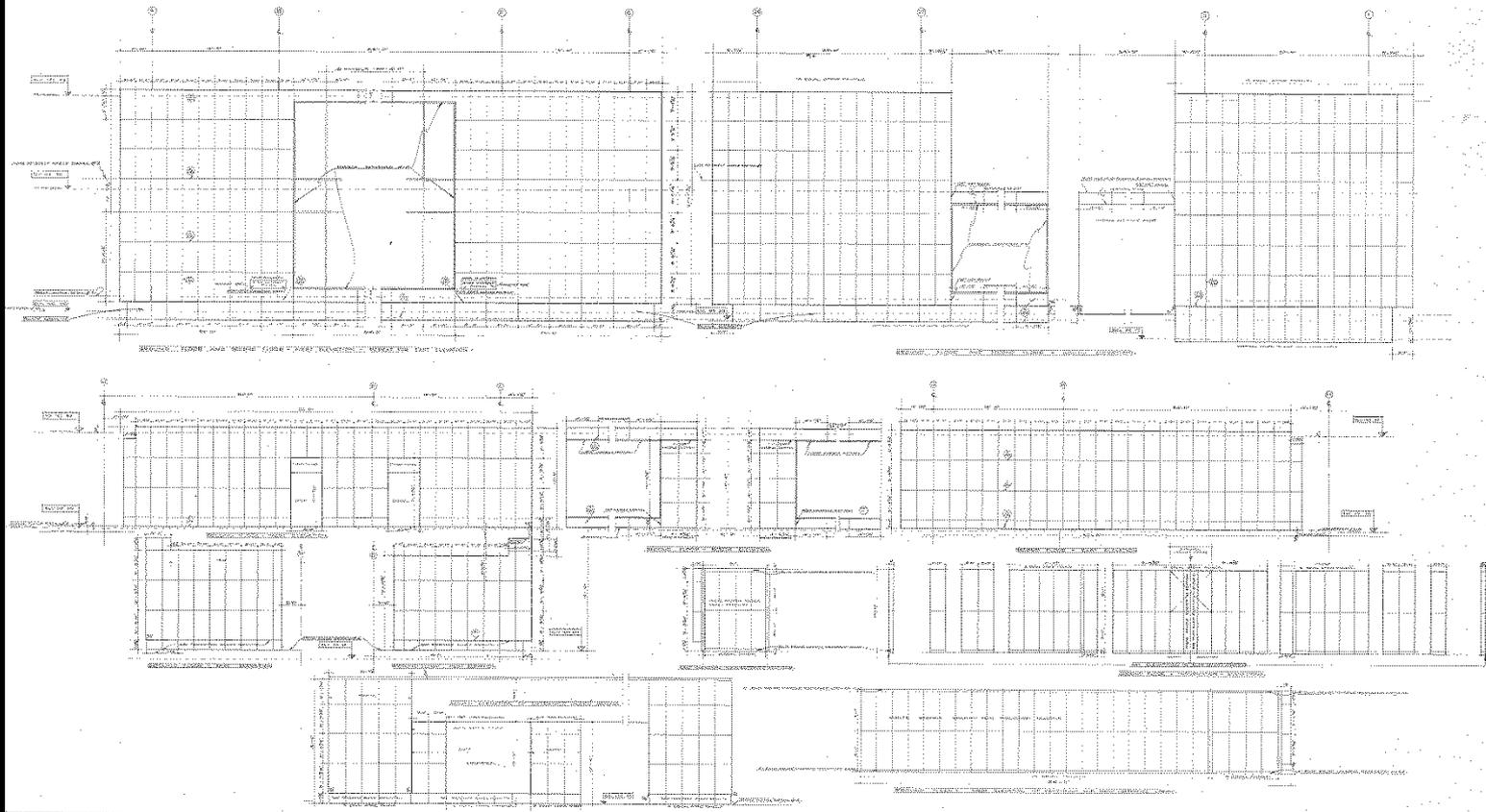
2010.03.17 – Installation of floor mounted stand with LCD display in second floor lobby.

2010.03.29 – Installation of security cameras and brackets.

2010.06.01 – Modification of existing glass doors to allow installation of panic hardware

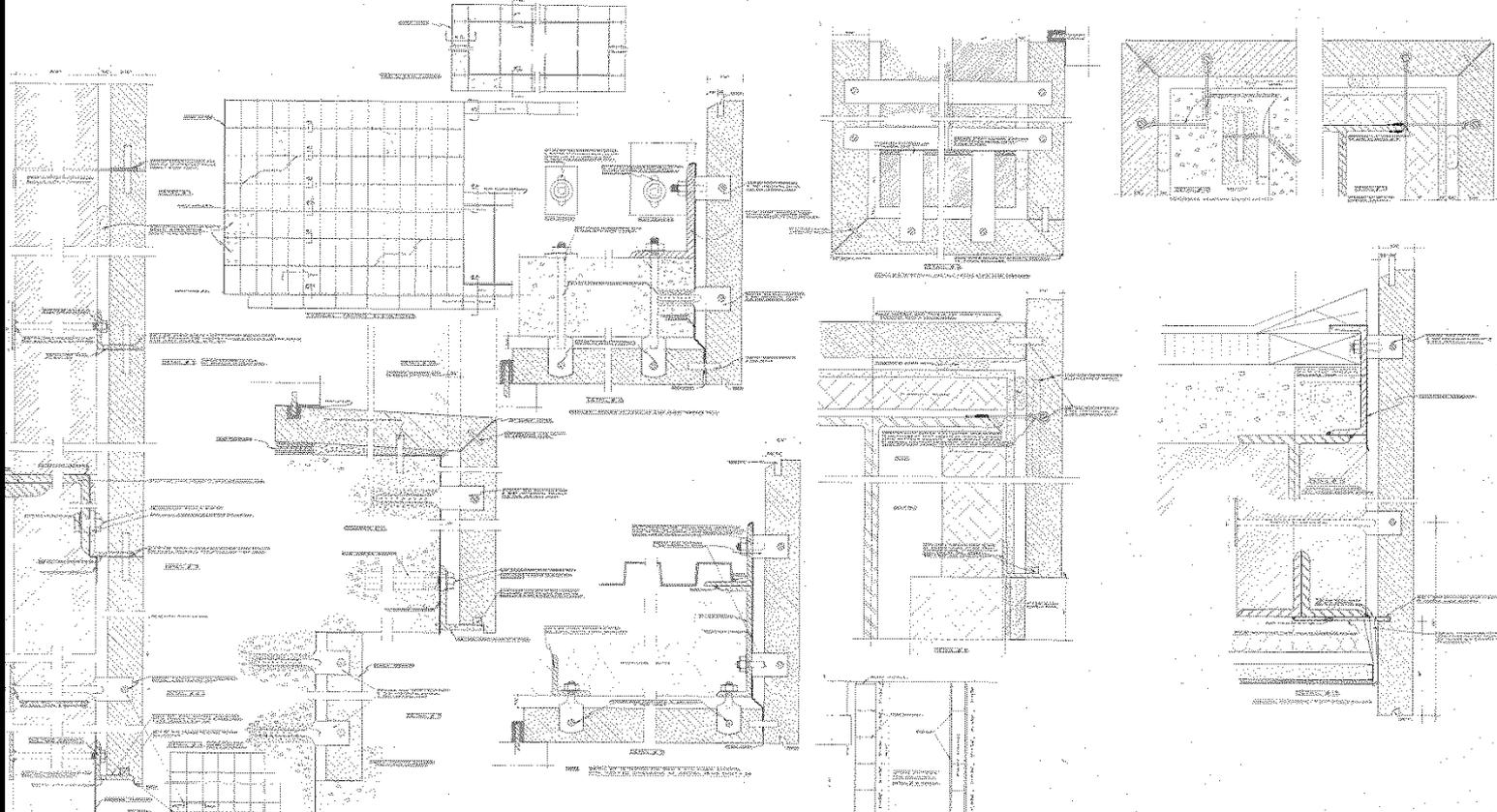
Heritage Challenges:

- **Materials:**
 - Marble cladding
 - Italian mosaic glass tiles
 - Wood paneling and doors
 - Luminescent panels
 - Aluminum handrails and guards
- **Details:**
 - Cladding details
 - Curtain wall details
 - Fastening details for spandrel panels
- **Integration of New Building Systems:**
- **Art Conservation:**
 - Murals



Stone patterns, S.M. Roscoe, 1958

Marble cladding



Stone fixings and anchors details, S.M. Roscoe, 1958

Marble cladding

Marble Cladding Challenges

The original anchors for the marble panels started to fail within the first few years of being constructed (early 1960s).

Additional anchors were added to the façade by drilling through the marble panels and patching the exterior.

Further to this remediation, the marble panels started to crack and to bow on the façade.

A building science engineer was involved with the project to specifically look at the marble panels and assess their structural stability. It was determined the panels required replacement.

Marble Cladding Challenges

The design team found the quarry where the original marble had come from however the quarry was exhausted. Marble from the quarry was only being used for monuments and gravestones.

Similar marble was found at another quarry however the use of marble was not further explored since it was not considered to be the best material for the façade due to the southern Ontario climate. Replacement with similar marble was also seen as an expensive option.

Marble Cladding Challenges

The design team recommended Adair limestone from Warton be used, the same material used on the Canadian Embassy in Washington D.C. by Arthur Erickson. Adair limestone has natural veining like marble.

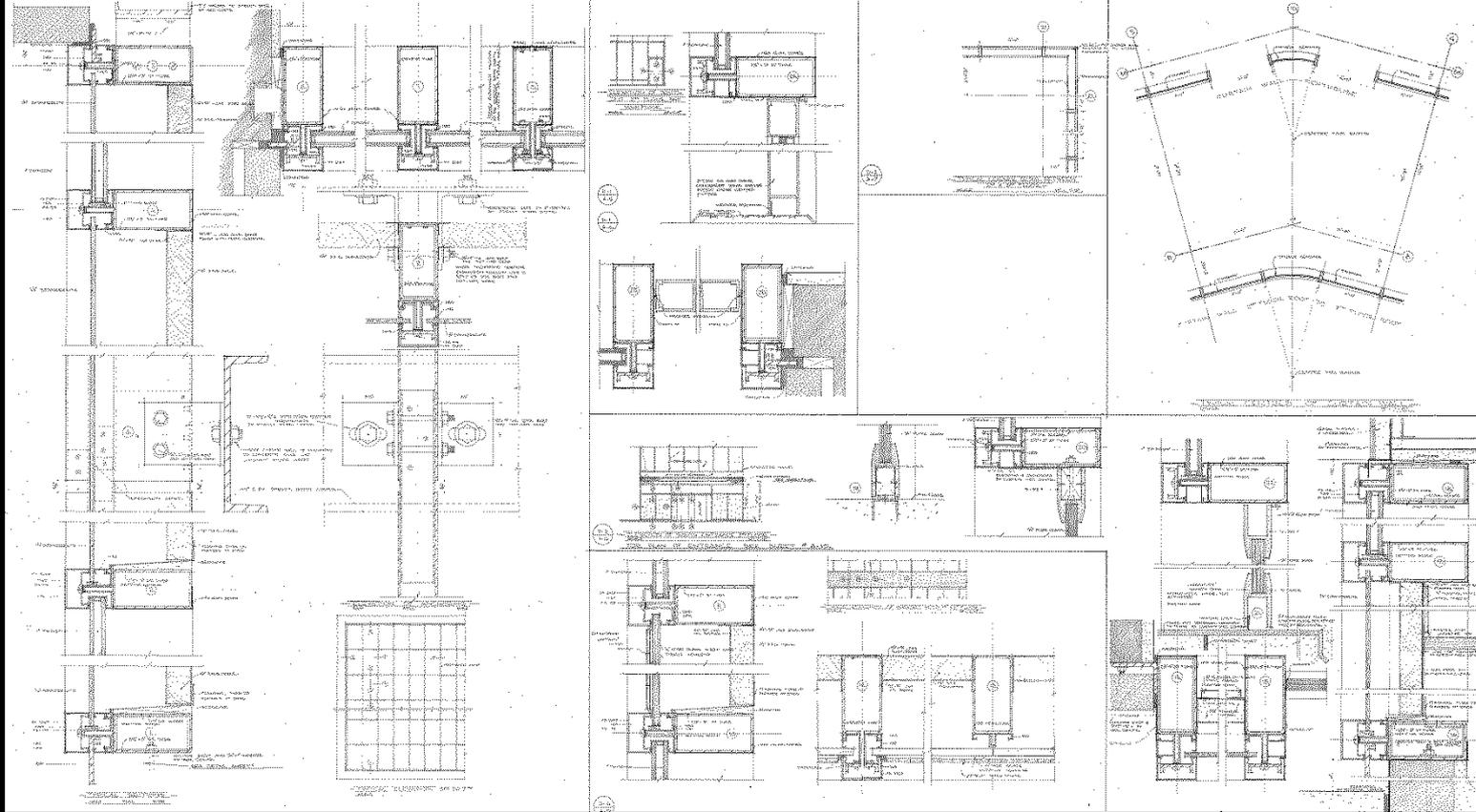


Marble Cladding Challenges

City council asked the design team to explore alternative options based on cost.

A number of alternative options were discussed and considered. Mockup panels were created using the crushed marble as an aggregate however dirt and caulking on the panels impeded the structural bond. The marble also did not crush down well.

In the end City Council voted 10-4 in favour of pre-cast concrete panels made to be as white as possible with white sand. Council was presented with numerable options and they chose the pre-cast concrete at approx.. \$66 sf. The preferred and recommended option of the design team was Adair limestone at approx. \$127 sf.

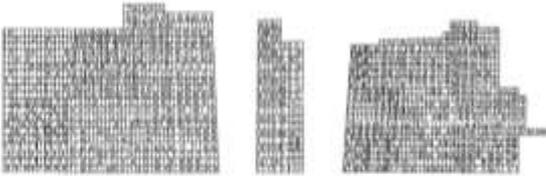
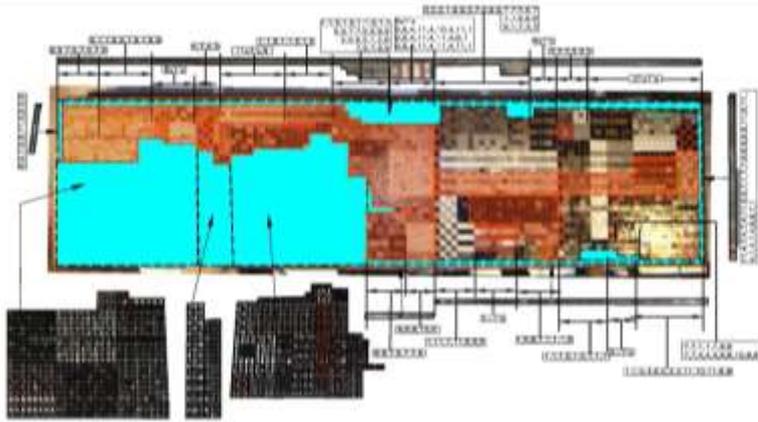


Curtain wall details, S.M. Roscoe, 1958

Curtain wall details



Italian mosaic glass tiles – spandrel panels



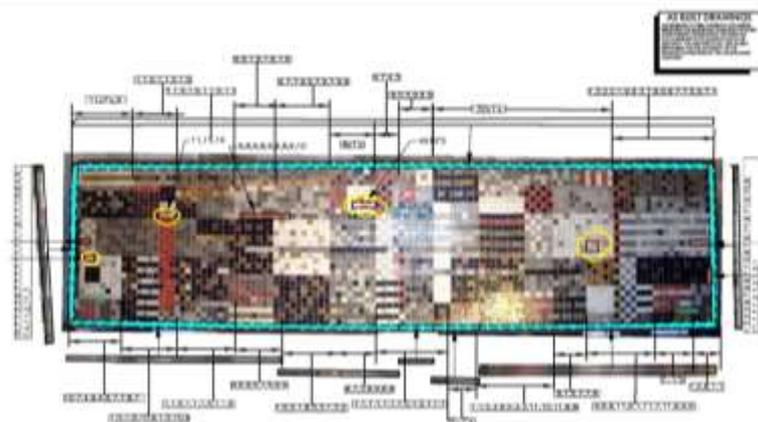
NOTE:

1. CAREFULLY CUT OUT AND REMOVE REMAINING PORTLAND CEMENT TILE. REMOVE ALL GROUT AND DETERMINED BASE PLASTER BEHIND THIS AREA. INSTALL NEW PLASTER LEVELING OVER THIS REMOVAL, EXPOSED TILE AND REPLACE REMAINING TILE TO MATCH ORIGINAL TILE COLOR PATTERN.
2. CAREFULLY REMOVE REMAINING LIME TILE AT ISOLATED SPOTS FOR AN APPROXIMATE TOTAL OF ONE (1) SQ. YD. OF GROUT PANEL. REMOVE REMAINING GROUT AND DETERMINED PLASTER. INSTALL NEW PLASTER LEVELING OVER THIS REMOVAL, TILE TO MATCH ORIGINAL TILE COLOR PATTERN.
3. CAREFULLY CUT OUT PATCHES WHERE BEST AT ISOLATED PLASTER AREAS. REMOVE ALL GROUT IN STEEL SUPPORT FRAMING OVER MURAL SURROUNDING PATCH OVER STEEL. INSTALL NEW TYPED SANDWICH MESH PLASTER OVER THIS AREA, NEW PLASTER BASE COAT & LEVELING COAT.

1. 100 - ON NORTH 2
41A 975



1. 100 - ON NORTH 2
41A 975



NOTE:

1. CAREFULLY CUT OUT AND REMOVE REMAINING PORTLAND CEMENT TILE. REMOVE ALL GROUT AND DETERMINED BASE PLASTER BEHIND THIS AREA. INSTALL NEW PLASTER LEVELING OVER THIS REMOVAL, EXPOSED TILE AND REPLACE REMAINING TILE TO MATCH ORIGINAL TILE COLOR PATTERN.
2. CAREFULLY REMOVE APPROXIMATELY 8 SQUARE FEET OF REMAINING TILE. REMOVE ALL REMAINING GROUT AND DETERMINED BASE PLASTER. INSTALL NEW PLASTER LEVELING OVER THIS REMOVAL, TILE TO MATCH ORIGINAL TILE COLOR PATTERN.

2. 100 - ON NORTH 2
41A 975



2. 100 - ON NORTH 2
41A 975

GENERAL NOTE:
REMOVE & REST OR EXPOSED STEEL FRAMING OF SPANDREL PANELS FROM MURAL SURROUNDING PATCH OVER ALL SPANDREL PANELS.

LEGEND:

- AREA TO BE REMOVED
- ALUMINUM ANCHORS TO BE REPLACED
- REINFORCING TO BE REPLACED
- SUB REINFORCING TO BE REPLACED

TILE COLORS:

1. BLACK	6. LIGHT PINK
2. DARK MUSTARD	7. BROWN GREY
3. LIGHT MUSTARD	8. DUSTY GREY
4. DARK PINK	9. PINKISH GREY
5. LIGHT GREY	10. PINK
11. PINK WHITE	

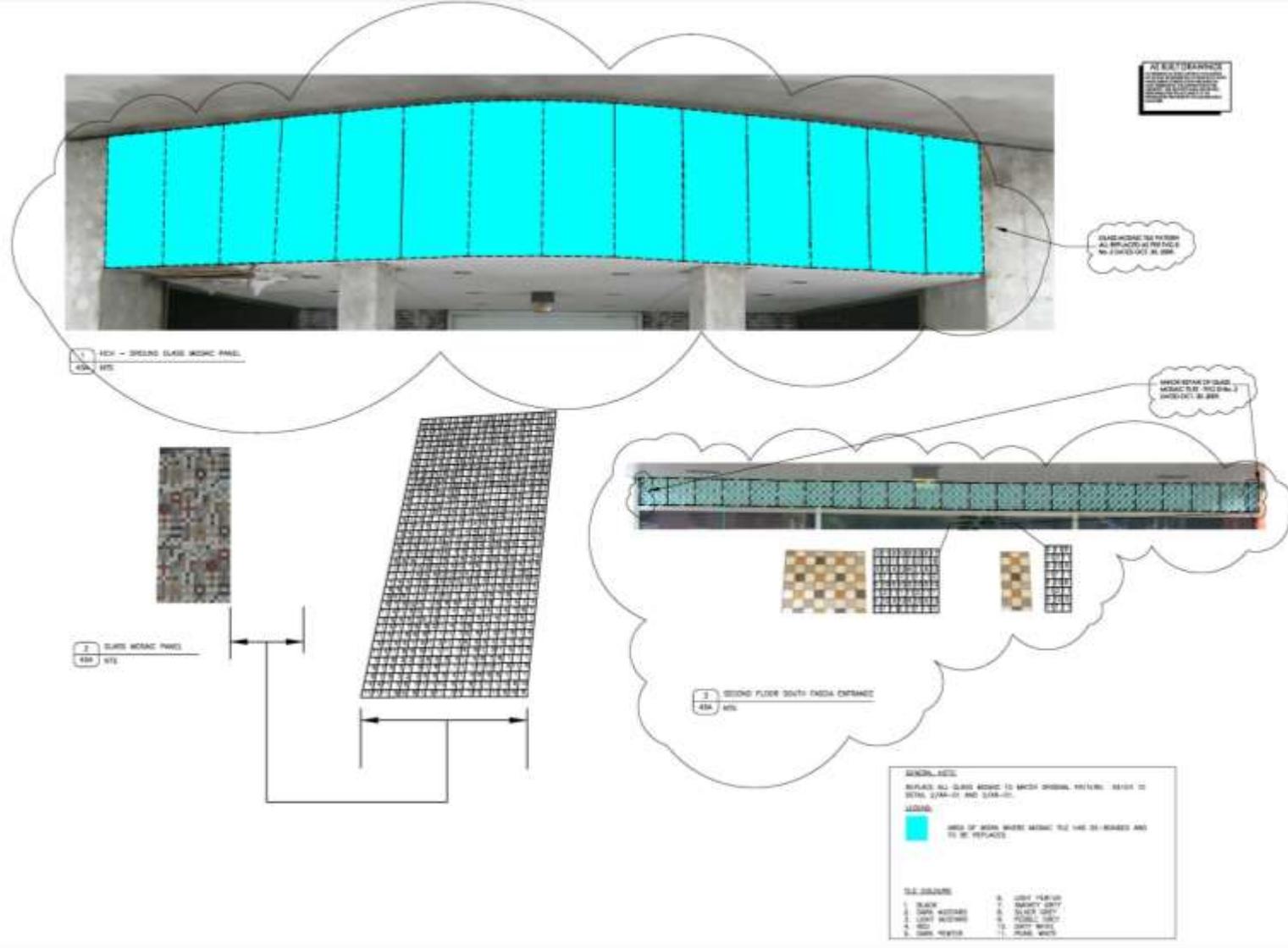
Italian mosaic glass tiles – spandrel panels



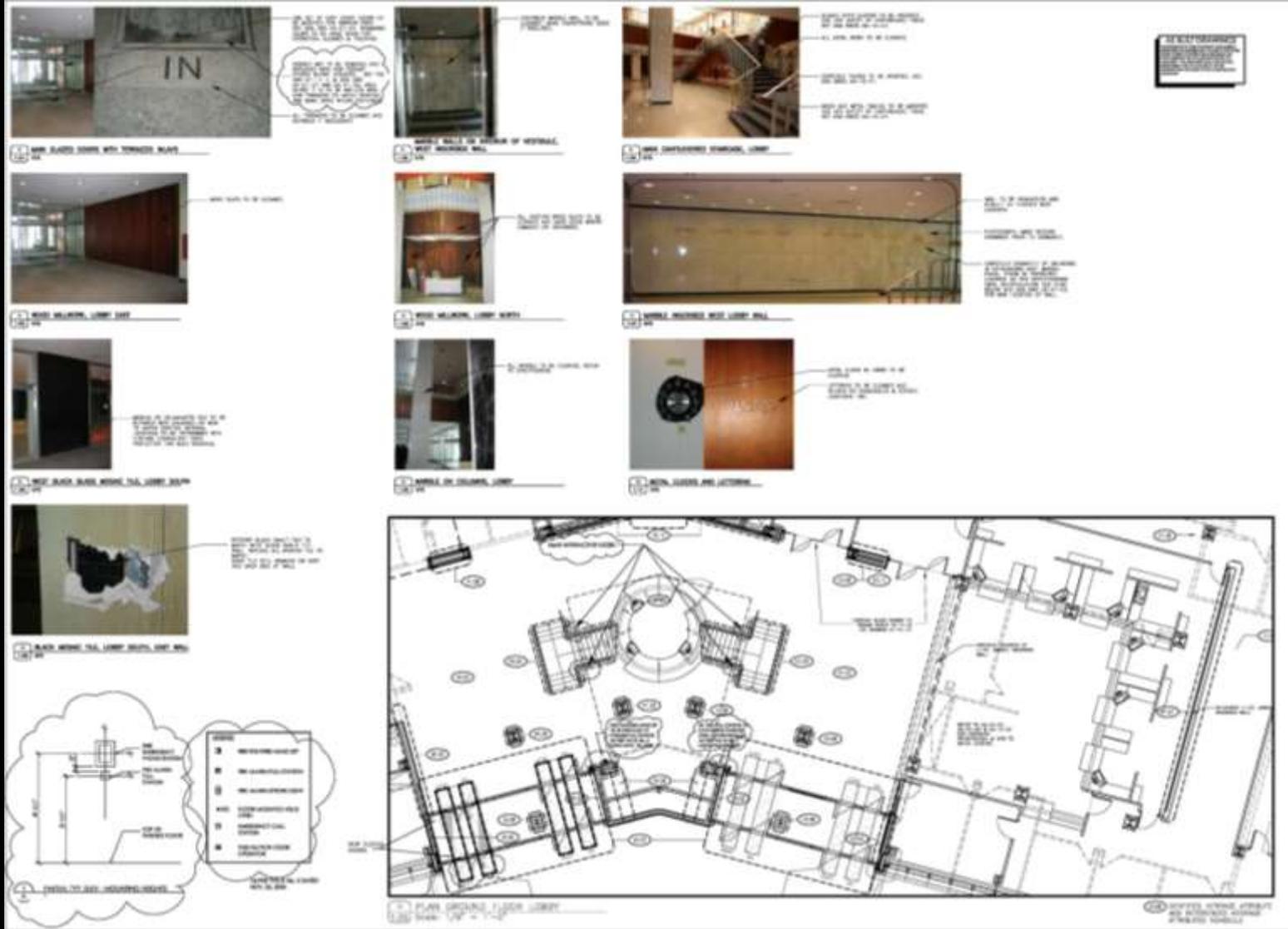
Italian mosaic glass tiles – soffit



Italian mosaic glass tiles – fascia



Italian mosaic glass tiles – fascia



Ground floor heritage conservation plan Lobby



1.1.1 WEST AND EAST FIRE EXIT STAIRS
 1.1.1.1 WTS
 ALL METAL RAILINGS TO BE GRANITE
 FINISHED ALL METALWORK TO BE
 PAINTED TO MATCH EXISTING
 FINISHES
 CONCRETE FLOORS TO BE
 REPAIRED AND FINISHED TO
 MATCH EXISTING



1.1.2 THE CLERKS COUNTER
 1.1.2.1 WTS
 COUNTER TOP TO BE GRANITE &
 FINISHED TO MATCH EXISTING
 FINISHES
 ALL METALWORK TO BE
 PAINTED TO MATCH EXISTING
 FINISHES



1.1.3 WEST JANITORS CLOSET
 1.1.3.1 WTS
 CONCRETE SILL AND CHASE TO BE
 REPAIRED TO MATCH EXISTING
 FINISHES
 ALL METALWORK TO BE
 PAINTED TO MATCH EXISTING
 FINISHES
 CONCRETE FLOORS TO BE
 REPAIRED AND FINISHED TO
 MATCH EXISTING



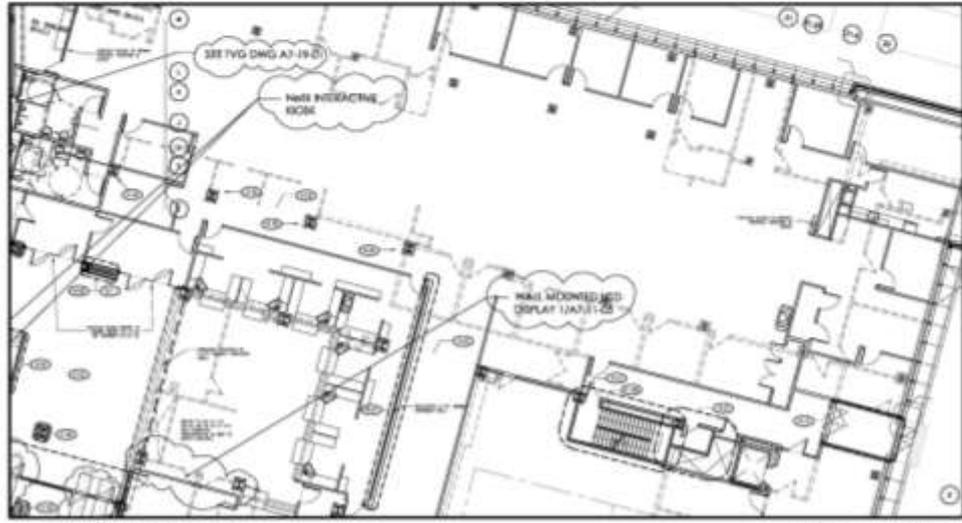
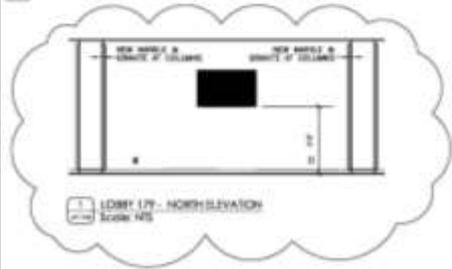
1.1.4 WEST ENTRANCE DOORS
 1.1.4.1 WTS
 WEST ENTRANCE DOORS TO BE
 REPAIRED AND FINISHED TO
 MATCH EXISTING FINISHES
 ALL METALWORK TO BE
 PAINTED TO MATCH EXISTING
 FINISHES



1.1.5 FIRE ALARM
 1.1.5.1 WTS
 FIRE ALARM TO BE REPAIRED &
 FINISHED TO MATCH EXISTING
 FINISHES
 ALL METALWORK TO BE
 PAINTED TO MATCH EXISTING
 FINISHES



1.1.6 DOOR HARDWARE
 1.1.6.1 WTS
 DOOR HARDWARE TO BE
 REPAIRED AND FINISHED TO
 MATCH EXISTING FINISHES
 ALL METALWORK TO BE
 PAINTED TO MATCH EXISTING
 FINISHES



Ground floor heritage conservation plan West heritage attributes



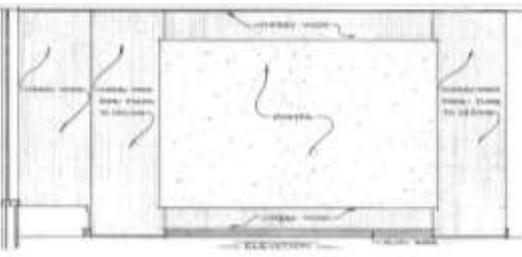
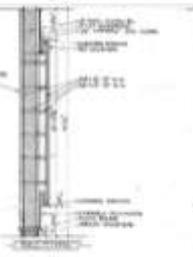
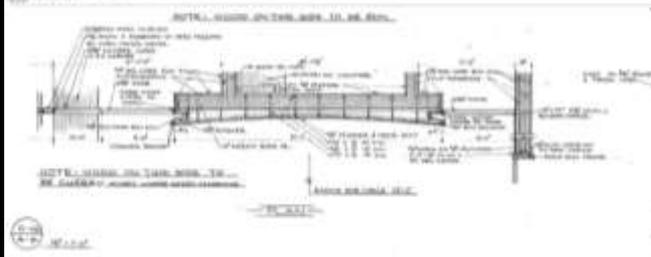
Second floor heritage conservation plan Mezzanine lobby



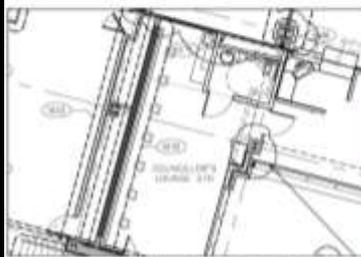
MURAL TO BE CLONED BY THE CITY OF HALIFAX (EXISTING ROOM 2181)
 MURAL TO BE CLONED BY THE CITY OF HALIFAX (EXISTING ROOM 2181)

ALL BATHROOMS
 TO BE DEMOLISHED
 AND RELOCATED
 TO THE SECOND FLOOR

1. MURAL - THIRD FLOOR REVERENDING EASTING ROOM 2181
 (2.18) 4/8



2. MURAL - THIRD FLOOR REVERENDING EASTING ROOM 2181
 (2.18) 4/8



MURAL TO BE CLONED BY THE CITY OF HALIFAX (EXISTING ROOM 2181)

3. MURAL - EVERYDAY LIFE IN HALIFTON (EXISTING COUNCILOR LOUNGE)
 (2.19) 4/8

4. MURAL - THE CENTRAL MARKET (EXISTING ROOM 2333)
 (2.20) 4/8



MURAL TO BE CLONED BY THE CITY OF HALIFAX (EXISTING ROOM 2333)



WOOD PANELING AND STAINED GLASS WINDOWS TO BE CLONED BY THE CITY OF HALIFAX (EXISTING ROOM 2333)

5. WOOD PANELING - OFFICE INTERIORS
 (2.21) 4/8

6. WOOD PANELING - OFFICE INTERIORS
 (2.21) 4/8

7. WOOD PANELING - OFFICE INTERIORS
 (2.21) 4/8

Second floor heritage conservation plan Murals



THIS BALCONY IS AN IMPORTANT PART OF THE CHAMBER AND SHOULD BE PRESERVED AS SUCH. THE BALCONY IS A KEY FEATURE OF THE CHAMBER AND SHOULD BE PRESERVED AS SUCH. THE BALCONY IS A KEY FEATURE OF THE CHAMBER AND SHOULD BE PRESERVED AS SUCH.

1.1 COUNCIL CHAMBER BALCONY EXTERIOR
1:250 0/0



THE CHAMBER IS AN IMPORTANT PART OF THE CHAMBER AND SHOULD BE PRESERVED AS SUCH. THE CHAMBER IS AN IMPORTANT PART OF THE CHAMBER AND SHOULD BE PRESERVED AS SUCH. THE CHAMBER IS AN IMPORTANT PART OF THE CHAMBER AND SHOULD BE PRESERVED AS SUCH.

1.2 LAYOUT
1:250 0/0



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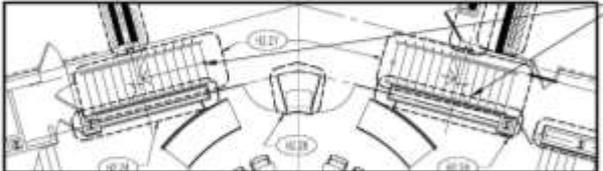
1.3 DETAIL
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GENERAL NOTE:
IDENTIFIED HERITAGE ATTRIBUTES AND REFERENCES
HERITAGE ATTRIBUTE SCHEDULE ON DWG A7-00-01



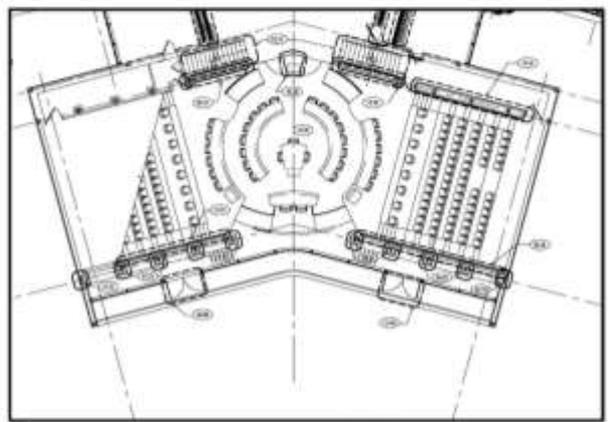
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1.4 COUNCIL CHAMBER BALCONY DOOR
1:250 0/0



THIS SECTION IS AN IMPORTANT PART OF THE CHAMBER AND SHOULD BE PRESERVED AS SUCH. THIS SECTION IS AN IMPORTANT PART OF THE CHAMBER AND SHOULD BE PRESERVED AS SUCH. THIS SECTION IS AN IMPORTANT PART OF THE CHAMBER AND SHOULD BE PRESERVED AS SUCH.

1.5 SOUTH STAIR
SCALE 1/8" = 1'-0"



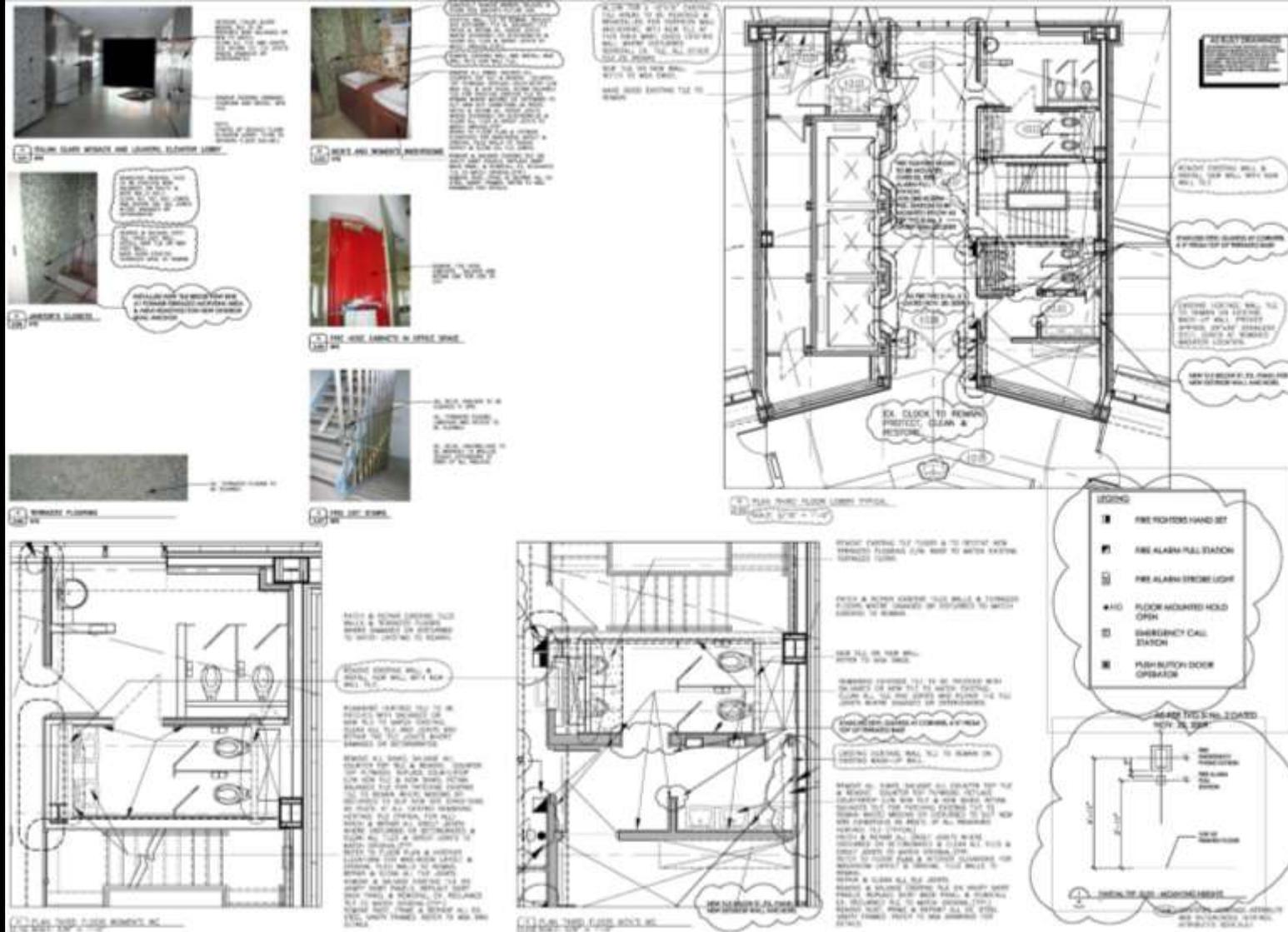
1.6 PLAN COUNCIL CHAMBER
SCALE 1/8" = 1'-0"

GENERAL NOTE:
IDENTIFIED HERITAGE ATTRIBUTES AND REFERENCES
HERITAGE ATTRIBUTE SCHEDULE ON DWG A7-00-01

Second floor heritage protection plan Council chamber



Second floor heritage protection plan
Council chamber



Third floor heritage conservation plan
 Typical 3-7 floors



Mayor's Office

712
R. Smith











CITY HALL





CITY HALL







Lessons Learned from Hamilton City Hall