

Heritage Advisory Committee

Date: July 22, 2025
Time: 9:30 AM
Location: Council Chambers, Civic Centre, 2nd Floor
300 City Centre Drive, Mississauga, Ontario, L5B 3C1
and Online Video Conference

Members

Councillor Stephen Dasko	Ward 1
Councillor Dipika Damerla	Ward 7
Chair and Councillor Brad Butt	Ward 11
Vice Chair David Cook	Citizen Member
Alexander Hardy	Citizen Member
Antoine Musiol	Citizen Member
Jahnvi Pathak	Citizen Member
James Holmes	Citizen Member
Jason De Brum	Citizen Member
Lucy Zita	Citizen Member
Matthew Wilkinson	Citizen Member
Somayyeh Nezhad Bagher	Citizen Member
Terry Ward	Citizen Member

To Request to Speak on Agenda Items - Advance registration is required. To make a Deputation please email Martha Cameron, Legislative Coordinator at martha.cameron@mississauga.ca or call 905-615-3200 ext. 5438 no later than **July 18, 2025 before 4:00 PM**.

Questions for Public Question Period – To pre-register for Public Question Period, questions may be provided to the Legislative Coordinator at least 24 hours in advance of the meeting. Following the preregistered questions, if time permits, the public may be given the opportunity to ask a question on an agenda item. Virtual participants must pre-register.

Virtual Participation - All meetings of the Heritage Advisory Committee are streamed live and archived at Mississauga.ca/videos. To speak during the virtual meeting or if you do not have access to the internet, contact the Legislative Coordinator and you will be provided with directions on how to participate. Comments submitted will be considered as public information and entered into the public record.

Contact

Martha Cameron, Legislative Coordinator, Legislative Services
905-615-3200 ext. 5438 | Email: martha.cameron@mississauga.ca

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1. **CALL TO ORDER**

2. **INDIGENOUS LAND STATEMENT**

“We acknowledge the lands which constitute the present-day City of Mississauga as being part of the Treaty and Traditional Territory of the Mississaugas of the Credit First Nation, The Haudenosaunee Confederacy the Huron-Wendat and Wyandotte Nations. We recognize these peoples and their ancestors as peoples who inhabited these lands since time immemorial. The City of Mississauga is home to many global Indigenous Peoples.

As a municipality, the City of Mississauga is actively working towards reconciliation by confronting our past and our present, providing space for Indigenous peoples within their territory, to recognize and uphold their Treaty Rights and to support Indigenous Peoples. We formally recognize the Anishinaabe origins of our name and continue to make Mississauga a safe space for all Indigenous peoples.”

3. **APPROVAL OF AGENDA**

4. **DECLARATION OF CONFLICT OF INTEREST**

5. **MINUTES OF PREVIOUS MEETING**

5.1 Draft Heritage Advisory Committee minutes - June 10, 2025

6. **DEPUTATIONS**

Any member of the public interested in making a deputation to an item listed on the agenda must register by calling 905-615-3200 ext. 5438 or by emailing martha.cameron@mississauga.ca by **July 18, 2025 before 4:00 PM**.

Each Deputation to Committee is limited to speaking not more than 10 minutes.

Pursuant to Section 57.1 of the Council Procedure By-law 0044-2022, as amended:

Deputations shall be received and the matter shall be referred to staff for a report, unless there is a resolution or recommendation passed to “receive” the Deputation. After a Deputation is completed, Members shall each have one opportunity to make a preamble statement and ask questions to the Deputant(s) or staff for clarification purposes only, and without debate.

7. **PUBLIC QUESTION PERIOD - 15 Minute Limit**

Public Comments: Members of the Public that have a question about an item listed on the agenda may pre-register by contacting the Legislative Coordinator at least 24 hours in advance of the meeting. Following the registered speakers, if time permits the Chair will acknowledge members of the public who wish to ask a question about an item listed on the agenda. Virtual participants must pre-register.

Pursuant to Section 58 of the Council Procedure By-law 0044-2022, as amended:

The Heritage Advisory Committee may grant permission to a member of the public to ask a question of the Heritage Advisory Committee, with the following provisions:

1. Questions may be submitted to the Clerk at least 24 hours prior to the meeting;
2. A person is limited to two (2) questions and must pertain specific item on the current agenda and the speaker will state which item the question is related to;
3. The total speaking time shall be five (5) minutes maximum, per speaker, unless extended by the Mayor or Chair; and
4. Any response not provided at the meeting will be provided in the format of a written response.

8. **CONSENT AGENDA**

9. **MATTERS TO BE CONSIDERED**

- 9.1 Request to Alter a Heritage Listed Property: 850 Enola Avenue (Ward 1)
- 9.2 Request to Demolish a Heritage Listed Property from the City's Registry: 33 Beverley Street (Ward 5)
- 9.3 Peel Region Cultural Heritage Conservation Orientation Session
- 9.4 Port Credit Heritage Conservation District Subcommittee Recommendation Report 3 - 2025 - dated July 7, 2025

10. **INFORMATION ITEMS**

11. **OTHER BUSINESS**

12. **DATE OF NEXT MEETING**

September 9, 2025 at 9:30 AM

13. **ADJOURNMENT**

Heritage Advisory Committee

Date: June 10, 2025
Time: 9:30 AM
Location: Council Chambers, Civic Centre, 2nd Floor
300 City Centre Drive, Mississauga, Ontario, L5B 3C1
and Online Video Conference

Members Present	Chair and Councillor Brad Butt	Ward 11
	Councillor Stephen Dasko	Ward 1
	Councillor Dipika Damerla	Ward 7 (Arrived at 9:41 AM)
	Vice Chair David Cook	Citizen Member
	Alexander Hardy	Citizen Member
	Jahnvi Pathak	Citizen Member
	James Holmes	Citizen Member (Arrived at 9:40 AM)
	Jason De Brum	Citizen Member
	Lucy Zita	Citizen Member
	Matthew Wilkinson	Citizen Member
	Somayyeh Nezhad Bagher	Citizen Member
	Terry Ward	Citizen Member
Members Absent	Antoine Musiol	Citizen Member

Staff Present

John Dunlop, Manager, Indigenous Relations, Heritage and Museums
Paula Wubbenhorst, Heritage Planner
Andrew Douglas, Heritage Analyst
Martha Cameron, Legislative Coordinator

1. CALL TO ORDER

Councillor Brad Butt, Chair called the meeting to order at 9:30 AM

2. INDIGENOUS LAND STATEMENT

Councillor Brad Butt, Chair recited the Indigenous Land Statement.

3. APPROVAL OF AGENDA

Approved (L. Zita)

4. DECLARATION OF CONFLICT OF INTEREST

Jason De Brum, Citizen Member declared a conflict of interest with item 9.2 - Proposed Heritage Designation of 972 Clarkson Road South (Ward 2)

5. MINUTES OF PREVIOUS MEETING

5.1 Draft Heritage Advisory Committee minutes - April 8, 2025

Approved (T. Ward)

6. DEPUTATIONS

There were no deputations.

7. PUBLIC QUESTION PERIOD - 15 Minute Limit

There were no questions registered by the public.

8. CONSENT AGENDA

RECOMMENDATION HAC-0017-2025

Moved By M. Wilkinson

That the following items were approved on consent:

- Item 9.2 - Proposed Heritage Designation of 972 Clarkson Road South (Ward 2)
- Item 9.3 - Request to Alter the Heritage Designated Property at 2700 Lakeshore Road West (Ward 2)
- Item 9.4 - Request to Remove a Heritage Listed Property from the City's Registry: 1147 Dixie Road (Ward 1)
- Item 9.5 - Request to Demolish a Heritage Listed Property at 3610 Burnbrae Drive (Ward 6)
- Item 9.6 - Meadowvale Village Heritage Conservation District Subcommittee Recommendation Report 2- 2025 - dated April 29, 2025
- Item 9.7 - Meadowvale Village Heritage Conservation District Subcommittee Recommendation Report 3 - 2025 - dated May 27, 2025
- Item 9.8 - Port Credit Heritage Conservation District Subcommittee Recommendation Report 2 - 2025 - dated May 26, 2025

- Item 10.1 - Credit River Active Transportation Bridge (Ward 1)
- Item 10.2 - Request to Alter 42 John Street South (Ward 1)
- Item 10.3 - Request to Alter 1059 Old Derry Road (Ward 11)
- Item 10.5 - Revised Ontario Heritage Took Kit

Approved

9. MATTERS CONSIDERED

9.1 Proposed Heritage Designation of 1040 Welwyn Drive (Ward 2)

Matthew Wilkinson, Citizen Member spoke in support of the report and designation of the property.

RECOMMENDATION HAC-0018-2025

Moved By M. Wilkinson

That the property at 1040 Welwyn Drive (Ward 2) be designated under Part IV of the Ontario Heritage Act for its historical and associative value and that the appropriate City officials be authorized and directed to take the necessary action to give effect thereto, as per the Corporate Report from the Commissioner of Community Services, dated May 6, 2025.

Approved

9.2 Proposed Heritage Designation of 972 Clarkson Road South (Ward 2) (CONSENT)

RECOMMENDATION HAC-0019-2025

Moved By M. Wilkinson

That the property at 972 Clarkson Road South (Ward 2) be designated under Part IV of the Ontario Heritage Act for its physical, design, historical, associative and contextual value and that the appropriate City officials be authorized and directed to take the necessary action to give effect thereto, as per the Corporate Report from the Commissioner of Community Services, dated May 6, 2025.

Approved

9.3 Request to Alter the Heritage Designated Property at 2700 Lakeshore Road West (Ward 2) (CONSENT)

RECOMMENDATION HAC-0020-2025

Moved By M. Wilkinson

That the request to alter the heritage designated property at 2700 Lakeshore Road West (Ward 2), as per the Corporate Report from the Commissioner of Community Services, dated May 14, 2025, be approved.

Approved

- 9.4 Request to Remove a Heritage Listed Property from the City's Registry: 1147 Dixie Road, (Ward 1) (CONSENT)

RECOMMENDATION HAC-0021-2025

Moved By M. Wilkinson

That the request to remove the property at 1147 Dixie Road (Ward 1) from the City's heritage register as outlined in the corporate report from the Commissioner of Community Services dated May 8, 2025, be approved.

Approved

- 9.5 Request to Demolish a Heritage Listed Property at 3610 Burnbrae Drive (Ward 6) (CONSENT)

RECOMMENDATION HAC-0022-2025

Moved By M. Wilkinson

That the request to demolish the heritage listed property at 3610 Burnbrae Drive (Ward 6), as outlined in the report from the Commissioner of Community Services, dated May 7, 2025, be approved.

Approved

- 9.6 Meadowvale Village Heritage Conservation District Subcommittee Recommendation Report 2 - 2025 - April 29, 2025 (CONSENT)

RECOMMENDATION HAC-0023-2025

Moved By M. Wilkinson

MVHCD-0003-2025

That the request to alter the Part V heritage designated property at 1059 Old Derry Road (Ward 11), as per the Corporate Report from the Commissioner of Community Services, dated April 14, 2025, be approved.

(MVHCD-0003-2025)

(Ward 11)

Approved

9.7 Meadowvale Village Heritage Conservation District Recommendation Report 3 - 2025 - May 27, 2025 (CONSENT)

RECOMMENDATION HAC-0024-2025

Moved By M. Wilkinson

MVHCD-0004-2025

That the memorandum from John Dunlop, Manager, Indigenous Relations, Heritage and Museums dated May 12, 2025 entitled "Alteration of the Part V Heritage Designated Property at 1133 Willow Lane (Ward 11), be approved.

(MVHCD-0004-2025)

(Ward 11)

Approved

RECOMMENDATION HAC-0025-2025

Moved By M. Wilkinson

MVHCD-0005-2025

That the memorandum from John Dunlop, Manager, Indigenous Relations, Heritage and Museums dated May 21, 2025 entitled "7025 Pond Street (Ward 11)", be received.

(MVHCD-0005-2025)

(Ward 11)

Approved

9.8 Port Credit Heritage Conservation District Subcommittee Recommendation Report 2 - 2025 - May 26, 2025 (CONSENT)

RECOMMENDATION HAC-0026-2025

Moved By M. Wilkinson

PCHCD-0002-2025

1. That the request to alter 18 John Street South (Ward 1), as per the memorandum from John Dunlop, Manager of Indigenous Relations, Heritage & Museums, dated April 22, 2025, be approved with the following conditions;
2. That the Port Street West elevation be more symmetrical with regards to the roof line;
3. That the parking and curb cut on Port Street West be identified on the site plan; and
4. That if SDL (simulated divided lite) windows are employed, they have clear and proper muntins on both sides of the windows.

(PCHCD-0002- 2025)

(Ward 1)

Approved

9.9 Peel Region Cultural Heritage Conservation Orientation Session
RECOMMENDATION HAC-0027-2025

Moved By M. Wilkinson

That the approval of the Heritage Advisory Committee Members who wish to participate in the Peel Region Cultural Heritage Conservation Orientation Session scheduled for October 8, 2025 be deferred to the next Heritage Advisory Committee meeting.

Deferred

10. INFORMATION ITEMS

10.1 Credit River Active Transportation Bridge (Ward 1)

RECOMMENDATION HAC-0028-2025

Moved By M. Wilkinson

That the memorandum from John Dunlop, Manager, Indigenous Relations, Heritage and Museums dated May 9, 2025 entitled "Credit River Active Transportation Bridge (Ward 1)", be received.

Received

10.2 Request to Alter 42 John Street South (Ward 1)

RECOMMENDATION HAC-0029-2025

Moved By M. Wilkinson

That the memorandum from John Dunlop, Manager, Indigenous Relations, Heritage and Museums dated May 8, 2025 entitled "Request to Alter 42 John Street South (Ward 1)", be received.

Received

10.3 Request to Alter 1059 Old Derry Road (Ward 11)

RECOMMENDATION HAC-0030-2025

Moved By M. Wilkinson

That the memorandum from John Dunlop, Manager, Indigenous Relations, Heritage and Museums dated May 8, 2025 entitled "Request to Alter 1059 Old Derry Road (Ward 11)", be received.

Received

10.4 Mississauga Mural, Celebration Square (Ward 4)

In response to Councillor S. Dasko and Alexander Hardy, Citizen Member, Michael Tunney, Manager, Cultural Planning and Rachel Pennington, Public Art Curator spoke to the mural design that harmonizes with the architecture of the building, location, matching colour scheme, longevity of the mural and noted it is part of the temporary art collection. Staff further spoke to measures that would be taken if the paint begins to deteriorate and noted the commencement of the project.

RECOMMENDATION HAC-0031-2025

Moved By A. Hardy

That the memorandum from Nadia Paladino, Director, Parks, Forestry and Environment dated May 22, 2025 entitled "Mississauga Mural, Celebration Square (Ward 4)", be received.

Received

10.5 Revised Ontario Heritage Tool Kit
RECOMMENDATION HAC-0032-2025

Moved By M. Wilkinson

That the memorandum from Nadia Paladino, Director, Parks, Forestry and Environment dated May 22, 2025 entitled "Revised Ontario Heritage Tool Kit", be received.

Received

11. OTHER BUSINESS

John Dunlop, Manager, Indigenous Relations, Heritage and Museums spoke to the June 21st Annual National Indigenous People's Day Celebration events at Celebration Square.

12. DATE OF NEXT MEETING

July 22, 2025 at 9:30 AM

13. ADJOURNMENT - 9:50 AM

(J. De Brum)

City of Mississauga Corporate Report



Date: June 17, 2025

To: Chair and Members of Heritage Advisory Committee

From: Raj Sheth, P.Eng, Commissioner of Community Services

Originator's files:

Meeting date:
July 22, 2025

Subject

Request to Alter a Heritage Listed Property: 850 Enola Avenue (Ward 1)

Recommendation

That the request to alter the property at 850 Enola Avenue (Ward 1), as per the Corporate Report from the Commissioner of Community Services dated June 17, 2025, be approved.

Executive Summary

- The subject property is designated under Part IV of the Ontario Heritage Act.
- Staff propose to decommission a well and cistern located on the Adamson Estate property.
- The project will have a minimal impact on the heritage character of the property.

Background

Council designated the subject property under Part IV of the Ontario Heritage Act on December 16, 1992. Section 33 of the Act requires permission from Council in order to make alterations to a property designated under Part IV of the Act.

Comments

City staff are proposing the decommissioning of an abandoned well and cistern on the property. The well and cistern are approximately 100 years old and are only identifiable as a small hole in the ground and a circular concrete pad. The decommissioning of the well and cistern will be undertaken in compliance with the Ontario Water Resources Act (Appendix 1). The property, located along the Waterfront Trail is a very active and well used by the public, this work is being done for public safety considerations. This work will have a minimal impact the heritage character of the property and so it should be approved.

Financial Impact

There is no new financial impact resulting from the recommendation in this report.

Conclusion

City staff have proposed to decommission a well and cistern located on the Adamson Estate property. This work will have a minimal impact on the property and should therefore be approved.

Attachments

Appendix 1: Project Plan



Raj Sheth, P.Eng, Commissioner of Community Services

Prepared by: Andrew Douglas, Heritage Analyst, Indigenous Relations, Heritage & Museums

**CITY OF MISSISSAUGA
SPECIFICATIONS FOR THE DECOMMISSIONING OF
AN ABANDONED WELL AND CISTERN
AT THE ADAMSON ESTATE PROPERTY**

**850 Enola Avenue
Mississauga, ON L5G 4B2**

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Appendix A	Site Photographs
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1. INTRODUCTION

The purpose of this project is to decommission an abandoned 100-year-old (approximate) well and cistern at the Adamson Estate property, which is located at 850 Enola Avenue, Mississauga, Ontario (ON), the "Site", with the objective of decommissioning the two subsurface structures to ensure the health and safety of the general public for use of the Site as a public park area. Refer to Figure 1 for the Site's geographical location and Appendix A for Site photographs.

The Adamson Estate property is a historic property set on expansive grounds bordering Lake Ontario. The estate lands comprise a 13.2 acre parcel. The main structure comprises a two-storey manor house. Surrounding the house are extensive landscaped grounds, which include formal gardens, lawns, mature trees, and pathways. The structures of the original estate, with its house, barn outbuildings and grounds are a significant waterfront cultural landscape and the Site was recognised for its heritage value by the City of Mississauga By-law 461-78, on January 5, 1993.

This specification defines the procedures and requirements for the proper abandonment (decommissioning) of the historic well and cistern at the Site. Refer to Figure 2 for the well and cistern location and the general Site layout. The purpose is to ensure that the well is abandoned in strict compliance with the Ontario Water Resources Act, R.R.O. 1990, Regulation 903 (WELLS), particularly Sections 21 and 21.1, thereby protecting groundwater resources and public safety. This specification is intended for use by qualified and licensed Ontario Well Contractors and Well Technicians.

The purpose of this specification is to provide clear, actionable instructions for qualified well contractors and technicians to perform the work safely and correctly, preventing movement of water, contaminants, or other material between subsurface formations or between a subsurface formation and the ground surface *via* the well bore or annular space. Note, there is no "National Master Specification" (NMS) section solely dedicated to the decommissioning of a water well or an underground water cistern. Relevant information and requirements can be found within other regulatory documents, particularly at the provincial level.

➤ Provincial Regulations (Ontario):

- Wells Regulation, Ontario Regulation 903: Although primarily focused on wells, this regulation highlights the importance of preventing contamination and ensuring the safe abandonment of underground structures that could pose a risk to groundwater or cause physical hazards. The principles of plugging and sealing to prevent pathways for contaminants is relevant to the water cistern, and as such, select procedures for decommissioning of the water well have been applied to the cistern.

2. PROJECT INFORMATION

Project Name: Adam Estate Property - Abandon Well and Cistern

Site Location: 850 Enola Avenue, Mississauga, Ontario

Specific Well ID: N/A

Estimated Well Depth: 7.5 metres below ground surface (mbgs)

Estimated Well Diameter(s): 0.8 metres (m)

Observed Well Construction: Brick lined

Estimated Cistern Depth(s): 1.34 mbgs

Estimated Cistern Diameter(s): 1.33 m

Observed Cistern Construction: Brick lined

Specific Site Hazards: Underground services, nearby structures, softscape lands, nearby trees, limited access.

Responsible Professional Engineer/Geoscientist (P.Eng./P.Geo.): Keystone Environmental Ltd.

Engaged Well Contractor Name and License Number: [TBD]

3. APPLICABLE REGULATIONS AND STANDARDS

The work shall be performed in accordance with the following regulations and standards, as amended:

- Ontario Water Resources Act, R.R.O. 1990, Regulation 903 (WELLS): Specifically, but not limited to:
 - Section 1: Definitions (e.g., sealant, suitable sealant, bentonite, tremie pipe).
 - Section 12.1: Log and Field Notes (required during abandonment).
 - Section 16.5: Records — Well Abandonment (Well Record completion and submission).
 - Section 21: Abandonment Conditions (conditions requiring abandonment).
 - Section 21.1: Abandonment Procedure (detailed steps and material requirements).
 - Section 22: Protection of Well Tag (removal procedures).
- Relevant Standards referenced in R.R.O. 903 for materials:
 - ASTM, ANSI, AWWA, NSF/ANSI/CAN standards for casing/materials as cross-referenced by R.R.O. 903 Section 1 and 21.1(3). Abandonment materials must meet the requirements of Section 21.1(3) regarding composition and freedom from contamination.
- Occupational Health and Safety Act, R.S.O. 1990, c. O.1 and its regulations.

4. PERSONNEL QUALIFICATIONS AND RESPONSIBILITIES

- All well abandonment activities shall be performed by or under the direct supervision of a Well Technician holding a valid licence from the Ontario Ministry of the Environment, Conservation and Parks (MECP) with the appropriate class for the type of work and well being abandoned, unless specifically exempted by R.R.O. 903 Section 21(13)(a-d).

-
- The work shall be conducted under the oversight of a licensed Well Contractor as required by R.R.O. 903 Section 21(13).
 - The Engaged Well Contractor is responsible for ensuring all personnel on site are appropriately qualified and that all work strictly adheres to this specification and R.R.O. 903.
 - The well technician supervising or performing the work must have their licence on site and produce it upon request. All personnel shall comply with the requirements of the Act and the Regulation.
 - The Responsible Professional Engineer/Geoscientist will provide technical oversight and validation for the project scope and objectives but the Well Contractor/Technician holds direct responsibility for the safe and compliant execution of the well abandonment work as required by R.R.O. 903.

5. SUBMITTALS

Submit the following to the City of Mississauga or their designated representative for review and acceptance prior to commencing work:

- Detailed Work Plan and Schedule.
- Site-specific Health and Safety Plan (HASP), including provisions for confined space entry (if required), excavation safety, and personal protective equipment (PPE).
- Site-specific Environmental Protection Plan (EPP), including spill prevention and response procedures, dust control, erosion and sediment control.
- Waste Management Plan, including anticipated waste streams, proposed disposal facilities, and waste tracking procedures.
- Proposed method for emptying the cistern, including proposed disposal of any pumped water or sludge.
- For well and cistern decommissioning: Proposed source and type of inert fill material, including any required documentation (e.g., gradation, contamination testing if required by Professional or regulations).
- For cistern removal: Proposed method for dismantling and removing the cistern structure, and planned staging area for materials prior to disposal.
- Traffic management plan.
- Emergency contact information.

6. SITE PREPARATION

- Delineate the work area and install temporary fencing or barriers as required for safety and security.
 - Implement traffic control measures as per the approved plan.
 - Establish temporary erosion and sediment control measures.
 - Implement dust control measures as needed.
-

-
- Identify and locate all adjacent underground and above-ground utilities. Ensure protection of all utilities that are to remain in service. Contact Ontario One Call (or equivalent) for utility locates.

7. REQUIRED MATERIALS

- **Abandonment Barrier Materials:** Materials used for abandonment shall constitute a "suitable sealant" or "abandonment barrier" as defined in R.R.O. 903 Section 1 and specified in Section 21.1(3) and (5). These materials must be compatible with the quality of water in the well and shall not contain soil or drill cuttings or any other materials that may impair the integrity of the abandonment barrier (21.1(3)). If the well is in contact with contaminants, the barrier must be stable in their presence (21.1(3) Para 3).
 - **Specific Materials for Large Diameter Wells [> 65 cm diameter, per 21.1(5)]:** As detailed in the procedure (Section 6.0, Step 4), the abandonment barrier for large diameter wells (> 65 cm) involves the specific sequential placement of:
 - Clean sand or pea gravel.
 - Bentonite chips or pellets.
 - Bentonite slurry (clean water and at least 20% bentonite solids) or the chosen abandonment barrier from 21.1(3).
 - Clean gravel, sand, silt, or clay or abandonment barrier interspersed with sand/pea gravel.
 - **Placement Method:** Bentonite chips/pellets shall be screened and placed according to the manufacturer's specifications (21.1(3) Para 7 vii).
 - **Sealant Properties:** The abandonment barrier must be compatible with the quality of water found in the well and must not contain any materials that may impair its integrity, including soil or drill cuttings (R.R.O. 903 21.1(3) Para 1, 2). If the well is in contact with contaminants, the barrier must be stable in their presence (R.R.O. 903 21.1(3) Para 3).
 - **Sand/Gravel (for >65 cm wells or minimizing sealant loss):** Clean sand or pea gravel (for use at the bottom of >65 cm wells or adjacent to water zones/fractures per R.R.O. 903 21.1(4) and 21.1(5)).
 - **Bentonite for Surface Seal:** Bentonite chips, pellets, granules, or powder for the surface seal (R.R.O. 903 21.1(1) Para 8(i)). Must be placed according to manufacturer's specifications.
 - **Soil Cover:** Clean soil or other material native to the site surface for final backfill (R.R.O. 903 21.1(1) Para 8(ii)).
 - **Water:** Clean water for mixing slurries.
 - **Estimated Material Quantities:** The Contractor shall verify required quantities based on actual well dimensions and conditions.
 - **Structural Strength:** For wells greater than 65.0 cm in diameter, sealing materials shall be selected and placed to provide appropriate structural strength to support the weight of persons and vehicles that may move over the area after it is filled (21.1(6)).
-

8. ABANDONMENT PROCEDURE

8.1 Water Well

The abandonment procedure shall follow the steps outlined in R.R.O. 903 Section 21.1, paying particular attention to the specific requirements for dug wells (> 65 cm diameter) in Section 21.1(5) and well pits in Section 21.1(9).

8.1.1 Pre-Abandonment Activities:

- Verify site hazards identified in Project Information (Section 2.0) and take appropriate precautions.
- Confirm well and cistern location, estimated dimensions, and observed construction details.
- Review any available well records or historical information (as applicable).
- Ensure that the conditions requiring abandonment under R.R.O. 903 Section 21 have been met or addressed (Note: the well and cistern is not being used or maintained).
- Step-by-Step Procedure (Based on R.R.O. 903 Section 21.1(1), (5), and (9)):
 - Well Tag Removal: Not Applicable – there is no applicable well tag.
 - Equipment and Debris Removal: Remove all equipment (e.g., piping) and debris (e.g., collapsed casing sections, foreign materials) from the well bore (21.1(1) Para 2). Make reasonable efforts to remove collapsed casing if present.
 - Well Pit Handling: If a well pit is present, Section 21.1 applies to the well pit as well as the well bore (21.1(9)). Removal of below-ground concrete structures, foundations, and slabs associated with the well pit shall be performed to a depth adequate to accommodate surface sealing measures (Step 8), unless removal would destabilize remaining structures (21.1(1) Para 7, 21.1(9)). The well pit volume shall be filled as part of the overall abandonment process, integrating the requirements for plugging the well bore and surface sealing. The large diameter well procedure (Step 4 below) should be applied within the well pit area extending downwards.
 - Plugging the Well Bore and Annular Space: Plug the well bore and any annular space with a continuous column of abandonment barrier material(s) from the bottom of the well upward to approximately two metres (2 m) below the ground surface (21.1(1) Para 3).
- Crucially, for wells greater than 65.0 cm in diameter (typical of dug wells), the following specific sequential steps from R.R.O. 903 Section 21.1(5) must be followed:
 - Place clean sand or pea gravel from the bottom of the well to the top of the deepest water producing zone or the top of the well screen, whichever is deeper (21.1(5) Para 1). Clean sand or gravel may also be placed adjacent to water producing zones/fractures to minimize sealant loss (21.1(4)).
 - Place at least 0.1 metres (10 cm) of bentonite chips or pellets over the sand or pea gravel placed in Step 4a (21.1(5) Para 2). Ensure chips/pellets are screened and placed per manufacturer's specifications (21.1(3) Para 7 vii).

- If the water level can be drawn down to the top of the bentonite chips or pellets:
 - Draw down the water level to the top of the bentonite chips or pellets (21.1(5) Para 3 i).
 - Place at least 0.3 metres (30 cm) of a bentonite slurry (clean water and at least 20% bentonite solids, compatible with water quality) over the bentonite chips or pellets (21.1(5) Para 3 ii). Place slurry using a tremie pipe, keeping the pipe immersed in the rising accumulation (21.1(3) Para 8).
 - Drop clean gravel, sand, silt, or clay over the bentonite slurry to fill the remainder of the well bore upward to approximately two metres below ground surface, while maintaining at least 0.3 metres of the bentonite slurry above the rising accumulation of gravel, sand, silt, or clay (21.1(5) Para 3 iii).
 - If the water level cannot be drawn down to the top of the bentonite chips or pellets (e.g., well refills too quickly):
 - Fill the remainder of the well bore upward to approximately two metres below ground surface with an abandonment barrier selected from the list in Section 5.2 (21.1(5) Para 4).
 - This abandonment barrier may be interspersed with clean sand or pea gravel placed in each water producing zone of the well (21.1(5) Para 4). Wet barriers must be placed using a tremie pipe (21.1(3) Para 8).
 - **Casing/Screen Handling During Plugging:** If well casing or screen was not removed in Step 2, remove it where reasonably possible during the plugging process (Step 4), keeping the bottom of the casing immersed in the rising accumulation of the abandonment barrier until the required level (approx. 2m bgs) is reached (21.1(1) Para 4).
 - **Casing/Screen Removal After Plugging:** If casing or screen was not removed in Step 2 or Step 5, remove it where reasonably possible to a minimum depth of two metres (2 m) below the ground surface after plugging is complete (21.1(1) Para 5).
 - **Setting Time (if cement used):** If the abandonment barrier placed in Step 4 contains cement (e.g., cement-bentonite grout, concrete slurry), allow it to set until firm according to the manufacturer's specifications or for 12 hours, whichever is longer (21.1(1) Para 6). If, after setting, the material has settled or subsided, top it up to approximately two metres (2 m) below the ground surface (21.1(1) Para 6).
 - **Removal of Near-Surface Structures:** Ensure below-ground concrete structures, foundations, and slabs (including well pit structures not previously removed in Step 3) are removed to a depth adequate to accommodate the surface sealing measures described in Step 8, unless removal would destabilize remaining structures (21.1(1) Para 7, 21.1(9)).
 - **Surface Sealing:** Seal the well opening at the ground surface (21.1(1) Para 8). This involves:
 - Placing between 50 and 150 centimetres (0.5 - 1.5 m) in vertical thickness of bentonite chips, pellets, granules, or powder in the well opening, placed in accordance with the manufacturer's specifications (21.1(1) Para 8 i).
-

- Filling the remaining well opening from the top of the bentonite seal to the ground surface with soil cover, or other material that is more in keeping with the surface material immediately adjacent to the well opening (21.1(1) Para 8 ii). This prevents inadvertent or unauthorized access.
- Site Stabilization: Stabilize the disturbed area to prevent erosion (21.1(1) Para 9).
- Alternative Abandonment Method (Excavation):
 - As an alternative to the steps above, the well may be abandoned by excavation of the entire well in the course of work carried out for another purpose (21.1(8)). If this method is used, paragraphs 2 to 9 of subsection 21.1(1) and subsections 21.1(3) to (7) do not apply. The well record must still be completed and submitted.

8.2 Cistern

Complete Removal

- a) Safely demolish and remove the entire cistern structure (walls, floor, roof/crown).
- b) Break down excavated brick and concrete into manageable sizes for hauling.
- c) Load and transport demolition debris to an approved receiving facility (e.g., construction and demolition waste landfill, recycling facility) in accordance with the Waste Management Plan.
- d) Obtain and retain documentation (e.g., manifests, weigh tickets) for all disposed materials.

Backfilling and Compactions: After removal, backfill the excavation using approved backfill material as directed by the Project Geotechnical Professional. Place backfill material in lifts and compact each lift to the required density specified by the Project Geotechnical Professional. Use appropriate compaction equipment and techniques. Perform density testing as required by the Project Geotechnical Professional to confirm adequate compaction.

9. QUALITY CONTROL

- The Contractor shall ensure strict adherence to all requirements of R.R.O. 903 and this specification.
 - The well contractor shall ensure that:
 - All work strictly adheres to the requirements of R.R.O. 1990, Regulation 903 (WELLS) and this specification.
 - Abandonment barrier materials are selected and placed correctly according to regulatory requirements, manufacturer specifications, and accepted industry practice.
 - Slurry mixtures are properly mixed to achieve the required consistency and solids content.
 - Bentonite chips/pellets are placed according to manufacturer's specifications for hydration/placement depth.
-

- Sufficient abandonment barrier is placed to form a continuous column from the bottom of the well to approximately two metres below ground surface, preventing the movement of water, contaminants, or other material between subsurface formations or between a subsurface formation and the top of the abandonment barrier (R.R.O. 903 21.1(1) Para 3).
- For wells >65 cm diameter, the specific placement sequence described in R.R.O. 903 21.1(5) is followed.
- Near-surface structures are removed to the required depth.
- The surface seal uses the correct thickness of bentonite material as specified (50-150 cm).
- Sealing materials for >65 cm wells provide appropriate structural strength at the surface (R.R.O. 903 21.1(6)).

10. WASTE DISPOSAL

- Waste disposal must comply with Ontario Ministry of the Environment, Conservation and Parks (MECP) regulations and any local waste disposal facility requirements.

11. SITE RESTORATION

- The disturbed area around the former well and cistern location shall be graded and stabilized to prevent erosion (R.R.O. 903 21.1(1) Para 9).
- Restore the site to a condition as agreed upon with the City of Mississauga or as it existed prior to abandonment activities, to the extent practicable.
- Notify the Environmental Engineer of the source site for any imported soil (as defined under O. Reg. 153/04), for testing by the Environmental Engineer under separate contract prior to importation.

12. DOCUMENTATION AND REPORTING

- The Contractor shall complete a well record (Form 9 supplied by the MECP) for the well abandonment in accordance with R.R.O. 903 Section 16.5(1)(a). The well record must accurately detail the abandonment procedures, materials used (including quantities), depths of different materials/layers placed (especially for > 65 cm wells), casing/screen handling, well tag disposition, and any issues encountered. Field notes and logs of materials encountered during any initial clearing/preparation should support the well record (R.R.O. 903 12.1(1)).
 - Deliver a copy of the completed well record to the owner of the land on which the well is situated within 14 days after the date on which the well construction equipment is removed from the site (R.R.O. 903 16.5(1)(b)(i)).
 - Forward a copy of the completed well record, and any well tag that was removed from the well, to the Director (MECP) within 30 days after the date on which the well construction equipment is removed from the site (R.R.O. 903 16.5(1)(c)(i)).
 - Retain a copy of the well record for a minimum of two years (implied by 16.3(1)(d) which applies to construction records; good practice for abandonment).
-

- Maintain a daily log of all decommissioning activities, including personnel on site, weather, work performed, materials used, quantities of waste generated, observations, and any issues encountered.
- Record details of waste disposal, including dates, quantities, types of waste, transporter information, and disposal facility name and location. Retain copies of all waste manifests, weigh tickets, and disposal receipts.
- Take progress photographs documenting key stages of the work (e.g., pre-excavation, excavation, dewatering/cleaning, cistern condition, filling/removal, backfilling, final surface restoration).
- Submit daily logs and progress reports as required by the Professional.
- Within 20 business days of completing the field work, submit a final Decommissioning Report to the City of Mississauga. The final report shall include:
 - Summary of work performed and dates of field activities.
 - Details of the decommissioning method implemented (filling or removal).
 - Quantities and types of materials used (e.g., fill material).
 - Documentation of waste disposal (manifests, receipts).
 - Summary of any issues encountered and corrective actions taken.
 - Copies of permits and approvals.
 - Photographic log.
 - Confirmation that the work was completed in accordance with the approved Work Plan and this specification.

13. HEALTH AND SAFETY

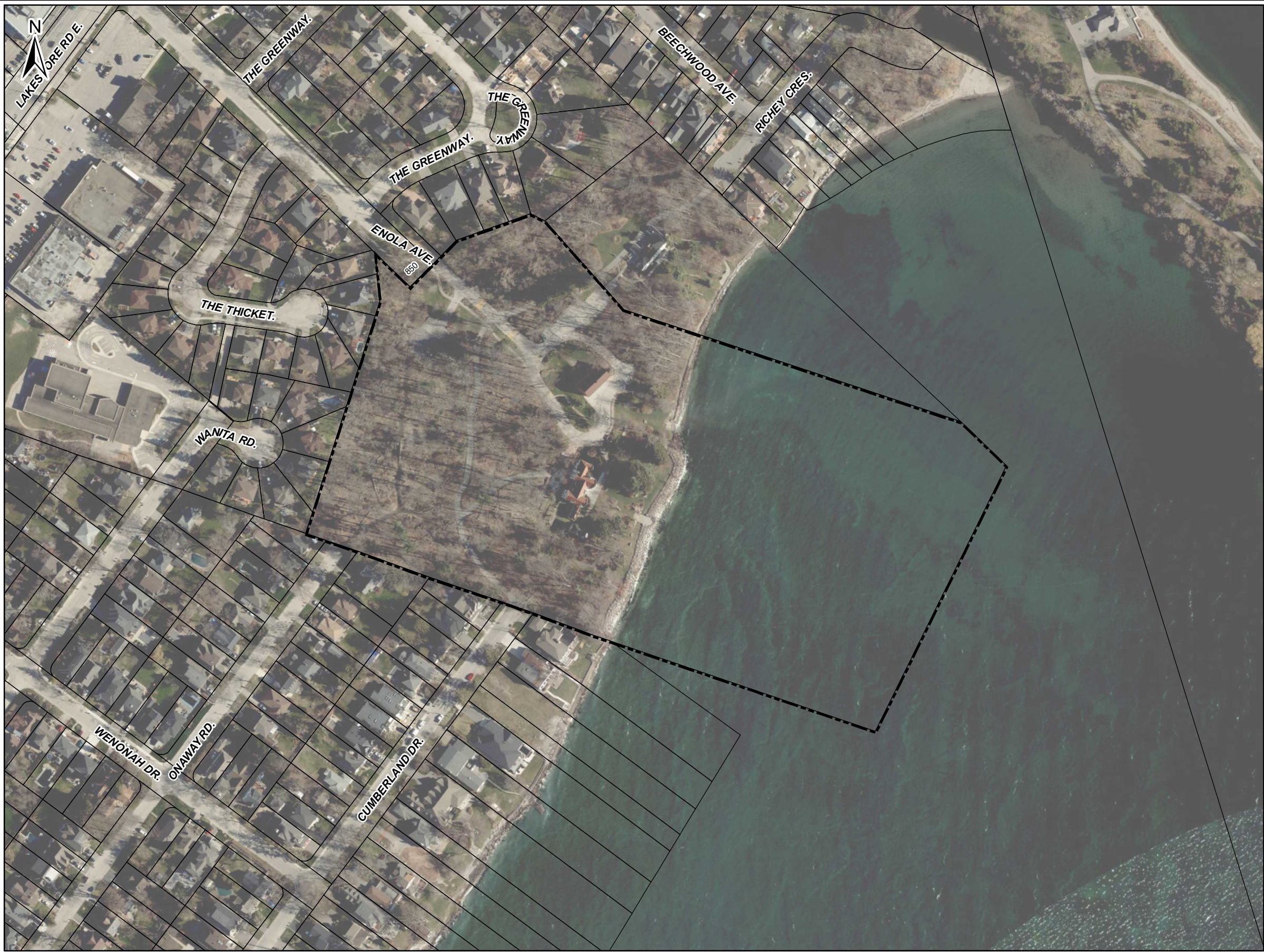
All work shall be performed in accordance with the Health and Safety requirements in the City of Mississauga bid / contracts documents, including but not limited to:

- All work shall be performed in compliance with the latest version of the Occupational Health and Safety Act (Ontario) and its regulations.
 - The Contractor shall develop and implement a site-specific health and safety plan covering all aspects of the abandonment work, including but not limited to:
 - Excavation safety (if applicable).
 - Confined space entry (if accessing the well bore directly is necessary and safe).
 - Handling of materials (bentonite, cement, etc.).
 - Potential hazards from the well (e.g., unstable ground, contaminated water, gases per 21(6)). * Site-specific hazards (Section 2.0).
 - All personnel shall be trained on the site-specific safety plan and required procedures.
-

14. REFERENCES

- Ontario Water Resources Act, R.R.O. 1990, Regulation 903 (WELLS)
- Occupational Health and Safety Act, R.S.O. 1990, c. O.1

FIGURES



↓
INFERRED LOCAL
GROUNDWATER
FLOW DIRECTION

LEGEND

- SITE
- LOT LINES

NOTES:
1. THIS DRAWING IS FOR GENERAL INFORMATION ONLY.
LOT BOUNDARIES AND FEATURES ARE APPROXIMATE.
2. THE DATE OF AERIAL PHOTO IS 2021.

SCALE: 1:2,500 (approx.)

Adamson Estate Property - 850 Enola Ave,
Mississauga, ON
Stephenson Engineering (a company of Salas O'Brien)

REVISION No.	DATE	PROJECT No.
A	May, 2025	20550-24

Figure 1
Site Location Map



APPENDIX A

SITE PHOTOGRAPHS



Photograph 1: General Access to the Well and Cistern Area



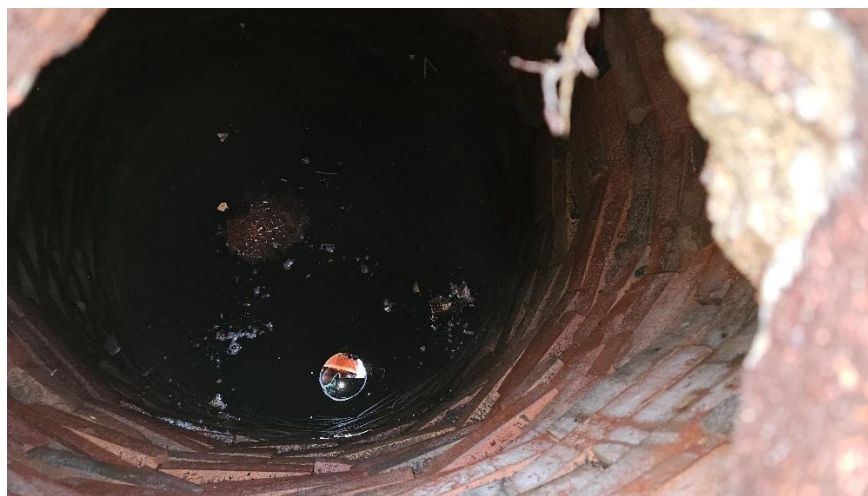
Photograph 2: General View of Well Area



Photograph 3: General View of Cistern Area



Photograph 4: Well Opening



Photograph 5: Well Interior



Photograph 6: Cistern Exterior Surface



Photograph 7: Cistern Interior

APPENDIX B

IRRIGATION LAYOUT PLAN

APPENDIX C

WATER SAMPLE ANALYTICAL RESULTS

Your Project #: 20550
Your C.O.C. #: 1043796-01-01

Attention: Jeff Muir

Keystone Environmental Ontario Ltd.
700 – 6733 Mississauga Road
Mississauga, ON
CANADA L5N 6J5

Report Date: 2025/05/08
Report #: R8534567
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C548490

Received: 2025/04/30, 18:18

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Biochemical Oxygen Demand (BOD)	2	2025/05/01	2025/05/06	CAM SOP-00427	SM 24 5210B m
Total Residual Chlorine	2	2025/05/01	2025/05/01	CAM SOP 00425	SM 24 4500-CL G m
Chromium (VI) in Water	2	N/A	2025/05/03	CAM SOP-00436	EPA 7199 m
Total Cyanide	2	2025/05/01	2025/05/01	CAM SOP-00457	OMOE E3015 5 m
Petroleum Hydro. CCME F1 & BTEX in Water	2	N/A	2025/05/08	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1)	2	2025/05/05	2025/05/06	CAM SOP-00316	CCME PHC-CWS m
Mercury in Water by CVAA	1	2025/05/05	2025/05/05	CAM SOP-00453	EPA 7470A m
Mercury in Water by CVAA	1	2025/05/07	2025/05/07	CAM SOP-00453	EPA 7470A m
Total Metals Analysis by ICPMS	2	2025/05/06	2025/05/07	CAM SOP-00447	EPA 6020B m
E.coli, (CFU/100mL)	2	N/A	2025/05/01	CAM SOP-00552	SM9222B, MECP E3371
PAH Compounds in Water by GC/MS (SIM)	2	2025/05/05	2025/05/06	CAM SOP-00318	EPA 8270E
Polychlorinated Biphenyl in Water	2	2025/05/06	2025/05/06	CAM SOP-00309	EPA 8082A m
Phenols (4AAP)	2	N/A	2025/05/06	CAM SOP-00444	OMOE E3179 m
pH	2	2025/05/01	2025/05/02	CAM SOP-00413	SM 24th-4500H+ B
Total PAHs: Barrie/Mississauga Sewer Use (2)	2	N/A	2025/05/06	CAM SOP - 00301	
Total Suspended Solids	2	2025/05/05	2025/05/07	CAM SOP-00428	SM 24 2540D m
Volatile Organic Compounds in Water	2	N/A	2025/05/04	CAM SOP-00228	EPA 8260D

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the



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BUREAU VERITAS JOB #: C548490

Received: 2025/04/30, 18:18

customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

(2) Total PAHs include only those PAHs specified in the sewer use by-law.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Kudrat Bajwa, B.Sc., Project Manager

Email: Kudrat.Bajwa@bureauveritas.com

Phone# (905)817-5755

=====

This report has been generated and distributed using a secure automated process.

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Total Cover Pages : 2

Page 2 of 22

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



**BUREAU
VERITAS**

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

MISSISSAUGA STORM SEWER BYLAW (46-2022)

Bureau Veritas ID				AQKL28			AQKL28		
Sampling Date				2025/04/30 03:00			2025/04/30 03:00		
COC Number				1043796-01-01			1043796-01-01		
	UNITS	Criteria	Criteria-2	W-1	RDL	QC Batch	W-1 Lab-Dup	RDL	QC Batch
Inorganics									
Total BOD	mg/L	15	-	<2	2	9920065			
Total Chlorine	mg/L	1.0	-	<0.1	0.1	9920180	<0.1	0.1	9920180
pH	pH	6:9	-	8.18		9920606			
Phenols-4AAP	mg/L	0.008	-	<0.0010	0.0010	9923394			
Total Suspended Solids	mg/L	15	-	<10	10	9922416			
Total Cyanide (CN)	mg/L	0.02	-	<0.0050	0.0050	9920299			
Metals									
Chromium (VI)	ug/L	40	140	<0.50	0.50	9921706			
Mercury (Hg)	mg/L	0.0004	0.00029	<0.00010	0.00010	9922133			
Total Aluminum (Al)	ug/L	1000	-	<4.9	4.9	9923483			
Total Arsenic (As)	ug/L	20	1900	1.3	1.0	9923483			
Total Cadmium (Cd)	ug/L	8	2.7	<0.090	0.090	9923483			
Total Chromium (Cr)	ug/L	80	810	<5.0	5.0	9923483			
Total Copper (Cu)	ug/L	40	87	<0.90	0.90	9923483			
Total Lead (Pb)	ug/L	120	25	<0.50	0.50	9923483			
Total Manganese (Mn)	ug/L	2000	-	17	2.0	9923483			
Total Nickel (Ni)	ug/L	80	490	<1.0	1.0	9923483			
Total Phosphorus (P)	ug/L	400	-	120	100	9923483			
Total Selenium (Se)	ug/L	20	63	<2.0	2.0	9923483			
Total Silver (Ag)	ug/L	120	1.5	<0.090	0.090	9923483			
Total Zinc (Zn)	ug/L	200	1100	7.3	5.0	9923483			
Calculated Parameters									
Total PAHs	ug/L	2	-	<0.20	0.20	9919766			
Polyaromatic Hydrocarbons									
Acenaphthene	ug/L	-	600	<0.050	0.050	9922362			
Acenaphthylene	ug/L	-	1.8	<0.050	0.050	9922362			
Anthracene	ug/L	-	2.4	<0.050	0.050	9922362			
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									
Criteria: City of Mississauga Storm Sewer Use By-Law 0046-2022									
Criteria-2: Ontario Reg. 153/04 (Amended April 15, 2011)									
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition									
Non- Potable Ground Water - All Types of Property Uses - Coarse Textured Soil									



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COC Number				1043796-01-01			1043796-01-01		
	UNITS	Criteria	Criteria-2	W-1	RDL	QC Batch	W-1 Lab-Dup	RDL	QC Batch
Benzo(a)anthracene	ug/L	-	4.7	<0.050	0.050	9922362			
Benzo(a)pyrene	ug/L	-	0.81	<0.0090	0.0090	9922362			
Benzo(g,h,i)perylene	ug/L	-	0.2	<0.050	0.050	9922362			
Benzo(k)fluoranthene	ug/L	-	0.4	<0.050	0.050	9922362			
Chrysene	ug/L	-	1	<0.050	0.050	9922362			
Dibenzo(a,h)anthracene	ug/L	-	0.52	<0.050	0.050	9922362			
Fluoranthene	ug/L	-	130	<0.050	0.050	9922362			
Fluorene	ug/L	-	400	<0.050	0.050	9922362			
Indeno(1,2,3-cd)pyrene	ug/L	-	0.2	<0.050	0.050	9922362			
1-Methylnaphthalene	ug/L	-	1800	<0.050	0.050	9922362			
2-Methylnaphthalene	ug/L	-	1800	<0.050	0.050	9922362			
Naphthalene	ug/L	-	1400	<0.050	0.050	9922362			
Phenanthrene	ug/L	-	580	<0.030	0.030	9922362			
Pyrene	ug/L	-	68	<0.050	0.050	9922362			
Benzo(b)fluoranthene	ug/L	-	0.75	<0.030	0.030	9922362			
Volatile Organics									
Benzene	ug/L	2	44	<0.20	0.20	9920930	<0.20	0.20	9920930
1,2-Dichlorobenzene	ug/L	5.6	4600	<0.40	0.40	9920930	<0.40	0.40	9920930
1,4-Dichlorobenzene	ug/L	6.8	8	<0.40	0.40	9920930	<0.40	0.40	9920930
Ethylbenzene	ug/L	2	2300	<0.20	0.20	9920930	<0.20	0.20	9920930
Methylene Chloride(Dichloromethane)	ug/L	5.2	610	<2.0	2.0	9920930	<2.0	2.0	9920930
1,1,1,2-Tetrachloroethane	ug/L	-	3.3	<0.50	0.50	9920930	<0.50	0.50	9920930
1,1,2,2-Tetrachloroethane	ug/L	17	3.2	<0.40	0.40	9920930	<0.40	0.40	9920930
Tetrachloroethylene	ug/L	4.4	1.6	<0.20	0.20	9920930	<0.20	0.20	9920930
Toluene	ug/L	2	18000	<0.20	0.20	9920930	<0.20	0.20	9920930
Trichloroethylene	ug/L	7.6	1.6	<0.20	0.20	9920930	<0.20	0.20	9920930
p+m-Xylene	ug/L	-	-	<0.20	0.20	9920930	<0.20	0.20	9920930
o-Xylene	ug/L	-	-	<0.20	0.20	9920930	<0.20	0.20	9920930
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									
Criteria: City of Mississauga Storm Sewer Use By-Law 0046-2022									
Criteria-2: Ontario Reg. 153/04 (Amended April 15, 2011)									
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition									
Non- Potable Ground Water - All Types of Property Uses - Coarse Textured Soil									



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VERITAS

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Keystone Environmental Ontario Ltd.

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COC Number				1043796-01-01			1043796-01-01		
	UNITS	Criteria	Criteria-2	W-1	RDL	QC Batch	W-1 Lab-Dup	RDL	QC Batch
Total Xylenes	ug/L	4.4	4200	<0.20	0.20	9920930	<0.20	0.20	9920930
PCBs									
Total PCB	ug/L	0.4	7.8	<0.05	0.05	9923194			
Microbiological									
Escherichia coli	CFU/100mL	200	-	<10	10	9920446			
Surrogate Recovery (%)									
D10-Anthracene	%	-	-	91		9922362			
D14-Terphenyl (FS)	%	-	-	83		9922362			
D8-Acenaphthylene	%	-	-	109		9922362			
Decachlorobiphenyl	%	-	-	101		9923194			
4-Bromofluorobenzene	%	-	-	95		9920930	96		9920930
D4-1,2-Dichloroethane	%	-	-	111		9920930	115		9920930
D8-Toluene	%	-	-	102		9920930	100		9920930
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									
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VERITAS

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Bureau Veritas ID				AQKL29			AQKL29		
Sampling Date				2025/04/30 04:30			2025/04/30 04:30		
COC Number				1043796-01-01			1043796-01-01		
	UNITS	Criteria	Criteria-2	C-1	RDL	QC Batch	C-1 Lab-Dup	RDL	QC Batch
Inorganics									
Total BOD	mg/L	15	-	<2	2	9920065	<2	2	9920065
Total Chlorine	mg/L	1.0	-	<0.1	0.1	9920180			
pH	pH	6:9	-	8.09		9920606			
Phenols-4AAP	mg/L	0.008	-	<0.0010	0.0010	9923394			
Total Suspended Solids	mg/L	15	-	410	10	9922416			
Total Cyanide (CN)	mg/L	0.02	-	<0.0050	0.0050	9920351			
Metals									
Chromium (VI)	ug/L	40	140	<0.50	0.50	9921706			
Mercury (Hg)	mg/L	0.0004	0.00029	0.00027	0.00010	9923818			
Total Aluminum (Al)	ug/L	1000	-	1200	4.9	9923483			
Total Arsenic (As)	ug/L	20	1900	1.2	1.0	9923483			
Total Cadmium (Cd)	ug/L	8	2.7	0.16	0.090	9923483			
Total Chromium (Cr)	ug/L	80	810	<5.0	5.0	9923483			
Total Copper (Cu)	ug/L	40	87	40	0.90	9923483			
Total Lead (Pb)	ug/L	120	25	8.9	0.50	9923483			
Total Manganese (Mn)	ug/L	2000	-	59	2.0	9923483			
Total Nickel (Ni)	ug/L	80	490	2.9	1.0	9923483			
Total Phosphorus (P)	ug/L	400	-	370	100	9923483			
Total Selenium (Se)	ug/L	20	63	<2.0	2.0	9923483			
Total Silver (Ag)	ug/L	120	1.5	3.4	0.090	9923483			
Total Zinc (Zn)	ug/L	200	1100	50	5.0	9923483			
Calculated Parameters									
Total PAHs	ug/L	2	-	<0.20	0.20	9919766			
Polyaromatic Hydrocarbons									
Acenaphthene	ug/L	-	600	<0.050	0.050	9922362	<0.050	0.050	9922362
Acenaphthylene	ug/L	-	1.8	<0.050	0.050	9922362	<0.050	0.050	9922362
Anthracene	ug/L	-	2.4	<0.050	0.050	9922362	<0.050	0.050	9922362
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									
Criteria: City of Mississauga Storm Sewer Use By-Law 0046-2022									
Criteria-2: Ontario Reg. 153/04 (Amended April 15, 2011)									
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition									
Non- Potable Ground Water - All Types of Property Uses - Coarse Textured Soil									



BUREAU
VERITAS

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

MISSISSAUGA STORM SEWER BYLAW (46-2022)

Bureau Veritas ID				AQKL29			AQKL29		
Sampling Date				2025/04/30 04:30			2025/04/30 04:30		
COC Number				1043796-01-01			1043796-01-01		
	UNITS	Criteria	Criteria-2	C-1	RDL	QC Batch	C-1 Lab-Dup	RDL	QC Batch
Benzo(a)anthracene	ug/L	-	4.7	<0.050	0.050	9922362	<0.050	0.050	9922362
Benzo(a)pyrene	ug/L	-	0.81	<0.0090	0.0090	9922362	<0.0090	0.0090	9922362
Benzo(g,h,i)perylene	ug/L	-	0.2	<0.050	0.050	9922362	<0.050	0.050	9922362
Benzo(k)fluoranthene	ug/L	-	0.4	<0.050	0.050	9922362	<0.050	0.050	9922362
Chrysene	ug/L	-	1	<0.050	0.050	9922362	<0.050	0.050	9922362
Dibenzo(a,h)anthracene	ug/L	-	0.52	<0.050	0.050	9922362	<0.050	0.050	9922362
Fluoranthene	ug/L	-	130	<0.050	0.050	9922362	<0.050	0.050	9922362
Fluorene	ug/L	-	400	<0.050	0.050	9922362	<0.050	0.050	9922362
Indeno(1,2,3-cd)pyrene	ug/L	-	0.2	<0.050	0.050	9922362	<0.050	0.050	9922362
1-Methylnaphthalene	ug/L	-	1800	<0.050	0.050	9922362	<0.050	0.050	9922362
2-Methylnaphthalene	ug/L	-	1800	<0.050	0.050	9922362	<0.050	0.050	9922362
Naphthalene	ug/L	-	1400	<0.050	0.050	9922362	<0.050	0.050	9922362
Phenanthrene	ug/L	-	580	<0.030	0.030	9922362	<0.030	0.030	9922362
Pyrene	ug/L	-	68	<0.050	0.050	9922362	<0.050	0.050	9922362
Benzo(b)fluoranthene	ug/L	-	0.75	<0.030	0.030	9922362	<0.030	0.030	9922362
Volatile Organics									
Benzene	ug/L	2	44	<0.20	0.20	9920930			
1,2-Dichlorobenzene	ug/L	5.6	4600	<0.40	0.40	9920930			
1,4-Dichlorobenzene	ug/L	6.8	8	<0.40	0.40	9920930			
Ethylbenzene	ug/L	2	2300	<0.20	0.20	9920930			
Methylene Chloride(Dichloromethane)	ug/L	5.2	610	<2.0	2.0	9920930			
1,1,1,2-Tetrachloroethane	ug/L	-	3.3	<0.50	0.50	9920930			
1,1,2,2-Tetrachloroethane	ug/L	17	3.2	<0.40	0.40	9920930			
Tetrachloroethylene	ug/L	4.4	1.6	<0.20	0.20	9920930			
Toluene	ug/L	2	18000	<0.20	0.20	9920930			
Trichloroethylene	ug/L	7.6	1.6	<0.20	0.20	9920930			
p+m-Xylene	ug/L	-	-	<0.20	0.20	9920930			
o-Xylene	ug/L	-	-	<0.20	0.20	9920930			
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									
Criteria: City of Mississauga Storm Sewer Use By-Law 0046-2022									
Criteria-2: Ontario Reg. 153/04 (Amended April 15, 2011)									
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition									
Non- Potable Ground Water - All Types of Property Uses - Coarse Textured Soil									



BUREAU
VERITAS

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

MISSISSAUGA STORM SEWER BYLAW (46-2022)

Bureau Veritas ID				AQKL29			AQKL29		
Sampling Date				2025/04/30 04:30			2025/04/30 04:30		
COC Number				1043796-01-01			1043796-01-01		
	UNITS	Criteria	Criteria-2	C-1	RDL	QC Batch	C-1 Lab-Dup	RDL	QC Batch
Total Xylenes	ug/L	4.4	4200	<0.20	0.20	9920930			
PCBs									
Total PCB	ug/L	0.4	7.8	<0.05	0.05	9923194			
Microbiological									
Escherichia coli	CFU/100mL	200	-	<10	10	9920446			
Surrogate Recovery (%)									
D10-Anthracene	%	-	-	91		9922362	86		9922362
D14-Terphenyl (FS)	%	-	-	82		9922362	77		9922362
D8-Acenaphthylene	%	-	-	107		9922362	101		9922362
Decachlorobiphenyl	%	-	-	94		9923194			
4-Bromofluorobenzene	%	-	-	95		9920930			
D4-1,2-Dichloroethane	%	-	-	115		9920930			
D8-Toluene	%	-	-	102		9920930			
No Fill	No Exceedance								
Grey	Exceeds 1 criteria policy/level								
Black	Exceeds both criteria/levels								
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									
Criteria: City of Mississauga Storm Sewer Use By-Law 0046-2022									
Criteria-2: Ontario Reg. 153/04 (Amended April 15, 2011)									
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition									
Non- Potable Ground Water - All Types of Property Uses - Coarse Textured Soil									

BUREAU
VERITAS

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

O.REG 153 PHCS, BTEX/F1-F4 (WATER)

Bureau Veritas ID			AQKL28			AQKL28			AQKL29		
Sampling Date			2025/04/30 03:00			2025/04/30 03:00			2025/04/30 04:30		
COC Number			1043796-01-01			1043796-01-01			1043796-01-01		
	UNITS	Criteria	W-1	RDL	QC Batch	W-1 Lab-Dup	RDL	QC Batch	C-1	RDL	QC Batch
BTEX & F1 Hydrocarbons											
F1 (C6-C10)	ug/L	750	<25	25	9924502	<25	25	9924502	<25	25	9924502
F1 (C6-C10) - BTEX	ug/L	750	<25	25	9924502	<25	25	9924502	<25	25	9924502
F2-F4 Hydrocarbons											
F2 (C10-C16 Hydrocarbons)	ug/L	150	<90	90	9922397				<90	90	9922397
F3 (C16-C34 Hydrocarbons)	ug/L	500	<200	200	9922397				<200	200	9922397
F4 (C34-C50 Hydrocarbons)	ug/L	500	<200	200	9922397				<200	200	9922397
Reached Baseline at C50	ug/L	-	Yes		9922397				Yes		9922397
Surrogate Recovery (%)											
1,4-Difluorobenzene	%	-	109		9924502	108		9924502	108		9924502
4-Bromofluorobenzene	%	-	111		9924502	106		9924502	104		9924502
D10-o-Xylene	%	-	114		9924502	113		9924502	110		9924502
D4-1,2-Dichloroethane	%	-	107		9924502	108		9924502	106		9924502
o-Terphenyl	%	-	98		9922397				100		9922397
No Fill	No Exceedance										
Grey	Exceeds 1 criteria policy/level										
Black	Exceeds both criteria/levels										
RDL = Reportable Detection Limit											
QC Batch = Quality Control Batch											
Lab-Dup = Laboratory Initiated Duplicate											
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)											
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition											
Non- Potable Ground Water - All Types of Property Uses - Coarse Textured Soil											



BUREAU
VERITAS

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

O.REG 153 PHCS, BTEX/F1-F4 (WATER)

Bureau Veritas ID			AQKL29		
Sampling Date			2025/04/30 04:30		
COC Number			1043796-01-01		
	UNITS	Criteria	C-1 Lab-Dup	RDL	QC Batch
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/L	150	<90	90	9922397
F3 (C16-C34 Hydrocarbons)	ug/L	500	<200	200	9922397
F4 (C34-C50 Hydrocarbons)	ug/L	500	<200	200	9922397
Reached Baseline at C50	ug/L	-	Yes		9922397
Surrogate Recovery (%)					
o-Terphenyl	%	-	97		9922397
No Fill	No Exceedance				
Grey	Exceeds 1 criteria policy/level				
Black	Exceeds both criteria/levels				
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					
Lab-Dup = Laboratory Initiated Duplicate					
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)					
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition					
Non- Potable Ground Water - All Types of Property Uses - Coarse Textured Soil					



**BUREAU
VERITAS**

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

TEST SUMMARY

Bureau Veritas ID: AQKL28

Sample ID: W-1

Matrix: Water

Collected: 2025/04/30

Shipped:

Received: 2025/04/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Biochemical Oxygen Demand (BOD)	DO	9920065	2025/05/01	2025/05/06	Nusrat Naz
Total Residual Chlorine	SPEC	9920180	2025/05/01	2025/05/01	Gurpartee Kaur
Chromium (VI) in Water	IC	9921706	N/A	2025/05/03	Rupinder Sihota
Total Cyanide	SKAL/CN	9920299	2025/05/01	2025/05/01	Jency Sara Johnson
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	9924502	N/A	2025/05/08	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9922397	2025/05/05	2025/05/06	Mohammed Abdul Nafay Shueb
Mercury in Water by CVAA	CV/AA	9922133	2025/05/05	2025/05/05	Maitri PATIL
Total Metals Analysis by ICPMS	ICP/MS	9923483	2025/05/06	2025/05/07	Thuy Linh Nguyen
E.coli, (CFU/100mL)	PL	9920446	N/A	2025/05/01	Jessica (Ya Ping) Qiang
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9922362	2025/05/05	2025/05/06	Mitesh Raj
Polychlorinated Biphenyl in Water	GC/ECD	9923194	2025/05/06	2025/05/06	Debashis Saha
Phenols (4AAP)	TECH/PHEN	9923394	N/A	2025/05/06	Shivani Shivani
pH	AT	9920606	2025/05/01	2025/05/02	Nachiketa Gohil
Total PAHs: Barrie/Mississauga Sewer Use	CALC	9919766	N/A	2025/05/06	Automated Statchk
Total Suspended Solids	BAL	9922416	2025/05/05	2025/05/07	Madhav Somani
Volatile Organic Compounds in Water	GC/MS	9920930	N/A	2025/05/04	Narayan Ghimire

Bureau Veritas ID: AQKL28 Dup

Sample ID: W-1

Matrix: Water

Collected: 2025/04/30

Shipped:

Received: 2025/04/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Residual Chlorine	SPEC	9920180	2025/05/01	2025/05/01	Gurpartee Kaur
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	9924502	N/A	2025/05/08	Georgeta Rusu
Volatile Organic Compounds in Water	GC/MS	9920930	N/A	2025/05/04	Narayan Ghimire

Bureau Veritas ID: AQKL29

Sample ID: C-1

Matrix: Water

Collected: 2025/04/30

Shipped:

Received: 2025/04/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Biochemical Oxygen Demand (BOD)	DO	9920065	2025/05/01	2025/05/06	Nusrat Naz
Total Residual Chlorine	SPEC	9920180	2025/05/01	2025/05/01	Gurpartee Kaur
Chromium (VI) in Water	IC	9921706	N/A	2025/05/03	Rupinder Sihota
Total Cyanide	SKAL/CN	9920351	2025/05/01	2025/05/01	Jency Sara Johnson
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	9924502	N/A	2025/05/08	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9922397	2025/05/05	2025/05/06	Mohammed Abdul Nafay Shueb
Mercury in Water by CVAA	CV/AA	9923818	2025/05/07	2025/05/07	Maitri PATIL
Total Metals Analysis by ICPMS	ICP/MS	9923483	2025/05/06	2025/05/07	Thuy Linh Nguyen
E.coli, (CFU/100mL)	PL	9920446	N/A	2025/05/01	Jessica (Ya Ping) Qiang
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9922362	2025/05/05	2025/05/06	Mitesh Raj
Polychlorinated Biphenyl in Water	GC/ECD	9923194	2025/05/06	2025/05/06	Debashis Saha
Phenols (4AAP)	TECH/PHEN	9923394	N/A	2025/05/06	Shivani Shivani
pH	AT	9920606	2025/05/01	2025/05/02	Nachiketa Gohil
Total PAHs: Barrie/Mississauga Sewer Use	CALC	9919766	N/A	2025/05/06	Automated Statchk



BUREAU
VERITAS

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

TEST SUMMARY

Bureau Veritas ID: AQKL29

Sample ID: C-1

Matrix: Water

Collected: 2025/04/30

Shipped:

Received: 2025/04/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Suspended Solids	BAL	9922416	2025/05/05	2025/05/07	Madhav Somani
Volatile Organic Compounds in Water	GC/MS	9920930	N/A	2025/05/04	Narayan Ghimire

Bureau Veritas ID: AQKL29 Dup

Sample ID: C-1

Matrix: Water

Collected: 2025/04/30

Shipped:

Received: 2025/04/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Biochemical Oxygen Demand (BOD)	DO	9920065	2025/05/01	2025/05/06	Nusrat Naz
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9922397	2025/05/05	2025/05/06	Mohammed Abdul Nafay Shoeb
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9922362	2025/05/05	2025/05/06	Mitesh Raj

**BUREAU
VERITAS**

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	5.3°C
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Results relate only to the items tested.

BUREAU
VERITAS

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

QUALITY ASSURANCE REPORT

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

9.1

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9920930	4-Bromofluorobenzene	2025/05/04	95 (5)	70 - 130	95	70 - 130	94	%				
9920930	D4-1,2-Dichloroethane	2025/05/04	108 (5)	70 - 130	111	70 - 130	118	%				
9920930	D8-Toluene	2025/05/04	104 (5)	70 - 130	104	70 - 130	102	%				
9922362	D10-Anthracene	2025/05/06	97	50 - 130	96	50 - 130	93	%				
9922362	D14-Terphenyl (FS)	2025/05/06	94	50 - 130	95	50 - 130	91	%				
9922362	D8-Acenaphthylene	2025/05/06	114	50 - 130	114	50 - 130	110	%				
9922397	o-Terphenyl	2025/05/06	98 (9)	60 - 140	100	60 - 140	96	%				
9923194	Decachlorobiphenyl	2025/05/06	97	60 - 130	98	60 - 130	101	%				
9924502	1,4-Difluorobenzene	2025/05/07	96 (10)	70 - 130	98	70 - 130	107	%				
9924502	4-Bromofluorobenzene	2025/05/07	100 (10)	70 - 130	97	70 - 130	101	%				
9924502	D10-o-Xylene	2025/05/07	100 (10)	70 - 130	113	70 - 130	102	%				
9924502	D4-1,2-Dichloroethane	2025/05/07	96 (10)	70 - 130	93	70 - 130	106	%				
9920065	Total BOD	2025/05/06					<2	mg/L	NC (1)	30	93	80 - 120
9920180	Total Chlorine	2025/05/01	97 (2)	85 - 115	101	85 - 115	<0.1	mg/L	NC (3)	25		
9920299	Total Cyanide (CN)	2025/05/01	92	80 - 120	102	80 - 120	<0.0050	mg/L	NC (4)	20		
9920351	Total Cyanide (CN)	2025/05/01	91	80 - 120	92	80 - 120	<0.0050	mg/L	NC (4)	20		
9920606	pH	2025/05/02			102	98 - 103			0.19 (4)	N/A		
9920930	1,1,1,2-Tetrachloroethane	2025/05/04	109 (5)	70 - 130	104	70 - 130	<0.50	ug/L	NC (6)	30		
9920930	1,1,2,2-Tetrachloroethane	2025/05/04	109 (5)	70 - 130	101	70 - 130	<0.40	ug/L	NC (6)	30		
9920930	1,2-Dichlorobenzene	2025/05/04	110 (5)	70 - 130	100	70 - 130	<0.40	ug/L	NC (6)	30		
9920930	1,4-Dichlorobenzene	2025/05/04	108 (5)	70 - 130	97	70 - 130	<0.40	ug/L	NC (6)	30		
9920930	Benzene	2025/05/04	96 (5)	70 - 130	94	70 - 130	<0.20	ug/L	NC (6)	30		
9920930	Ethylbenzene	2025/05/04	101 (5)	70 - 130	97	70 - 130	<0.20	ug/L	NC (6)	30		
9920930	Methylene Chloride(Dichloromethane)	2025/05/04	98 (5)	70 - 130	97	70 - 130	<2.0	ug/L	NC (6)	30		
9920930	o-Xylene	2025/05/04	104 (5)	70 - 130	99	70 - 130	<0.20	ug/L	NC (6)	30		
9920930	p+m-Xylene	2025/05/04	100 (5)	70 - 130	95	70 - 130	<0.20	ug/L	NC (6)	30		
9920930	Tetrachloroethylene	2025/05/04	89 (5)	70 - 130	85	70 - 130	<0.20	ug/L	NC (6)	30		
9920930	Toluene	2025/05/04	101 (5)	70 - 130	98	70 - 130	<0.20	ug/L	NC (6)	30		
9920930	Total Xylenes	2025/05/04					<0.20	ug/L	NC (6)	30		
9920930	Trichloroethylene	2025/05/04	94 (5)	70 - 130	92	70 - 130	<0.20	ug/L	NC (6)	30		
9921706	Chromium (VI)	2025/05/03	99	80 - 120	103	80 - 120	<0.50	ug/L	NC (4)	20		

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Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

BUREAU
VERITAS

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

QUALITY ASSURANCE REPORT(CONT'D)

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

9.1

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9922133	Mercury (Hg)	2025/05/05	89	75 - 125	98	80 - 120	<0.00010	mg/L	NC (4)	20		
9922362	1-Methylnaphthalene	2025/05/06	128	50 - 130	129	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	2-Methylnaphthalene	2025/05/06	128	50 - 130	130 (7)	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Acenaphthene	2025/05/06	107	50 - 130	109	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Acenaphthylene	2025/05/06	109	50 - 130	111	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Anthracene	2025/05/06	109	50 - 130	109	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Benzo(a)anthracene	2025/05/06	111	50 - 130	112	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Benzo(a)pyrene	2025/05/06	107	50 - 130	109	50 - 130	<0.0090	ug/L	NC (8)	30		
9922362	Benzo(b)fluoranthene	2025/05/06	109	50 - 130	112	50 - 130	<0.030	ug/L	NC (8)	30		
9922362	Benzo(g,h,i)perylene	2025/05/06	105	50 - 130	108	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Benzo(k)fluoranthene	2025/05/06	106	50 - 130	107	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Chrysene	2025/05/06	106	50 - 130	108	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Dibenzo(a,h)anthracene	2025/05/06	107	50 - 130	109	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Fluoranthene	2025/05/06	111	50 - 130	111	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Fluorene	2025/05/06	109	50 - 130	110	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Indeno(1,2,3-cd)pyrene	2025/05/06	106	50 - 130	109	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Naphthalene	2025/05/06	108	50 - 130	110	50 - 130	<0.050	ug/L	NC (8)	30		
9922362	Phenanthrene	2025/05/06	108	50 - 130	108	50 - 130	<0.030	ug/L	NC (8)	30		
9922362	Pyrene	2025/05/06	109	50 - 130	110	50 - 130	<0.050	ug/L	NC (8)	30		
9922397	F2 (C10-C16 Hydrocarbons)	2025/05/06	92 (9)	60 - 140	96	60 - 140	<90	ug/L	NC (8)	30		
9922397	F3 (C16-C34 Hydrocarbons)	2025/05/06	96 (9)	60 - 140	103	60 - 140	<200	ug/L	NC (8)	30		
9922397	F4 (C34-C50 Hydrocarbons)	2025/05/06	88 (9)	60 - 140	95	60 - 140	<200	ug/L	NC (8)	30		
9922416	Total Suspended Solids	2025/05/07			98	80 - 120	<10	mg/L				
9923194	Total PCB	2025/05/06	91	60 - 130	85	60 - 130	<0.05	ug/L	NC (4)	40		
9923394	Phenols-4AAP	2025/05/06	101	80 - 120	99	80 - 120	<0.0010	mg/L	NC (4)	20		
9923483	Total Aluminum (Al)	2025/05/07	102	80 - 120	96	80 - 120	<4.9	ug/L	NC (4)	20		
9923483	Total Arsenic (As)	2025/05/07	103	80 - 120	97	80 - 120	<1.0	ug/L	7.2 (4)	20		
9923483	Total Cadmium (Cd)	2025/05/07	99	80 - 120	95	80 - 120	<0.090	ug/L	NC (4)	20		
9923483	Total Chromium (Cr)	2025/05/07	102	80 - 120	99	80 - 120	<5.0	ug/L	8.1 (4)	20		
9923483	Total Copper (Cu)	2025/05/07	105	80 - 120	99	80 - 120	<0.90	ug/L	10 (4)	20		
9923483	Total Lead (Pb)	2025/05/07	97	80 - 120	97	80 - 120	<0.50	ug/L	NC (4)	20		



**BUREAU
VERITAS**

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

QUALITY ASSURANCE REPORT(CONT'D)

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9923483	Total Manganese (Mn)	2025/05/07	100	80 - 120	96	80 - 120	<2.0	ug/L	NC (4)	20		
9923483	Total Nickel (Ni)	2025/05/07	99	80 - 120	97	80 - 120	<1.0	ug/L	5.9 (4)	20		
9923483	Total Phosphorus (P)	2025/05/07	100	80 - 120	83	80 - 120	<100	ug/L	4.9 (4)	20		
9923483	Total Selenium (Se)	2025/05/07	101	80 - 120	101	80 - 120	<2.0	ug/L	NC (4)	20		
9923483	Total Silver (Ag)	2025/05/07	97	80 - 120	95	80 - 120	<0.090	ug/L	NC (4)	20		
9923483	Total Zinc (Zn)	2025/05/07	101	80 - 120	100	80 - 120	<5.0	ug/L	20 (4)	20		
9923818	Mercury (Hg)	2025/05/07	98	75 - 125	98	80 - 120	<0.00010	mg/L	NC (4)	20		
9924502	F1 (C6-C10) - BTEX	2025/05/08					<25	ug/L	NC (11)	30		

BUREAU
VERITAS

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

QUALITY ASSURANCE REPORT(CONT'D)

Keystone Environmental Ontario Ltd.

Client Project #: 20550

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QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9924502	F1 (C6-C10)	2025/05/08	102 (10)	60 - 140	112	60 - 140	<25	ug/L	NC (11)	30		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID [AQKL29-07]

(2) Matrix Spike Parent ID [AQKL28-15]

(3) Duplicate Parent ID [AQKL28-15]

(4) Duplicate Parent ID

(5) Matrix Spike Parent ID [AQKL28-13]

(6) Duplicate Parent ID [AQKL28-13]

(7) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(8) Duplicate Parent ID [AQKL29-04]

(9) Matrix Spike Parent ID [AQKL28-04]

(10) Matrix Spike Parent ID [AQKL28-14]

(11) Duplicate Parent ID [AQKL28-14]



BUREAU
VERITAS

Bureau Veritas Job #: C548490

Report Date: 2025/05/08

Keystone Environmental Ontario Ltd.

Client Project #: 20550

Sampler Initials: AA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Handwritten signature of Cristina Carriere in black ink.

Cristina Carriere, Senior Scientific Specialist

Handwritten signature of Yizhou Han in black ink.

Yizhou Han, Analyst 1

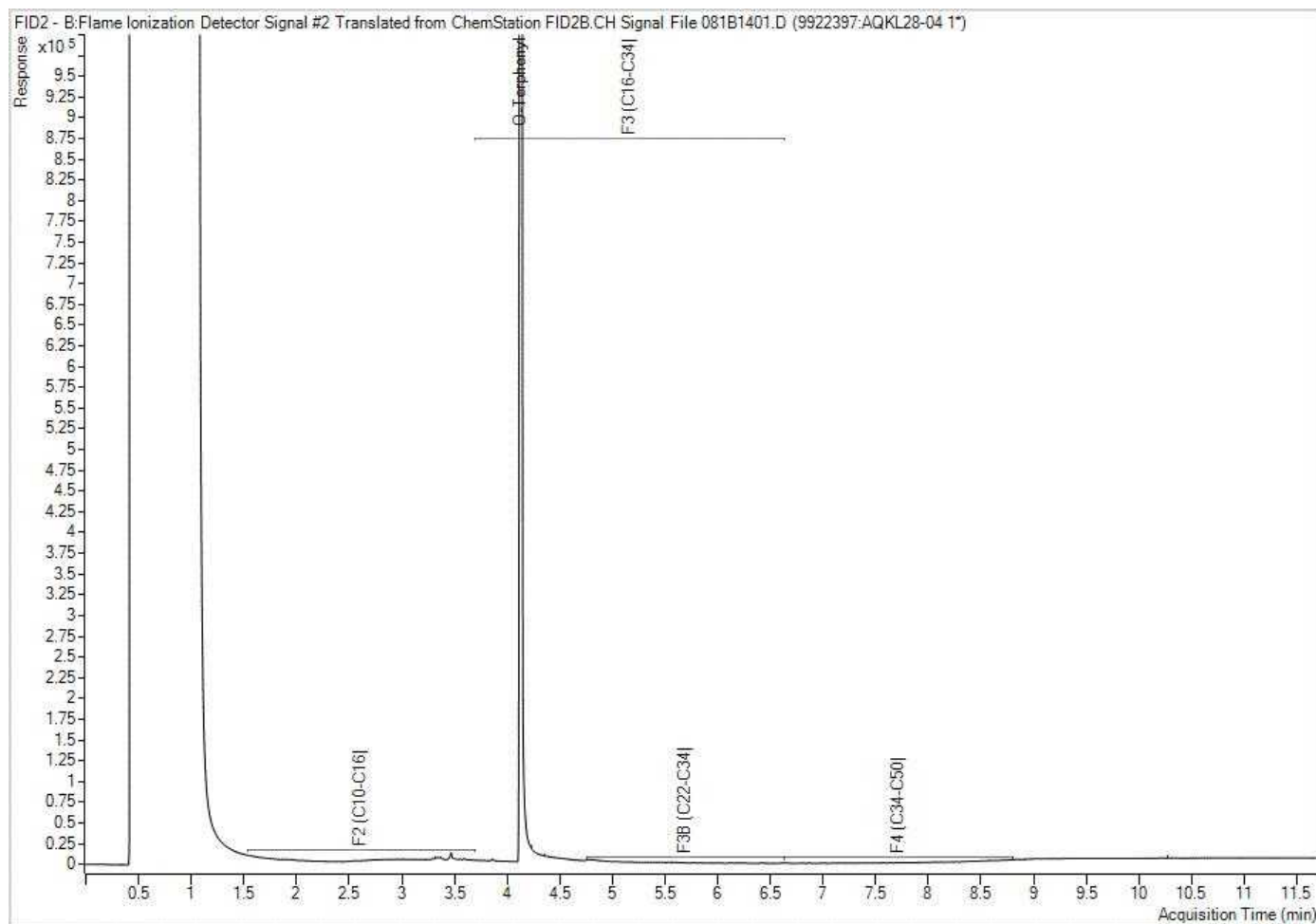
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

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Bureau Veritas Job #: C548490
Report Date: 2025/05/08
Bureau Veritas Sample: AQKL28

Keystone Environmental Ontario Ltd.
Client Project #: 20550
Client ID: W-1

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

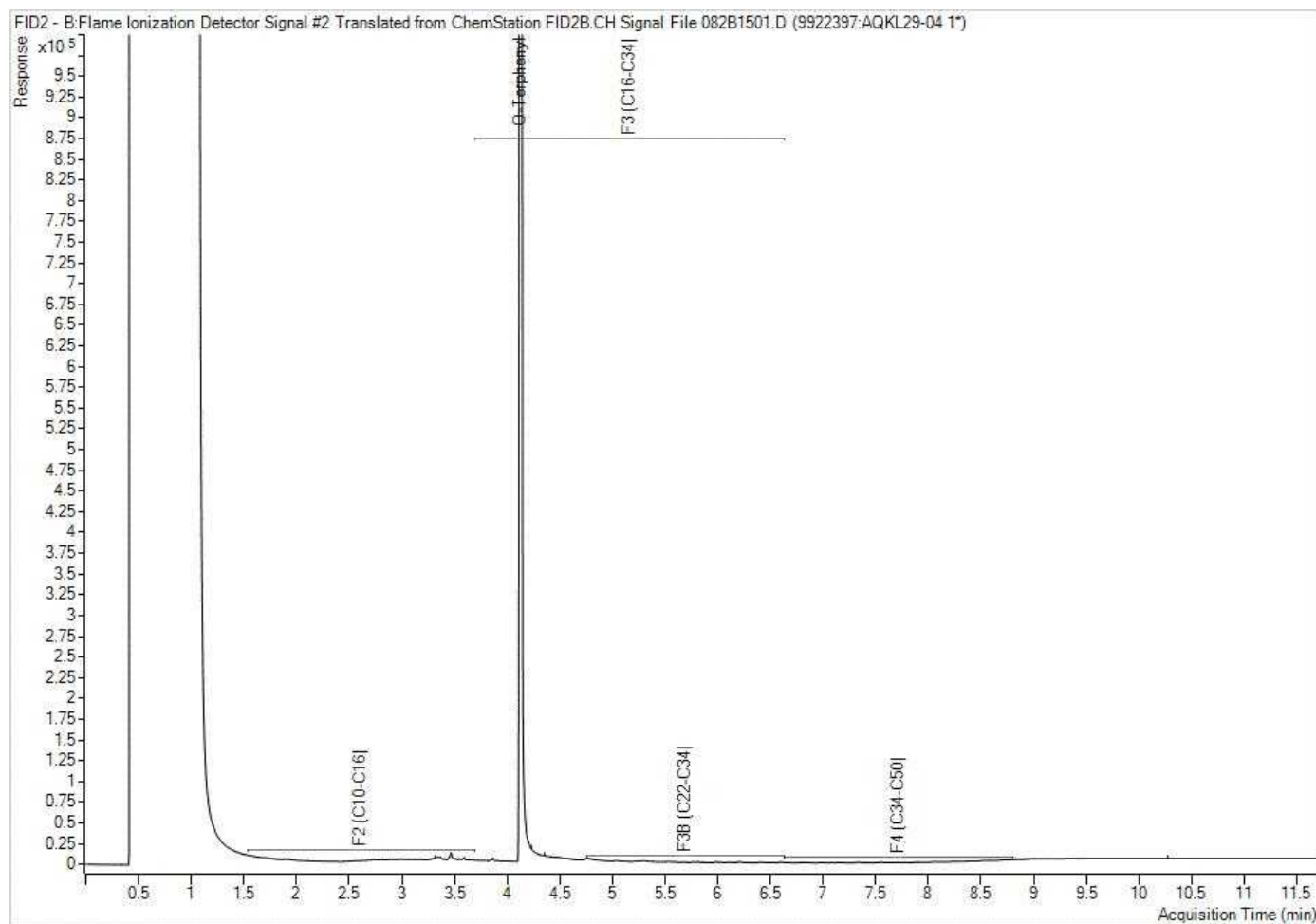


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C548490
Report Date: 2025/05/08
Bureau Veritas Sample: AQKL29

Keystone Environmental Ontario Ltd.
Client Project #: 20550
Client ID: C-1

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

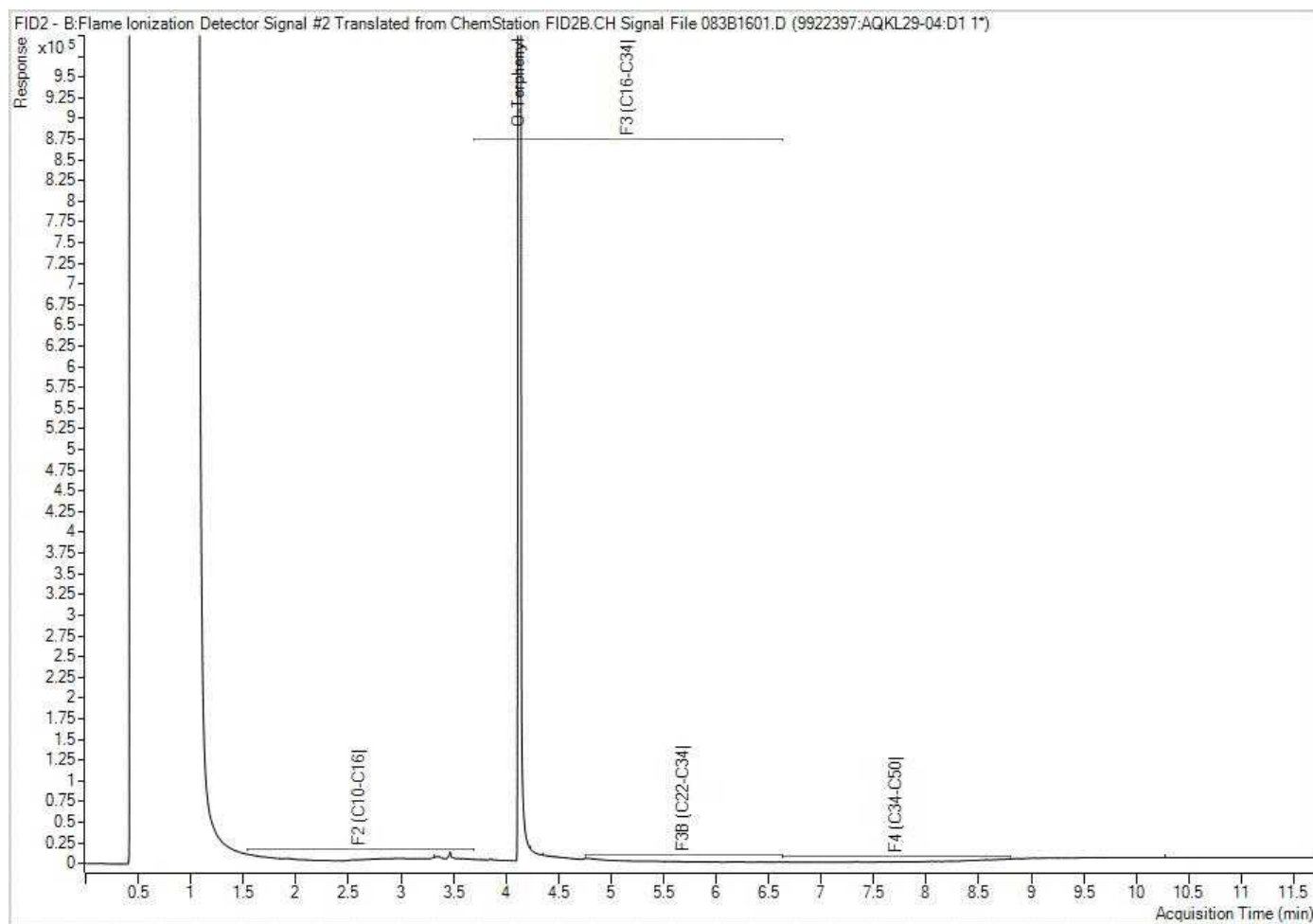


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C548490
Report Date: 2025/05/08
Bureau Veritas Sample: AQKL29 Lab-Dup

Keystone Environmental Ontario Ltd.
Client Project #: 20550
Client ID: C-1

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

City of Mississauga Corporate Report



Date: June 16, 2025 To: Chair and Members of Heritage Advisory Committee	Originator's files:
From: Raj Sheth, P.Eng, Commissioner of Community Services	Meeting date: July 22, 2025

Subject

Request to Demolish a Heritage Listed Property from the City's Registry: 33 Beverley Street (Ward 5)

Recommendation

That the request to demolish the property at 33 Beverley Street (Ward 5) from the City's heritage register as outlined in the corporate report from the Commissioner of Community Services dated June 16, 2025, be approved.

Executive Summary

- Owners of properties listed on the City's Heritage Register must provide 60 days notice of their intent to demolish.
- The applicant has demonstrated that the property does not merit designation under the Ontario Heritage Act.
- As such, the property can be removed from the heritage registry and demolished.

Background

Section 27.3 of the Ontario Heritage Act states that structures or buildings listed on the City's Heritage Register cannot be removed or demolished without 60 days notice. The legislation allows time for Council to consider designating the property under the Ontario Heritage Act.

Comments

The owner of the subject property, which is listed on the City's heritage registry, have applied to demolish the existing dwellings. The submitted Heritage Impact Assessment (HIA), attached as Appendix 1, demonstrates that the property does not merit designation under the Ontario Heritage Act. Although the barn does have some heritage value it is structurally unsound and there is currently an order to remove it which was issued by the City in 2022. The plan for the

property is to sever the lot and build two dwellings which would match the size and scope of the other properties in the neighborhood. Staff concur with the report and recommend the property be removed from the City's heritage registry to allow for demolition.

Financial Impact

There are no financial implications resulting from the recommendation of this report.

Conclusion

The owner of the property at 33 Beverley Street has requested permission to demolish the existing dwelling. The submitted Heritage Impact Assessment demonstrates that the property does not merit designation under the Ontario Heritage Act. As such the property can be removed from the City's heritage register.

Attachments

Appendix 1: Heritage Impact Assessment



Raj Sheth, P.Eng, Commissioner of Community Services

Prepared by: Andrew Douglas, Heritage Analyst, Indigenous Relations, Heritage & Museums

33 Beverley Street

Heritage Impact Assessment

May, 2025



Executive Summary

This Heritage Impact Assessment (HIA) has been prepared by W.E. Oughtred & Associates Inc. to determine the impacts to known and potential heritage resources, that being 33 Beverley Street. The intention of this review is to identify all known heritage resources, an evaluation of the significance of the resources and recommendations towards mitigation measures that would minimize negative impacts on those resources.

The assessment includes the following evaluations by W.E. Oughtred & Associates Inc.:

- Field review of the subject property
- Review of existing historical information
- Review of existing heritage evaluations
- Review of relevant heritage policies
- Evaluation of the property and proposed development in relation to the terms of

Reference

Introduction

This Heritage Impact Assessment (HIA) has been prepared by W.E. Oughtred & Associates Inc. as a requirement for obtaining a heritage permit for the demolition of the existing dwelling and detached barn at 33 Beverley Street. An HIA is required as this property is identified as Inventory item #560, Graham Residence, on the City of Mississauga Heritage register.

The History is listed as “This structure is a storey-and-a-half with the gable end facing the street. On the side elevations there are central dormers that break the facade and give it height. The building is totally clad in aluminium siding which is probably over the original siding of the frame structure”.¹

This report was prepared in accordance with the City of Mississauga’s Terms of Reference for Heritage Impact Assessments (March, 2022). A site visit was undertaken by

¹ City of Mississauga, Heritage Register

W.E. Oughtred & Associates on May 9, 2022 to assess and document the property and its relationship to the neighbourhood.

Location & Site Description

Municipal Address: 33 Beverley Street

Legal Description: Lot 425 and Part Lot 426, Plan TOR4

Lot Area: 1016.38m² (city records)

Zoning: R3-69, Residential

General Location: North side of Beverley Street, West of Airport Road and north of Derry Road East.



Figure 1: Location Map²

The subject property is indicated by a red star on all mapping.



Figure 2: Zoning Map³

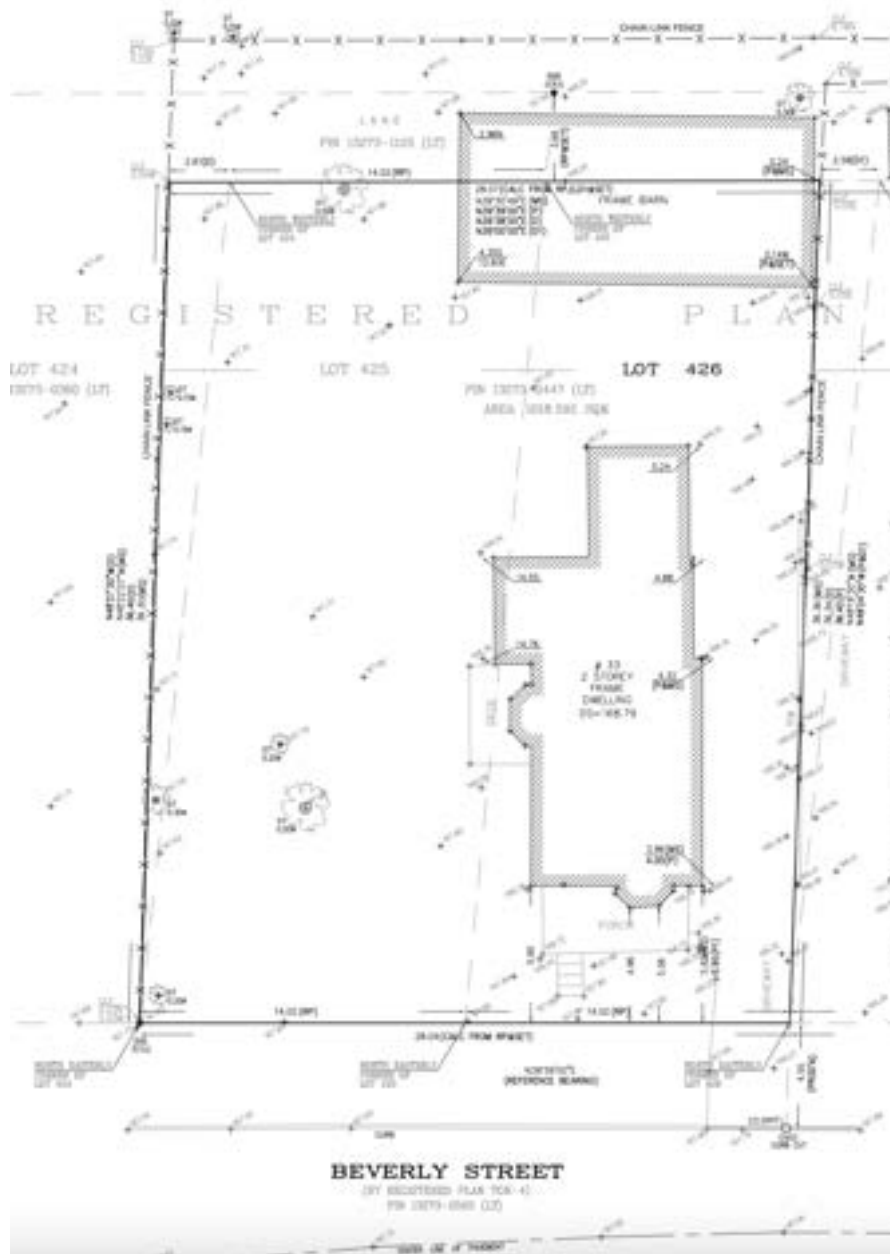
² Apple Maps

³ City of Mississauga

The subject property is located on the north side of Beverley Street, within the Mississauga neighbourhood known as Malton.

The property is relatively flat. It contains a 1.5 storey dwelling and a detached barn.

Figure 3: Existing Survey



Property History

Matthew Wilkinson, Heritage Mississauga, supplied this information with regards to the property.

This property was originally owned by George Wightman, who in turn sold the property to John Hutchinson (1844-1880) in 1866. Hutchinson was a farmer by profession and owned several lots in Malton. In 1887 the property was purchased by James Fleming (1852-1890), and it is believed that Fleming built the house in 1887. The Fleming family also operated a sawmill, which was one of Malton's earliest industries. After Fleming's early death, his widow Harriet and two sons moved to Saskatchewan, and the property was purchased by Henry Milner in 1890. In 1937 the property was purchased by Elgin Graham (1915-1984). Elgin and his wife Bessie were active in the Malton community and raised three daughters here: Kathleen, Nancy and Joy. This vernacular style house is one and a half storeys in height, with the gable end and ornate bay window facing the street.

At the time of the City's inventory in the 1980's, most listed homes were assigned a name based on ownership at the time. Hence, this house is listed as #560, Graham Residence.

Table 1: Title Search

Date	Transferor	Transferee
East half of lot 11, Con 6, EHS		
January 22, 1821	The Crown	Joseph Price
December 31, 1822	Joseph Price	Joseph Floor
March 26, 1823	Joseph Bloor	John Sanderson
March 13, 1837	John Sanderson	Robert Blanchrd
February 7, 1855	William Blanchard	John S. Dennis
PLAN TOR 4		
May 18, 1857	John S. Dennis	Vickman Holtby
September 11, 1866	Frederick W. Jarvis	Daniel Brooke

Date	Transferor	Transferee
February 25, 1874	Corporation of Peel	T.B. Allen
March 3, 1887	Thomas B. Allen	James Fleming
March 3, 1887	James Fleming	Harriet S. Fleming
May 21, 1888	Harriet Fleming	Henry Milner
September 22, 1920	John Milner	John Milner
August 6, 1937	John Milner	Elgin Graham
July 14, 1948	Elgin Graham	Malcom D.C. McRae
August 17, 1948	Malcom D.C. Crate	The Board of Trustees of the Roman Catholic Separate Schools for No. 21
July 14, 1958	The Board of Trustees of the Roman Catholic Separate Schools for No. 21	Elgin Graham
LOT 425		
May 18, 1857	John S. Dennis	Vickman Holt
February 25, 1874	Corporation of Peel	John Mead
March 3, 1887	John Mead	James Fleming
March 3, 1887	James Fleming	Harriet S. Fleming
August 13, 1890	Thos. Morphy	Henry Milner
September 22, 1920	John Milner	John Milner
August 6, 1937	Jon Milner	Elgin Graham
April 20, 1976	George E. Graham - Estate	Joy S. Graham
Part Lot 426		
May 18, 1857	John S. Dennis	Vickman Holtby
April 8, 1863	Frederick W. Jarvis	George Blain
September 5, 1865	George Blain	George Wightman
May 16, 1866	George Wightman	John Hutchinson
March 3, 1887	Edward McBride	James Fleming
March 3, 1887	James Fleming	Harriet S. Fleming
August 13, 1890	Thos. Morphy	Henry Milner

Date	Transferor	Transferee
March 22, 1913	Henry Milner	Jackson E. Price
May 13, 1913	Jackson E. Price	Henry Milner
September 22, 1920	John Milner	John Milner
August 6, 1937	John Milner	Elgin Graham
April 20, 1976	George E. Graham - Estate	Joy S. Graham
Lot 425 & Part Lots 424 & 426		
July 30, 1986	George E. Graham - Estate	Joy Suzette Graham
May 5, 2015	Joy Suzette Graham	Balbir Singh Goraya & Gagan Grewal
December 30, 2021	Balbir Singh Goraya & Gagan Grewal	Current owner



Figure 4: County of Peel Road Map⁴

⁴ Peel Archives

The City of Mississauga recognizes the historic and continued use of the land now known as Mississauga by the Mississaugas of the Credit First Nation, The Haudenosaunee Confederacy the Huron-Wendat and Wyandotte Nations.⁵ As such, we reached out to Matthew Wilkinson, Heritage Mississauga, to provide information on the historic use of the subject property and surrounding area. Matthew only had information on the property, noted above.

⁵ City of Mississauga, Cultural Heritage Landscape Heritage Impact Assessment Terms of Reference

Evaluation of Heritage Attributes

In evaluating the heritage attributes of the home at 33 Beverley Street, the property is listed as a storey-and-a-half with the gable end facing the street. On the side elevations there are central dormers that break the facade and give it height.

The style could be characterized as a one-and-a-half storey side hall plan. To make the most efficient use of interior space, the front door would be placed to one side creating an asymmetrical and vertically massed front. Internally, on the ground floor, the hall was located to one side at the front of the house.⁶

The house is likely constructed by balloon framing. This framing method began in the 1830's, and was common in North America through to the mid 1950's. It made use of very long, continuous, lightweight, wooden wall members (called studs) that typically extended at least two floors of building height, at a time when really long lumber was common and plentiful. *(FYI: In a budget-built balloon-framed house, the 2x4's might have been scabbed together to reach the desired two, or three story height.)* The rough-sawn, lightweight studs were a true 2"x4" dimension and they greatly reduced the costs, labour and skills required to erect long-lasting dwellings. Dwellings could now be more easily constructed by as few as one, or two persons, rather than requiring big teams of people, as in the case of the earlier timber framing method. The floors were then constructed inside the wall structure and suspended on what is called the "rim board, ribbon board, or ledger board" that was notched into the studs *(similar technique to attaching a deck to the side of a house)*. The resultant walls could contain all manner of insulation material, including sawdust, treated newspaper, even no insulation, making these older houses expensive to heat, insulate or renovate. Balloon-framed buildings are also very susceptible to sagging (particularly the floors) making these old houses very challenging and therefore expensive to renovate well, with some materials and methods not being compatible at all. For example, attempting to install new baseboard trim is likely going to show off huge, unsightly gaps between the trim and the sagged floor! In any house *(and especially in an older house)*, never assume anything is straight, plumb or level! Assume there are likely to be significant and extensive problems ... the big question is ... how big and how bad are they? Always check out everything that is possible to check.

⁶ https://www.gov.mb.ca/chc/hrb/internal_reports/pdfs/southern_ontario_farm_buildings_full.pdf

Interior walls were then nailed up and covered with thin, horizontal strips of wood (known as lathe), and then the gaps and the wall surface covered over with plaster (*a wall construction and finishing technique known as lath and plaster*) and often painted with lead-based paints (*which form a hazard during renovations*).⁷ We were unable to confirm if this was the method of construction utilized.

Further, we could not confirm if the barn and dwelling were constructed at the same time, but is assumed that they were.



Figure 5: 1952 Aerial photo

Subject property defined by green star. The property does not appear to be associated with a farming operation. Our Lady of the Airways Catholic School was situated behind the property and opened in 1954.

⁷ <https://www.confederationcollege.ca/trees/more-about-balloon-framing>

Existing Dwelling - Exterior Photos



Photo 1: Front Elevation

Photo 2: Side Elevation





Photo 3: Rear elevation

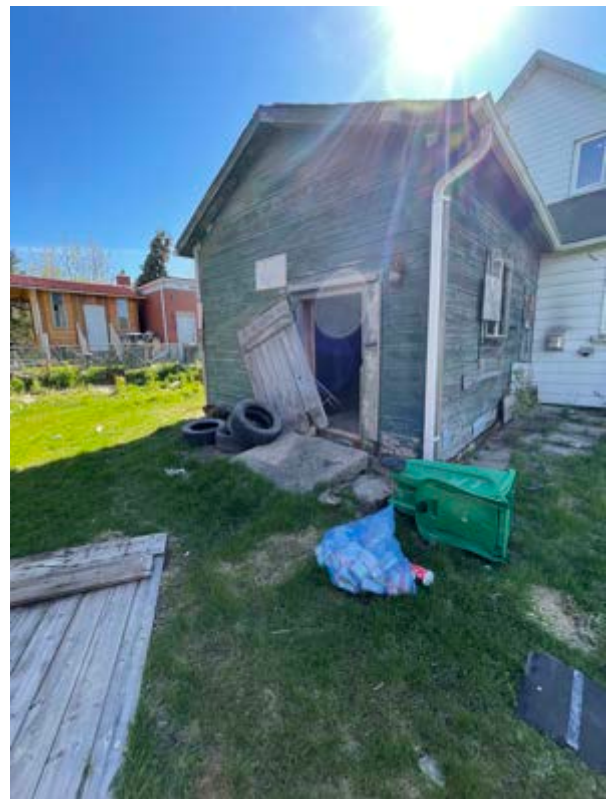


Photo 4: Rear Addition



Photo 5: Side and rear elevation



Photo 6: Front and side elevation



Photo 7: Barn,
Front Elevation



Photo 8: Barn,
Side Elevation

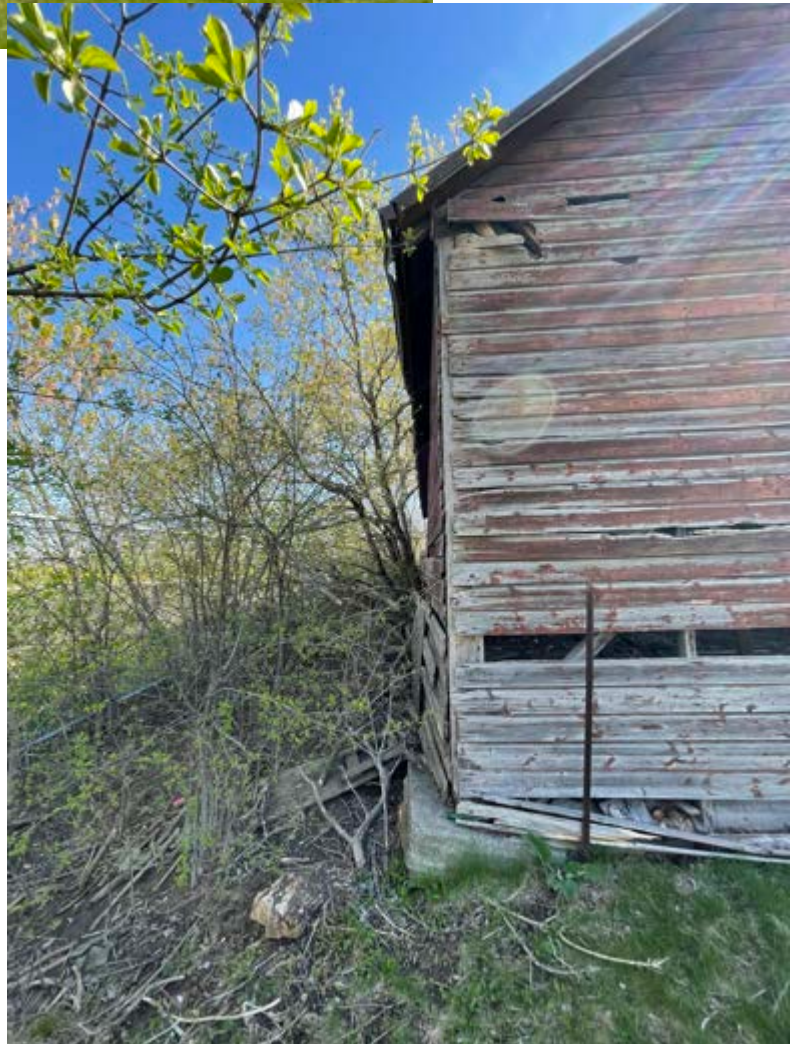


Photo 9: Barn, Rear Corner



Photo 10: Barn,
Foundation
Support

Photo 11: Barn, Interior



The Barn



Photo 12: Front of Barn

The barn is original to the property.

Style: English Gable

Construction: Wood, with corrugated metal roof, no foundation evident.

Dirt/gravel floor

Size: Approximately 30' x 60'

Condition: poor, structurally unsafe

The form and function of Canadian barns today are classified as Pennsylvania, Dutch and English. Most of the largest barns you see today date from the 1870's to 1880's and were usually 40 – 50 ft. by 60 – 100 feet with a gambrel or gable roof.⁸ The gable roof is the most simple and most common roof type on barns in both Washington and across North America.

⁸ <https://2oldguyswalking.wordpress.com/2019/04/03/the-rise-and-decline-of-the-ontario-barn/>

Gable roofs materialize in the shape of an inverted V. They have two equal pitched sides rising together to meet at the peak, forming one center ridge running the length of the roof.⁹

There is no foundation visible. Sections of the barn (corners specifically) appear to have been propped by concrete blocks at some point. See photo #10. There are three sliding doors, all three on the front. One on the west side and two on the east. They are top hung sliding on a rail mounted to the exterior of the barn. Doors often exhibited material deterioration along the lower edge due to storm water backs-plash from the roof drip line.¹⁰ The larger door on the west side has fallen off due to age and condition.

There is a central beam (as evidenced in Photo #11) dissecting the barn. Sway braces are also prominent.

The City of Mississauga, By-law, issued order to remove the barn in June 2022. However, this was not done as a heritage permit is required.

⁹ <https://dahp.wa.gov/sites/default/files/HeritageBarnReport.pdf>

¹⁰ <https://dahp.wa.gov/sites/default/files/HeritageBarnReport.pdf>

Cultural Heritage Value Assessment

Table 2: Heritage Assessment - Barn

Value (quoted from Ontario Reg. 9/06) Assessment of 33 Beverley Street	
The property has design value or physical value because it,	
i. is a rare, unique, representative or early example of a style, type, expression, material or construction method,	The barn is representative example of an early barn.
ii. displays a high degree of craftsmanship or artistic merit, or	No, this is typical of the era in which it was built
iii. demonstrates a high degree of technical or scientific achievement.	As a modest 19th century structure it does not demonstrate a high degree of technical or scientific achievement.
The property has historical value or associative value because it,	
i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,	Based on the research conducted, the property is not associated with a theme, event, belief, person, activity, organization or institution that is significant to a community. While the property was owned by James Fleming, the building does not exemplify this association, and it not considered to meet any threshold for conservation on this basis.
ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture, or	ii. The property does not yield, nor does it have the potential to yield, information that contributes to an understanding of community or culture.
iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.	The architect or builder is unknown

Value (quoted from Ontario Reg. 9/06)	Assessment of 33 Beverley Street
The property has contextual value because it,	
i. is important in defining, maintaining or supporting the character of an area,	33 Beverley Street is not important in defining, maintaining or supporting the character of the surrounding area.
ii. is physically, functionally, visually or historically linked to its surroundings, or	ii. Although the buildings were constructed in the 1880s, it does not demonstrate a physical, functional, visual or historical relationship to its surroundings.
iii. is a landmark.	i. 33 Beverley Street is not considered a landmark.

Interior Photos



Photo 13: Front Hallway and stair

Photo 14: Main floor door displaying molding





Photo 15: West side window



Photo 16: Laundry area (main floor)



Photo 17: Kitchen



Photo 18: Bathroom mold

Photo 19: Basement Access
Photo 20: Basement



The interior of existing home has been significantly renovated. The main floor consists of two large open spaces. The space adjacent to the front hall way is a bedroom. The rear open space contains a laundry area and kitchen. There are two rear additions. One utilized as a second suite and the one beyond that is uninhabitable.



Photo 21 & 22 Rear addition, exterior and interior.

It is unlikely that the kitchen is in the original location. The only remaining elements of the original home are some molding around windows and doors. The banister on the staircase would be original as well. The kitchen, bathroom, flooring and interior partitions are new.

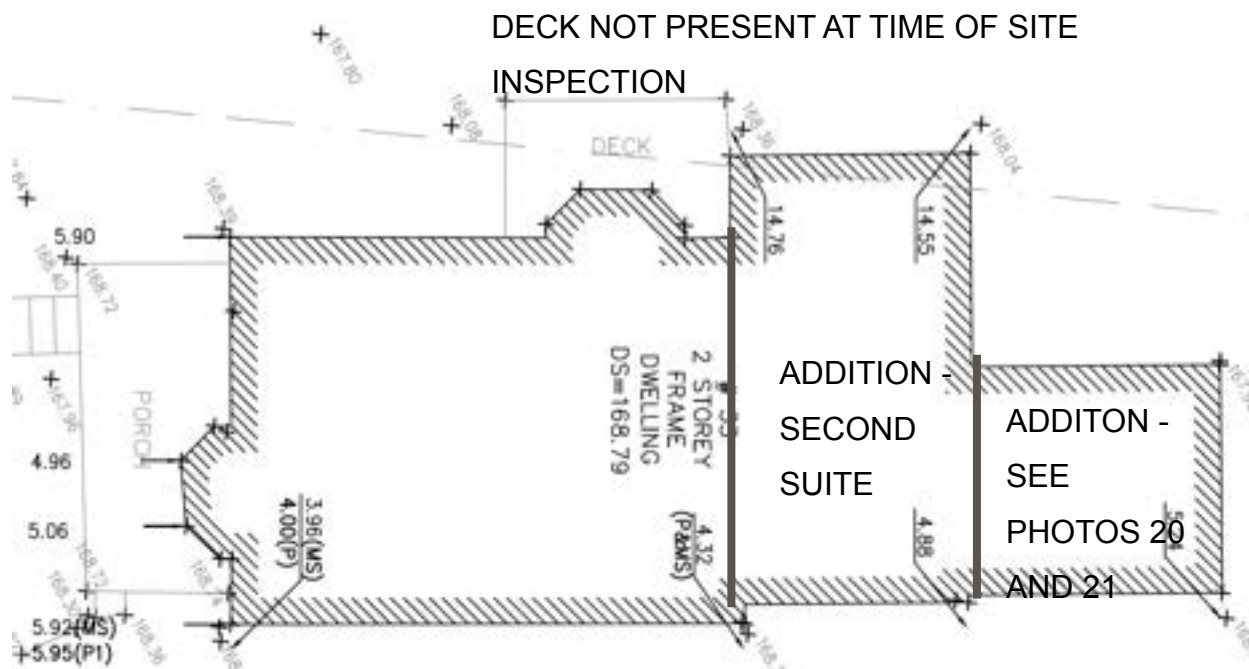


Figure 6: Main floor additions

Table 3: City of Mississauga Building Permit Records

App no.	Address	Unit no. 	Scope	Issue date 
Applied date 	Description		Type description	Status 
HCC 84 197723	33 BEVERLEY ST	-	-	-
1984-09-10	FURNACE REPLACEMENT CODE: 2663 PERMIT 58591 OCT 2/84		-	HISTORY COMMENT PERMIT

City records do not provide any insight into the additions to the dwelling.

Aerial photos are not legible prior to 2002 and thus the date of the additions cannot be determined.



Figure 7: 2002 Aerial Photo

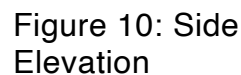


Figure 12: Rear Elevation

PROP. REAR ELEVATION
SCALE: 1/4" = 1'-0"

Architectural drawing of the rear elevation of a two-story single-family dwelling. The drawing shows a brick house with a gabled roof, a chimney on the left, and a central entrance with a small porch. Dimensions are provided for the roof, walls, and windows. The drawing is titled "PROP. REAR ELEVATION" and "SCALE: 1/4" = 1'-0".

Minor variances for each lot were obtained under files A154.24 and A155.24. Since the time of the applications, the zoning has changed from R3-69 to RL-173. Two of the variances approved relating to height are not longer required. Further, the side yard setback of 1.2m now complies with the provisions of the by-law. All other variances, those for lot frontage, lot area and GFA are still applicable.



Photo 23: View of property from the street. (Google street view)



Photo 24: Existing Streetscape (Google streetview)



Photo 25: The subject property in the forefront.

Looking east on Beverley street



Photo 26: The homes on the opposite side entrance to the park.

Looking west on Beverley street. The homes noted A, B and C above correspond to the key map location above.



Proposed Streetscape



The new by-law permits a maximum dwelling height of 10.7m. The proposed height is 9.14m and complies with the by-law. The houses are in keeping with the new builds around the corner shown in the previous image.

Cultural Heritage Value Assessment

Table 4: Heritage Assessment - House

Value (quoted from Ontario Reg. 9/06)	Assessment of 33 Beverley Street
The property has design value or physical value because it,	
i. is a rare, unique, representative or early example of a style, type, expression, material or construction method,	33 Beverley Street is a modest example of a vernacular dwelling that has undergone exterior and interior alterations. It is not a rare, unique or exceptionally representative example of a vernacular dwelling.
ii. displays a high degree of craftsmanship or artistic merit, or	ii. The remaining interior and exterior features do not display a high degree of craftsmanship or artistic merit.
iii. demonstrates a high degree of technical or scientific achievement.	As a modest vernacular 19th century structure it does not demonstrate a high degree of technical or scientific achievement.
The property has historical value or associative value because it,	
i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,	Based on the research conducted, the property is not associated with a theme, event, belief, person, activity, organization or institution that is significant to a community. While the property was owned by James Fleming, and assumed he built the home or had the home built; the building does not exemplify this association, and it not considered to meet any threshold for conservation on this basis.
ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture, or	ii. The property does not yield, nor does it have the potential to yield, information that contributes to an understanding of community or culture.

Value (quoted from Ontario Reg. 9/06)	Assessment of 33 Beverley Street
iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.	The architect or builder is unknown
The property has contextual value because it,	
i. is important in defining, maintaining or supporting the character of an area,	33 Beverley Street is not important in defining, maintaining or supporting the character of the surrounding area.
ii. is physically, functionally, visually or historically linked to its surroundings, or	Although the buildings were constructed in the 1880s, it does not demonstrate a physical, functional, visual or historical relationship to its surroundings.
iii. is a landmark.	33 Beverley Street is not considered a landmark.

Evaluation of Heritage Impacts

Provincial, Regional and Local Policies

Policy 2.6.1 of the PPS states that significant built heritage resources and significant cultural landscapes shall be conserved.

Policy 2.6.2 of the PPS states that development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.

Policy 2.6.3 of the PPS states that planning authorities shall not permit development and site alterations on adjacent lands to protected heritage property unless the proposed development and any site alteration is evaluated and that evaluation demonstrates that the heritage attributes of the protected property will be conserved.

Listed heritage properties have been identified because they have cultural heritage value or interest. A listed property has not yet been reviewed for designation. The property at 33 Beverley Street is listed as a residential building in a vernacular style. This structure is a storey-and-a-half with the gable end facing the street. On the side elevations there are central dormers that break the facade and give it height. The building is totally clad in aluminum siding which is probably over the original siding of the frame structure.¹¹

The Planning Act, the Growth Plan, 2019 and the Region of Peel Official Plan also contain policies that encourage the conservation of significant and protected heritage properties and archaeological sites and recommends consultation with indigenous communities. It encourages municipalities to establish cultural heritage landscape policies.

The City of Mississauga's Official Plan identifies cultural heritage resources including landscapes, streetscapes and historic corridors. The City maintains a heritage register which includes both built heritage resources and cultural heritage landscapes

Specifically, this property has been evaluated and determined to have heritage value or interest. As such, a heritage impact assessment is required for any proposed demolition and construction on a subject property.

Evaluation according to Ontario Regulation 09/06

TABLE 1: EVALUATION ACCORDING TO ONTARIO REGULATION 09/06

Criteria for Determining Cultural Heritage Value or Interest	Assessment (yes/no)	Rationale
1. Design or physical value:		
a) Is a rare, unique, representative or early example of a style, type, expression, material or construction method	NO	Although the home was built in the late 1800's, it is not a rare or unique example of a specific style or construction method.
b) Displays a high degree of craftsmanship or artistic merit	NO	While the home is well built, it is typically of the era of construction.
c) Demonstrates a high degree of technical or scientific achievement	NO	It is a frame dwelling and does not demonstrate a high degree of technical merit.

¹¹ City of Mississauga

Criteria for Determining Cultural Heritage Value or Interest	Assessment (yes/no)	Rationale
2. Historical or associative value		
a) Has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community	NO	The property is not known to have any direct associations significant to the community.
b) Yields, or has potential to yield, information that contributes to an understanding of a community or culture	NO	The home does not have any potential to yield information that contributes to an understanding of a community or culture.
c) Demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community	NO	The dwellings design or construction cannot be linked to anyone significant in the community.
3. Contextual Value		
a) Is important in defining, maintaining, or supporting the character of an area	NO	The immediate area has seen recent redevelopment, this will continue the trend.
b) Is physically, functionally, visually, or historically linked to its surroundings	NO	There is no contextual value.
c) Is a landmark	NO	This is a typical home of the era in which it was built.

Cultural Heritage

TABLE 2: ANALYSIS OF HERITAGE IMPACTS BASED ON THE GENERAL STANDARDS FOR PRESERVATION, REHABILITATION AND RESTORATION, STANDARDS AND GUIDELINES FOR THE CONSERVATION OF HISTORIC PLACES IN CANADA

General Standards	Analysis
Conserve the heritage value of a historic place. Do not remove, replace or substantially alter its intact or repairable character-defining elements. Do not move a part of a historic place if its current location is a character defining element.	The home is an example of the period in which it was built. There is nothing remarkable about the construction or design that should be preserved.
Conserve changes to a historic place that, over time, have become character-defining elements in their own right.	Not Applicable

Conserve heritage value by adopting an approach calling for minimal intervention.	Not applicable.
Recognize each historic place as a physical record of its time, place and use. Do not create a false sense of historical development by adding elements from other historic places or other properties, or by combining features of the same property that never coexisted.	Not Applicable
Find a use for a historic place that requires minimal or no change to its character-defining elements.	The continued use is residential
Protect and, if necessary, stabilize a historic place until any subsequent intervention is undertaken. Protect and preserve archaeological resources in place. Where there is potential for disturbing archaeological resources, take mitigation measures to limit damage and loss of information.	Should mitigation measures be required, they will be undertaken. If deeply buried archaeological resources are discovered during excavation, all work will stop and a licensed archaeologist will be engaged in accordance with Section 48(1) of the Ontario Heritage Act to carry out additional archaeological field work.
Evaluate the existing condition of the character-defining elements to determine the appropriate intervention needed. Respect heritage value when undertaking an intervention.	Not applicable.
Maintain character-defining elements on an ongoing basis. Repair character-defining elements by reinforcing their materials using recognized conservation methods. Replace in kind any extensively deteriorated or missing parts where there are surviving prototypes.	Not applicable.
Make any intervention needed to preserve character-defining elements physically and visually compatible with the historic place and identifiable on close inspection. Document any intervention for future reference.	The mature trees and landscaping on the property will be maintained where possible.

Mandatory Recommendations

The subject property contains a one and half-storey residential dwelling built around the 1880's and a detached barn. It does not meet any of the criteria for Designation under the Ontario Heritage Act, Regulation 9/06. Table 2, Heritage Assessment - Barn and Table 4, Heritage Assessment - House outline the rationale and analysis as to why the property does

not merit designation. Further, the property does not warrant conservation as per the definition in the Provincial Policy Statement.

“Conserved: means the identification, protection, use and/or management of cultural heritage and archaeological resources in such a way that their heritage values, attributes and integrity are retained.”

Conclusions, Recommendations

The subject property contains a one and half-storey residential dwelling and detached barn built around the 1880's. It does not meet any of the criteria for Designation under the Ontario Heritage Act and thus demolition should be permitted.

About the Author:

William Oughtred of W.E. Oughtred & Associates Inc., is a development and land use consultant who has been practicing in the Mississauga and GTA area for over 30 years. Mr. Oughtred has a Bachelor of Arts from McMaster University. Mr. Oughtred is well versed in both Planning and building procedures and the City of Mississauga Zoning By-law and Official Plan.

Mr. Oughtred specializes in infill development projects. His extensive experience has afforded him the opportunity to see the City evolve and be at the forefront of growing trends and patterns in land development in Mississauga. He consults regularly on both heritage and urban design for infill projects.

Heritage Impact Statements and Assessments have been completed for many properties in Mississauga, including, but not limited to, the properties listed below.

- ❖ 1532 Adamson Road
- ❖ 1484 Hurontario Street

-
- ❖ 846 Chaucer Ave
 - ❖ 2222 Doulton Drive
 - ❖ 915 North Service Road
 - ❖ 2375 Mississauga Road
 - ❖ 943 Whittier Crescent

References

<https://www.mississauga.ca/portal/services/property>

<http://www.mtc.gov.on.ca/en/heritage/heritage.shtml>

PAMA

Matthew Wilkinson, Heritage Mississauga

<https://madisonbarns.wordpress.com/2014/05/21/the-english-barn-in-the-new-world/>

<https://2oldguyswalking.wordpress.com/2019/04/03/the-rise-and-decline-of-the-ontario-barn/>

<https://dahp.wa.gov/sites/default/files/HeritageBarnReport.pdf>

<https://www.confederationcollege.ca/trees/more-about-balloon-framing>

https://www.gov.mb.ca/chc/hrb/internal_reports/pdfs/southern_ontario_farm_buildings_full.pdf

Heritage Conservation In Ontario: Fundamentals for Municipal Heritage Committees

Hosted by the Town of Caledon

Join Bert Duclos Heritage Services as he guides
Peel Region municipal participants
through the cultural heritage conservation approach in Ontario
and explores the role of municipal heritage committees

Wednesday, October 8, 2025

1:00 - 5:00 pm

Humber River Centre

Gathering Place

28 Ann Street

Bolton, Ont.

Who should attend?

**Municipal heritage committee members,
councillors and municipal staff**

1:00 - 1:15	Welcome & Introductions
1:15 - 2:00	What is Cultural Heritage Value?
2:00 - 3:00	Establishing and Sustaining an Effective Municipal Heritage Committee
3:00 - 3:15	Break
3:15 - 4:45	Inventory, Evaluation and Designation: From Survey to Protection
4:45 - 5:00	Discussion & Wrap-up

REGISTRATION IS LIMITED

Registration deadline is **Monday, September 29, 2025**

REGISTRATION

To register your municipality please provide the following information and return to:

Bert Duclos Email:

Name & Title:

Municipality:

of participants

REPORT 3 - 2025

To: CHAIR AND MEMBERS OF THE HERITAGE ADVISORY COMMITTEE

The Port Credit Heritage Conservation District Subcommittee presents its third report for 2025 and recommends:

PCHCD-0003-2025

That the deputation and presentation by Cherie Ng, Architect of Cherie Ng Architect Inc., with respect to Clarke Memorial Hall Restoration, be received.

(PCHCD-0003-2025)

(Ward 1)

PCHCD-0004-2025

That the request to alter the property at 161 Lakeshore Road West (Ward 1), as per the memorandum from John Dunlop, Manager of Indigenous Relation, Heritage and Museums, dated June 24, 2025, be approved.

(PCHCD-0004-2025)

(Ward 1)