Ainley & Associates Limited
195 County Court Boulevard, Suite 300, Brampton, ON L6W 4P7
Tel: (905) 452-5172 Fax: (705) 445-0968
E-mail: brampton@ainleygroup.com

Friday, August 11, 2022 File No. 119042

Sean Ballaro, Project Manager, Capital Works
Water Linear Engineering & Reliability
Water Division, Public Works, Region of Peel
10 Peel Centre Drive, Suite B, 4th Floor
Brampton, ON, L6T 4B9

Attn: **Sean Ballaro, Project Manager**

Ref: **Engineering Services for Watermain Construction on Heritage Road, Cities of Brampton and Mississauga, Project 15-1138, Project File, Phase 1& 2 Project File Report**

Dear Mr. Ballaro:

Ainley & Associates Limited is pleased to present our Project File Report the Heritage Road Watermain Class Environmental Assessment study. This study was completed as a Schedule 'B' Class EA. This Report provides an overview of the MEA Class Environmental Assessment Process, and a summary of the Phase 1 and Phase 2 Environmental Assessment process for watermain engineering on Heritage Road.

Yours truly,

AINLEY & ASSOCIATES LIMITED

Wendy Smeh, C.E.T., PMP.

Project Manager

Region of Peel
Heritage Road Water Distribution System Upgrades
Schedule B Environmental Assessment

Phase 1 & 2 Project File

August 2022

Ainley GROUP
CONSULTING
ENGINEERS
PLANNERS

Heritage Road Water Distribution System Upgrades
Schedule B Environmental Assessment

Phase 1 & 2 Project File

Project No. 119042

Prepared for:
The Region of Peel

Prepared By:

Wendy Smeh, C.E.T., PMP

Ainley Group
195 County Court Blvd., Suite 300
Brampton, ON L6W 4P7

Phone: (905) 452 – 5172
www.ainleygroup.com

Table of Contents

1.0 Introduction 7

2.0 Class EA Process 8

2.1 Class EA Schedules & Phases 8

2.2 Study Background 10

3.0 Study Area 11

4.0 Phase 1 – Problem or Opportunity 12

4.1 Problem/Opportunity Identification 12

5.0 Investigation of Existing Conditions 13

5.1 Environmental Site Assessment 13

5.2 Baseline Natural Features Assessment 15

5.3 Cultural Heritage Resource Assessment 16

5.4 Archeological Assessment 17

5.5 Geotechnical Assessment 21

5.6 Hydrogeological Assessment 22

5.7 Existing Infrastructure Assessment 23

6.0 Phase 2 – Proposed Alternative Solutions 24

6.1 Alternative 1 – Construct the Watermain with Portions of the Alignment Outside of the Road Right-of-Way 24

6.2 Alternative 2 – Construct the Watermain within the Road Right-of-Way 25

6.3 Alternative 3 – Limit Growth 25

6.4 Alternative 4 – Do Nothing 25

7.0 Explanation of Alternative Solutions 25

7.1 Alternative 1 - Design Option 1 (Green) 26

7.3 Alternative 2 - Design Option 3 (Purple-Red) 28

7.4 Alternative 2 - Design Option 4 (Orange-Green) 28

7.5 Alternative 2 – Design Option 5 (Green-Blue) 29

6.1 Evaluation of Alternatives 33

6.1.1 Evaluation Criteria 33
6.1.2 Comparative Evaluation of Alternatives 35
6.2 Preferred Design Alternative 39

7 Public & Agency Consultation 39

7.1 Public Consultation & Comments 40
7.2 Review Agency Consultation & Comments 42
7.3 Indigenous Consultation & Comments 47

8 Potential Effects and Mitigation Measures 50

8.1 Construction Mitigation 50
8.2 Long-Term Mitigation 51

9 Property Requirements 52

9.1 City of Mississauga 52
9.2 Ministry of Transportation 52
9.3 Infrastructure Ontario 52
9.4 Hydro One 52
9.5 Credit Valley Conservation Authority 53

10 Conclusions and Recommendations 53

List of Tables

Table 1: Identified Potential Source Contaminants 14
Table 2: Identified Heritage Resource Sites 17
Table 3: Archeological List of Previously Registered Sites 18
Table 4: Monitoring Well Water Level Measurements 21
Table 5: Comparative Evaluation of South of Edgeware Road to North Meadowvale Pumping Station 36
Table 6: Public Consultation Summary 41
Table 7: Review Agency Consultation Summary 43
Table 8: Indigenous Consultation Summary 48
Table 9: Mitigation Measures During Construction 50
Table 10: Long-term Mitigation Measures During Construction 51

List of Figures

Figure 1: Class EA Phases Flow Chart 9
Figure 2: Heritage Road Study Area Map 12
Figure 3: Edgeware Road to Meadowvale North Pumping Station Tunneling Section 1 30
Figure 4: Edgeware Road to Meadowvale North Pumping Station Tunneling Section 2 31
Figure 5: Edgeware Road to Meadowvale North Pumping Station Tunneling Section 3 with Open-Cut to Existing Watermain 32

Appendices

Appendix A – Public Consultation Records
Appendix B – Environmental Site Assessment
Appendix C – Cultural Heritage Assessment
Appendix D – Stage 1 Archaeological Assessment
Appendix E – Baseline Natural Features Assessment

1.0 Introduction

The Region of Peel has initiated the Heritage Road Water Distribution System Environmental Assessment (EA) planning process (Schedule B) for watermain upgrades outlined in the Water & Wastewater Master Plan (Master Plan) for the South Peel water supply and storage up to the year 2031. The assessment will consider upgrades to and construction methods for the water supply which includes 1,300 linear meters of 600mm watermain on Heritage Road from the Meadowvale North Pumping Station in the City of Mississauga up to the intersection of Heritage Road and Steeles Avenue in the City of Brampton.

The project involves the completion of a Municipal Class EA including investigations, studies and analyses in accordance with the requirements of the Municipal Engineers Association (MEA) Municipal Class Environmental Assessment (October 2000, as amended in 2007, 2011 & 2015). This project has been undertaken as a Schedule 'B' Class EA, with the key deliverable being the Project File based on the completion of Phases 1 and 2 of the Class EA planning and design process.

This Project File provides a summary of the Class EA Phase 1 and 2 consultation process and identification of water distribution system requirements, alternatives and the preferred solution. As assessment of the existing water distribution design was completed and assisted in the review of proposed upgrades of the distribution system.

The objectives of this report include:

- Provide a summary of the Class EA process;
- Provide a description of the Study Area and the Phase 1 and 2 Consultation process;
- Provide a background of the water distribution system and identify limitations to meet current and future servicing requirements (study problem/ opportunity statement); and
- Identify, evaluate and compare Alternative Solutions for the Heritage Road water distribution systems upgrades.

2.0 Class EA Process

Ontario municipalities are subject to the requirements of the Environmental Assessment Act (EAA) for public works projects. The MEA's Municipal Class Environmental Assessment document (October 2000, as amended in 2007, 2001 & 2015) provides municipalities with a phased procedure, approved under the EAA, to plan most municipal works projects. These are usually limited in scale with a predictable set of environmental impacts and mitigation measures.

Capital works for municipal water distribution systems and facilities, such as expanding a drinking water distribution system, are subject to the requirements of the EAA. The EAA identifies two types of environmental assessment planning and approval processes including Individual Environmental Assessments (Part II of the EAA) and Class Environmental Assessments (Part II.1 of the EAA). Generally, the Class EA process is applicable to municipal projects where either a new system is to be established or where an existing system requires modification beyond what would be considered to be maintenance or operational improvements. Under the Class EA, projects are subject to varying levels of environmental review depending on the extent of their potential impact.

2.1 Class EA Schedules & Phases

2.1.1 Class EA Schedules

Under the Municipal Class Environmental Assessment (Class EA) process, projects fall into one of four schedules of undertakings:

1. **Schedule A** – Projects that are considered pre-approved based on the MEA's Municipal Class Environmental Assessment document.
2. **Schedule A+** – Projects that are considered pre-approved, but also require the public to be advised prior to project implementation.
3. **Schedule B** – Projects that are considered to potentially have some environmental impacts. Schedule B projects require proponents to undertake a screening process that involves mandatory contact with directly affected public or relevant review agencies to ensure that they are aware of the project and that their concerns are addressed. If there are no outstanding concerns, the proponent may file a Notice of Completion.
4. **Schedule C** – Projects that have the potential for significant environmental effects and must proceed through the full planning and documentation procedures specified in the Class EA document. Schedule C projects require that an Environmental Study Report (ESR) be prepared and filed for review by the public and review agencies in conjunction with the filing of a Notice of Completion. Schedule C projects generally include the construction of the new facilities and major expansions to existing facilities. Provided that the approved

Class EA planning process is followed, a proponent has complied with Section 13 (3)(a) of the EAA.

2.1.2 Class EA Phases

The Class EA process follows the five following phases:

1. **Phase 1** – Identify the problem (deficiency) or opportunity statement;
2. **Phase 2** – Identify alternative solutions to address the problem or opportunity;
3. **Phase 3** – Examine alternative methods of implementing the preferred solution (required for Schedule C projects);
4. **Phase 4** – Produce an Environmental Study Report (ESR) that provides a summary of the rationale, planning, design and consultant process throughout the project (required for Schedule C projects); and
5. **Phase 5** – Complete contract documents and drawings, and proceed to construction and operation.

See Figure 1 below for the Class EA Phase flow chart.

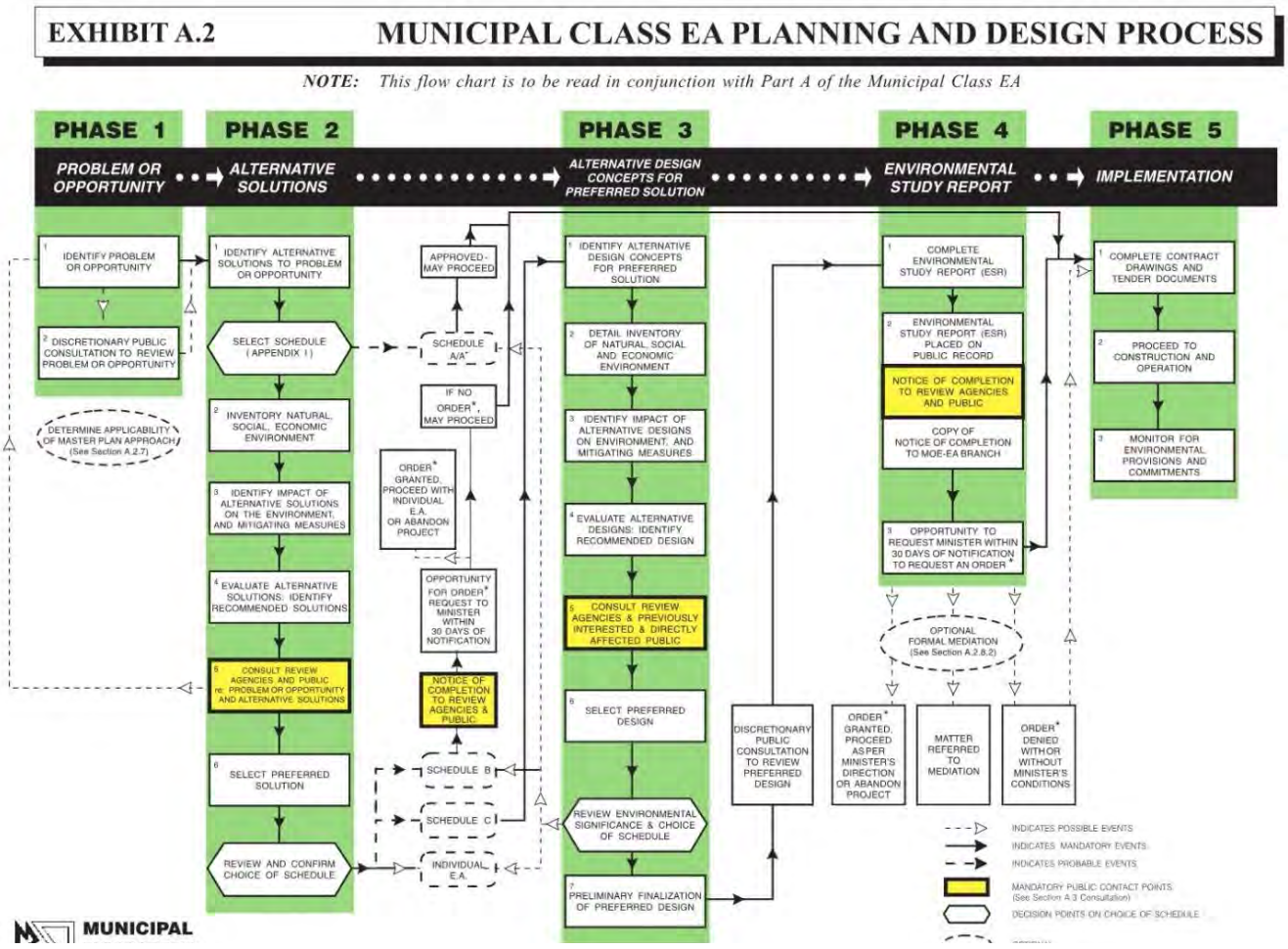


Figure 1: Class EA Phases Flow Chart

2.2 Study Background

The Agency's Water and Wastewater Master Plan (the Master Plan) identified the expansions and upgrades required for the South Peel water supply and storage system through to the year 2031 to meet its servicing needs. It was determined that a new 600mm Pressure Zone 4 sub-transmission watermain was needed to service proposed development in Brampton, particularly within the areas of the Bram West Secondary Plan (SPA40) and the Vales of Humber Plan (SPA50). This work fell under Schedule A+ of the MEA and can be found under Master Plan ID W-ST-098 of the Master Plan. After beginning the design process, the Region moved forward with the Schedule 'B' process because it was determined that some alignment options may fall out of the road allowance therefore further review must be considered.

Therefore, the Heritage Road water distribution system upgrades are considered to fall under the classification of a Schedule B project as described in the Municipal Class Environmental Assessment Document (October 2000 as amended in 2007, 2011 & 2015), published by the Municipal Engineer's Association. This project does not require the completion of Phases 3 and 4 of the Class EA activities. Subsequent to the Class EA process, implementation of the preferred solution (Phase 5) will proceed.

A Schedule 'B' project is generally comprised of the following tasks:

- Identify the problem/opportunity;
- Inventory the existing environment (physical, natural, social and economic);
- Develop alternative solutions to address the problem/opportunity;
- Evaluate proposed alternative solutions;
- Consult with the public, review agencies, relevant stakeholders;
- Select the Preferred Solution giving consideration to the evaluation and any feedback received through consultation;
- Establish mitigation measures to minimize potential environmental impacts;
- Document the process in a Project File Report (PFR);
- Issue a Notice of Completion followed by a 30-day review period; and
- Address and final comments and conclude the Class EA process.

Consultation is a key component of the Class EA process as it allows members of the public, Indigenous communities, and review agencies opportunity to provide relevant information and feedback for consideration.

2.2.1 Study Objective

The objective of this project is to expand the Heritage Road water distribution system while minimizing impacts to local residential, institutional, commercial, and industrial activities. Members of the public, interest groups and review agencies are entitled to

review the problem/ opportunity statements and alternative solutions. The purpose of the consultation period is to communicate and resolve concerns regarding the project with the City. If concerns cannot be addressed through the City, stakeholders may request that the Minister of the Environment make an order for the project to comply with a Part II of the EAA. The Part II order addresses the individual environmental assessment by submitting a written request to the Ministry of Environment, Conservation, and Parks (MECP).

3.0 Study Area

The Regional Municipality of Peel is a region that consists of the following three municipalities:

1. City of Brampton;
2. City of Mississauga; and
3. Town of Caledon.

The Region of Peel is located west/ northwest of the City of Toronto and has a population of approximately 1,381,739 (2016 census).

The Region of Peel is a large region where the southern portion is predominantly urban, while the northern portion is predominantly rural. The Region's rapid population growth and business development in its southern portion can be attributed to its accessibility to six 400-series highways and Toronto Pearson International Airport. The Region of Peel is bordered to the west by the Region of Halton and Wellington County, Dufferin County and Simcoe County to the north, York and Toronto Region to the east, and Lake Ontario to the south.

The study area for the Heritage Road Water Distribution System Upgrades was set out in the Terms of Reference. For the purpose of the Class EA, the same area will be reviewed under this assessment.

Heritage Road is designated as a collector road under the City of Brampton's Schedule B Road Hierarchy (2019) and has four lanes. The Heritage Road water distribution system upgrades study area includes the intersection of Steeles Avenue/ Heritage Road in Brampton and extends south beyond the Brampton/Mississauga City Limits to the Meadowvale North Pumping Station in Mississauga (see Figure 2 Below). The land-use of this particular area of Brampton and Mississauga is predominantly commercial and industrial.

The proposed watermain distribution system upgrades includes the construction of approximately 1,300 linear meters of 600mm watermain.

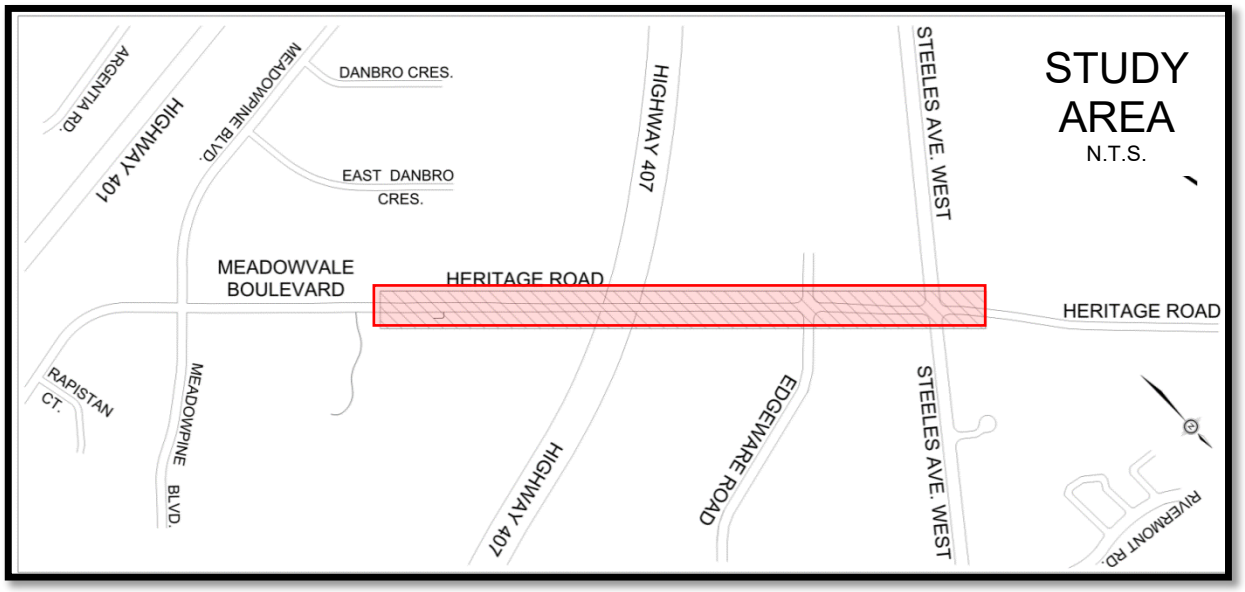


Figure 2: Heritage Road Study Area Map

4.0 Phase 1 – Problem or Opportunity

4.1 Problem/Opportunity Identification

The purpose of the problem/opportunity statement for this Class EA is to define the starting point of the undertaking of the process and to help to define the project scope. The RFP for this project outlines that an increase in commercial and industrial growth along the Heritage Road corridor has initiated the requirement for water distribution system upgrades from the Steeles Avenue/ Heritage Road intersection in Brampton, to the Meadowvale North Pumping Station in Mississauga.

The Master Plan identifies the Heritage Road watermain upgrades as a Schedule A+ project. With consideration to construction options outside of the existing road allowance that require the need for property acquisition, a Schedule B EA is required. The problem statement reflecting this consideration is:

> ***How to provide a water system to meet the requirements of the Agency's Water and Wastewater Master Plan.***

This Schedule B Class Environmental Assessment will determine the preferred design alternatives to construct approximately 1,300 meters of 600mm diameter watermain. The Class EA will identify and examine alternative design solutions within and outside of the road allowance, specifically at the south end of the study area. It will address the environmental, social and economic feasibility of the alternatives, as well as the property requirements, permits and approvals therein required to upgrade the distribution system.

5.0 Investigation of Existing Conditions

This section describes the characteristics of the study area to provide context and allow for accurate evaluation of potential impacts.

5.1 Environmental Site Assessment

An environmental site assessment (ESA) site assessment was completed by Peto MacCallum Ltd. on August 7, 2020, to verify the site conditions including past uses and to determine if there is a possibility of existing environmental contamination within the project area. The site review of the study area can be found in Section 5 of the ESA report attached in Appendix B.

The ESA was completed in accordance with protocols outlined in the Canadian Standard Association (CSA) Standard Z768-01 and includes a review of; MECP water well records, Environmental Risk Information Services Report, Technical Standards and Safety Authority (TSSA), the National Pollutant Release Inventory website.

The MECP water well records indicate that there are twenty-three (23) wells within 250m of the project study area. The purpose of the wells are recorded as follows:

- Nine (9) domestic water supply;
- One (1) industrial supply;
- One (1) livestock water supply;
- Seven (7) monitoring and test holes;
- Two (2) not used; and
- Three (3) no record.

The ESA identified fifteen (15) Potential Source Contaminants (PSCs) on the properties adjacent to the study area. The ESA outlined that the PSCs were a result of commercial trucking and container terminals, electronic and computer equipment manufacturing, gasoline and associated products storage in fixed tanks, storage, maintenance, fuelling

and repair of equipment, vehicles and material to maintain transportation systems and transformer manufacturing processing and use.

Descriptions of the identified PSC's are illustrated in Table 1 below:

Table 1: Identified Potential Source Contaminants

PSC No.	Location	Description
1	8050 Heritage Road	Amazon Fulfillment Center. Shipping and Receiving areas in the rear of the building
2	8050 Heritage Road	Amazon Fulfillment Center. Light fuels and petroleum distillates were used in 2020
3	7975 Heritage Road	Shipping and Receiving areas in the rear of the building
4	7965 Heritage Road	Shipping and Receiving areas in the rear of the building
5	7965 Heritage Road	Survalent. Electronic and Computer Equipment Manufacturing in the western portion of the building
6	7965 Heritage Road	G&W Canada. Transformer Manufacturing, Processing and Use in the eastern portion of the Site
7	2675 Steeles Avenue West	Matrix Logistics Services. Shipping and Receiving areas in the rear of the building
8	7726 – 7882 Heritage Road	Shipping and Receiving areas in the rear of the building
9	7405 E Danbro Crescent	Penske Truck Rental. Gasoline and Associated Products in Fixed Tanks in the eastern portion of the Site and eastern portion of the building
10	7405 E Danbro Crescent	Penske Truck Rental. Storage, maintenance, fueling and repair of equipment, vehicles and material used to maintain transportation systems throughout the Site. Diesel fuel tank

		is stored on Site. As per ERIS database, light fuels were used in 2020
11	2720 Meadowvale Blvd	Ontario Clean Water Agency. As per ERIS database, light fuels were used from 2003 to 2015.
12	7755 Heritage Road	As per ERIS database, 1400L port-a-pottie waste was spilled onto the ground contaminating the soil in 2013
13	2675 Steeles Avenue West	Canada Cartage Limited. As per ERIS database, 15L of diesel fuel spilled onto the land in 2009
14	2720 Meadowvale Blvd	Unknown amount of chlorinated water spilled into the ditch in 2016
15	8050 Heritage Road	Amazon Fulfillment Center. 2-3L of diesel fuel spilled to the ground in 2019

The PSCs outlined in Table 1 above, are identified on Drawing 1 in Appendix C.

Considering the findings above, the ESA recommended geoenvironmental sampling and chemical testing programs for soil and ground water to be completed for the fifteen sites identified above.

5.2 Baseline Natural Features Assessment

The Baseline Natural Features Assessment was completed by Palmer Environmental Consulting Group Inc. (Palmer) to delineate the existing vegetation and flora, breeding bird and aquatic habitats, and potential species at risk within the study area. The Baseline Natural Features assessment was conducted in accordance to federal, provincial and local legislation, including but not limited to Ontario's Provincial Policy Statement, Credit Valley Conservation Authority (CVC) Regulations and Policies, Endangered Species Act (2007), Fisheries Act, and the Migratory Birds Convention Act (1994). The Baseline Natural Features Assessment report and supporting documentation can be found in Appendix D.

In addition to the legislation above, Palmer initiated a variety of ecological surveys to provide an overview of the natural features within the study area. The ecological surveys included the following:

- Two (2) botanical and Ecological Land Classification (ELC) surveys were conducted on March 30, 2020 and June 1, 2020 respectively;
- Two (2) breeding bird surveys were conducted on June 14, 2020 and June 21, 2020 respectively; and
- One (1) aquatic habitat assessment was completed on June 1, 2020.

After legislation review and the completion of the ecological surveys, the following recommendations were made in the Baseline Natural Features Assessment Report with respect to the construction phase of this project:

1. Construction timing window for tree and vegetation removal should be limited to October 1st to April 1st of the calendar year;
2. To minimize the potential for erosion and sediment into Mullet Creek, the Contractor must:
   a. Retain existing vegetation and stabilize ground with native vegetation where possible;
   b. Limit the duration of soil exposure and/or phase construction;
   c. Delimit the perimeter of and excavation or drilling area with light duty silt fencing;
   d. Maintain overland sheet flow and avoid concentrating flow;
   e. Store and stockpile soil away from watercourse and drainage structure; and
   f. Assess erosion and sediment control measures before and after significant rainfall and snowmelt events.
3. Minimal frequency of site inspections and reporting shall be:
   a. Daily during active dewatering and daily visual inspection of discharge;
   b. Environmental inspections before and after significant storm and snow melt events; and
   c. Daily during extended rain and snowmelt periods.
4. A Response Plan to avoid spills of deleterious substances from entering the watercourse is required. The Contractor's Response Plan is to include:
   a. Stop work, contain sediment-laden water and other deleterious substances and prevent further migration in the watercourse;
   b. Maintain all machinery on site in a clean condition and free of fluid leaks; and
   c. Wash, refuel and service machinery and store fuel and other materials for machinery such that deleterious substances are prevented from entering the water.

5.3 Cultural Heritage Resource Assessment

The Cultural Heritage Resource Assessment (CRHA) was conducted by ASI on April 9, 2020, to illustrate the existing conditions of the study area and provide an inventory of cultural heritage resources. A field review of the study area can be found in Section 5.4 of the CHRA report attached in Appendix E.

The CHRA was conducted using federal, provincial, and municipal legislation surrounding the assessment of culturally significant sites, a review of existing heritage inventories, and through public consultation. Principally, the CRHA considered cultural heritage resources that were above-ground and over 40-years-old. The CHRA report notes that 40-year-old threshold is a guideline that is used when conducting preliminary identification of cultural heritage resources. The report also illustrates that resources identified to be 40-years-old does not signify cultural significance, and resources identified to be less than 40-years-old does not eliminate the resource as being culturally significant.

The CRHA identified a total of two cultural heritage sites, one known (7696 Heritage Road) and one potential (7655 Heritage Road), adjacent to the study area:

1. 7696 Heritage Road – as identified by the City of Brampton's *Municipal Register of Cultural Resources*; and

2. 7655 Heritage Road – as identified in the Highway 407 Transitway Cultural Heritage Resource Assessment for meeting criteria outlined in O.Reg 9/06.

Descriptions of the two identified sites are summarized in Table 2 below:

Table 2: Identified Heritage Resource Sites

CHR#	Location/Name	Heritage Recognition	Description
CHR 1	7696 Heritage Road (Dolson Farm)	Listed by the City of Brampton	Late nineteenth century vernacular farmhouse
CHR 2	7655 Heritage Road	Identified during background research Evaluated in March 2020 and found to meet criteria outlined in O.Reg 9/06 (ASI2020b)	c. 1830's log house encased in a c.1880's frame farmhouse

5.4 Archeological Assessment

The Stage I Archaeological Assessment (Background Research and Property Inspection) was conducted by ASI on April 14, 2020, to identify the archaeological potential of the

study area. A field review of the study area can be found in Section 2.0 of the Stage I Archaeological report attached in Appendix F.

The Stage I assessment was conducted using federal, provincial, and municipal legislation surrounding the assessment of archaeologically significant sites, and Ontario's archaeological site database. The Stage I Assessment illustrates that Ontario Archaeological Sites Database uses the Borden system to identify the coordinates of archaeological sites. A Borden block is approximately 18.5km north to south, and 13km east to west. A Borden block is identified by a four-letter designator with archeological sites located within the block being numbered sequentially as they are discovered. The Borden block designation for the study area is AjGw.

This Stage I assessment identified a total of 39 previously registered archaeological sites within a kilometer from the study area. A summary of the sites within the AjGw block is illustrated in Table 3 below:

Table 3: Archeological List of Previously Registered Sites

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AjGw-14	Laidlaw	Euro-Canadian	Homestead	Konrad 1972
AjGw-17	Garnett Laidlaw	Archaic	Campsite	Unknown 1976
AjGw-63	Junction	Pre-Contact Indigenous	Findspot	Junction
AjGw-64	John Beatty	Euro-Canadian	Midden	MPP 1985
AjGw-65	Levi's	Archaic, Late	Camp	MPP 1985
AjGw-71	Mullet Ponds	Woodland, Early; Woodland, Middle	Village	Lennox 1987
AjGw-100	N/A	Euro-Canadian	Homestead	MPP 1988
AjGw-205	New Parcel	Iroquoian	Campsite	MTO 1990
AjGw-247	GWG	Paleo-Indian, Late	Camp	Stewart 1995

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AjGw-248	Mullet Creek	Pre-Contact Indigenous	Campsite	Stewart 1996
AjGw-249	*Brackenreed Homestead*	*Euro-Canadian*	*Homestead*	*MCHI 1996*
AjGw-315	House	Euro-Canadian	Homestead	Currie 1999
AjGw-316	Oliver	Euro-Canadian	Homestead	Currie 1999
AjGw-333	Location 25	Pre-Contact Indigenous	Scatter	MHCI 2002
AjGw-335	Location 43	Pre-Contact Indigenous	Scatter	MHCI 2002
AjGw-336	Whaley	Euro-Canadian	Homestead	MHCI 2002; AAL 2005
AjGw-337	McClure	Euro-Canadian	Homestead	MHCI 2002; AAL 2005
AjGw-340	Location 24	Pre-Contact Indigenous	Findspot	MHCI 2002
AjGw-341	Location 27	Pre-Contact Indigenous	Findspot	MHCI 2002
AjGw-342	*Location 36*	*Pre-Contact Indigenous*	*Findspot*	*MHCI 2002*
AjGw-343	*Location 38*	*Pre-Contact Indigenous*	*Findspot*	*MHCI 2002*
AjGw-344	Location 46	Pre-Contact Indigenous	Findspot	MHCI 2002
AjGw-345	*Location 48*	*Pre-Contact Indigenous*	*Findspot*	*MHCI 2002*
AjGw-346	Location 49	Pre-Contact Indigenous	Findspot	MHCI 2002

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AjGw-347	Location 60	Pre-Contact Indigenous	Findspot	MHCI 2002
AjGw-348	Location 31	Pre-Contact Indigenous	Findspot	MHCI 2002
AjGw-350	Location 30	Euro-Canadian	Scatter	MHCI 2002
AjGw-415	AjGw-415 – P2	Archaic, Early	Findspot	ASI 2006
AjGw-416	N/A	Archaic, Late	Findspot	ASI 2006
AjGw-492	Ornstock P1	Pre-Contact Indigenous	Findspot	Archeoworks 2007
AjGw-505	Kingshott Site	Woodland, Early	Single-activity or short-term occupation	ARA 2009
AjGw-514	Heritage Knolls	Archaic, Middle	Campsite	AAL 2012
AjGw-515	Heritage Knolls II	Pre-Contact Indigenous	Campsite	AAL 2012
AjGw-516	Heritage Knolls III	Pre-Contact Indigenous	Campsite	AAL 2012
AjGw-519	Heritage Knolls IV	Pre-Contact Indigenous	Campsite	AAL 2012
AjGw-524	*McClure*	*Euro-Canadian*	*Homestead*	*AAL 2012*
AjGw-556	Beatty	Euro-Canadian	Homestead	ASI 2015; TAI 2016
AjGw-563	Arnott	Archaic, Middle; Euro-Canadian	Short-term occupation; Homestead	ASI 2016, 2018, 2019
AjGw-581	N/A	Euro-Canadian	Church, cemetery	ARA 2017

Sites in *italic* are within 50m

AAL – Archaeological Assessments Ltd.

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher

ARA – Archaeological Research Associates Ltd.

5.5 Geotechnical Assessment

Peto MacCallum completed geotechnical assessments by drilling boreholes (BH) based on the preliminary watermain alignments provided by Ainley.

Generally, the subsurface soil conditions encountered at the BH locations includes a topsoil/ pavement structure/ concrete structure over heterogeneous fill that is laid over sandy clayey silt/ silty sand till/ sandy silt till. The following significant native soil types were found under the fill material described above:

1. Top soil;
2. Pavement Structure;
3. Concrete Structure;
4. Fill;
5. Clayey Silt/ Silty Clay, with Sand/ Sandy;
6. Sandy Silt/ Silty Sand; and
7. Silty Sand/ Sandy Silt Till.

Monitoring wells were installed in several of the boreholes. Ground water level measurements were recorded in Appendix A of the Geotechnical Data Report. The water level measurements are summarized in Table 4 below:

Table 4: Monitoring Well Water Level Measurements

Borehole No.	Ground Surface Elevation	Mid-Screen Depth (m) (Elevation, m)	Soil Type	Groundwater Level Depth (m) (Elevation, m)			
				Installation Date	Nov 11, 2020	Nov 16, 2020	Dec 4, 2020
BH1	199.49	11.12 (188.37)	Sandy Claeyey Silt	October 20, 2020	4.11 (195.38)	4.19 (195.30)	4.16 (195.33)
BH5	201.59	10.97 (190.62)	Sandy Claeyey Silt	October 21, 2020	6.24 (195.35)	6.32 (195.27)	6.30 (195.29)
BH6	201.77	8.53 (193.24)	Sandy Claeyey Silt	October 26, 2020	6.23 (195.54)	6.25 (195.52)	6.45 (195.32)

Borehole No.	Ground Surface Elevation	Mid-Screen Depth (m) (Elevation, m)	Soil Type	Groundwater Level Depth (m) (Elevation, m)			
				Installation Date	Nov 11, 2020	Nov 16, 2020	Dec 4, 2020
BH7	202.88	12.95 (189.93)	Sandy Silt Till	October 27, 2020	6.43 (196.45)	6.57 (196.31)	6.47 (196.41)
BH8	205.84	16.50 (189.34)	Sandy Clayey Silt/Silty Sand	November 4, 2020	8.41 (197.43)	8.53 (197.31)	8.35 (197.49)
BH10	203.18	13.50 (189.68)	Silty Sand/ Sandy Silt Till	October 13, 2020	5.09 (198.09)	5.14 (198.04)	5.11 (198.07)

In addition to groundwater monitoring, QRAE 3 was used to identify whether methane, hydrogen sulphide, carbon monoxide and oxygen in the BHs. At approximately 12.2m below the ground surface, BH5 had carbon monoxide level of 234ppm. Oxygen levels in the BHs was detected to be 20.9%.

Peto MacCallum retained Geophysics GPR International Inc. to perform a geophysical survey to map the depth to bedrock on Heritage Road. The purpose of the survey was to create a comprehensive bedrock profile along five seismic lines along the proposed alignment of the tunneled watermain. The bedrock compressional wave velocity ranged from 2,950m/s to 3,300m/s which is typical for competent shale bedrock. There are no indications of low velocity zones that are indicative of fracture or shear zones.

5.6 Hydrogeological Assessment

Peto MacCallum was retained to complete a Hydrogeological Data Report (HDR) and a Hydrogeological Impact Assessment Report (HIAR) along the proposed watermain alignment. Peto MacCallum installed six (6) monitoring wells in boreholes 1, 5 to 8 and 10, to facilitate monitoring of groundwater levels, and in-hole permeability testing and ground water sampling for the hydrogeological assessment.

Ground water sample testing determined that the discharged water quality is expected to comply with the City of Mississauga and Brampton Sewers Bylaw for discharge to a sanitary sewer, with the exception of pH in BH1 and TSS concentration in BH6. In addition, the groundwater samples generally complied with the criteria for discharging to

a natural watercourse/ ditch or to a storm sewer within close proximity to the receiving natural watercourse/ ditch, with the exception of total suspended solids, metals, pH, BOD, possible PAHs, chlorine and 4AAP-Phenolics. Groundwater sampling results are summarized in Table A1 and A2 on pages 17 and 18 respectively, in the HDR report.

Construction dewatering is required where the proposed excavation elevation is deeper than the groundwater strike and/or hydrostatic groundwater level where the soil is relatively permeable. As a result, the majority of the watermain alignment is not expected to require construction dewatering. Estimated construction dewatering discharge rates for the construction area along the proposed watermain alignment ranged from 1,200L/d to 15,000L/d, with a safety factor of two (2), the discharge rates ranged from 2,400L/d to 30,000L/d. The estimated zone of influence radii ranged from about 2m to 63m. A summary of the estimated dewatering discharge rate and zone of influence calculations is outlined in the HDR report.

5.7 Existing Infrastructure Assessment

Urban X completed subsurface utility engineering on Heritage Road in 2019. Quality Level D utility records were obtained from utility companies. Once reviewed, Urban X completed a Quality Level B investigation. The utilities identified on the project site are as follows:

The Steeles Avenue West intersection is congested with a significant number of utilities. Bell and Hydro lines (under- and over-ground) are present on the east and west sides of Heritage Road. A 100mm high pressure gas main is located on the east side of the intersection, with a 200mm high pressure gas main running east to west directly through the middle of the intersection. In addition, the 1500mm CCP Zone 4 and 900mm CPP Zone 5 watermains are in the center of and on the east side of the intersection respectively. Moreover, a 1090x1725mm storm and 300mm sanitary sewer run north/south through the intersection.

From Steeles Avenue West intersection to Edgeware Road, the existing utilities, as identified above, generally run parallel to Heritage Road, with the exception of stormwater catch basin laterals and the occasional Bell and Hydro line running perpendicular to the road. The 100mm high pressure gas line is located in the boulevard on the east side of the road. In addition, the 1500mm CPP Zone 4, 400mm CPP Zone 4, and 900mm CPP Zone 5 watermain are located on the east side of Heritage Road, with the 1500mm watermain located in the boulevard and the 400mm and 900mm watermains located in the roadway. Further, the storm and sanitary sewers are located in the roadway on the west side of the roadway.

From Edgeware Road to the north side of the Highway 407 crossing, the utilities become gradually less congested. Bell and Hydro lines continue to run parallel to the roadway with the occasional crossing. The 100mm high pressure gas main remains in

the boulevard located on the east side of the roadway and ends at 7755/ 7845/ 7855 Heritage Road. In addition, the 1500mm and 400mm CPP Zone 4 watermains continue to run parallel with road on the east side until 7755/ 7845/ 7855 Heritage Road where the 1500mm CPP watermain crosses the road to the west side. Directly after the Edgeware Road intersection, the 900mm CPP Zone 5 watermain crosses from the east to west side of the road and continues to run adjacent to the 1500mm CPP Zone 4 watermain outside of the roadway on the boulevard on the west side. Moreover, directly after the Edgeware Road intersection, the storm sewer crosses Heritage Road and discharges to a stormwater management pond on to the east of the roadway. The remaining stormwater catch basins in this section of the roadway immediately discharge to swales and stormwater ditches on the east side of the road. Furthermore, the sanitary sewer on the roadway on the west side of the road crosses Heritage Road and continues in the boulevard on the east side where it continues to the east to the Mullet Creek Sewage Pumping Station.

From south of Highway 407 to the end of the study area near the Meadowvale North Zone 3 Pumping Station, the utilities become significantly congested. Overhead and underground Bell and Hydro lines continue parallel to Heritage Road, with the occasional road crossing. Directly south of the Highway 407 corridor, there is a 1400mm stormwater culvert that lies perpendicular to Heritage Road. In addition, there are two Enbridge high pressure gas mains with diameters of 1070mm and 900mm respectively that cross perpendicular to Heritage Road. In between the Enbridge gas mains and the Brampton/ Mississauga City Limits lies a Hydro One overhead high voltage transmission lines. In addition to the overhead lines, Hydro One also has an underground fibre optic line that lays parallel to Heritage Road in the west boulevard; and at the end of the study area, the roadway and boulevard adjacent to the Totoredaca Dog Park and Meadowvale North Pumping Station, there is significant utility congestion within the roadway and boulevard on the west side of the intersection.

6.0 Phase 2 – Proposed Alternative Solutions

During Phase 2 of the Class EA process, several alternative solutions were developed to address the problem/opportunity statement and are presented as follows:

6.1 Alternative 1 – Construct the Watermain with Portions of the Alignment Outside of the Road Right-of-Way

This Alternative considers both trenchless and open-cut construction methods both within and outside of the road right-of-way. It is anticipated that a sending/ receiving shaft for tunneling the watermain from Edgeware Road to the North Meadowvale Pumping Station will need to be constructed outside of the road right-of-way due to space limitations. This alternative is being considered because constructing the watermain outside of the road allowance in specific locations may minimize impact to north and south bound traffic and minimize the time required to construct the watermain.

Where water distribution system expansion construction occurs outside of the right-of-way, a Schedule B Class EA is required.

6.2 Alternative 2 – Construct the Watermain within the Road Right-of-Way

This Alternative is similar to Alternative 1 but only considers the opportunities to construct the watermain within the road right of way. This Alternative considers both trenchless and open-cut construction methods for the watermain. Where it is economically feasible, this will minimize disruption to traffic and where space allows, tunneling the watermain will be the preferred method of construction. However, where cost of tunneling significantly outweighs that of open-cut, open-cut will be considered the preferred method of construction.

6.3 Alternative 3 – Limit Growth

The objective of this Class EA is to determine the feasibility of construction methods to upgrade the existing water distribution system on Heritage Road as a reflection of projected commercial and industrial growth outlined in the Master Plan. The Limit Growth Alternative conflicts with the purpose of this project and therefore was not considered viable and was screened out of the detailed comparative assessment.

6.4 Alternative 4 – Do Nothing

The Class EA process must provide a holistic solution to all aspects of the problem statement. The “Do-Nothing” option considers no improvements and/or modifications. This alternative does not address the problem/opportunity statement and is provided as a benchmark to gauge the potential impacts of the other alternatives being considered.

7.0 Explanation of Alternative Solutions

Generally, the proposed conceptual watermain alignment alternatives remain within the Heritage Road/ Meadowvale Boulevard road allowances. However, a large portion of the project is within Ontario Infrastructure and Lands Corporation (IO) lands. In order to cross Highway 407, the MTO and Highway 407ETR Group require that crossings occur at a distance away from the overpass. Therefore, the watermain must cross IO lands. The Ministry of Infrastructure Public Works Class EA sets out how the Ministry of Infrastructure (MOI) and IO will meet EAA requirements. MOI and IO may necessitate specific requirements for the EA process; however, it was determined through stakeholder communications that an MOI Environmental Assessment for this project is not required.

When considering impacts to 'private' property, impacts outside of IO lands are being considered as they fall under the Schedule B MCEA process.

In some of the design options, the proposed tunneling shaft adjacent to the Totoredaca Dog Park is located outside of the Heritage Road right of way. As well, the tunneling shaft closest to Edgeware Road requires temporary use of private property for a tunneling compound. In order to complete the crossing of Mullet Creek without significant environmental impacts, this is considered the most suitable location for the tunneling shaft.

The design alternative options can be viewed on Figure No. 3, 4 and 5. Note that the alignment from the connection at Steeles Avenue to the tunneling shaft just south of Edgeware Road are the same for each alternative. The alignment is within the road allowance and technically feasible. This section will not be reviewed further under the various design alternatives.

7.1 Alternative 1 - Design Option 1 (Green)

Design Option 1, represented by a green line in the following figures, consists of a total of three tunnel sections and one open-cut section. The first tunnel section would extend along the west side of Heritage Road offset approximately 7.5m from the west property line for 139.3m. The tunnel crosses under Mullet Creek, therefore open cut construction is not suitable a suitable construction method. The locations for the proposed tunnel shafts are in open, flat areas with few utilities. The southerly tunnel shaft is located near the entrance of an Amazon warehouse. This area sees significant pedestrian and vehicular traffic creating safety considerations. As well, the area was recently landscaped.

The second tunnel section extends from the shaft in the frontage of the Amazon property on the west side of Heritage Road, crossing Highway 407, future Highway 407 Transitway corridor and two large diameter gas mains (1070 and 900 mm diameter). It will also cross under the existing 1500 and 900mm diameter CPP watermains with 6 to 8m of vertical clearance. The proposed vertical clearance below the Highway 407 driving lanes is approximately 10m. The proposed shaft location on the south side of Highway 407 is in a relatively open, flat area. The land is owned by Infrastructure Ontario and is agricultural in use. It lies midway between an existing 900mm CPP watermain and a Bell fibre optic line. These utilities would need to be accurately located before the shaft location is confirmed. This would be the longest of the three tunnel sections under Design Alternative 1 at 447.7m.

The third tunnel section extends from the shaft south of Highway 407 crossing Heritage Road diagonally from the west boulevard to a property owned by the City of Mississauga on the east side of Meadowvale Boulevard (Totoredaca Leash Free Dog Park) near the Meadowvale North Pumping Station. This section would cross under four

overhead high voltage Hydro transmission lines and would also cross under the existing 400mm diameter watermain with approximately 2.5m vertical clearance. The tunnel length would 196.4m. The proposed shaft location would be on property owned by the City of Mississauga and would therefore require a land use agreement. The area is relatively flat with scrub brush and no utilities, therefore, it would be a suitable shaft location. It is located approximately 20m south of the boundary line between the City of Brampton and the City of Mississauga, and is approximately 45m north of the dog park parking lot. It is noted that Heritage Road is the City of Brampton title for the roadway. The road name changes to Meadowvale Boulevard on the City of Mississauga side of the municipal boundary.

The final section of watermain would be installed by open cut from the final shaft to the point of connection to the existing 750mm CPP Zone 4 watermain. This section of watermain would be installed on the dog park property, therefore a land use agreement would be required. The Region indicated in the Request for Tender (RFT) that the watermain within the City of Mississauga is to be located within the boulevard or installed by trenchless methods due to recent road improvements. There is no available location to install the watermain within the Meadowvale Boulevard road allowance unless it is placed in the road. Utilizing the alignment through the dog park property will allow the road to remain undisturbed and will facilitate a direct connection to the existing 750 watermain on the east side of the road. This alignment will reduce traffic impacts at the time of construction and also when the new watermain is connected into the existing system. This alignment would also cross in front of the main entrance to the dog park, however, there is a secondary entrance to the dog park via the adjacent access road which would still allow the public to access the park during construction.

The RFT identifies that the proposed 600mm watermain is to be constructed directly into the Meadowvale North Pumping Station and connected into the Pressure Zone 4 discharge header. The piping configuration in and adjacent to the station has been reviewed and it was determined that this is not feasible. It is recommended that for ease of construction and to avoid disturbing the road, the connection should be made to the existing 750mm CPP Zone 4 watermain on the east side of Meadowvale Boulevard.

7.2 Alternative 1 - Design Option 2 (Red)

Design Option 2, represented by a red line, consists of two tunnel sections and one open cut section. The first tunnel section would extend along the west side of Heritage Road, crossing under Mullet Creek and under the existing 1500 and 900mm diameter CPP watermains. The length of this tunnel would be 295m. The proposed tunnel shaft on the north side of Highway 407, is within a sloped area approximately 50m north of the Highway 407 westbound lanes. The area is fairly open from utilities but is near a concrete encased buried duct bank that crosses under Highway 407. This site could be used as a tunneling shaft location but is considered less desirable due to the sloped topography, proximity to Highway 407 and difficult access.

The second tunnel section extends from the north shaft, crossing Heritage Road diagonally from the west boulevard to a location in the dog park (described in Design Option 1 above). This tunnel would cross under Highway 407, future Highway 407 Transitway corridor, two large diameter gas mains (1070 and 900mm diameter) and four overhead high voltage Hydro transmission lines. It would also cross under the existing 1500mm, 900mm and 400mm diameter CPP watermains. The length of this tunnel section would 490m which is longer than the sections considered for Design Alternative 1.

The final section of watermain would be installed by open cut from the shaft located in the dog park to point of connection to the existing 750mm CPP Zone 4 watermain. This section would be installed roughly in the middle of the road, or alternatively it could follow the same alignment as the final section of Design Option 1 as described above. It is important to acknowledge that if the watermain is connected in the middle of Heritage Road, there will be greater impacts to the flow of traffic compared to connecting the watermain in the eastern boulevard during construction and watermain tapping process. In addition to traffic flow impacts, constructability of the new watermain in the center of the road would be challenging, as the Contractor would be required to cross under existing utilities such as large diameter watermains. Constructing the new watermain in the east boulevard would eliminate conflicts with existing utilities.

7.3 Alternative 2 - Design Option 3 (Purple-Red)

Design Option 3, purple alignment in combination with the red extension, is similar to Design Option 2, except the southerly tunneling shaft would be shifted out of the dog park approximately 50m north. The shaft location is relatively open and flat but would likely require relocation of an existing Bell line to facilitate construction of the shaft. An existing concrete sidewalk would also be impacted. The shaft location is situated on Infrastructure Ontario land and would require an easement agreement.

7.4 Alternative 2 - Design Option 4 (Orange-Green)

Design Option 4, orange alignment in combination with green (1), consists of two tunnel sections and one open cut section. The two tunnel sections are the same as the first two tunnel sections under Design Option 1. South from the shaft on IO lands, construction would take place by open cut means following a diagonal path into the roadway. Once the alignment passes existing infrastructure, in alignment with the centre of the road, it would be constructed by open cut until it connects to the existing 750mm watermain. This alternative removes the need for one of the tunnel shafts and drives. However, this alternative creates the most disruption to traffic and disturbs the recently

paved roadway within the City of Mississauga. More onerous permits from Hydro One would also be necessary to cross its easement by open cut methods. Technically, construction within close proximity to existing infrastructure would be difficult.

7.5 Alternative 2 – Design Option 5 (Green-Blue)

Design Option 5, blue alignment in combination with green (1), consists of two tunnel sections and one open cut section. From the shaft at the City park, the remaining open cut section would follow a diagonal path into the roadway and then from Station 2+115+/- would follow an alignment near the centre of the road. This alternative removes the need for one of the tunnel shafts which are in difficult locations with respect to constructability.

The final section of watermain would be installed by open cut from the final shaft to the point of connection to the existing 750mm CPP Zone 4 watermain. This section of watermain would be installed on the dog park property, therefore a land use agreement would be required. The Region indicated in the Request for Tender (RFT) that the watermain within the City of Mississauga is to be located within the boulevard or installed by trenchless methods due to recent road improvements. There is no available location to install the watermain within the Meadowvale Boulevard road allowance unless it is placed in the road. Utilizing the alignment through the dog park property will allow the road to remain undisturbed and will facilitate a direct connection to the existing 750 watermain on the east side of the road. This alignment will reduce traffic impacts at the time of construction and also when the new watermain is connected into the existing system. This alignment would also cross in front of the main entrance to the dog park, however, there is a secondary entrance to the dog park via the adjacent access road which would still allow the public to access the park during construction.

The RFT identifies that the proposed 600mm watermain is to be constructed directly into the Meadowvale North Pumping Station and connected into the Pressure Zone 4 discharge header. The piping configuration in and adjacent to the station has been reviewed and it was determined that this is not feasible. It is recommended that for ease of construction and to avoid disturbing the road, the connection should be made to the existing 750mm CPP Zone 4 watermain on the east side of Meadowvale Boulevard.

Figures 3, 4 & 5 outline the alternative solutions discussed above.

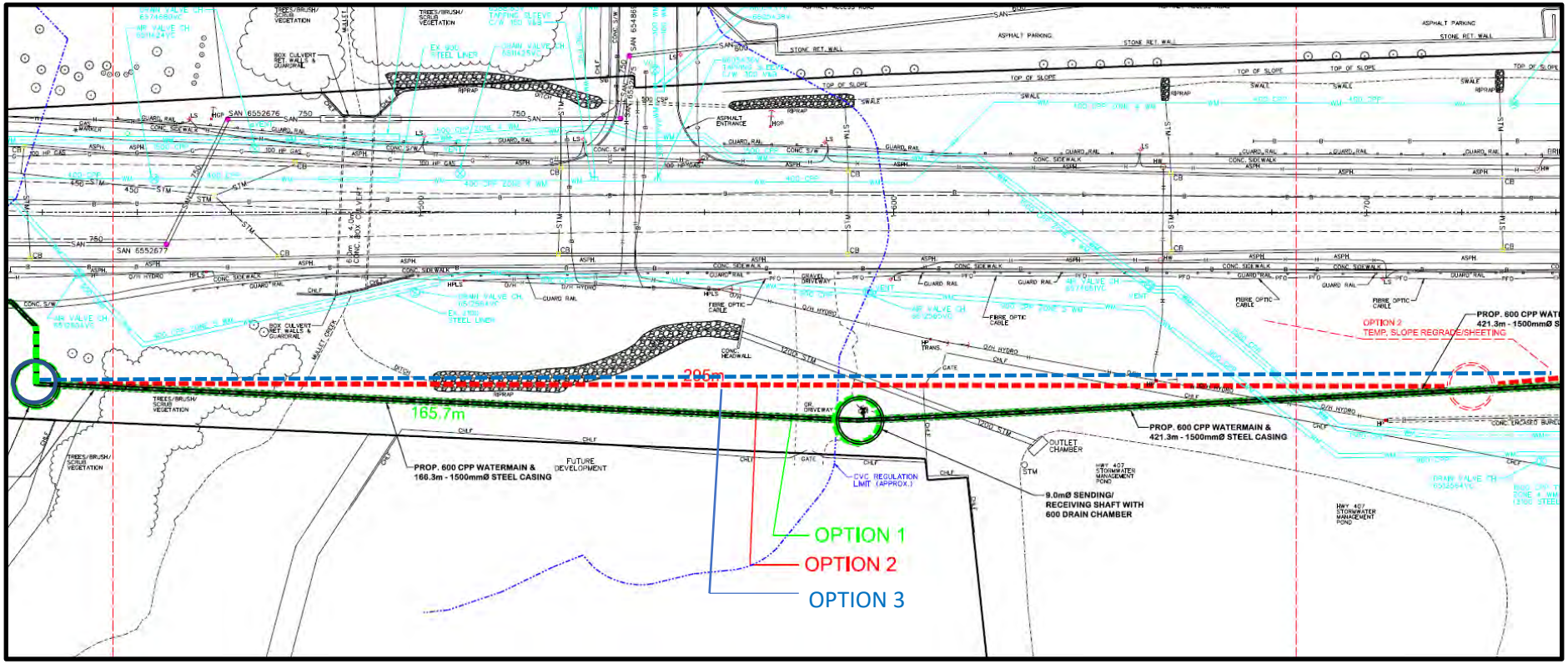


Figure 3: Edgeware Road to Meadowvale North Pumping Station Tunneling Section 1

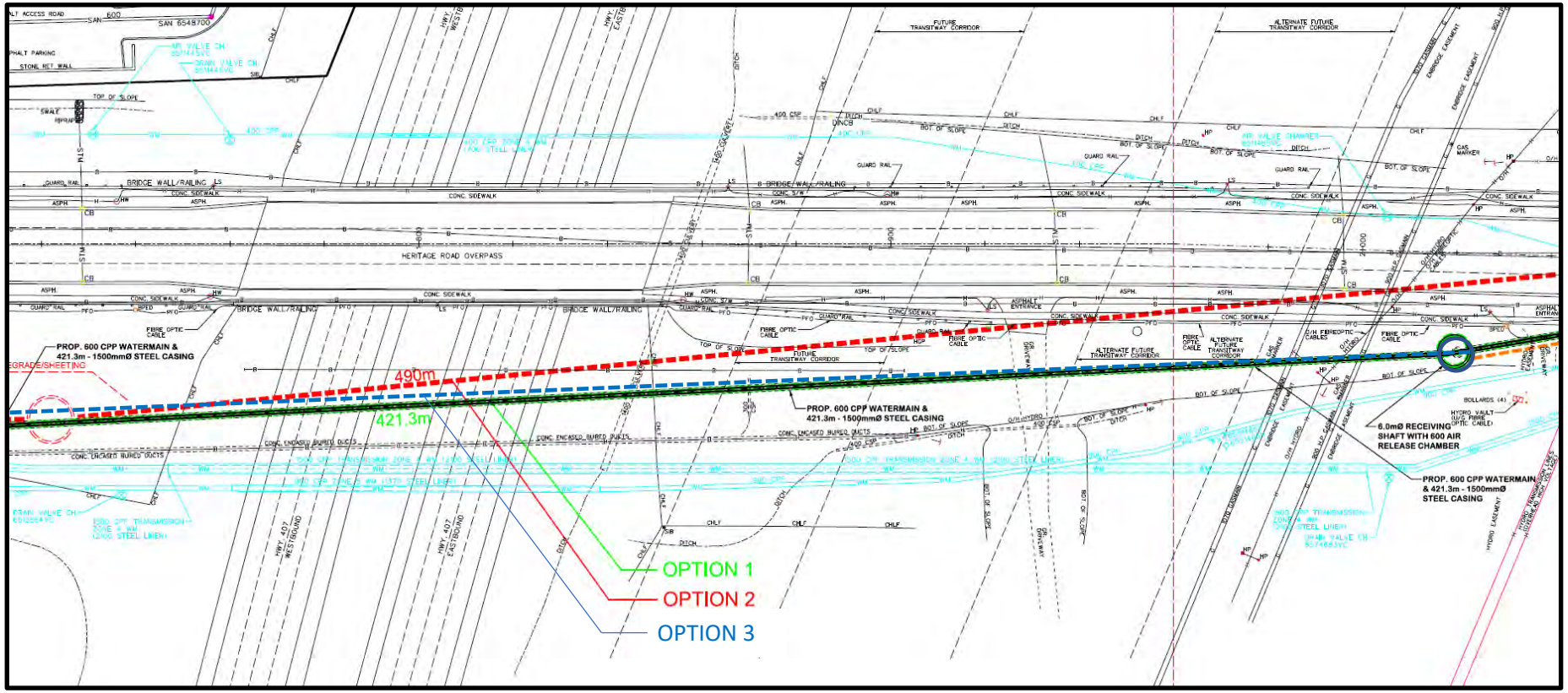


Figure 4: Edgeware Road to Meadowvale North Pumping Station Tunneling Section 2

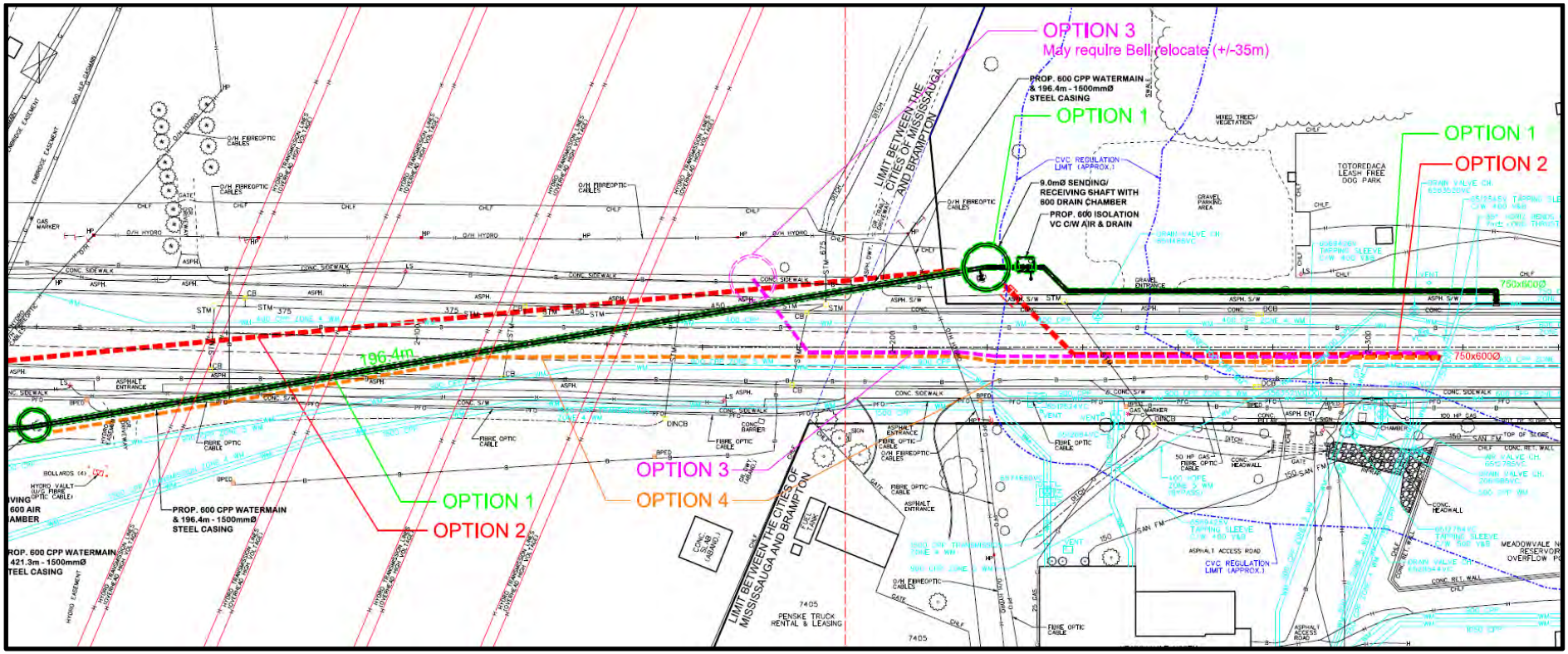


Figure 5: Edgeware Road to Meadowvale North Pumping Station Tunneling Section 3 with Open-Cut to Existing Watermain

6.1 Evaluation of Alternatives

The criteria used for evaluating the design alternatives for water projects are set out in the approved Class EA document. The recommended criteria list to be used in the evaluation process was developed based on the project type and the community's core beliefs. The evaluation criteria are used to compare the feasibility of the design alternatives for constructing the watermain on the south section of Heritage Road from the Edgeware Road to the Meadowvale Boulevard North Pumping Station. Each alternative is rated using the following based on its performance in each category:

1. Most preferred (positive impact);
2. Less preferred (some negative impact); or
3. Least preferred (significant negative impact).

The design alternative that scored the highest based on this ranking system becomes the recommended solution for this Schedule B Class EA.

6.1.1 Evaluation Criteria

The following evaluation criteria were developed based on a list of considerations outlined in Part C – Municipal Water and Wastewater Projects of the Class EA document.

Natural Heritage Features

Significant natural heritage features in proximity to the Heritage Road distribution system upgrades, including Mullet Creek, are identified across all jurisdictions and reflect Conservation Authority, municipal, provincial, and federal policies. Natural heritage features can be described as: land forms, groundwater, surface water and fisheries, wetlands, terrestrial vegetation, habitat and wildlife, and connections provided by or between these resources.

A Baseline Nature Features Assessment was completed to identify ecological sensitivities within the study area. Recommended timelines for construction, erosion and sediment control measures and requirements for a spill response plan were included in the assessment. Although the design alternatives for the project delineate tunneling as the preferred method of construction for crossing Mullet Creek, it was also recommended to negate in-water work.

Social Environment

When considering the social environment, impacts to the surrounding community, residential, recreational, commercial and industrial areas were considered. This includes noise, traffic impacts, and property access. To mitigate the impacts of construction of the social environment, recommendations made by the City of Brampton and the City of Mississauga, provincial policies and MECP policies were considered using the evaluation process.

The impact of each alternative on property owners, users of the Totoredaca dog park, and commuter traffic during construction were reviewed as part of the evaluation process.

Cultural Environment

The cultural environment refers to the cultural heritage and archaeological resources in the environment. As an identified recommendation in ASI's CHRA, the cultural heritage focused on evaluating the potential impacts to identified cultural heritage resources by assessing the suitability of construction activities and staging adjacent to culturally significant sites.

A Stage I Archaeological assessment was completed to identify the archaeological potential of the study area. Some sites with archaeological potential were found within 50m of the study area, however due to extensive land disturbance and previous archaeological studies, no additional considerations were recommended.

First Nations/Aboriginal Peoples

This includes consideration to Aboriginal peoples' and First Nations lands. A Stage I Archaeological assessment was completed to identify the historic Aboriginal Peoples' archaeological potential of the study area. As well, First Nations communities were advised at every stage of the Assessment.

Physical and Technical Environment

The technical considerations reviewed the feasibility of constructing the 600mm watermain through two methods: tunneling or open-cut. Constructability considerations such as land availability for tunneling sending/receiving shafts; ability to navigate existing subsurface infrastructure; ability to minimize traffic disruptions to traffic; and future operability were used during the evaluation process. As well, the designs were considered with respect to their ability to meet Region and City Standards.

Economic Environment

The capital costs of all the design alternatives were considered; including all aspects of construction. It is anticipated that the costs for operation and maintenance would be the same for all of the alternatives and therefore were not included in the evaluation. Conceptual level cost estimates were developed for each Alternative, and have been prepared from the information available at this stage of the conceptual design. The final costs associated with this project will depend on labour, equipment and material costs, market conditions, project scope, schedule, and other variable conditions. The costs calculated are based on the following assumptions and exclusions:

Assumptions:

- Includes Contractor's overhead, profit, mobilization, demobilization and bonding/ insurance;
- Estimated cost is in 2020 dollars;
- Unit prices are based on quotations, cost books and historical data;
- Equipment estimates are based on vendor quotations or historical data from recently tendered projects with allowances for installation based on ratios of the equipment cost; and
- Pricing assumes competitive bidding for every portion of the General Contractor and Sub-Contractor work.

Exclusions:

- Permits and approvals;
- Site investigations;
- Engineering costs;
- Harmonized Sales Tax; and
- Impacts due to inflation, escalation, and the COVID-19 pandemic.

6.1.2 Comparative Evaluation of Alternatives

Table 5 below illustrates the comparative assessment of the design alternatives based on the identified evaluation criteria above. The detailed evaluation was completed using information gathered through specific field studies and background research.

Table 5: Comparative Evaluation of South of Edgeware Road to North Meadowvale Pumping Station

Criteria	Design Alternative 1 (GREEN)	Design Alternative 2 (RED)	Design Alternative 3 (PURPLE w/ Red)	Design Alternative 4 (ORANGE w/GREEN)	Design Alternative 5 (BLUE w/GREEN)
Natural Environment Considerations • Impacts on wildlife, vegetation and wetlands • Proximity to floodplains and watercourses • Climate Change	• Some potential impacts on wildlife, vegetation and wetlands due to proximity to Mullet Creek. • Construction compound would require land at drainage ditch to Mullet Creek. • Water distribution system upgrades (including the sending/ receiving shafts for tunneling) are located within CVC Regulation Limits. It was determined that the tunneling shafts would have the same impact on the natural environment, regardless of the location. • Water distribution system upgrades (including the sending/ receiving shaft for tunneling) are not located within an MNR evaluated or unevaluated wetland.	• Some potential impacts on wildlife, vegetation and wetlands due to proximity to Mullet Creek. • Water distribution system upgrades (including the sending/ receiving shafts for tunneling) are located within CVC Regulation Limits. It was determined that the tunneling shafts would have the same impact on the natural environment, regardless of the location. • Water distribution system upgrades (including the sending/ receiving shaft for tunneling) are not located within an MNR evaluated or unevaluated wetland.	• Some potential impacts on wildlife, vegetation and wetlands due to proximity to Mullet Creek. • Water distribution system upgrades (including the sending/ receiving shafts for tunneling) are located within CVC Regulation Limits. It was determined that the tunneling shafts would have the same impact on the natural environment, regardless of the location. • Water distribution system upgrades (including the sending/ receiving shaft for tunneling) are not located within an MNR evaluated or unevaluated wetland.	• Some potential impacts on wildlife, vegetation and wetlands due to proximity to Mullet Creek. • Water distribution system upgrades (including the sending/ receiving shafts for tunneling) are located within CVC Regulation Limits. It was determined that the tunneling shafts would have the same impact on the natural environment, regardless of the location. • Water distribution system upgrades (including the sending/ receiving shaft for tunneling) are not located within an MNR evaluated or unevaluated wetland. • Greater climate change impact due to additional length of open cut construction.	• Some potential impacts on wildlife, vegetation and wetlands due to proximity to Mullet Creek. • Water distribution system upgrades (including the sending/ receiving shafts for tunneling) are located within CVC Regulation Limits. It was determined that the tunneling shafts would have the same impact on the natural environment, regardless of the location. • Water distribution system upgrades (including the sending/ receiving shaft for tunneling) are not located within an MNR evaluated or unevaluated wetland
Natural Environment Considerations Rating	**Least Preferred**	**Less Preferred**	**Less Preferred**	**Least Preferred**	**Less Preferred**
Social and Cultural Considerations • Traffic disruption • Pedestrian disruption • Recreational activities • Aesthetics	• Two cultural resources are located adjacent to the project area. Additional consideration for construction activities and staging may be required. • Archeological Assessment identified some archeological significance but no further action is required. • Little impact to traffic with first tunneling send/receiving shafts to cross Mullet Creek west of Heritage Road.	• Two cultural resources are located adjacent to the project area. Additional consideration for construction activities and staging may be required. • Archeological Assessment identified some archeological significance but no further action is required. • Little impact to traffic with first tunneling send/receiving shafts to cross Mullet Creek west of Heritage Road.	• Two cultural resources are located adjacent to the project area. Additional consideration for construction activities and staging may be required. • Archeological Assessment identified some archeological significance but no further action is required. • Little impact to traffic with first tunneling send/receiving shafts to cross Mullet Creek west of Heritage Road.	• Two cultural resources are located adjacent to the project area. Additional consideration for construction activities and staging may be required. • Archeological Assessment identified some archeological significance but no further action is required. • Little impact to traffic with first tunneling send/receiving shafts to cross Mullet Creek west of Heritage Road.	• Two cultural resources are located adjacent to the project area. Additional consideration for construction activities and staging may be required. • Archeological Assessment identified some archeological significance but no further action is required. • Little impact to traffic with first tunneling send/receiving shafts to cross Mullet Creek west of Heritage Road.

Criteria	Design Alternative 1 (GREEN)	Design Alternative 2 (RED)	Design Alternative 3 (PURPLE w/ Red)	Design Alternative 4 (ORANGE w/GREEN)	Design Alternative 5 (BLUE w/GREEN)
	• High possibility of impact to vehicle and pedestrian traffic at Amazon Warehouse entrance at second tunneling send/receiving shafts to cross Mullet Creek west of Heritage Road. • Little impact to traffic with third tunneling sending/receiving west of Heritage Road. • Some short-term impact on farm field at shaft location. • Long term impact to parking lot of the Totoredaca Dog Park on the east side of Heritage Road where the final tunneling sending/ receiving shaft is located north of the parking lot but less impact to roadway. • Short term impact across frontage of dog park where watermain is installed by open-cut to connect to the North Meadowvale Pumping Station feeder main. • No significant traffic impacts.	• Some impact to traffic at second tunneling send/receiving shaft at Amazon Warehouse entrance. • No impact to traffic with third tunneling sending/receiving west of Heritage Road. • Long term impact to parking lot of the Totoredaca Dog Park on the east side of Heritage Road where the final tunneling sending/ receiving shaft is located north of the parking lot. • Short term major impact to traffic with open-cut construction from final tunneling shaft to existing 750mm CPP Zone 4 watermain in the middle of the road. • Long term impact to sidewalk and surrounding area at shaft location on IO lands.	• Some impact to traffic at second tunneling send/receiving shaft at Amazon Warehouse entrance. • No impact to traffic with third tunneling sending/receiving west of Heritage Road. • Impact to the Totoredaca Dog Park, Reservoir and Penske entrance on Heritage Road south of the final tunneling sending/ receiving shaft. • Short term major impact to traffic with open-cut construction from final tunneling shaft to existing 750mm CPP Zone 4 watermain in the middle of the road. (Impacts a slightly longer distance than Alt. 2). • Long term impact to sidewalk and surrounding area at shaft location on IO lands.	• High possibility of impact to traffic at Amazon Warehouse entrance at second tunneling send/receiving shafts to cross Mullet Creek west of Heritage Road. • Some short-term impact on farm field at shaft location. • Traffic Impact to the Totoredaca Dog Park, Reservoir and Penske entrance on Heritage Road south of the final tunneling sending/ receiving shaft. • Most short-term major impact to traffic with open-cut construction from final tunneling shaft to existing 750mm CPP Zone 4 watermain in the middle of the road. (Impacts a longer distance than Alt. 2, 3 and 1/3).	• Some short-term impact on farm field at shaft location. • Long term impact to parking lot of the Totoredaca Dog Park on the east side of Heritage Road where the final tunneling sending/ receiving shaft is located north of the parking lot. • Short term traffic impact across frontage of dog park where watermain is installed by open-cut to connect to the North Meadowvale Pumping Station feedermain. • No significant traffic impacts.
Social and Cultural Environment Considerations Rating	**Least Preferred**	**Less Preferred**	**Least Preferred**	**Least Preferred**	**Most Preferred**
Technical Suitability and Operational Suitability Considerations • Region of Peel, City of Brampton and City of Mississauga requirements • Ability to connect with existing infrastructure • Constructability	• Meets Region's RFT requirements. • Less congested connection to existing Zone 4 watermain. • All tunneling sending/receiving shafts are located in relatively flat areas with no existing utilities/ infrastructure for ease of constructability.	• Meets Region's RFT requirements, however, RFT required Consultant to avoid road reconstruction in City of Mississauga roads. • Second tunneling sending/receiving shaft located close to concrete duct bank, has sloped topography, is close in proximity, and would be difficult to access.	• Meets Region's RFT requirements, however, RFT required Consultant to avoid road reconstruction in City of Mississauga roads. • Second tunneling sending/receiving shaft located close to concrete duct bank, has sloped topography, is close in proximity, and would be difficult to access.	• Meets Region's RFT requirements, however, RFT required Consultant to avoid road reconstruction in City of Mississauga roads. • Connection to existing Zone 4 watermain in close proximity to other large diameter watermains. • All tunneling sending/receiving shafts are located in relatively flat areas with	• Meets Region's RFT requirements. • Less congested connection to existing Zone 4 watermain. • All tunneling sending/receiving shafts are located in relatively flat areas with no existing utilities/ infrastructure for ease of constructability.

Criteria	Design Alternative 1 (GREEN)	Design Alternative 2 (RED)	Design Alternative 3 (PURPLE w/ Red)	Design Alternative 4 (ORANGE w/GREEN)	Design Alternative 5 (BLUE w/GREEN)
• Impact on existing operations during construction	• No impact to existing operations during construction.	• Connection to existing Zone 4 watermain in close proximity to other large diameter watermains. • No impact to existing operations during construction.	• Final tunneling sending/ receiving shaft location would require a Bell utility to be relocated. • Connection to existing Zone 4 watermain in close proximity to other large diameter watermains. • No impact to existing operations during construction.	no existing utilities/ infrastructure for ease of constructability. • Connection to existing Zone 4 watermain in close proximity to other large diameter watermains.	• No impact to existing operations during construction.
Technical and Operational Suitability Considerations Rating	**Most Preferred**	**Less Preferred**	**Least Preferred**	**Least Preferred**	**Most Preferred**
Economic and Financial Considerations • Costs related to considerations of work either within or outsider of road allowance on south end of project up to first shaft.	• Operation and maintenance costs are similar for all alternatives. • Requires compensation to City for easement on City Lands. • Open cut outside of roadway less expensive. • Additional construction costs to build temporary shaft compound at Totoredaca Dog Park.	• Operation and maintenance costs are similar for all alternatives. • Requires compensation to City for easement on City Lands. • More complicated connection is more expensive. • Road work at centreline of road means additional costs. • Additional construction costs to build temporary shaft compound at Totoredaca Dog Park.	• Operation and maintenance costs are similar for all alternatives. • Requires compensation to IO and easement on IO Land. • More complicated connection is more expensive. • Second most expensive road work related expenses. • Additional construction costs to build temporary shaft compound on IO property.	• Operation and maintenance costs are similar for all alternatives. • Longest section of open cut = most expensive road reconstruction costs. • One less shaft, tunnel drive and compound create significantly less expense. • No land agreement expenses.	• Operation and maintenance costs are similar for all alternatives. • Requires compensation to City for easement on City Lands. • Open cut outside of roadway less expensive. • Additional construction costs to build temporary shaft compound at Totoredaca Dog Park.
Financial Considerations Rating	**Less Preferred**	**Least Preferred**	**Least Preferred**	**Most Preferred**	**Less Preferred**
Overall Rating	**Less Preferred**	**Less Preferred**	**Least Preferred**	**Least Preferred**	**Most Preferred**

.

6.2 Preferred Design Alternative

6.2.1 South of Edgeware Road to Meadowvale North Pumping Station

The recommended alternative between Edgeware Road and Meadowvale North Pumping Station is 'Alternative 2 – Design Option 5 (Green-Blue)'. This option consists of two tunnel sections and one open cut section. In order to avoid disturbing the road in the City of Mississauga, the last tunnelling shaft and the open cut section would be within the Totoredaca Leash Free Dog Park (owned by City of Mississauga). This would require a land use agreement with the City of Mississauga.

The Alternative is also preferred for the following reasons:

- There are suitable tunneling shaft locations;
- There is limited disturbance to the road surface and limited traffic issues; and
- There is a suitable location to connect to the existing 750mm CPP watermain.

7 Public & Agency Consultation

Public and Agency consultation is an integral component of the Class EA process, allowing public and review agencies to become informed and comment throughout the process. For the Class EA, public and agency input and comments will be received and incorporated into the evaluation process. A copy of all of the correspondence to date is attached in Appendix A, along with a list of all the review agencies that have been contacted during the Class EA process.

The public and review agencies were contacted with two (2) notices throughout the Class EA process. A notice of commencement was sent out via email on February 28, 2020, and was advertised in the Mississauga News and the Brampton Guardian on February 20, 2020 to provide information on the project and how to get involved.

A Schedule B EA requires mandatory contact with directly affected public and relevant review agencies to ensure that they are aware of the project and that their concerns are addressed. After reviewing the alternative solutions and confirming the recommended solution, directly affected public and review agencies were consulted. The City of Mississauga and its Parks department have been engaged throughout the EA process at numerous points.

An Information Centre meeting was held on June 2, 2021 in coordination with City of Mississauga Parks, to inform Leash Free Mississauga about the project and use of the City property for tunneling works. The group was advised of construction activities that will occur on-site, the duration of the work, impact to the park and to discuss any concerns regarding noise and vibration. The MECP confirmed that considering the

specific and localized nature of the impacts, that consultation done with affected stakeholders and Indigenous communities can be sufficient to satisfy public consultation requirements.

A final notice advising of the study completion was published on August 18th, 2022.

7.1 Public and Agency Consultation & Comments

The Class EA process is meant to ensure effective communication with the public, agencies and other stakeholders throughout the process. The public has been kept informed at each stage of the Class EA process with notices in the newspaper that encouraged public involvement. Table 6 summarizes when each of the notices were issued and the comments that were received during the consultation process. Response letters were sent to those who provided comments on the servicing plan when applicable.

7.2 Notice of Study Commencement

Table 6: Public Consultation Summary

Property Owner Name & Contact Information	Date of Contact	Reply Received from Notice Notes/Dates/Etc.	Major Items of Concern Comments	Ainley's Response & Date
Notice of Commencement: Published in Brampton & Mississauga on February 20th, 2020.				
Totoredaca Dog Park—Kevin Pulis, President, Leash Free Mississauga	Looking for Contact – February 5, 2020	February 5, 2020 – Email	Provided information for Totoredaca Dog Park Representative	No response required.
Totoredaca Dog Park – Jeff Meiusi, Totoredaca Dog Park Representative	Notice of Commencement – February 28, 2020	February 28, 2020 – Email	Requested clarification for email received.	Ainley explained that public participation is a component of the class EA process. Meeting held June 2, 2021. No further response required.
Notice of Commencement				

7.3 Review Agency Consultation & Comments

Review Agencies have been contacted at each stage of the Class EA. Email correspondence with Agencies included attached relevant documents for the Agencies as the Class EA progressed. Table 7 outlines when each notice was sent to the review Agencies and the comments that were received throughout the consultation process. Review agencies that provided comments on the watermain design received email responses when applicable.

Table 7: Review Agency Consultation Summary

Property Owner Name & Contact Information	Date of Contact	Reply Received from Notice Notes/Dates/Etc.	Major Items of Concern Comments	Ainley's Response & Date
Notice of Commencement: Emails sent to Agencies February 28th, 2020.				
MHSTCI—Joseph Harvey	Notice of Commencement – February 28, 2020	March 12, 2020 – Email	MHSTCI included letter outlining requirement to identify Cultural Heritage Resources, Archaeological Resources, Built and Cultural Heritage Landscapes and Environmental Assessment.	No response required.
Transport Canada	Notice of Commencement – February 28, 2020	March 12, 2020 – Email	Transport Canada does not require Class EA related notifications if the project does not interact with federal property or require approval under Acts administered by Transportation Canada.	No response required.

Property Owner Name & Contact Information	Date of Contact	Reply Received from Notice Notes/Dates/Etc.	Major Items of Concern Comments	Ainley's Response & Date
Zayo – Caroline Rysyk	Notice of Commencement – February 28, 2020	March 12, 2020 – Email	Zayo has no existing infrastructure in the study area. No markups and no objections.	No response required.
Hydro One – TPUCC Markup	Notice of Commencement – February 28, 2020	March 5, 2020 – Email	Hydro One does not own or operate any transmission high voltage underground facilities.	No response required.
Telus – Indira Sharma, Project Support	Notice of Commencement – February 28, 2020	March 2, 2020 – Email	Telus has no infrastructure in the area of proposed work.	No response required.
Group Telecom – Mary Tina	Notice of Commencement – February 28, 2020	March 27, 2020 – Email	GT has no existing or proposed underground plant within 2m of proposed installation.	No response required.
CVC – Jakub Kilis, Manager, Infrastructure Relations	Notice of Commencement – February 28, 2020	March 31, 2020 – Email	Jakub provided preliminary comments and considerations for future detailed design. Please keep CVC updated on future meetings and EA progress.	No response required. Preliminary comments to be considered in design.

Property Owner Name & Contact Information	Date of Contact	Reply Received from Notice Notes/Dates/Etc.	Major Items of Concern Comments	Ainley's Response & Date
Enbridge – Kishore Sagar	Notice of Commencement – February 28, 2020	March 23, 2020 – Email	Kishore provided drawings that outline general gas main locations. Detailed design drawings are required to receive approval from Enbridge.	No response required.
City of Mississauga – Ashley Visneski	Notice of Commencement – February 28, 2020	April 30, 2020 – Email	Region of Peel is to confirm if there will be impact to City lands. The letter attached outlined plans, applications, and permits required to use City lands to complete proposed works.	No response required.
MECP – Trevor Bell, Regional Environmental Assessment Coordinator	Notice of Commencement – February 28, 2020	May 1, 2020 – Email	Trevor provided an "Areas of Interest" letter.	No response required.

Notice of Commencement

Property Owner Name & Contact Information	Date of Contact	Reply Received from Notice Notes/Dates/Etc.	Major Items of Concern Comments	Ainley's Response & Date

7.4 Indigenous Consultation & Comments

Indigenous community consultation has occurred in parallel to review agency consultation at each stage of the Class EA. Email correspondence was sent that included project notices. Table 8 outlines when each notice was sent to the Indigenous communities and comments received throughout the consultation process. Indigenous communities that provided comments regarding the Heritage Road Water Distribution System Upgrades Class EA received email responses with relevant attachments when applicable.

Table 8: Indigenous Consultation Summary

Property Owner Name & Contact Information	Date of Contact	Reply Received from Notice Notes/Dates/Etc.	Major Items of Concern Comments	Ainley's Response & Date
Notice of Commencement: Emails sent to Indigenous Groups on February 28th, 2020.				
Huron-Wendat Nation – Maxime Picard	Notice of Commencement – May 11, 2020	May 11, 2020 – Email	CNHW wanted to review the archaeological assessment completed for the EA.	Ainley provided the Stage 1 Archeological Assessment completed by ASI on May 15, 2020.
Rama First Nation – Sharday James	Notice of Commencement – February 28, 2020	March 16, 2020 – Email	No comments or concerns with respect to project.	No response required.
Mississaugas of the Credit First Nation – Fawn Sault	Notice of Commencement – May 12, 2020	May 26, 2020 – Email	Fawn asked for the archaeological assessment completed by ASI.	Ainley provided the archaeological and cultural heritage assessment reports on May 27, 2020.

Property Owner Name & Contact Information	Date of Contact	Reply Received from Notice Notes/Dates/Etc.	Major Items of Concern Comments	Ainley's Response & Date
Notice of Commencement				

8 Potential Effects and Mitigation Measures

There is potential for environmental impacts to occur when constructing all types of infrastructure. As a result, there are mitigation techniques that can be used to offset the impacts construction activities have on the environment. The Class EA process requires that mitigation measures be developed after an understanding of the potential negative impacts are identified.

It is an objective of this project to reduce, prevent and avoid potential adverse impacts and environmental impacts. The Baseline Natural Features Assessment conducted by Palmer includes mitigation measures to be taken during construction. Additional provisions will be made during the detailed design and construction of the watermain to protect the study area from negative environmental impacts.

8.1 Climate Change Mitigation and Adaptation

Climate change considerations were taken into account during the evaluation of alternatives. Consideration was given to the effects of greenhouse gas emissions resulting from the various alternatives. The 'Do Nothing' options would not have climate change impacts. Considering the options of constructing within the existing road allowance, or outside of it, the impacts would be similar but more negative impacts would result within the road allowance due to the more significant impacts on the newly paved roadway and open cut construction methodology.

With respect to climate change adaptation, the watermain will be designed and constructed to the Regin's design and construction specifications which consider climate change impacts with respect to operations and construction.

8.2 Construction Mitigation

The preferred alternative will consist of the construction of a new watermain via tunneling and open-cut methods. Table 9 illustrates the proposed construction mitigation measures:

Table 9: Mitigation Measures During Construction

Effect	Mitigation
Species Protection	• Ensure the Contractor is aware of tree and vegetation removal to occur outside of Breeding Bird and Roosting Maternity Bat Season; • Ensure the Contractor negates any in-water work and disturbance within Mullet Creek; and • Communication and feedback with the CVC, MNR, Palmer, and interested parties.

Effect	Mitigation
Sedimentation	• Ensure Contractor has developed an Erosion and Sedimentation Control Plan; • Retain existing vegetation; • Enclose the perimeter of the excavation or drilling area with light duty silt fencing; • Ensure Contractor stockpiles soils away from Mullet Creek and drainage structures; and • Assess existing erosion and sediment control measures before and after significant rainfall and snowmelt events.
Drainage Disruption	• Maintain over land sheet flow and avoid concentrating flow.
Contamination of Surface Waters	• Spill control/ containment measures to be in place.
Contamination of Groundwater – Spills	• Construction refuelling precautions.
Tree Removal	• Minimize tree removal; and • Replace trees through landscape design where possible.
Traffic Flow	• Ensure continuous use of Heritage Road for public transportation; and • Ensure traffic flagging is used when necessary.
Public Health	• Minimize operation of emission producing construction equipment and establish reasonable daily and seasonal construction periods.
Public Recreational Areas	• Proper signage will be implemented during construction to show lane closures during open-cut construction activities; and • Proper signage to ensure safe entry for local dog park users.

Contractors should be made aware of all proposed mitigation measures and environmental considerations. Mitigation measures should be monitored throughout construction.

8.3 Long-Term Mitigation

Table 10 outlines long term mitigation measures:

Table 10: Table 10: Long-term Mitigation Measures During Construction

Effect	Mitigation
Surface Water Drainage	• Maintain or reinstate existing surface water drainage measures.

Effect	Mitigation
Economic	• Assess annual operating costs and allow for any needed increases;
Environment	• Ensure replacement vegetation is adequately maintained.

9 Property Requirements

9.1 City of Mississauga

Generally, the preferred alternative is designed to be within the existing Heritage Road right of way, with the exception of the final tunneling shaft and open-cut excavation required at the south end of the study area. The proposed tunneling shaft and open-cut construction are located on property that is owned by the City of Mississauga. A Property Impact Plan was prepared for the City of Mississauga.

9.2 Ministry of Transportation

The preferred Alternative includes a tunneled section that crosses Highway 407 and the proposed 407 Transitway on Plan 43R-23414. Approvals are required by the MTO for crossing Highway 407 and the 407 Transitway property. In conjunction with the permit, the MTO requires the geotechnical investigation report, including a summary of boreholes drilled at a minimum of 50m increments across MTO lands.

9.3 Infrastructure Ontario

There is a proposed tunneling shaft and tunneled sections of watermain on Infrastructure Ontario (IO) lands (PIN 14089-0667 and -0494) in the preferred design Alternative. Easements are required from IO for all areas where the watermain passes through IO owned lands. Any easement granted by IO that is across the Hydro One corridor will be conditional upon receiving approval from Hydro One. The required easement application shall include an overall plan area plan including staging and material storage areas, copies of parcel registrations, property reference plans, survey appraisal, archaeological studies and Class EA information.

9.4 Hydro One

The preferred design Alternative has a tunneling shaft and tunneled piping section in an existing Region of Peel Watermain Easement (PR1796657) which is adjacent to lands

used by Hydro One for high voltage transmission lines. Although the tunneling activities are within the Region of Peel easement, the tunneling crosses under the transmission lines. A Hydro One Secondary Land Use Technical Review Requirements and Completeness Checklist is required for Hydro One's review of the project.

9.5 Credit Valley Conservation Authority

The study area falls within CVC regulated lands. Prior to any work, including site alteration, in a CVC regulated area will require permits and approvals from the agency.

In addition to the CVC regulated area, the watermain on the south end of the study area is located on the property owned by the City of Mississauga. Approval will be required by the City of Mississauga prior to construction activities.

Other approvals and permits include Construction and Rehabilitation Management Plans.

10 Conclusions and Recommendations

The Region of Peel will undertake the design and construction of the preferred alternative as follows:

1. Complete design and construction of a new 600mm watermain from the Heritage Road and Steeles Avenue West intersection to the North Meadowvale Pumping Station. The construction of the watermain will include open-cut installation from the south side of Steeles Road to the Edgeware Road intersection, tunneling from Edgeware Road to the north side of the Totoredaca Dog Park parking lot, and finish with an open-cut installation to the 750mm watermain on the east side of Meadowvale Boulevard;

2. Approval from the CVC will be obtained prior to any work, including site alteration, in a CVC regulated area; and

3. Approval from the City of Mississauga, City of Brampton, Infrastructure Ontario, Orlando Corporation, MTO, 407 Group and Hydro One will be obtained prior to any work completed outside of the road right of way on Meadowvale Boulevard /Heritage Road.

Appendix A
Public Consultation Records

Public Notice

Region of Peel
working with you

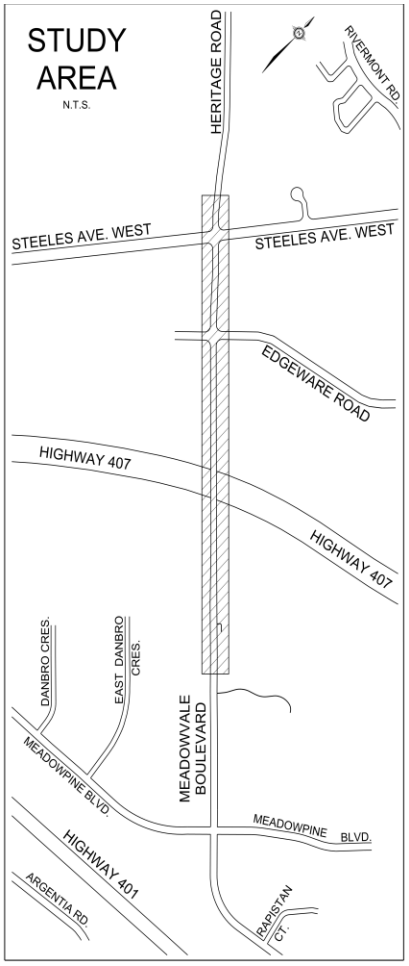
Environmental Assessment Study

NOTICE OF STUDY COMMENCEMENT
WATERMAIN CONSTRUCTION HERITAGE ROAD, BRAMPTON AND MISSISSAUGA

Study Background

The Region of Peel has started an Environmental Assessment (Class EA) study to consider extending a watermain outside of the existing road right-of-way on Heritage Road. This watermain will extend from the Meadowvale North Pumping Station in Mississauga to Steeles Avenue West in Brampton.

These improvements are required to provide municipal drinking water to the proposed development in the Bram West Secondary Plan. In addition, the watermain provides a continued water supply to existing businesses and residents in northwest Mississauga and southwest Brampton. The map shows the boundaries of the proposed watermain extension.



How to Get Involved

Stakeholder consultation (which includes the public and agencies) is an important part of the Class EA process. The Region wants to provide an opportunity for input on the recommended watermain alignments. We are interested in hearing any comments or concerns you may have with this study. Information about this project is available in a newsletter on the Region of Peel's website at: peelregion.ca/pw/construction/bram/15-1138.htm

Additional information will be made available once alternative solutions have been identified and evaluated. Another notice will be provided to allow an opportunity to comment.

If you require any other information or to provide your comments, please contact either the project manager or the consultant listed below:

Sean Ballaro
Project Manager, Capital Works
Water Linear Engineering & Reliability
Water Division, Public Works
905-791-7800 x 7917
sean.ballaro@peelregion.ca

Chris Ewen, P.Eng, PMP
Consultant Project Manager – Vice President
Water Business, Ainley & Associates Ltd.
905-452-5172
ewen@ainleygroup.com

This notice was first issued on February 20, 2020.

With the exception of personal information, all comments will become part of the public record of the study. The study is being conducted according to the requirements of the Municipal Class Environmental Assessment, which is a planning process approved under Ontario's *Environmental Assessment Act*.

Stakeholder Contact Log

Contact Confirmed?	Group/Organization	Contact Name	Role	Phone	Fax	Email	Address	Contact Notes/ Comments	Notice of Commencement		PIC 1		Notice of Completion		Comments About Submissions
									Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	
Municipal															
	City of Brampton	Patrick Brown	Mayor	905-874-2600		patrick.brown@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Rowena Santos	Regional Councillor - Wards 1 & 5	905-874-2605		rowena.santos@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Paul Vicente	Regional Councillor - Wards 1 & 5	905-874-2601		paul.vicente@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Michael Palleschi	Regional Councillor - Ward 2 & 6	905-874-2661		michael.palleschi@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Martin Medeiros	Regional Councillor - Ward 3 & 4	905-874-2634		martin.medeiros@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2	Notice sent on February 28 had a bouceback. Email address was spelled incorrectly and has been updated. (2020-03-03 Heather James)	28-Feb-20						
	City of Brampton	Pat Fortini	Regional Councillor - Wards 7 & 8	905-874-2611		pat.fortini@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Gurpreet Dhillon	Regional Councillor - Wards 9 & 10	905-874-2609		gurpreet.dhillon@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Doug Whillans	City Councillor - Wards 2 & 6	905-874-2606		doug.whillans@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Jeff Bowman	City Councillor - Wards 3 & 4	905-874-2603		jeff.bowman@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Charmaine Williams	City Councillor - Ward 7 & 8	905-874-2671		charmaine.williams@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Harkirat Singh	City Councillor - Wards 9 & 10	905-874-2610		harkirat.singh@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Amol Dhillon	Wards 9 & 10 Administrative Assistant			amol.dhillon@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	John Chatha	Wards 9 & 10 Administrative Assistant			John.chatha@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2	Notice sent on February 28 had a bouceback. Contacted Ward 9 &10 Administrative Assistants for correct information. Name was spelled incorrectly and has been updated. (2020-03-03 Heather James)							
	City of Brampton	Amrit Kang	Wards 9 & 10 Administrative Assistant			amrit.kang@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Rupinder Dhindsa	Wards 9 & 10 Administrative Assistant			rupinder.dhindsa@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Khushpal Pawar	Wards 9 & 10 Administrative Assistant			Khushpal.Pawar@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2	Notice sent on February 28 had a bouceback. Contacted Ward 9 &10 Administrative Assistants for correct information. Name was spelled incorrectly and has been updated. (2020-03-03 Heather James)							
	City of Brampton	Ghazanfar Mohammad	EA Contact			ghazanfar.mohammad@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Bino Varghese	EA Contact			bino.varghese@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Antonietta Minichillo	Heritage Co-ordinator (Bram West & Churchville)	905-874-2050		antonietta.minichillo@brampton.ca	2 Wellington Street West, Brampton, ON, L6Y 4R2		28-Feb-20						
	City of Brampton	Ricardo Scattolon	Engineering Design and Drafting	905-874-2934		ricardo.scattolon@brampton.ca	8850 McLaughlin Rd S, Unit 2 Brampton, ON, L6Y5T1		28-Feb-20						
	City of Brampton	Kyla Devin	Works and Transportation	905-874-3843		pucc.apps@brampton.ca	8850 McLaughlin Rd S, Unit 2 Brampton, ON, L6Y5T1		28-Feb-20						
	City of Brampton	John Allison	Planning Design and Development	905-874-3880		john.allison@brampton.ca	2 Wellington St W, Brampton, ON, L6Y4R2		28-Feb-20						
	City of Brampton	Susan Evans	Traffic Signal and Street Lighting	905-874-2592		susan.evans@brampton.ca	8850 McLaughlin Rd S, Unit 2 Brampton, ON, L6Y5T1		28-Feb-20						
	City of Brampton	Bishnu Parajuli	Manager Infrastructure Planning	905-874-2500		bishnu.parajuli@brampton.ca	1975 Williams Parkway, Brampton, ON L6S 6E5	Notice sent on February 28 had a bouceback. Requested contact information from Ward 9 & 10 Administrative Assistant (2020-03-03 Heather James) Tried updated @brampton address	10-Mar-20						
	City of Brampton	Jayne Holmes	Director Capital Works			jayne.holmes@brampton.ca			28-Feb-20						
	City of Brampton	Chris Meilleur	Real Estate Coordinator			Christopher.Meilleur@brampton.ca			28-Feb-20						

Stakeholder Contact Log

Contact Confirmed?	Group/Organization	Contact Name	Role	Phone	Fax	Email	Address	Contact Notes/ Comments	Notice of Commencement		PIC 1		Notice of Completion		Comments About Submissions
									Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	
	City of Brampton	Mark Burkholder	Real Estate Coordinator			Mark.Burkholder@brampton.ca		Notice sent on February 28 had a bouceback. Requested contact information from Ward 9 & 10 Administrative Assistant (2020-03-03 Heather James) Try calling 905-874-2985 - sent email to clerk's office Emailed clerk's office with notice	16-Mar-20						
	Region of Peel	Anthony Zois	Acquisition Agent			anthony.zois@peelregion.ca			28-Feb-20						
	Region of Peel	Sally Rook	Manager, Transportation Planning Program			sally.rook@peelregion.ca			28-Feb-20						
	Brampton Transit	Andrea Charles	Planning Coordinator			andrew.charles@brampton.ca		Replaced Craig Sherwood	10-Mar-20						
	City of Brampton	Chris LaFleur	Planning Coordinator, Transit	905 874 2750 x 62620		chris.lafleur@brampton.ca									
	City of Brampton	Andrew Charles				Andrew.Charles@brampton.ca									
	City of Brampton	David Stowe				David.Stowe@brampton.ca									
Agencies															
	Brampton Transit - Zum	Chris Lafleur	Planning Coordinator, Transit	905-874-2750 ext 62620		chris.lafleur@brampton.ca			28-Feb-20						
	Ministry of Traffic Ontario	Elena Nicol				elena.nicol@ontario.ca		No co-ordination with MTO, just encroachment permit after co-ordination with 407	28-Feb-20						
	Orangeville-Brampton Railway	Nancy Huether	Manager, Economic Development	519-941-0440		nhuether@orangeville.ca	87 Broadway Orangeville, ON L9W 1K1		28-Feb-20						
Utilities															
	Bell Canada	Scott Moon					5115 Creekbank Road, Floor 3 West Tower Mississauga ON L4W 5R1		28-Feb-20						
	Alectra/ Enersource	Micheline Scaife				Micheline.Scaife@alectrautilities.com			28-Feb-20						
	Enbridge Gas Distribution	Camelo Tancioco	Manager of Special Projects				500 Consumers Road, 4th Floor North York ON M2J 1P8		28-Feb-20						
	Enbridge Gas Distribution	Jamie Delaney				mark-ups@enbridge.com	500 Consumers Road, 4th Floor North York ON M2J 1P8		28-Feb-20						
	Enbridge Gas Distribution	Diana Beaulne					500 Consumers Road, 4th Floor North York ON M2J 1P8		28-Feb-20						
	Hydro One					tpumarkup@hydroone.com			28-Feb-20						
	Hydro One Brampton	Linda Morson	EA Coordinator	905-840-6300 x 3266		lmorson@hydroonebrampton.com	175 Sandalwood Parkway West Brampton, ON L7A 1E8	Phone number extension does not work. Called - 905-840-6300 and spoke to the front desk. Linda Morson was not listed as a contact. The receptionist transferred me to Caroline at extension 21057 and left a voicemail (2020-03-04 Heather James)	16-Mar-20						
	MTS Allstream	Ian Fleming	EA Coordinator	416-345-3406		utility.circulations@mtsallstream.com	50 Worcester Road Toronto, ON M9W 5X2		28-Feb-20						
	Zayo					Utility.Circulations@Zayo.com			28-Feb-20						
	Rogers Communications					GTA.markups@rci.rogers.com			28-Feb-20						
	Rogers Cable TV Limited	Darrell Dimitroff	Planning Team Manager				3573 Wolfedale Road Mississauga ON L5C 3T6		28-Feb-20						
	Rogers Cable TV Limited	Ryan Fiueiredo	System Planner				3573 Wolfedale Road Mississauga ON L5C 3T6		28-Feb-20						
	Rogers Cable TV Limited	Marian Wright					3573 Wolfedale Road Mississauga ON L5C 3T6		28-Feb-20						
	Telus					telusutilitymarkups@telecon.ca		Telus does not have infrastructure in proposed area of work.	28-Feb-20						
	Telus Network	Frederic Sua	EA Coordinator			Frederic.Sua@telus.com	25 York St, 22nd Floor Toronto, ON M5J 2V5	No longer Steve Hoy; see note above	28-Feb-20						
Emergency Services															
	Peel Regional Police, Research & Development	Cst. Jim Adams	Operational Planning & Resources	905-453-3311		2186@peelpolice.ca	7750 Hurontario Street Brampton, ON L6V 3W6		28-Feb-20						
	Peel Regional Police, 21 Division	Ingrid Berkeley-Brown							28-Feb-20						
Local Businesses/ Interest Groups															
	Brampton Cycling Advisory Committee	Lisa Stokes				lisastokes66@gmail.com			28-Feb-20						

Stakeholder Contact Log

Contact Confirmed?	Group/Organization	Contact Name	Role	Phone	Fax	Email	Address	Contact Notes/ Comments	Notice of Commencement		PIC 1		Notice of Completion		Comments About Submissions
									Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	
	Amazon Hub Locker - Megha			+1 877-346-6244			8050 Heritage Rd, at Amazon FC, Brampton, ON L6Y 0C9	"Don't have number for that location" - Amazon Customer Service February 6, 2020; Probably best to deliver the notice							
	Matrix Logistics Services	Blair Wraight		(905) 451-6792 ext. 2221		bwraight@shoppersdrugmart.ca	2675 Steeles Ave W, Brampton, ON L6Y 0B2		28-Feb-20						
	TG Appliance Group Inc.	Bob Sahota		(289) 748-0320		bob.sahota@tgappliance.ca	7975 Heritage Rd #1, Brampton, ON L6Y 5X5		28-Feb-20						
	Tasco	Jeremy Steeves		+1 866-848-6767		jeremy.steeves@tgappliance.ca	7975 Heritage Rd #1 #1, Brampton, ON L6Y 5X5		28-Feb-20						
	D&H	C. Stone		(905) 796-0030		cstone@dandh.com	Building A, 7975 Heritage Rd #20, Brampton, ON L6Y 5X5		28-Feb-20						
	Survalent	Kevin Felice	Building Maintenance Manager	(905) 826-5000		kfelice@qwelec.ca	7965 Heritage Rd, Brampton, ON L6Y 5X5	Left a voicemail February 6, 2020 Left a voicemail February 13, 2020 Notice sent on February 28 had a bouceback. Called - Phone number provided and left a voicemail to call back. (2020-03-04 Heather James) Called again looking for Kevin Felice, left a message to call (March 16, 2020)								
	SCI/RED APPLES	Ron Stortini	SCI Building Manager	(416) 401-3011 Cell: 647-274-1628		ron.stortini@sci.ca	7726-7882 Heritage Rd, Brampton, ON L6Y 0E2	Left a message with receptionist; is sending my information to branch manager; Probably best to deliver notice February 6, 2020 Left message with receptionist on February 13, 2020 to send my information to the right person and have them to contact me. Kevin Felice contact updated							
	G&W Canada	Kevin Felice	Building Maintenance Manager	(905) 542-2000		kfelice@qwelec.ca	7965 Heritage Rd, Brampton, ON L6Y 5X5		28-Feb-20						
	Region of Peel/ Mullet Creek SPS								28-Feb-20						
	Orlando Corp.	John Little				littlej@orlandocorp.com									
Indigenous Groups															
Private Groups															
	Resident						7696 Heritage Road, Brampton								
	Vacant House						Located within Hwy 407 Corridor, Brampton								

Stakeholder Contact Log

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									Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	
Municipal															
	City of Mississauga	Bonnie Crombie	Mayor	905-896-5555		bonnie.crombie@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Stephen Dasko	Regional Councillor, Ward 1	905-896-5100		stephen.dasko@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Angie Dell	Ward 1 Admin Assistant			angie.dell@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Karen Ras	Regional Councillor, Ward 2	905-896-5200		karen.ras@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Tara McCarthy	Ward 2 Admin Assistant			Tara.McCarthy@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1	Notice sent on March 2 had a bouceback. Email address was spelled incorrectly and has been updated. (2020-03-03 Heather James)	10-Mar-20						
	City of Mississauga	Chris Fonseca	Regional Councillor, Ward 3	905-896-5300		chris.fonseca@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Deanna Dubicki	Ward 3 Admin Assistant			deanna.dubicki@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	John Kovac	Regional Councillor, Ward 4	905-896-5400		john.kovac@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Shelley Blake	Ward 4 Admin Assistant			shelley.blake@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Carolyn Parrish	Regional Councillor, Ward 5	905-896-5500		carolyn.parrish@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Mary Maiorano	Ward 5 Admin Assistant			mary.maiorano@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Ron Starr	Regional Councillor, Ward 6	905-896-5600		ron.starr@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Angela Bentham	Ward 6 Admin Assistant			angela.bentham@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Dipika Damerla	Regional Councillor, Ward 7	905-896-5700		dipika.damerla@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Matt Mahoney	Regional Councillor, Ward 8	905-896-5800		matt.mahoney@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Debbie Thomson	Ward 8 Admin Assistant			debbie.thomson@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Pat Saito	Regional Councillor, Ward 9	905-896-5900		pat.saito@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Sue McFadden	Regional Councillor, Ward 10	905-896-5010		sue.mcfadden@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Joanne Lebold	Ward 10 Admin Assistant			joanne.lebold@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	George Carlson	Regional Councillor, Ward 11	905-896-5011		george.carlson@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1		02-Mar-20						
	City of Mississauga	Kimberly Duarte	Ward 11 Admin Assistant			kimberly.duarte@mississauga.ca	300 City Centre Drive, Mississauga ON L5B 3C1	Notice sent on March 2 had a bouceback. Email address was spelled incorrectly and has been updated. (2020-03-03 Heather James)	10-Mar-20						
	City of Mississauga	Martin Powell	Commissioner, Transportation and Works	905-615-3200 Ext 5112		martin.powell@mississauga.ca	201 City Centre Drive, 8th Floor Mississauga, ON L5B 2T4		02-Mar-20						
	City of Mississauga	Katie Henley	City Parks			katie.henley@mississauga.ca	202 City Centre Drive, 8th Floor Mississauga, ON L5B 2T4	Provided Community Service Dept Comments	20-Mar-20						
	City of Mississauga														
	City of Mississauga	Alex Liya	City of Mississauga, Transit			Alex.Liya@mississauga.ca									
Agencies															
	Mississauga Transit - MiWay	Bryan Macmillan	Planner	905-615-3200 ext 3825		bryan.macmillan@mississauga.ca			28-Feb-20						
	Ministry of Municipal Affairs and Housing & Environmental Services	Bruce Singbush					777 Bay Street, 14 Floor Toronto ON M5G 2E5		28-Feb-20						
	Ministry of the Environment, Conservation & Parks	Tracey Goodwin	District Manager				4145 North Service Road, Suite 300 Burlington ON L7L 6A3		28-Feb-20						
	Ministry of the Environment, Conservation & Parks					eanotification.cregion@ontario.ca	5775 Yonge Street, 8th Floor North York ON M2M 4J1	email all notices	28-Feb-20						
	Ministry of the Environment, Conservation & Parks					MEA.Notices.EAAB@ontario.ca	5775 Yonge Street, 8th Floor North York ON M2M 4J1	email all notices	28-Feb-20						
	Ministry of Tourism, Culture and Sport	Rosi Zirger	Heritage Planner - CULTURE SERVICES UNIT	416-314-7159		rosi.zirger@ontario.ca	Suite 1700 401 Bay St Toronto ON M7A0A7		28-Feb-20						

Stakeholder Contact Log

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	Ministry of Natural Resources and Forestry	Tom Farrell	Coordinator, Strategic Planning				50 Bloomington Road West Aurora ON L4G 3G8		28-Feb-20						
	Ministry of Natural Resources and Forestry	Mark Heaton	Fish and Wildlife Biologist				50 Bloomington Road West Aurora ON L4G 3G8		28-Feb-20						
	Ministry of Natural Resources and Forestry	Jackie Burkart	District Planner				50 Bloomington Road West Aurora ON L4G 3G8		28-Feb-20						
	TRCA	Annette Lister	Planner			alister@trca.on.ca	5 Shoreham Drive Downsview ON M3N 1S4		28-Feb-20						
	TRCA	Sharon Lingertat	Planner				5 Shoreham Drive Downsview ON M3N 1S5		28-Feb-20						
Utilities															
	Blink Communications Inc	Edgar Henriquez	c/o Rogers Cable	905-897-6457		edgar.henriquez@rci.rogers.com	3573 Wolfedale Road Mississauga, ON L5C 3T6		28-Feb-20						
	Cogeco Data Services Inc	Samir Patel	EA Coordinator	416-840-8755		samir.patel@cogecodata.com	413 Horner Avenue Etobicoke, ON, M8W 4W3	Notice sent on February 28 had a bouceback. Email address and phone number do not work. Called - 514-764-4600 and left a voicemail no operator available (2020-03-04 Heather James) Tried calling 905-333-5343 on March 16, 2020 - will get back to us in a few weeks							
	Enersource Hydro Mississauga	Marilou Ignacio	EA Coordinator	905-283-4088		mignacio@enersource.com	3240 Mavis Road, Mississauga, ON L5C 3K1		28-Feb-20						
	GT Fiber Services Inc	Rayma Varma	c/o Netricom	905-470-2112 x 40265		gt.moc@telecon.ca	200 Town Centre Boulevard, Suite 300, Markham, ON L3R 8G5	Notice sent on February 28 had a bouceback. Phone number works but is for a different company and the extension is too short. I am not able to find the company through a google searct to narrow down a different phone number (2020-03-04 Heather James)	16-Mar-20						
	GTAA Toronto Pearson Int'l Airport (only area with airport boundaries)	Dante Palladinelli	EA Coordinator	416-776-3875		dante.palladinelli	3111 Convair Drive Mississauga, ON L5P 1B2		28-Feb-20						
	Hydro One Network Services	Mark Hamilton	OP&CS Department - OGCC	705-797-4142		tpumarkup@hydroone.com	230 Bayview Drive Barrie, ON, L4N 4Y8		28-Feb-20						
	Hydro One Brampton Inc	Ernie Vicente		(905) 840-6300			175 Sandlewood Parkway West Brampton ON L7A 1E8		28-Feb-20						
	Hydro One Brampton Inc	Robert Evangelista	Engineering Supervisor - Development				175 Sandlewood Parkway West Brampton ON L7A 1E8		28-Feb-20						
	MTS Allstream	Ian Fleming	EA Coordinator	416-345-3406		utility.circulations@mtsallstream.com	50 Worcester Road Toronto, ON M9W 5X2	Notice sent on February 28 had a bouceback. Left a voicemail (2020-03-04 Heather James) Try calling 1-888-288-2273							
	Telus Network	Max Pavese	EA Coordinator	416-992-0617		max.pavese@telus.com	25 York St, 22nd Floor Toronto, ON M5J 2V5		28-Feb-20						
	Union Gas (only area on Ninth Line)	Jeremy Getson	EA Coordinator	1-888-404-1356		jgetson@uniongas.com	360 Strathearne Avenue North, Hamilton, ON L8N 3A5		28-Feb-20						
	Union Gas	D. Gadbois				Dgadbois@uniongas.com			28-Feb-20						
Emergency Services															
	Peel Regional Police	H.M. Metcalf					7750 Hurontario Street Brampton ON L6Y 4M3		28-Feb-20						
	Peel Regional Police	Dale Walker					7750 Hurontario Street Brampton ON L6Y 4M3		28-Feb-20						
	Mississauga Fire & Emergency Services	Tim Beckett	Fire Chief	905-615-3777		tim.beckett@missisauga.ca	7535 Ninth Line, Mississauga ON L5N 7C3		28-Feb-20						
Local Businesses/ Interest Groups															
	Dufferin-Peel Catholic District School Board	Stephanie Cox	Manager of Planning	905-890-1010 ext. 2221		stephanie.cox@dpcdsb.org	40 Matheson Boulevard West, Mississauga, ON L5R 1C5		28-Feb-20						
	Dufferin-Peel Catholic District School Board	Vince Nichilo	Superintendent of Planning and Operations				40 Matheson Boulevard West Mississauga ON L5R 1C5		28-Feb-20						
	Peel District School Board	Paul Mountford	Intermediate Planning Officer				5650 Hurontario Street Mississauga ON L5R 1C6		28-Feb-20						
	Leash-Free Mississauga/ Totoredaca Dog Park	Kevin Pulis	President	416-725-4671		kpulis@rogers.com	2715 Meadowvale Blvd., Mississauga, ON		28-Feb-20						
	Leash-Free Mississauga/ Totoredaca Dog Park	Jeff Meiusi	Totoredaca Park Representative			jeff.meiusi@gmail.com	2715 Meadowvale Blvd., Mississauga, ON		28-Feb-20						

Stakeholder Contact Log

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	Penske Truck Rental	Andre Faubert	Manager	(905) 819-1540		andre.faubert@penske.com	7405 E Danbro Crescent, Mississauga, ON L5N 6P8		28-Feb-20						
	Hite Engineering Corporation			(905) 812-3709		stephanie@hite-engineering.com	2660 Meadowvale Blvd #2-4, Mississauga, ON L5N 6M6		28-Feb-20						
	Intrepid			(905) 607-5170			2660 Meadowvale Blvd Ste 11, Mississauga, ON L5N 6M6	Called Intrepid and they do not have a business at this location							
	Carlo Gavazzi			(905) 542-0979		pscicluna@carlogavazzi.com	2660 Meadowvale Blvd, Mississauga, ON L5N 6M6		28-Feb-20						
	Food Specialties Ltd.			(905) 567-7573		niki@foodspecialties.ca angelito@foodspecialties.ca qualityassurance@foodspecialties.ca	2650 Meadowvale Blvd, Mississauga, ON L5N 6M5		28-Feb-20						
	Lorama Group Inc			(905) 878-2833		elez@lorama.com	2695 Meadowvale Blvd, Mississauga, ON L5N 8A3		28-Feb-20						
	Voestalpine eifeler Coatings & Thermo-Tech			+1 800-665-8335		rob.ricketts@voestalpine.com	2645 Meadowvale Blvd, Mississauga, ON L5N 8C2		28-Feb-20						
	Voestalpine eifeler High Performance Metals Ltd.			+1 800-665-8335		rob.ricketts@voestalpine.com	2595 Meadowvale Blvd, Mississauga, ON L5N 7Y3		28-Feb-20						
	Takara Company Ltd	Tom Traves	Office Manager	(905) 816-8965		tom@takarabelmont.ca	2455 Meadowvale Blvd, Mississauga	"No soliciting" - Customer Service; Try again but Probably best to deliver notice February 5, 2020 Left voicemail February 13, 2020	28-Feb-20						
	Purolator			(905) 814-8080 905-567-9159 (yellow pages, not in service)			2600 Meadowvale Blvd, Mississauga, ON L5N 8C2	Got sent in phone circles -- probably best to deliver notice Left voicemail February 13, 2020	28-Feb-20						
	Sturdell Industries			(416) 675-2020		rob.ricketts@voestalpine.com	2595 Meadowvale Blvd, Mississauga, ON L5N 7Y3		28-Feb-20						
	Fugro			(905) 567-2870		receptionist_roadware@fugro.com	2505 Meadowvale Blvd, Mississauga, ON L5N 5S2	Left voicemail February 5, 2020 Left voicemail February 13, 2020	28-Feb-20						
	CGG Canada	Duanye Griffith		(905) 812-0212		duanye.griffith@cgg.com	2505 Meadowvale Blvd, Mississauga, ON L5N 5S2		28-Feb-20						
	Sandvik Canada Inc	Geoff Ireland	Facility Manager	Geoff: (905) 816-4956 (519) 820-9970		geoff.ireland@sandvik.com	2550 Meadowvale Blvd, Mississauga, ON L5N 8C2	Geoff is responsible for both Sandvik and Dormer Pramet in the building	28-Feb-20						
	Simmons Canada	Neil Finlayson	Senior Property Manager			neil.finlayson@avisonyoung.com			28-Feb-20						
	Dormer Pramet Canada							Neil Finlayson manages several	28-Feb-20						

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Canadian Pacific	Joe Van Humbeck	Manager | Environmental Assessments	403 319 6530		joe_vanhumbeck@cpr.ca	Suite 500, 401-9th Avenue SW, Calgary AB T2P 4Z4		28-Feb-20						
Credit Valley Conservations	Jakub Kilis	Planner, Environmental Assessment	905.670.1615 ext 287		jakub.kilis@cvc.ca	1255 Old Derry Rd, Mississauga, ON L5N 6R4		28-Feb-20						
Environment Canada	Rob Dobos	Manager, Environmental Assessment Section	905-336-4953		rob.dobos@ec.gc.ca	PO Box 5050, 867 Lakeshore Rd, Burlington, ON L7S 1A1		28-Feb-20						
407 ETR	Maria Efimova				mefimova@407etr.com									
407 ETR	Jeff Booker				jbooker@407etr.com									
GO Transit	Katie Bright	Manager, Environmental Programs			thirdpartyprojects@metrolinx.com			08-Apr-20						
Metrolinx			Main Number: 416-202-4887		thirdpartyprojects@metrolinx.com		called on February 28th, left voicemail Same contact as above	08-Apr-20						
Ministry of Indigenous Affairs	Camille Assam	Executive Assistant to ADM	(416) 326-4772		Camille.assam@ontario.ca	160 Bloor Street East, 4th Floor Toronto ON M7A 2E6		28-Feb-20						
Ministry of Municipal Affairs and Housing (EA Policy)	Aly N. Alibhai	Regional Director	416-585-7264		Aly.Alibhai@ontario.ca			16-Mar-20						
Ministry of the Environment, Conservation & Parks	Maria Jawaid	Area Biologist, Halton/Peel/Toronto	905-713-7406		maria.jawaid@ontario.ca	50 Bloomington Rd Aurora ON L4G0L8		28-Feb-20						
Ministry of the Environment, Conservation & Parks	Trevor Bell	Environmental Resource Planner/EA Coordinator	416-326-3469		Trevor.Bell@ontario.ca	Place Nouveau 9th Flr, 5775 Yonge St Toronto ON M2M4J1	Requirements to consult w Mississaugas of the Credit First Nation; Six Nations; Haudenosaunee Confederacy ; and Huron-Wendat , if there are potential archeological impacts	28-Feb-20						
Ministry of Tourism, Culture and Sport	Dan Minkin/Dan Minkin	Heritage Planner - CULTURE SERVICES UNIT	416-314-7147		dan.minkin@ontario.ca	Suite 1700, 401 Bay St., Toronto ON M7A0A7	reply March 20, 2020 on requirements	28-Feb-20						
Ministry of Tourism, Culture and Sport	ZeeShan Abedin													Archeoglical Report is filed with Ministry on March 26, 2021 for completeness
Ministry of Transportation	Mark White				Mark.J.White@ontario.ca									
Ministry of Transportation	Shawn Aurini				Shawn.Aurini@ontario.ca									
Ministry of Transportation	Kevin Kelly				Kevin.Kelly@ontario.com									
Ministry of Agricultural and Food/Ministry of Rural Affairs	Anneleis Eckert	Environmental and Land Use Policy, Rural Planner - Central-West Ontario	519-827-6040		anneleis.eckert@ontario.ca	6484 Wellington Road 7 - Unit 10 Elora, ON N0B 1S0		16-Mar-20						
Parks Canada, Historic Site & Monument Board	Mark Baldwin	Impact Assessment	819-420-9346		Mark.Baldwin@canada.ca	26 Rue Eddy Gatineau, QC K1A 1K5		16-Mar-20						
TRCA	Annette Lister	Planner , Infrastructure Planning & Permits| Development and Engineering Services	416-661-6600 ext. 6443		annette.lister@trca.ca	101 Exchange Avenue, Vaughan ON L4K 5R6	"Area is located outside of the TRCA. Remove Staff from mailing list". - Annette Lister (March 9, 2020)							
TRCA	Ben Krul	Planner II | Peel and Durham Region | Environmental Assessment Planning	416-661-6600 Ext. 5769		bkrul@trca.on.ca	5 Shoreham Drive, Toronto, ON M3N 1S4		28-Feb-20						
TRCA	Zack Carlan	Planner, Infrastructure Planning & Permits	416-661-6600 ext. 5310		zack.carlan@trca.ca	101 Exchange Avenue, Vaughan ON L4K 5R6		28-Feb-20						
TRCA	Victoria Kramkowski		416-661-6600		victoria.kramkowski@trca.ca	101 Exchange Avenue, Vaughan ON L4K 5R6		28-Feb-20						
Fisheries and Oceans Canada	Rick Kiriluk	Team Leader-Triage and Planning	905-336-4499		Rick.Kiriluk@dfo-mpo.gc.ca	868 Lakeshore Road, P.O. Box 5050 Burlington, ON L7R 4A6	See above email Only acting until March 23, 2020 (Heather (2020-03-06)	16-Mar-20						
Fisheries and Oceans Canada	Lisa Wren	Team Leader-Triage and Planning	905-336-4499		Lisa.Wren@dfo-mpo.gc.ca	869 Lakeshore Road, P.O. Box 5050 Burlington, ON L7R 4A6	See above email Will be acting starting March 23, 2020 for 4 months (Heather (2020-03-06)	16-Mar-20						
Ministry of Community Safety and Corrections	Ali Veshkini	Director, Facilities & Capital Planning Branch, Corporate Service Division	416-314-6683		ali.veshkini@ontario.ca	25 Grosvenor Street, 13th Floor, Toronto, ON M7A 1Y6		28-Feb-20						

Group/Organization	Contact Name	Role	Phone	Fax	Email	Address	Contact Notes/ Comments	Notice of Commencement		PIC 1		Notice of Completion		Comments About Submissions
								Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	
Belmont Equity Partners	Marwan Zahra	EA Coordinator	9052814424		mzahra@belmontequity.ca	1400 Cornwall Rd, #13, Oakville ON L6J 7W5	No longer David Kemper. Resend to Marwan. Contact information for Marwan is correct. (2020-03-04 Heather James)	28-Feb-20						
Transport Canada		Environmental Coordinator			EnviroOnt@tc.gc.ca	4900 Yonge Street, 4th Floor (PHE), North York, ON M2N 6A5	Email only	28-Feb-20						
IO (Infrastructure Ontario)	Rita Kelly				Keith.Noronha@infrastructureontario.ca		Email only	28-Feb-20						No EA required for IO lands. Archeolgical Report was submitted. Approvals needed during design.
Bell Canada Municipal Operations Centre	Diana Velez	c/o Netricom	905-470-2112 x 40309		bell.moc@telecon.ca	200 Town Centre Boulevard, Suite 300, Markham, ON L3R 8G5	Notice sent on February 28 had a bouceback. (2020-03-04 Heather James) Try new email address	16-Mar-20						
Enbridge Gas Distribution	Meetpal Chhina	Planning Technical Specialist	905-458-2159/ cell 905-867-9329		meetpal.chhina@enbridge.com	6 Colony Court, Brampton, ON L6T 4E4	provided design requirements document	28-Feb-20						
Hydro One Telecom (only on Kitimat Rd @ Argentia Rd, Mississauga Rd, Meadowvale Blvd, Syntex Ct/Syntex Dr, Heritage Rd)	Ian Mitchell	EA Coordinator	416-240-6701		ian.mitchell@hydroone.com	65 Kelfield Street Rexdale, ON M9W 5A3	No utilities in area.	28-Feb-20						
Rogers Cable (Mississauga)	Edgar Henriquez	EA Coordinator	905-897-6457		edgar.henriquez@rci.rogers.com	3573 Wolfedale Road Mississauga, ON L5C 3T6		28-Feb-20						
Peel Regional Police	Nishan Duraiappah	Chief	905-453-3311		nishan.duraiappah@peelpolice.ca	7750 Hurontario Street, Brampton, ON L6V 3W6		28-Feb-20						
Peel Regional Paramedic Services	Peter F. Dundas	Chief & Director	905-791-7800, ext. 3921		peter.dundas@peelregion.ca	1600 Bovaird Drive E, Brampton, ON L6R 3S8		28-Feb-20						
Peel District School Board	Suzanne Blakeman	Manager, Planning & Enrolment	905-890-1010 ext.2216		suzanne.blakeman@peelsb.com	5650 Hurontario Street, Mississauga, ON L5R 1C6	Called the Peel District School Board Director's office. They informed me that Bianca no longer works for The Peel District School Board. Suzanne Blakeman has been added to take Bianca's place. (2020-03-04 Heather James)	16-Mar-20						
Chiefs of Ontario Office	Scott Cavan				scott.cavan@coo.org	468 Queen Street East, Suite 400 Toronto ON M5A 1T7		16-Mar-20						
Chiefs of Ontario Office	Kathleen Padulo				kathleen.padulo@coo.org	468 Queen Street East, Suite 400 Toronto ON M5A 1T7		16-Mar-20						
Anishinabek Nation/Union of Ontario Indians,	Allan Dokis	Intergovernmental Affairs Director			info@anishinabek.ca	P.O. Box 711 North Bay ON P1B 8J8	not affected as advised by MECP	28-Feb-20						
Association of Iroquois and Allied Indians	Chris Hoyos	Intergovernmental Affairs			Choyos@aiai.on.ca	387 Princess Avenue London ON N6B 2A7	not affected as advised by MECP	28-Feb-20						
Chippewas of Rama First Nation	Sharday James	Community Consultation	(705) 325-3611 ext. 1633		shardayj@ramafirstnation.ca	5884 Rama Road, Suite 200 Rama ON L3V 6H6	not affected as advised by MECP	16-Mar-20						No comments or concerns with respect to project
Mississaugas of the Credit First Nation	Fawn Sault				fawn.sault@mncfn.ca	2789 Mississauga Road, R.R. 6 Hagersville ON N0A 1M0		28-Feb-20						Ainley provided the archaeological and cultural heritage assessment reports on May 27, 2020.
Six Nations of Grand River	Mark B. Hill	Chief	519-732-2905		markhill@sixnations.ca		No response to notice from Joanne Thomas, sent to Chief on November 9, 2020 with archaeological assessment	09-Nov-20						No response to notice from Joanne Thomas, sent to Chief on November 9, 2020 with archaeological assessment
Six Nations Council - Land and Resources	Joanne Thomas				jthomas@sixnations.ca	2498 Chiefswood Road, P.O. Box 5000 Ohsweken ON N0A 1M0	No response to notice, sent to Chief Mark Hill on November 9, 2020	28-Feb-20						
Credit River Metis Council	Karen Derocher				crmcoutreach@gmail.com	Plaza 2 - Unit 305 350 Rutherford Road South Brampton ON L6W 4N6	not affected as advised by MECP	28-Feb-20						
Peel Aboriginal Network	Jairus Skye	Executive Director			ed@theindigenousnetwork.com	208 Britannia Road East, Unit 1 Mississauga ON L4Z 1S6	Notice sent on February 28 had a bouceback. Email address was spelled incorrectly and has been updated. (2020-03-03)	28-Feb-20						
Haudenosaunee Confederacy Chiefs Council	Tracey General		418-843-3767		hdi2@bellnet.ca		Notice sent on May 11,2020 through website	11-May-20						

Group/Organization	Contact Name	Role	Phone	Fax	Email	Address	Contact Notes/ Comments	Notice of Commencement		PIC 1		Notice of Completion		Comments About Submissions
								Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	Date Sent	Follow-Up Date	
Huron-Wendat Nation	Maxime Picard				administration@cnhw.qc.ca	255, place Chef Michel Laveau Wendake (Quebec) G0A 4V0	Notice sent on May 11,2020 through website	11-May-20						Ainley provided the Stage 1 Archeological Assessment completed by ASI on May 15, 2020.

Ministry of Heritage, Sport, Tourism, and Culture Industries

Programs and Services Branch
401 Bay Street, Suite 1700
Toronto, ON M7A 0A7
Tel: 416.314.7147

Ministère des Industries du Patrimoine, du Sport, du Tourisme et de la Culture

Direction des programmes et des services
401, rue Bay, Bureau 1700
Toronto, ON M7A 0A7
Tél: 416.314.7147

Ontario

March 12, 2020 EMAIL ONLY

Sean Ballaro
Project Manager
Region of Peel
sean.ballaro@peelregion.ca

MHSTCI File	**:**	**0012096**
Proponent	**:**	**The Region of Peel**
Subject	**:**	**Notice of Study Commencement – Municipal Class EA**
Project	**:**	**Watermain Construction Heritage Road**
Location	**:**	**Heritage Road, Brampton, Region of Peel**

Dear Sean Ballaro:

Thank you for providing the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) with the Notice of study Commencement the above-referenced project. MHSTCI's interest in this Environmental Assessment (EA) project relates to its mandate of conserving Ontario's cultural heritage, which includes:

- Archaeological resources, including land and marine;
- Built heritage resources, including bridges and monuments; and,
- Cultural heritage landscapes.

Under the EA process, the proponent is required to determine a project's potential impact on cultural heritage resources.

Project Summary
The Region of Peel has started an Environmental Assessment (Class EA) study to consider extending a watermain outside of the existing road right-of-way on Heritage Road. This watermain will extend from the Meadowvale North Pumping Station in Mississauga to Steeles Avenue West in Brampton.

Identifying Cultural Heritage Resources
While some cultural heritage resources may have already been formally identified, others may be identified through screening and evaluation. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to these communities. Municipal Heritage Committees, historical societies and other local heritage organizations may also have knowledge that contributes to the identification of cultural heritage resources.

Archaeological Resources
This EA project may impact archaeological resources and should be screened using the MHSTCI *Criteria for Evaluating Archaeological Potential* to determine if an archaeological assessment is needed. MHSTCI archaeological sites data are available at *archaeology@ontario.ca*. If the EA project area exhibits archaeological potential, then an archaeological assessment (AA) should be undertaken by an archaeologist licenced under the *OHA*, who is responsible for submitting the report directly to MHSTCI for review.

Built Heritage and Cultural Heritage Landscapes
The MHSTCI *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* should be completed to help determine whether this EA project may impact cultural heritage resources. If potential or known heritage resources exist, MHSTCI recommends that a Heritage Impact Assessment (HIA), prepared by a qualified consultant, should be completed to assess potential project impacts. Our Ministry's *Info Sheet #5: Heritage Impact Assessments and Conservation Plans* outlines the scope of HIAs. Please send the HIA to MHSTCI for review, and make it available to local organizations or individuals who have expressed interest in review.

Environmental Assessment Reporting
All technical cultural heritage studies and their recommendations are to be addressed and incorporated into EA projects. Please advise MHSTCI whether any technical cultural heritage studies will be completed for this EA project, and provide them to MHSTCI before issuing a Notice of Completion or commencing any work on the site. If screening has identified no known or potential cultural heritage resources, or no impacts to these resources, please include the completed checklists and supporting documentation in the EA report or file.

Thank you for consulting MHSTCI on this project and please continue to do so throughout the EA process. If you have any questions or require clarification, do not hesitate to contact me.

Sincerely,

Joseph Harvey
On behalf of

Dan Minkin
Heritage Planner
Heritage Planning Unit
Dan.Minkin@ontario.ca

Copied to: Chris Ewen, Consultant Project Manager, Ainley & Associates Ltd.
Becca Weatherall, Engineering Intern, Ainley & Associates Ltd.

Wendy Smeh

From: Harvey, Joseph (MHSTCI) <Joseph.Harvey@ontario.ca>
Sent: March 12, 2020 12:37 PM
To: sean.ballaro@peelregion.ca
Cc: Barboza, Karla (MHSTCI); Minkin, Dan (MHSTCI); Chris Ewen; Rebecca Weatherall
Subject: Notice of Study Commencement - Heritage Road Watermain
Attachments: 2020-03-12_HeritageRoadWaterMain_MHSTCI_Ltr.pdf

Sean Ballaro,

Please find attached, a letter acknowledging the receipt of your notice of commencement. Contact us with any further questions or concerns.

Joseph Harvey
On behalf of

Dan Minkin
Heritage Planner
Heritage Planning Unit
Dan.Minkin@ontario.ca

Wendy Smeh

From: EnviroOnt <EnviroOnt@tc.gc.ca>
Sent: March 12, 2020 10:05 AM
To: Rebecca Weatherall
Subject: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Agencies
Attachments: 119042 - Notice of Commencement - Published.pdf

Greetings,

Thank you for your correspondence.

Please note Transport Canada **does not** require receipt of all individual or Class EA related notifications. We are requesting project proponents to self-assess if their project:

1. Will interact with a federal property and/or waterway by reviewing the Directory of Federal Real Property, available at at www.tbs-sct.gc.ca/dfrp-rbif/; **and**
2. Will require approval and/or authorization under any Acts administered by Transport Canada* available at http://www.tc.gc.ca/eng/acts-regulations/menu.htm.

Projects that will occur on federal property prior to exercising a power, performing a function or duty in relation to that project, will be subject to a determination of the likelihood of significant adverse environmental effects, per Section 82 of the *Impact Assessment Act, 2019*.

If the aforementioned does not apply, the Environmental Assessment program should not be included in any further correspondence and future notifications will not receive a response. If there is a role under the program, correspondence should be forwarded *electronically* to: EnviroOnt@tc.gc.ca with a **brief description of Transport Canada's expected role**.

*Below is a summary of the most common Acts that have applied to projects in an Environmental Assessment context:

- ***Canadian Navigable Waters Act (CNWA)*** – the Act applies primarily to works constructed or placed in, on, over, under, through, or across navigable waters set out under the Act. The Navigation Protection Program administers the CNWA through the review and authorization of works affecting navigable waters. Information about the Program, CNWA and approval process is available at: http://www.tc.gc.ca/eng/programs-621.html. Enquiries can be directed to NPPONT-PPNONT@tc.gc.ca or by calling (519) 383-1863.

- ***Railway Safety Act (RSA)*** – the Act provides the regulatory framework for railway safety, security, and some of the environmental impacts of railway operations in Canada. The Rail Safety Program develops and enforces regulations, rules, standards and procedures governing safe railway operations. Additional information about the Program is available at: https://www.tc.gc.ca/eng/railsafety/menu.htm. Enquiries can be directed to RailSafety@tc.gc.ca or by calling (613) 998-2985.

- ***Transportation of Dangerous Goods Act (TDGA)*** – the transportation of dangerous goods by air, marine, rail and road is regulated under the TDGA. Transport Canada, based on risks, develops safety standards and regulations, provides oversight and gives expert advice on dangerous goods to promote public safety. Additional information about the transportation of dangerous goods is available at: https://www.tc.gc.ca/eng/tdg/safety-menu.htm. Enquiries can be directed to TDG-TMDOntario@tc.gc.ca or by calling (416) 973-1868.

- ***Aeronautics Act*** – Transport Canada has sole jurisdiction over aeronautics, which includes aerodromes and all related buildings or services used for aviation purposes. Aviation safety in Canada is regulated under this Act and the Canadian Aviation Regulations (CARs). Elevated Structures, such as wind turbines and communication towers, would be examples of projects that must be assessed for lighting and marking requirements in accordance with the CARs. Transport Canada also has an interest in projects that have the potential to cause interference between wildlife and aviation activities. One example would be waste facilities, which may attract birds into commercial and recreational flight paths. The *Land Use In The Vicinity of Aerodromes* publication recommends guidelines for and uses in the vicinity of aerodromes, available at: https://www.tc.gc.ca/eng/civilaviation/publications/tp1247-menu-1418.htm. Enquires can be directed to at tc.aviationservicesont-servicesaviationont.tc@tc.gc.ca or by calling 1 (800) 305-2059 / (416) 952-0230.

Please advise if additional information is needed.

Thank you,

Environmental Assessment Program, Ontario Region
Transport Canada / Government of Canada / 4900 Yonge St., Toronto, ON M2N 6A5
EnviroOnt@tc.gc.ca / Facsimile : (416) 952-0514 / TTY: 1-888-675-6863

Programme d'évaluation environnementale, Région de l'Ontario
Transports Canada / Gouvernement du Canada / 4900, rue Yonge, Toronto, ON, M2N 6A5
EnviroOnt@tc.gc.ca / télécopieur: (416) 952-0514

From: Rebecca Weatherall [mailto:weatherall@ainleygroup.com]
Sent: Friday, February 28, 2020 9:49 AM
To: joe_vanhumbeck@cpr.ca; jakub.kilis@cvc.ca; rob.dobos@ec.gc.ca; daniel.francey@gotransit.ca; Elise.Croll@gotransit.com; bryan.macmillan@mississauga.ca; Camille.assam@ontario.ca; Karly.jennings@ontario.ca; Audrey.Bennett@ontario.ca; maria.jawaid@ontario.ca; Trevor.Bell@ontario.ca; eanotification.cregion@ontario.ca; mea.notices.eaab@ontario.ca; tiola.seaton@ontario.ca; sabina.merey@ontario.ca; jackie.vandevalk@ontario.ca; alexandre.ferland@pc.gc.ca; zack.carlan@trca.ca; victoria.kramkowski@trca.ca; chris.lafleur@brampton.ca; Audrey.Bennett@ontario.ca; maria.jawaid@ontario.ca; dan.minkin@ontario.ca; rosi.zirger@ontario.ca; dawn.irish@ontario.ca; Thanga.Murugesu@ontario.ca; sabina.merey@ontario.ca; elena.nicol@ontario.ca; nhuether@orangeville.ca; alexandre.ferland@pc.gc.ca; bkrul@trca.on.ca; dan.thompson@dfo-mpo.gc.ca; ali.veshkini@ontario.ca; EnviroOnt <EnviroOnt@tc.gc.ca>; Keith.Noronha@infrastructureontario.ca
Cc: Wendy Smeh <smeh@ainleygroup.com>; Chris Ewen <ewen@ainleygroup.com>; Dave Ellis <ellis@ainleygroup.com>
Subject: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Agencies

To Whom It May Be Concerned:

Please find attached a Notice of Study Commencement, dated February 20, 2020, for a Class Environment Assessment (Class EA) that Ainley & Associates Ltd. has been retained to complete on behalf of the Region of Peel, associated with water distribution system upgrades for Heritage Road in Brampton.

The attached Notice signifies the beginning of the Class EA process and as we proceed through the process all stakeholders and interested parties will have an opportunity, through Notices and Public Information Centres (PIC's), to provide comments.

Please email comments to the parties listed in the Notice of Study Commencement.

Thank you in advance and we look forward to receiving your feedback.

Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

Wendy Smeh

From: caroline.rysyk@zayo.com on behalf of Utility Circulations <utility.circulations@zayo.com>
Sent: March 12, 2020 5:40 PM
To: Rebecca Weatherall
Subject: Re: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Utilities

Good afternoon

Zayo has no existing plant in the area indicated in your submission. No markup and no objection. Thank you.

Utility Circulations

Caroline Rysyk

On Fri, 28 Feb 2020 at 10:08, Rebecca Weatherall <weatherall@ainleygroup.com> wrote:

> To Whom It May Be Concerned:
>
> Please find attached a Notice of Study Commencement, dated February 20, 2020, for a Class Environment Assessment (Class EA) that Ainley & Associates Ltd. has been retained to complete on behalf of the Region of Peel, associated with water distribution system upgrades for Heritage Road in Brampton.
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>
> Please email comments to the parties listed in the Notice of Study Commencement.
>
> Thank you in advance and we look forward to receiving your feedback.
>
> Warm regards,
>
> Becca Weatherall, E.I.T.
> Engineering Intern
>
> Ainley GROUP
> CONSULTING ENGINEERS & PLANNERS
>
> www.ainleygroup.com
> Phone: (905)452-5172 ext 217
> Cell: (519)270-6062

Wendy Smeh

From: Annette Lister <Annette.Lister@trca.ca>
Sent: March 9, 2020 11:03 AM
To: Rebecca Weatherall
Cc: Ballaro, Sean; Chris Ewen
Subject: RE: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Agencies

Hello Rebecca,

TRCA staff received the Notice of Commencement for the Heritage Road Watermain Construction Class EA, from Steeles Avenue West to the Meadowvale North Pumping Station, in Brampton and Mississauga. Please note that staff has screened the area, and project study area is located outside of TRCA jurisdiction. Please remove our staff from the mailing list.

Thank you,
Annette

Annette Lister, M.A.Sc.
Planner
Infrastructure Planning and Permits | Development and Engineering Services

T: (416) 661-6600 ext. 6443
E: annette.lister@trca.ca
A: 101 Exchange Avenue, Vaughan, ON, L4K 5R6 | trca.ca

From: Rebecca Weatherall <weatherall@ainleygroup.com>
Sent: Friday, February 28, 2020 9:49 AM
To: joe_vanhumbeck@cpr.ca; jakub.kilis@cvc.ca; rob.dobos@ec.gc.ca; daniel.francey@gotransit.ca; Elise.Croll@gotransit.com; bryan.macmillan@mississauga.ca; Camille.assam@ontario.ca; Karly.jennings@ontario.ca; Audrey.Bennett@ontario.ca; maria.jawaid@ontario.ca; Trevor.Bell@ontario.ca; eanotification.cregion@ontario.ca; mea.notices.eaab@ontario.ca; tiola.seaton@ontario.ca; sabina.merey@ontario.ca; jackie.vandevalk@ontario.ca; alexandre.ferland@pc.gc.ca; Zack Carlan <Zack.Carlan@trca.ca>; Victoria Kramkowski <Victoria.Kramkowski@trca.ca>; chris.lafleur@brampton.ca; Audrey.Bennett@ontario.ca; maria.jawaid@ontario.ca; dan.minkin@ontario.ca; rosi.zirger@ontario.ca; dawn.irish@ontario.ca; Thanga.Murugesu@ontario.ca; sabina.merey@ontario.ca; elena.nicol@ontario.ca; nhuether@orangeville.ca; alexandre.ferland@pc.gc.ca; Ben Krul <Ben.Krul@trca.ca>; dan.thompson@dfo-mpo.gc.ca; ali.veshkini@ontario.ca; EnviroOnt@tc.gc.ca; Keith.Noronha@infrastructureontario.ca
Cc: Wendy Smeh <smeh@ainleygroup.com>; Chris Ewen <ewen@ainleygroup.com>; Dave Ellis <ellis@ainleygroup.com>
Subject: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Agencies

To Whom It May Be Concerned:

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Please email comments to the parties listed in the Notice of Study Commencement.

Thank you in advance and we look forward to receiving your feedback.

Warm regards,

Becca Weatherall, E.I.T.

Engineering Intern

Ainley GROUP
CONSULTING ENGINEERS & PLANNERS

www.ainleygroup.com

Phone: (905)452-5172 ext 217

Cell: (519)270-6062

Rebecca Weatherall

From: tpumarkup@hydroone.com
Sent: Thursday, March 05, 2020 12:11 PM
To: Rebecca Weatherall
Cc: tpumarkup@hydroone.com
Subject: RE: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Utilities

Good Day,

Thank you for informing us of your upcoming project. Hydro One **does not** own or operate any Transmission high voltage underground facilities in the areas identified in your request.

Regards,

TPUCC Markup – Hydro One
E-mail: tpumarkup@hydroone.com

From: Rebecca Weatherall [mailto:weatherall@ainleygroup.com]
Sent: Friday, February 28, 2020 10:08 AM
To: bell.moc@netricom.com; Micheline.Scaife@alectrautilities.com; meetpal.chhina@enbridge.com; mark-ups@enbridge.com; TPUCC DRAWINGS; lmorson@hydroonebrampton.com; MITCHELL Ian; utility.circulations@mtsallstream.com; Utility.Circulations@Zayo.com; GTA.markups@rci.rogers.com; telusutilitymarkups@telecon.ca; Stephen.hoy@telus.com; bell.moc@netricom.com; edgar.henriquez@rci.rogers.com; samir.patel@cogecodata.com; meetpal.chhina@enbridge.com; mignacio@enersource.com; gt.moc@prestigetel.com; TPUCC DRAWINGS; MITCHELL Ian; utility.circulations@mtsallstream.com; max.pavese@telus.com; jgetson@uniongas.com; Dgadbois@uniongas.com
Cc: Wendy Smeh; Dave Ellis; Chris Ewen
Subject: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Utilities

To Whom It May Be Concerned:

Please find attached a Notice of Study Commencement, dated February 20, 2020, for a Class Environment Assessment (Class EA) that Ainley & Associates Ltd. has been retained to complete on behalf of the Region of Peel, associated with water distribution system upgrades for Heritage Road in Brampton.

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Thank you in advance and we look forward to receiving your feedback.

Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

Wendy Smeh

From: tpumarkup@hydroone.com
Sent: March 5, 2020 12:11 PM
To: Rebecca Weatherall
Cc: tpumarkup@hydroone.com
Subject: RE: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Utilities

Good Day,

Thank you for informing us of your upcoming project. Hydro One **does not** own or operate any Transmission high voltage underground facilities in the areas identified in your request.

Regards,

TPUCC Markup – Hydro One
E-mail: tpumarkup@hydroone.com

From: Rebecca Weatherall [mailto:weatherall@ainleygroup.com]
Sent: Friday, February 28, 2020 10:08 AM
To: bell.moc@netricom.com; Micheline.Scaife@alectrautilities.com; meetpal.chhina@enbridge.com; mark-ups@enbridge.com; TPUCC DRAWINGS; lmorson@hydroonebrampton.com; MITCHELL Ian; utility.circulations@mtsallstream.com; Utility.Circulations@Zayo.com; GTA.markups@rci.rogers.com; telusutilitymarkups@telecon.ca; Stephen.hoy@telus.com; bell.moc@netricom.com; edgar.henriquez@rci.rogers.com; samir.patel@cogecodata.com; meetpal.chhina@enbridge.com; mignacio@enersource.com; gt.moc@prestigetel.com; TPUCC DRAWINGS; MITCHELL Ian; utility.circulations@mtsallstream.com; max.pavese@telus.com; jgetson@uniongas.com; Dgadbois@uniongas.com
Cc: Wendy Smeh; Dave Ellis; Chris Ewen
Subject: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Utilities

To Whom It May Be Concerned:

Please find attached a Notice of Study Commencement, dated February 20, 2020, for a Class Environment Assessment (Class EA) that Ainley & Associates Ltd. has been retained to complete on behalf of the Region of Peel, associated with water distribution system upgrades for Heritage Road in Brampton.

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Please email comments to the parties listed in the Notice of Study Commencement.

Thank you in advance and we look forward to receiving your feedback.

Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

Wendy Smeh

From: Telus Utility Markups <telusutilitymarkups@telecon.ca>
Sent: March 2, 2020 10:50 AM
To: Rebecca Weatherall
Subject: RE: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Utilities Telus 2020-1265

TELUS has no infrastructure in the area of your proposed work. Permit expires six(6) months from approval date.

Indira Sharma
Project Support
289-657-8256
7777 Weston Road
Vaughan, ON L4L 0G9

www.telecon.ca

From: Rebecca Weatherall <weatherall@ainleygroup.com>
Sent: Friday, February 28, 2020 10:08 AM
To: bell.moc@netricom.com; Micheline.Scaife@alectrautilities.com; meetpal.chhina@enbridge.com; mark-ups@enbridge.com; tpumarkup@hydroone.com; lmorson@hydroonebrampton.com; ian.mitchell@hydroone.com; utility.circulations@mtsallstream.com; Utility.Circulations@Zayo.com; GTA.markups@rci.rogers.com; Telus Utility Markups <telusutilitymarkups@Telecon.ca>; Stephen.hoy@telus.com; bell.moc@netricom.com; edgar.henriquez@rci.rogers.com; samir.patel@cogecodata.com; meetpal.chhina@enbridge.com; mignacio@enersource.com; gt.moc@prestigetel.com; tpumarkup@hydroone.com; ian.mitchell@hydroone.com; utility.circulations@mtsallstream.com; max.pavese@telus.com; jgetson@uniongas.com; Dgadbois@uniongas.com
Cc: Wendy Smeh <smeh@ainleygroup.com>; Dave Ellis <ellis@ainleygroup.com>; Chris Ewen <ewen@ainleygroup.com>
Subject: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Utilities

To Whom It May Be Concerned:

Please find attached a Notice of Study Commencement, dated February 20, 2020, for a Class Environment Assessment (Class EA) that Ainley & Associates Ltd. has been retained to complete on behalf of the Region of Peel, associated with water distribution system upgrades for Heritage Road in Brampton.

The attached Notice signifies the beginning of the Class EA process and as we proceed through the process all stakeholders and interested parties will have an opportunity, through Notices and Public Information Centres (PIC's), to provide comments.

Please email comments to the parties listed in the Notice of Study Commencement.

Thank you in advance and we look forward to receiving your feedback.

Warm regards,

Becca Weatherall, E.I.T.

Engineering Intern

Ainley GROUP
CONSULTING ENGINEERS & PLANNERS

www.ainleygroup.com

Phone: (905)452-5172 ext 217

Cell: (519)270-6062

Wendy Smeh

From: MOC (GT) <gt.moc@telecon.ca>
Sent: March 27, 2020 4:41 PM
To: Rebecca Weatherall
Subject: RE: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Utilities/GT20-1048
Attachments: GT20-1048.doc

Hi,

GT has no plant within 2m of proposed work-NO CONFLICT

Sincerely,

Mary Tina
Technicien CAO, Ingenierie-Centre du Canada
CAD Technician, Engineering-Central Canada

T 289-657-8072
7777 Weston Road, Woodbridge, ON L4L 0G9
telecon.ca

From: Rebecca Weatherall <weatherall@ainleygroup.com>
Sent: Monday, March 16, 2020 9:34 AM
To: MOC (GT) <gt.moc@Telecon.ca>; utility.circulations@mtsallstream.com; MOC (Bell) <bell.moc@Telecon.ca>
Subject: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Utilities

To Whom It May Be Concerned:

Please find attached a Notice of Study Commencement, dated February 20, 2020, for a Class Environment Assessment (Class EA) that Ainley & Associates Ltd. has been retained to complete on behalf of the Region of Peel, associated with water distribution system upgrades for Heritage Road in Brampton.

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Thank you in advance and we look forward to receiving your feedback.

Warm regards,

Becca Weatherall, E.I.T.

Engineering Intern

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Cell: (519)270-6062

Wendy Smeh

From: Dave Ellis
Sent: March 31, 2020 10:21 AM
To: Rebecca Weatherall
Subject: FW: 15-1138 FW: CVC Comments - Notice of Commencement - Heritage Rd Watermain (CVC File No. EA 20/003)

Hi Becca,

See below (EA related correspondence from CVC). I will ask Sean to copy you on all future EA related correspondence.

Regards,

Dave Ellis, P.Eng.
Senior Project Engineer
Ainley
www.ainleygroup.com
Tel: (705) 445-3451 Ext. 217
Cell: (705) 333-0573

From: Ballaro, Sean <sean.ballaro@peelregion.ca>
Sent: Tuesday, March 31, 2020 9:50 AM
To: Dave Ellis <ellis@ainleygroup.com>
Cc: Chris Ewen <ewen@ainleygroup.com>; Wendy Smeh <smeh@ainleygroup.com>
Subject: 15-1138 FW: CVC Comments - Notice of Commencement - Heritage Rd Watermain (CVC File No. EA 20/003)

I don't see anything that really sticks out as being concerning. Let me know if you have other comments.

Otherwise, can you ensure that these comments are followed or provide rationale if they cannot.
Thanks.

Sean Ballaro
Project Manager, Capital Works
Water Linear Engineering & Reliability
Water Division, Public Works
(905) 791-7800 x 7917
Mobile (905) 866-8588

Region of Peel
working with you

From: Kilis, Jakub <Jakub.Kilis@cvc.ca>
Sent: March 30, 2020 2:21 PM
To: Ballaro, Sean <sean.ballaro@peelregion.ca>
Cc: ewen@ainleygroup.com; Stewart, Rebecca <Rebecca.Stewart@cvc.ca>; Labrie, Sarah <Sarah.Labrie@cvc.ca>
Subject: CVC Comments - Notice of Commencement - Heritage Rd Watermain (CVC File No. EA 20/003)

Hi Sean,

It is the understanding of CVC staff that the Region of Peel has initiated a Municipal Class Environmental Assessment (EA) to consider extending a watermain outside of the existing road right-of-way on Heritage Road. This watermain will extend from the Meadowvale North Pumping Station in Mississauga to Steeles Avenue West in Brampton.

We have had an opportunity to review the Notice of Commencement and associated study area and offer the following preliminary comments for your consideration:

1. The study area is located within the Mullet Creek watershed. There is one regulated watercourse crossing of Mullet Creek which will require a permit in the future.
2. During the EA Study reference should be made to CVC's Fluvial Geomorphic Guidelines. The Guidelines and associated factsheets have been developed to standardize scour assessments in relationship to proposed infrastructure crossing a watercourse.
3. The EA Study should provide a clear representation of the location of any proposed infrastructure as compared to the erosion hazard corridor and meanderbelt width delineations (associated with the regulated watercourse). Indicate the 50-year, 75-year and 100-year erosion hazard limit in the vicinity of the proposed infrastructure. Consider the lifespan of the infrastructure and comment on the risk of being exposed in relation to the planning horizon. A geomorphologist may be required to provide input towards erosion counter measures, if required. Reference should be made to CVC's Fluvial Geomorphology Guidelines as well as the Slope Stability guidelines as necessary.
4. Any work being completed within the floodplain associated with the regulated watercourse must not create any offsite flooding impacts. During the study confirm that the proposed or that altered grades will be returned to existing conditions and therefore not have any offsite flooding impacts. CVC recommends any proposed exposed (at surface) infrastructure to be located outside of the regulatory floodplain associated with the regulated watercourse.
5. An increase in impervious area due to the proposed works being completed will require a stormwater management (SWM) investigation that adheres to all of CVC's criteria and applicable Provincial criteria. Therefore, please apply CVC's Stormwater Management Criteria for the proposed works, as applicable. Ensure this is identified and addressed within the Stormwater Management Report.
    a. The purpose of quantity control criteria is to protect downstream properties from flood increases due to upstream development. CVC expects that there be no increase in peak flows for all storm events (2-year to 100-year and Regional) in the receiving regulated watercourses in accordance with Table 3.1 of CVC's SWM Criteria document.
    b. All watercourses and waterbodies within CVC's jurisdiction are classified as requiring an Enhanced Level of Protection (80% TSS Removal). This criterion applies to the increase in impervious area along the study area.
    c. The minimum erosion control requirement for all watercourses within CVC's jurisdiction is the retention of the first 5mm of every rainfall event.
6. Based on preliminary review there are natural heritage features of concern within the project area including Mullet Creek, and associated vegetated valley and floodplain that crosses Heritage Road just south of Edgeware Rd. This watercourse contains direct fish habitat; any proposed in- or near water works will need to be assessed. There is a confirmed wetland within the Mullet Creek valley west of Heritage Road and south of Edgeware Rd. with potential for additional wetlands along the Mullet Creek Valley corridor. The Mullet Creek valley corridor in the vicinity of Heritage Road

consists of woodland vegetation that is part of the Credit Valley Watershed Natural Heritage System. Impacts to natural heritage features should be avoided. Preliminary alternative options 1 and 2 appear to result in infrastructure within regulated areas; works within regulated areas should be located outside of natural areas, where feasible. Please provide a detailed description of the works, a description of the locations of the proposed works (including access and staging areas), a description of impacts including impacts associated with staging and access, and details regarding site restoration and tree protection during the study.

Preliminary considerations for future detailed design

7. Pending the methodology of construction, a Frac-out Contingency Plan may be required specifically in relation to the crossing of Mullet Creek.
8. The proponent is responsible for the submission and ultimate implementation of a comprehensive ESC plan for each stage of construction. If the construction duration is relatively long and/or the watercourse is sensitive, multi stage construction ESC plans will be required to ensure adequate control for the entire period of work.
    a. If necessary, a flow diversion or by-pass plan may also be required.
    b. In the instances where groundwater is high and dewatering is required during construction activities, a dewatering plan will be required by a qualified person.
9. Any staging or stockpiling associated with proposed works will need to be off-site OR a minimum of 30m from Mullet Creek.
10. Please see the CVC Plant Selection Guideline for details on approved species, seed mixes and cover crops to be used in future restoration.
11. Based on the provided information there are works proposed in or near water. To protect sensitive aquatic receivers the project works must occur between July 1 – March 31 of any given year. This timing window restriction is to appear on all appropriate contract reports and drawings.
12. To avoid impacts to federally protected migratory birds, vegetation removals and/or any proposed activities within migratory bird habitat should be avoided during the primary breeding bird season (April 1 – August 31). A breeding bird timing window (April 1 – August 31) should appear on all construction drawings and reports to ensure compliance with the Migratory Birds Convention Act (MBCA 1994). Note that adherence to this timing window does not constitute clearance under and relevant legislation but is considered best practice for avoiding impacts.

Given CVC's interest staff would like to be kept informed of future meetings and proceedings through the EA process. Please forward any information or reports when available to ensure that this Authority's policy and program interests are reflected in the planning and design components for this project.

Regards,
Jakub

Jakub Kilis, RPP
Manager, Infrastructure and Regulations | Credit Valley Conservation
905-670-1615 ext 287 | C: 647-212-6554 | 1-800-668-5557
jakub.kilis@cvc.ca | cvc.ca

The information contained in this Credit Valley Conservation electronic message is directed in confidence

Wendy Smeh

From: Mark-Ups <Mark-Ups@enbridge.com>
Sent: March 23, 2020 12:24 AM
To: Rebecca Weatherall
Subject: RE: EGD 24194236 - 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Utilities - General Location
Attachments: 119042 - Notice of Commencement - Published.pdf; Cover EGD 24194236.pdf; Third_Party_Requirements_in_the_Vicinity_of_Natural_Gas_Facilities.pdf

Hello,

Attached is the information you had requested.

The information provided is for General Location Only. You must resubmit your detailed design for our review.

Should you require anything further please contact us at Mark-Ups@enbridge.com.

Kind Regards,

Kishore Sagar

From: Rebecca Weatherall [weatherall@ainleygroup.com]
Sent: Thursday, March 19, 2020 10:53 AM
To: MOC (Bell); gt.moc@telecon.ca; GTA.markups@rci.rogers.com; Micheline.Scaife@alectrautilities.com; Mark-Ups; Dave Gadbois
Subject: EGD 24194236 - 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Utilities

To Whom It May Be Concerned:

Please find attached a Notice of Study Commencement, dated February 20, 2020, for a Class Environment Assessment (Class EA) that Ainley & Associates Ltd. has been retained to complete on behalf of the Region of Peel, associated with water distribution system upgrades for Heritage Road in Brampton.

The attached Notice signifies the beginning of the Class EA process and as we proceed through the process all stakeholders and interested parties will have an opportunity, through Notices and Public Information Centres (PIC's), to provide comments.

Please email comments to the parties listed in the Notice of Study Commencement.

Thank you in advance and we look forward to receiving your feedback.

Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

City of Mississauga

Memorandum

To:	Sean Ballaro, Project Manager, Capital Works, Region of Peel
From:	Ashley Visneski, Park Planning, Community Services Department
Date:	April 29th 2020
Subject:	**Watermain Construction – Heritage Road Class EA Environmental Assessment Region of Peel Initial Community Services Comments**

In regard to the initiated Class Environmental Assessment Study for the extension of a watermain outside of the existing road right-of-way on Heritage Road, the Park Planning Section, Community Services department provides initial comments below for the proposed work:

- The Region of Peel is to confirm if there will be any impact on City lands. The area of work contains City of Mississauga lands identified as Totoredaca Park (P-284). If any City of Mississauga lands are required for works or access, a Consent to Enter agreement application and/or Park Access Permit application will be required;
- IF City lands are impacted a full construction/management drawing package with support for all areas of work including staging/stockpiling and access routes, removals plan, preservation/protection plan, and complete restoration plan identifying replacements for any required removals and or impacts trees within boulevard and park;
- Be advised once a construction/management package is submitted it may be recommended a site inspection be completed with Park Planning, Forestry, CVC and the Region of Peel present for the review of impacts and necessary restoration;
- Advise if new easements will be a requirement for the improvements proposed;
- Circulate to the conservation authority (Credit Valley Conservation) of the proposed works for the purposes of necessary permits/approvals for any impacts and restoration of the natural features and;
- Inform Community Services of the project schedule and phases once information is available.

Please circulate Community Services' on any future updates in regard to the proposed work and once a submission is complete.

Should any clarification be required, please contact:

Ashley Visneski
Landscape Architect, Park Assets
Park Planning Section, Community Services Department
(905) 615-3200 ext. 5360

Wendy Smeh

From: Ashley Visneski <Ashley.Visneski@mississauga.ca>
Sent: April 30, 2020 3:47 PM
To: Rebecca Weatherall
Subject: RE: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road
Attachments: CofM Comments . EA Review Meadowvale Blvd.pdf

Hi Becca

Hope all is well. Attached are the City's Community Services Departments' comments on the Notice of Study for the EA for Heritage Road. I apologize for the delay. If you have any questions or concerns please let me know.

Thanks!

Ashley Visneski, OALA
Landscape Architect, Parks Assets
T 905-615-3200 ext.5360
ashley.visneski@mississauga.ca

City of Mississauga | Community Services Department,
Parks, Forestry and Environment Division

From: Katie Henley
Sent: Wednesday, April 15, 2020 1:02 PM
To: Ashley Visneski
Cc: Sangita Manandhar
Subject: FW: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road

Hi Ashley,

This EA notice came in today, it's in the north west end of the city. I've attached a memo from a previous EA that might be helpful.

Thanks,
Katie

From: Rebecca Weatherall [mailto:weatherall@ainleygroup.com]
Sent: Wednesday, April 15, 2020 10:31 AM
To: william.turner@peelregion.ca; maarit.varga@peelregion.ca; sharon.mannie@peelregion.ca; Katie Henley; Loudel Uy; Alex Liya; Lenka.Nielsen@brampton.ca
Subject: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road

To Whom It May Be Concerned:

Please find attached a Notice of Study Commencement, dated February 20, 2020, for a Class Environment Assessment (Class EA) that Ainley & Associates Ltd. has been retained to complete on behalf of the Region of Peel, associated with water distribution system upgrades for Heritage Road in Brampton.

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Please email comments to the parties listed in the Notice of Study Commencement.

Thank you in advance and we look forward to receiving your feedback.

Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern

Ainley GROUP
CONSULTING ENGINEERS & PLANNERS

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

Wendy Smeh

From: Bell, Trevor (MECP) <Trevor.Bell@ontario.ca>
Sent: May 1, 2020 3:51 PM
To: sean.ballaro@peelregion.ca
Cc: Rebecca Weatherall; Chris Ewen; Dufresne, Tina (MECP); Evers, Andrew (MECP)
Subject: Re: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Agencies
Attachments: MECP Response Letter_Notice of Commencement_Heritage Road Watermain Construction.pdf

Good afternoon,

Please find attached a letter from the Ministry of the Environment, Conservation and Parks, Environmental Approvals Branch, regarding the above mentioned project. Feel free to contact me directly with any questions or concerns you may have.

Sincerely,

Trevor Bell | Environmental Planner/Environmental Assessment Coordinator
Project Review Unit, Environmental Assessment and Permissions Branch
Ministry of the Environment, Conservation and Parks
5775 Yonge Street, 8th floor, Toronto ON, M2M 4J1
Phone: 416-326-3577 | trevor.bell@ontario.ca

From: Rebecca Weatherall <weatherall@ainleygroup.com>
Sent: February 28, 2020 9:48 AM
To: joe_vanhumbeck@cpr.ca <joe_vanhumbeck@cpr.ca>; jakub.kilis@cvc.ca <jakub.kilis@cvc.ca>; rob.dobos@ec.gc.ca <rob.dobos@ec.gc.ca>; daniel.francey@gotransit.ca <daniel.francey@gotransit.ca>; Elise.Croll@gotransit.com <Elise.Croll@gotransit.com>; bryan.macmillan@mississauga.ca <bryan.macmillan@mississauga.ca>; Assam, Camille (IAO) <Camille.Assam@ontario.ca>; Karly.jennings@ontario.ca <Karly.jennings@ontario.ca>; Audrey.Bennett@ontario.ca <Audrey.Bennett@ontario.ca>; Jawaid, Maria (MNRF) <Maria.Jawaid@ontario.ca>; Bell, Trevor (MECP) <Trevor.Bell@ontario.ca>; EA Notices to CRegion (MECP) <eanotification.cregion@ontario.ca>; MEA Notices to Director EAAB (MECP) <MEANOTICESEAAB@ontario.ca>; tiola.seaton@ontario.ca <tiola.seaton@ontario.ca>; Merey, Sabina (MTO) <Sabina.Merey@ontario.ca>; jackie.vandevalk@ontario.ca <jackie.vandevalk@ontario.ca>; alexandre.ferland@pc.gc.ca <alexandre.ferland@pc.gc.ca>; zack.carlan@trca.ca <zack.carlan@trca.ca>; victoria.kramkowski@trca.ca <victoria.kramkowski@trca.ca>; chris.lafleur@brampton.ca <chris.lafleur@brampton.ca>; Audrey.Bennett@ontario.ca <Audrey.Bennett@ontario.ca>; Jawaid, Maria (MNRF) <Maria.Jawaid@ontario.ca>; Minkin, Dan (MHSTCI) <Dan.Minkin@ontario.ca>; Zirger, Rosi (MHSTCI) <Rosi.Zirger@ontario.ca>; Irish, Dawn (MTO) <Dawn.Irish@ontario.ca>; Thanga.Murugesu@ontario.ca <Thanga.Murugesu@ontario.ca>; Merey, Sabina (MTO) <Sabina.Merey@ontario.ca>; Nicol, Elena (MTO) <Elena.Nicol@ontario.ca>; nhuether@orangeville.ca <nhuether@orangeville.ca>; alexandre.ferland@pc.gc.ca <alexandre.ferland@pc.gc.ca>; bkrul@trca.on.ca <bkrul@trca.on.ca>; dan.thompson@dfo-mpo.gc.ca <dan.thompson@dfo-mpo.gc.ca>; Veshkini, Ali (SOLGEN) <Ali.Veshkini@ontario.ca>; EnviroOnt@tc.gc.ca <EnviroOnt@tc.gc.ca>; Noronha, Keith (IO) <Keith.Noronha@infrastructureontario.ca>
Cc: Wendy Smeh <smeh@ainleygroup.com>; Chris Ewen <ewen@ainleygroup.com>; Dave Ellis <ellis@ainleygroup.com>
Subject: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road - Agencies

To Whom It May Be Concerned:

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Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern

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Phone: (905)452-5172 ext 217
Cell: (519)270-6062

Ministry of the Environment, Conservation and Parks

Environmental Assessment Branch

1st Floor
135 St. Clair Avenue W
Toronto ON M4V 1P5
Tel.: 416 314-8001
Fax.: 416 314-8452

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Direction des évaluations environnementales

Rez-de-chaussée
135, avenue St. Clair Ouest
Toronto ON M4V 1P5
Tél. : 416 314-8001
Téléc. : 416 314-8452

May 1, 2020

Sean Ballaro
Project Manager, Capital Works
Water Linear Engineering & Reliability
Water Division, Public Works
Region of Peel
sean.ballaro@peelregion.ca
BY EMAIL ONLY

Re: **Heritage Road Watermain Construction**
Region of Peel
Schedule B Municipal Class Environmental Assessment
Notice of Study Commencement

Dear Mr. Ballaro,

This letter is in response to the Notice of Commencement for the above noted project. The Ministry of the Environment, Conservation and Parks (MECP) acknowledges that the Region of Peel has indicated that the study is following the approved environmental planning process for a Schedule B project under the Municipal Engineers Association's Municipal Class Environmental Assessment (Class EA).

The attached "Areas of Interest" document provides guidance regarding the ministry's interests with respect to the Class EA process. Please identify the areas of interest which are applicable to the project and ensure they are addressed. Proponents who address all the applicable areas of interest can minimize potential delays to the project schedule.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before authorizing this project, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of this duty to project proponents while retaining oversight of the consultation process.

The proposed project may have the potential to affect Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act* 1982. Where the Crown's duty to consult is triggered in relation to the proposed project**, the MECP is delegating the procedural aspects of rights-based consultation to the proponent through this letter.** The Crown intends to rely on the delegated consultation process in discharging its duty to consult and maintains the right to participate in the consultation process as it sees fit.

Based on information provided to date and the Crown`s preliminary assessment the proponent is required to consult with the following communities who have been identified as potentially affected by

the proposed project:

- Mississaugas of the Credit First Nation;
- Six Nations of the Grand River;
- Haudenosaunee Confederacy Chiefs Council; and
- Huron-Wendat Nation, if there are potential archeological impacts

Steps that the proponent may need to take in relation to Aboriginal consultation for the proposed project are outlined in the "Code of Practice for Consultation in Ontario's Environmental Assessment Process".

Additional information related to Ontario's *Environmental Assessment Act* is available online at: www.ontario.ca/environmentalassessments

Please also refer to the attached document "A Proponent's Introduction to the Delegation of Procedural Aspects of consultation with Aboriginal Communities" for further information.

The proponent must contact the Director of Environmental Assessment and Permissions Branch under any of the following circumstances subsequent to initial discussions with the communities identified by MECP:

- Aboriginal or treaty rights impacts are identified to the proponent by the communities;
- The proponent has reason to believe that the proposed project may adversely affect an Aboriginal or treaty right;
- Consultation has reached an impasse; or
- A Part II Order request or elevation request is expected

The Director of the Environmental Assessment and Permissions Branch can be notified either by email with the subject line "Potential Duty to Consult" to enviropermissions@ontario.ca or by mail or fax at the address provided below:

Email:	enviropermissions@ontario.ca Subject: Potential Duty to Consult
Fax:	416-314-8452
Address:	Environmental Assessment and Permissions Branch 135 St. Clair Avenue West, 1st Floor Toronto, ON, M4V 1P5

The MECP will then assess the extent of any Crown duty to consult for the circumstances and will consider whether additional steps should be taken, including what role the proponent will be asked to play in them.

A Part II Order Request Form must be used to request a Part II Order. The Part II Order Request Form is available online on the Forms Repository website (http://www.forms.ssb.gov.on.ca) by searching "Part II Order" or "012-2206E" (the form ID number). Please include reference to this in the Notice of Completion for this project.

A draft copy of the report should be sent to me prior to the filing of the final report, allowing a minimum of 30 days for the ministry's technical reviewers to provide comments. Please also forward the Notice of Completion and final report to me when completed.

Should you or your project team members have any questions regarding the material above, please contact me at trevor.bell@ontario.ca.

Sincerely,

Trevor Bell
Regional Environmental Assessment Coordinator

cc: Tina Dufresne, Manager, Halton Peel District Office, MECP
Andrew Evers, Supervisor (A), Project Review Unit, MECP
Chris Ewen, VP Water Business, Ainley & Associates Ltd.
Rebecca Weatherall, Engineering Intern, Ainley & Associates Ltd.

Attachments: Areas of Interest
A Proponent's Introduction to the Delegation of Procedural Aspects of consultation with Aboriginal Communities

AREAS OF INTEREST

It is suggested that you check off each applicable area after you have considered / addressed it.

☐ **Species at Risk**

- The Ministry of the Environment, Conservation and Parks has now assumed responsibility of Ontario's Species at Risk program. For any questions related to subsequent permit requirements, please contact SAROntario@ontario.ca.

☐ **Planning and Policy**

- Ontario has released "A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2019)" which replaces the "Growth Plan for the Greater Golden Horseshoe (2017)". More information, including the Plan, is found here: https://www.placestogrow.ca.

- Parts of the study area may be subject to the A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2019), Oak Ridges Moraine Conservation Plan (2017), Niagara Escarpment Plan (2017), Greenbelt Plan (2017) or Lake Simcoe Protection Plan (2014). Applicable policies should be referenced in the report, and the proponent should describe how the proposed project adheres to the relevant policies in these plans.

- The Provincial Policy Statement (2020) contains policies that protect Ontario's natural heritage and water resources. Applicable policies should be referenced in the report, and the proponent should describe how the proposed project is consistent with these policies.

☐ **Source Water Protection (all projects)**

The *Clean Water Act*, 2006 (CWA) aims to protect existing and future sources of drinking water. To achieve this, several types of vulnerable areas have been delineated around surface water intakes and wellheads for every municipal residential drinking water system that is located in a source protection area. These vulnerable areas are known as a Wellhead Protection Areas (WHPAs) and surface water Intake Protection Zones (IPZs). Other vulnerable areas that have been delineated under the CWA include Highly Vulnerable Aquifers (HVAs), Significant Groundwater Recharge Areas (SGRAs), Event-based modelling areas (EBAs), and Issues Contributing Areas (ICAs). Source protection plans have been developed that include policies to address existing and future risks to sources of municipal drinking water within these vulnerable areas.

Projects that are subject to the Environmental Assessment Act that fall under a Class EA, or one of the Regulations, have the potential to impact sources of drinking water if they occur in designated vulnerable areas or in the vicinity of other at-risk drinking water systems (i.e. systems that are not municipal residential systems). MEA Class EA projects may include activities that, if located in a vulnerable area, could be a threat to sources of drinking water (i.e. have the potential to adversely affect the quality or quantity of drinking water sources) and the activity could therefore be subject to policies in a source protection plan. Where an activity poses a risk to drinking water, policies in the local source protection plan may impact how or where that activity is undertaken. Policies may prohibit certain activities, or they may require risk management measures for these activities. Municipal Official Plans, planning decisions, Class EA projects (where the project includes an activity that is a threat to drinking water) and prescribed instruments must conform with policies that address significant risks to drinking water and must have regard for policies that address moderate or low risks.

- In October 2015, the MEA Parent Class EA document was amended to include reference to the

Clean Water Act (Section A.2.10.6) and indicates that proponents undertaking a Municipal Class EA project must identify early in their process whether a project is or could potentially be occurring with a vulnerable area. **Given this requirement, please include a section in the report on source water protection.**

- The proponent should identify the source protection area and should clearly document how the proximity of the project to sources of drinking water (municipal or other) and any delineated vulnerable areas was considered and assessed. Specifically, the report should discuss whether or not the project is located in a vulnerable area and provide applicable details about the area.

- If located in a vulnerable area, proponents should document whether any project activities are prescribed drinking water threats and thus pose a risk to drinking water (this should be consulted on with the appropriate Source Protection Authority). Where an activity poses a risk to drinking water, the proponent must document and discuss in the report how the project adheres to or has regard to applicable policies in the local source protection plan. This section should then be used to inform and be reflected in other sections of the report, such as the identification of net positive/negative effects of alternatives, mitigation measures, evaluation of alternatives etc.

- While most source protection plans focused on including policies for significant drinking water threats in the WHPAs and IPZs it should be noted that even though source protection plan policies may not apply in HVAs, these are areas where aquifers are sensitive and at risk to impacts and within these areas, activities may impact the quality of sources of drinking water for systems other than municipal residential systems.

- In order to determine if this project is occurring within a vulnerable area, proponents can use this mapping tool: http://www.applications.ene.gov.on.ca/swp/en/index.php.The mapping tool will also provide a link to the appropriate source protection plan in order to identify what policies may be applicable in the vulnerable area.

- For further information on the maps or source protection plan policies which may relate to their project, proponents must contact the appropriate source protection authority. **Please consult with the local source protection authority to discuss potential impacts on drinking water. The contact for this project is Jennifer Stephens at (416) 661-6600 ext 5568 or jstephens@trca.on.ca. Please document the results of that consultation within the report and include all communication documents/correspondence.**

More Information

For more information on the *Clean Water Act*, source protection areas and plans, including specific information on the vulnerable areas and drinking water threats, please refer to Conservation Ontario's website where you will also find links to the local source protection plan/assessment report.

A list of the prescribed drinking water threats can be found in section 1.1 of Ontario Regulation 287/07 made under the *Clean Water Act*. In addition to prescribed drinking water threats, some source protection plans may include policies to address additional "local" threat activities, as approved by the MECP.

Climate Change

Ontario is leading the fight against climate change through the Climate Change Action Plan. Recently released, the plan lays out the specific actions Ontario will take in the next five years to meet its 2020 greenhouse gas reduction targets and establishes the framework necessary to meet its long-term

targets. As a commitment of the action plan, **the province has now finalized a guide, "Considering Climate Change in the Environmental Assessment Process" (Guide).**

The Guide is now a part of the Environmental Assessment program's Guides and Codes of Practice. The Guide sets out the MECP's expectation for considering climate change in the preparation, execution and documentation of environmental assessment studies and processes. The guide provides examples, approaches, resources, and references to assist proponents with consideration of climate change in EA. **Proponents should review this Guide in detail.**

- The MECP expects proponents to:

    1. Take into account during the assessment of alternative solutions and alternative designs, the following:
        a. the project's expected production of greenhouse gas emissions and impacts on carbon sinks (climate change mitigation); and
        b. resilience or vulnerability of the undertaking to changing climatic conditions (climate change adaptation).
    2. Include a discrete section in the report detailing how climate change was considered in the EA.

    How climate change is considered can be qualitative or quantitative in nature, and should be scaled to the project's level of environmental effect. In all instances, both a project's impacts on climate change (mitigation) and impacts of climate change on a project (adaptation) should be considered.

- The MECP has also prepared another guide to support provincial land use planning direction related to the completion of energy and emission plans. The "Community Emissions Reduction Planning: A Guide for Municipalities" document is designed to educate stakeholders on the municipal opportunities to reduce energy and greenhouse gas emissions, and to provide guidance on methods and techniques to incorporate consideration of energy and greenhouse gas emissions into municipal activities of all types. We encourage you to review the Guide for information.

Air Quality, Dust and Noise

- If there are sensitive receptors in the surrounding area of this project, an air quality/odour impact assessment will be useful to evaluate alternatives, determine impacts and identify appropriate mitigation measures. The scope of the assessment can be determined based on the potential effects of the proposed alternatives, and typically includes source and receptor characterization and a quantification of local air quality impacts on the sensitive receptors and the environment in the study area. The assessment will compare to all applicable standards or guidelines for all contaminants of concern. **Please contact this office for further consultation on the level of Air Quality Impact Assessment required for this project if not already advised.**

- **If a full Air Quality Impact Assessment is not required for the project, the report should still contain:**

    - A discussion of local air quality including existing activities/sources that significantly impact local air quality and how the project may impact existing conditions;
    - A discussion of the nearby sensitive receptors and the project's potential air quality impacts on present and future sensitive receptors;
    - A discussion of local air quality impacts that could arise from this project during both construction and operation; and

- A discussion of potential mitigation measures.

- As a common practice, “air quality” should be used an evaluation criterion for all road projects.

- Dust and noise control measures should be addressed and included in the construction plans to ensure that nearby residential and other sensitive land uses within the study area are not adversely affected during construction activities.

- The MECP recommends that non-chloride dust-suppressants be applied. For a comprehensive list of fugitive dust prevention and control measures that could be applied, refer to *Cheminfo Services Inc. Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities*. report prepared for Environment Canada. March 2005.

- The report should consider the potential impacts of increased noise levels during the operation of the completed project. The proponent should explore all potential measures to mitigate significant noise impacts during the assessment of alternatives.

Ecosystem Protection and Restoration

- Any impacts to ecosystem form and function must be avoided where possible. The report should describe any proposed mitigation measures and how project planning will protect and enhance the local ecosystem.

- All natural heritage features should be identified and described in detail to assess potential impacts and to develop appropriate mitigation measures. The following sensitive environmental features may be located within or adjacent to the study area:

  - Areas of Natural and Scientific Interest (ANSIs)
  - Rare Species of flora or fauna
  - Watercourses
  - Wetlands
  - Woodlots

We recommend consulting with the Ministry of Natural Resources and Forestry (MNRF), Fisheries and Oceans Canada (DFO) and your local conservation authority to determine if special measures or additional studies will be necessary to preserve and protect these sensitive features. In addition, you may consider the provisions of the Rouge Park Management Plan if applicable.

Surface Water

- The report must include enough information to demonstrate that there will be no negative impacts on the natural features or ecological functions of any watercourses within the study area. Measures should be included in the planning and design process to ensure that any impacts to watercourses from construction or operational activities (e.g. spills, erosion, pollution) are mitigated as part of the proposed undertaking.

- Additional stormwater runoff from new pavement can impact receiving watercourses and flood conditions. Quality and quantity control measures to treat stormwater runoff should be considered for all new impervious areas and, where possible, existing surfaces. The ministry’s Stormwater Management Planning and Design Manual (2003) should be referenced in the report and utilized when designing stormwater control methods. **A Stormwater Management Plan should be prepared as part of the Class EA process** that includes:

  - Strategies to address potential water quantity and erosion impacts related to stormwater

draining into streams or other sensitive environmental features, and to ensure that adequate (enhanced) water quality is maintained
    - Watershed information, drainage conditions, and other relevant background information
    - Future drainage conditions, stormwater management options, information on erosion and sediment control during construction, and other details of the proposed works
    - Information on maintenance and monitoring commitments.

- Ontario Regulation 60/08 under the *Ontario Water Resources Act* (OWRA) applies to the Lake Simcoe Basin, which encompasses Lake Simcoe and the lands from which surface water drains into Lake Simcoe. If the proposed sewage treatment plant is listed in Table 1 of the regulation, the report should describe how the proposed project and its mitigation measures are consistent with the requirements of this regulation and the OWRA.

- Any potential approval requirements for surface water taking or discharge should be identified in the report. A Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, except for certain water taking activities that have been prescribed by the Water Taking EASR Regulation – *O. Reg. 63/16*. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the Water Taking User Guide for EASR for more information. Additionally, an Environmental Compliance Approval under the OWRA is required for municipal stormwater management works.

Groundwater

- The status of, and potential impacts to any well water supplies should be addressed. If the project involves groundwater takings or changes to drainage patterns, the quantity and quality of groundwater may be affected due to drawdown effects or the redirection of existing contamination flows. In addition, project activities may infringe on existing wells such that they must be reconstructed or sealed and abandoned. Appropriate information to define existing groundwater conditions should be included in the report.

- If the potential construction or decommissioning of water wells is identified as an issue, the report should refer to Ontario Regulation 903, Wells, under the OWRA.

- Potential impacts to groundwater-dependent natural features should be addressed. Any changes to groundwater flow or quality from groundwater taking may interfere with the ecological processes of streams, wetlands or other surficial features. In addition, discharging contaminated or high volumes of groundwater to these features may have direct impacts on their function. Any potential effects should be identified, and appropriate mitigation measures should be recommended. The level of detail required will be dependent on the significance of the potential impacts.

- Any potential approval requirements for groundwater taking or discharge should be identified in the report. A Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, with the exception of certain water taking activities that have been prescribed by the Water Taking EASR Regulation – *O. Reg. 63/16*. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the Water Taking User Guide for EASR for more information.

Contaminated Soils

- Since the removal or movement of soils may be required, appropriate tests to determine contaminant levels from previous land uses or dumping should be undertaken. If the soils are contaminated, you must determine how and where they are to be disposed of, consistent with

Part XV.1 of the Environmental Protection Act (EPA) and Ontario Regulation 153/04, Records of Site Condition, which details the new requirements related to site assessment and clean up. Please contact the appropriate MECP District Office for further consultation if contaminated sites are present.

- Any current or historical waste disposal sites should be identified in the report. The status of these sites should be determined to confirm whether approval pursuant to Section 46 of the EPA may be required for land uses on former disposal sites.

- The location of any underground storage tanks should be investigated in the report. Measures should be identified to ensure the integrity of these tanks and to ensure an appropriate response in the event of a spill. The ministry's Spills Action Centre must be contacted in such an event.

- The report should identify any underground transmission lines in the study area. The owners should be consulted to avoid impacts to this infrastructure, including potential spills.

Excess Materials Management

- Activities involving the management of excess soil should be completed in accordance with the MECP's current guidance document titled "Management of Excess Soil – A Guide for Best Management Practices" (2014).

- All waste generated during construction must be disposed of in accordance with ministry requirements

Servicing and Facilities

- Any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste must have an Environmental Compliance Approval (ECA) before it can operate lawfully. Please consult with the Environmental Approvals Access and Service Integration Branch (EAASIB) to determine whether a new or amended ECA will be required for any proposed infrastructure.

- We recommend referring to the ministry's environmental land use planning guides to ensure that any potential land use conflicts are considered when planning for any infrastructure or facilities related to wastewater, pipelines, landfills or industrial uses.

Mitigation and Monitoring

- Contractors must be made aware of all environmental considerations so that all environmental standards and commitments for both construction and operation are met. Mitigation measures should be clearly referenced in the report and regularly monitored during the construction stage of the project. In addition, we encourage proponents to conduct post-construction monitoring to ensure all mitigation measures have been effective and are functioning properly.

- Design and construction reports and plans should be based on a best management approach that centres on the prevention of impacts, protection of the existing environment, and opportunities for rehabilitation and enhancement of any impacted areas.

- The proponent's construction and post-construction monitoring plans must be documented in the report, as outlined in Section A.2.5 and A.4.1 of the MEA Class EA parent document.

Consultation

- The report must demonstrate how the consultation provisions of the Class EA have been fulfilled, including documentation of all stakeholder consultation efforts undertaken during the planning process. This includes a discussion in the SR that identifies concerns that were raised and **describes how they have been addressed by the proponent** throughout the planning process. The Class EA also directs proponents to include copies of comments submitted on the project by interested stakeholders, and the proponent's responses to these comments.

Class EA Process

- The report should provide clear and complete documentation of the planning process in order to allow for transparency in decision-making.

- If this project is a Master Plan: there are several different approaches that can be used to conduct a Master Plan, examples of which are outlined in Appendix 4 of the Class EA. The Master Plan should clearly indicate the selected approach for conducting the plan, by identifying whether the levels of assessment, consultation and documentation are sufficient to fulfill the requirements for Schedule B or C projects. Please note that any Schedule B or C projects identified in the plan would be subject to Part II Order Requests under the *Environmental Assessment Act*, although the plan itself would not be.

- The report must demonstrate how the consultation provisions of the Class EA have been fulfilled, including documentation of all stakeholder consultation efforts undertaken during the planning process. This includes a discussion in the report that identifies concerns that were raised and **describes how they have been addressed by the proponent** throughout the planning process. The Class EA also directs proponents to include copies of comments submitted on the project by interested stakeholders, and the proponent's responses to these comments.

- The Class EA requires the consideration of the effects of each alternative on all aspects of the environment. The report should include a level of detail (e.g. hydrogeological investigations, terrestrial and aquatic assessments) such that all potential impacts can be identified, and appropriate mitigation measures can be developed. Any supporting studies conducted during the Class EA process should be referenced and included as part of the report.

- Please include in the report a list of all subsequent permits or approvals that may be required for the implementation of the preferred alternative, including but not limited to, MECP's PTTW, EASR Registrations and ECAs, conservation authority permits, species at risk permits, and approvals under the *Impact Assessment Act*, 2019.

- Ministry guidelines and other information related to the issues above are available at http://www.ontario.ca/environment-and-energy/environment-and-energy. We encourage you to review all the available guides and to reference any relevant information in the report.

Definitions

The following definitions are specific to this document and may not apply in other contexts:

Aboriginal communities – the First Nation or Métis communities identified by the Crown for the purpose of consultation.

Consultation – the Crown's legal obligation to consult when the Crown has knowledge of an established or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. This is the type of consultation required pursuant to s. 35 of the *Constitution Act, 1982*. Note that this definition does not include consultation with Aboriginal communities for other reasons, such as regulatory requirements.

Crown – the Ontario Crown, acting through a particular ministry or ministries.

Procedural aspects of consultation – those portions of consultation related to the process of consultation, such as notifying an Aboriginal community about a project, providing information about the potential impacts of a project, responding to concerns raised by an Aboriginal community and proposing changes to the project to avoid negative impacts.

Proponent – the person or entity that wants to undertake a project and requires an Ontario Crown decision or approval for the project.

I. Purpose

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that may adversely impact that right. In outlining a framework for the duty to consult, the Supreme Court of Canada has stated that the Crown may delegate procedural aspects of consultation to third parties. This document provides general information about the Ontario Crown's approach to delegation of the procedural aspects of consultation to proponents.

This document is not intended to instruct a proponent about an individual project, and it does not constitute legal advice.

II. Why is it Necessary to Consult with Aboriginal Communities?

The objective of the modern law of Aboriginal and treaty rights is the *reconciliation* of Aboriginal peoples and non-Aboriginal peoples and their respective rights, claims and interests. Consultation is an important component of the reconciliation process.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. For example, the Crown's duty to consult is triggered when it considers issuing a permit, authorization or approval for a project which has the potential to adversely impact an Aboriginal right, such as the right to hunt, fish, or trap in a particular area.

The scope of consultation required in particular circumstances ranges across a spectrum depending on both the nature of the asserted or established right and the seriousness of the potential adverse impacts on that right.

Depending on the particular circumstances, the Crown may also need to take steps to accommodate the potentially impacted Aboriginal or treaty right. For example, the Crown may be required to avoid or minimize the potential adverse impacts of the project.

III. The Crown's Role and Responsibilities in the Delegated Consultation Process

The Crown has the responsibility for ensuring that the duty to consult, and accommodate where appropriate, is met. However, the Crown may delegate the procedural aspects of consultation to a proponent.

There are different ways in which the Crown may delegate the procedural aspects of consultation to a proponent, including through a letter, a memorandum of understanding, legislation, regulation, policy and codes of practice.

If the Crown decides to delegate procedural aspects of consultation, the Crown will generally:

- Ensure that the delegation of procedural aspects of consultation and the responsibilities of the proponent are clearly communicated to the proponent;
- Identify which Aboriginal communities must be consulted;
- Provide contact information for the Aboriginal communities;
- Revise, as necessary, the list of Aboriginal communities to be consulted as new information becomes available and is assessed by the Crown;
- Assess the scope of consultation owed to the Aboriginal communities;
- Maintain appropriate oversight of the actions taken by the proponent in fulfilling the procedural aspects of consultation;
- Assess the adequacy of consultation that is undertaken and any accommodation that may be required;
- Provide a contact within any responsible ministry in case issues arise that require direction from the Crown; and
- Participate in the consultation process as necessary and as determined by the Crown.

IV. The Proponent's Role and Responsibilities in the Delegated Consultation Process

Where aspects of the consultation process have been delegated to a proponent, the Crown, in meeting its duty to consult, will rely on the proponent's consultation activities and documentation of those activities. The consultation process informs the Crown's decision of whether or not to approve a proposed project or activity.

A proponent's role and responsibilities will vary depending on a variety of factors including the extent of consultation required in the circumstance and the procedural aspects of consultation the Crown has delegated to it. Proponents are often in a better position than the Crown to discuss a project and its potential impacts with Aboriginal communities and to determine ways to avoid or minimize the adverse impacts of a project.

A proponent can raise issues or questions with the Crown at any time during the consultation process. If issues or concerns arise during the consultation that cannot be addressed by the proponent, the proponent should contact the Crown.

a) What might a proponent be required to do in carrying out the procedural aspects of consultation?

Where the Crown delegates procedural aspects of consultation, it is often the proponent's responsibility to provide notice of the proposed project to the identified Aboriginal communities. The notice should indicate that the Crown has delegated the procedural aspects of consultation to the proponent and should include the following information:

- a description of the proposed project or activity;
- mapping;
- proposed timelines;
- details regarding anticipated environmental and other impacts;
- details regarding opportunities to comment; and
- any changes to the proposed project that have been made for seasonal conditions or other factors, where relevant.

Proponents should provide enough information and time to allow Aboriginal communities to provide meaningful feedback regarding the potential impacts of the project. Depending on the nature of consultation required for a project, a proponent also may be required to:

- provide the Crown with copies of any consultation plans prepared and an opportunity to review and comment;
- ensure that any necessary follow-up discussions with Aboriginal communities take place in a timely manner, including to confirm receipt of information, share and update information and to address questions or concerns that may arise;
- as appropriate, discuss with Aboriginal communities potential mitigation measures and/or changes to the project in response to concerns raised by Aboriginal communities;
- use language that is accessible and not overly technical, and translate material into Aboriginal languages where requested or appropriate;
- bear the reasonable costs associated with the consultation process such as, but not limited to, meeting hall rental, meal costs, document translation(s), or to address technical & capacity issues;
- provide the Crown with all the details about potential impacts on established or asserted Aboriginal or treaty rights, how these concerns have been considered and addressed by the proponent and the Aboriginal communities and any steps taken to mitigate the potential impacts;
- provide the Crown with complete and accurate documentation from these meetings and communications; and
- notify the Crown immediately if an Aboriginal community not identified by the Crown approaches the proponent seeking consultation opportunities.

b) What documentation and reporting does the Crown need from the proponent?

Proponents should keep records of all communications with the Aboriginal communities involved in the consultation process and any information provided to these Aboriginal communities.

As the Crown is required to assess the adequacy of consultation, it needs documentation to satisfy itself that the proponent has fulfilled the procedural aspects of consultation delegated to it. The documentation required would typically include:

- the date of meetings, the agendas, any materials distributed, those in attendance and copies of any minutes prepared;
- the description of the proposed project that was shared at the meeting;
- any and all concerns or other feedback provided by the communities;

- any information that was shared by a community in relation to its asserted or established Aboriginal or treaty rights and any potential adverse impacts of the proposed activity, approval or disposition on such rights;
- any proposed project changes or mitigation measures that were discussed, and feedback from Aboriginal communities about the proposed changes and measures;
- any commitments made by the proponent in response to any concerns raised, and feedback from Aboriginal communities on those commitments;
- copies of correspondence to or from Aboriginal communities, and any materials distributed electronically or by mail;
- information regarding any financial assistance provided by the proponent to enable participation by Aboriginal communities in the consultation;
- periodic consultation progress reports or copies of meeting notes if requested by the Crown;
- a summary of how the delegated aspects of consultation were carried out and the results; and
- a summary of issues raised by the Aboriginal communities, how the issues were addressed and any outstanding issues.

In certain circumstances, the Crown may share and discuss the proponent's consultation record with an Aboriginal community to ensure that it is an accurate reflection of the consultation process.

c) Will the Crown require a proponent to provide information about its commercial arrangements with Aboriginal communities?

The Crown may require a proponent to share information about aspects of commercial arrangements between the proponent and Aboriginal communities where the arrangements:

- include elements that are directed at mitigating or otherwise addressing impacts of the project;
- include securing an Aboriginal community's support for the project; or
- may potentially affect the obligations of the Crown to the Aboriginal communities.

The proponent should make every reasonable effort to exempt the Crown from confidentiality provisions in commercial arrangements with Aboriginal communities to the extent necessary to allow this information to be shared with the Crown.

The Crown cannot guarantee that information shared with the Crown will remain confidential. Confidential commercial information should not be provided to the Crown as part of the consultation record if it is not relevant to the duty to consult or otherwise required to be submitted to the Crown as part of the regulatory process.

V. What are the Roles and Responsibilities of Aboriginal Communities' in the Consultation Process?

Like the Crown, Aboriginal communities are expected to engage in consultation in good faith. This includes:

- responding to the consultation notice;
- engaging in the proposed consultation process;
- providing relevant documentation;
- clearly articulating the potential impacts of the proposed project on Aboriginal or treaty rights; and
- discussing ways to mitigates any adverse impacts.

Some Aboriginal communities have developed tools, such as consultation protocols, policies or processes that provide guidance on how they would prefer to be consulted. Although not legally binding, proponents are encouraged to respect these community processes where it is reasonable to do so. Please note that there is no obligation for a proponent to pay a fee to an Aboriginal community in order to enter into a consultation process.

To ensure that the Crown is aware of existing community consultation protocols, proponents should contact the relevant Crown ministry when presented with a consultation protocol by an Aboriginal community or anyone purporting to be a representative of an Aboriginal community.

VI. What if More Than One Provincial Crown Ministry is Involved in Approving a Proponent's Project?

Depending on the project and the required permits or approvals, one or more ministries may delegate procedural aspects of the Crown's duty to consult to the proponent. The proponent may contact individual ministries for guidance related to the delegation of procedural aspects of consultation for ministry-specific permits/approvals required for the project in question. Proponents are encouraged to seek input from all involved Crown ministries sooner rather than later.

Heather James

From: FPP.CA / PPP.CA (DFO/MPO) <fisheriesprotection@dfo-mpo.gc.ca>
Sent: March 5, 2020 10:50 AM
To: Heather James
Cc: Di Lorenzo, Samantha
Subject: RE: Fisheries and Oceans Canada, Burlington (Canada Centre for Inland Waters): Bounceback of Project Notice

Hi Heather,

The current acting Team Lead for the Triage and Planning group is Rick Kiriluk (Rick.Kiriluk@dfo-mpo.gc.ca). As of March 23, 2020, the new acting Team Lead will be Lisa Wren (Lisa.Wren@dfo-mpo.gc.ca). Lisa will be the acting Team Lead for 4 months.

I hope this help.

Regards,

Brianne Kucharski

Biologist | Biologiste
Fisheries and Oceans Canada | Pêches et Océans Canada
Fish and Fish Habitat Protection Program | Programme de protection du poisson et de son habitat
867 Lakeshore Road, Burlington, ON, L7S 1A1 | 867, ch. Lakeshore, Burlington, ON, L7S 1A1
Brianne.Kucharski@dfo-mpo.gc.ca

From: Di Lorenzo, Samantha <Samantha.DiLorenzo@dfo-mpo.gc.ca>
Sent: Thursday, March 5, 2020 9:37 AM
To: FPP.CA / PPP.CA (DFO/MPO) <fisheriesprotection@dfo-mpo.gc.ca>
Subject: FW: Fisheries and Oceans Canada, Burlington (Canada Centre for Inland Waters): Bounceback of Project Notice

Hello,

The following request was received via Fisheries and Oceans Canada's general enquiry service.
Please reply directly to the correspondent.

Kindly provide us with a copy of the response that has been sent to the correspondent so we may close our file.

Thank you,

Sam Di Lorenzo

Administrative Assistant, Communications
Fisheries and Oceans Canada / Government of Canada
Samantha.DiLorenzo@dfo-mpo.gc.ca / Tel: 905-336-4499

Assistant Administratif, Communications
Pêches et Océans Canada / Gouvernement du Canada
Samantha.DiLorenzo @dfo-mpo.gc.ca / Tél. : 905-336-4499

From: Heather James <james.h@ainleygroup.com>
Sent: Wednesday, March 4, 2020 11:40 AM
To: Info / Info (DFO/MPO) <Info.XNCR@dfo-mpo.gc.ca>
Subject: Fisheries and Oceans Canada, Burlington (Canada Centre for Inland Waters): Bounceback of Project Notice

Good morning,

My name is Heather James and I work for an engineering firm (Ainley Group) in Brampton. Ainley Group has been retained by the Region of Peel for an environmental assessment/construction project regarding watermain upgrades in Brampton and Mississauga. I am hoping that you can give me some assistance with tracking down the right contact information for Dan Thompson so that he can receive project notices. We got a bounce-back from the notice that was sent to him on February 28, 2020. The contact information that I have is provided below.
If he no longer work for Fisheries and Oceans Canada, Burlington (Canada Centre for Inland Waters) can you please provide me with the information of the person that has taken over the Team Leader-Triage and Planning role so that they can receive the notices?

Group/Organization	Contact Name	Role	Phone	Fax
Fisheries and Oceans Canada	Dan Thompson	Team Leader-Triage and Planning	(519) 668-3897	

Regards,

Heather James
Administrative Assistant / Proposal Coordinator
Ainley
www.ainleygroup.com
Tel: (905) 452-5172
Cell: (780) 994-0417

Heather James

From: Cotroneo, Kimberly (PC) <kimberly.cotroneo@canada.ca> on behalf of CLMHC-HSMBC (PC) <pc.clmhc-hsmbc.pc@canada.ca>
Sent: March 6, 2020 8:48 AM
To: Heather James
Subject: RE: Parks Canada, Historic Site & Monument Board: Bounceback of Project Notice

Hi Heather,

The contact you can note for Parks Canada is:

Mark Baldwin, Impact Assessment, 819-420-9346
Mark.Baldwin@canada.ca

Thank you,

Kimberly Cotroneo
Agente des Programmes, Désignations du patrimoine | Program Officer, Heritage Designations
Direction générale des affaires autochtones et du patrimoine culturel /
Indigenous Affairs and Cultural Heritage Directorate
Parcs Canada | Parks Canada
30 rue Victoria, 3e étage (PC-03-M) Bureau no156 | 30 Victoria St, 3rd Fl. (PC-03-M) Office #156
Gatineau, Québec J8X 0B3 | Gatineau, Quebec J8X 0B3

kimberly.cotroneo@canada.ca 819.420.9702
www.parcscanada.gc.ca | www.parkscanada.gc.ca
Gouvernement du Canada | Government of Canada

Parcs Canada - 450 000 km2 de souvenirs / Parks Canada - 450 000 km2 of memories

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From: Heather James <james.h@ainleygroup.com>
Sent: Wednesday, March 4, 2020 11:18 AM
To: CLMHC-HSMBC (PC) <pc.clmhc-hsmbc.pc@canada.ca>
Subject: Parks Canada, Historic Site & Monument Board: Bounceback of Project Notice

Good morning,

My name is Heather James and I work for an engineering firm (Ainley Group) in Brampton. Ainley Group has been retained by the Region of Peel for an environmental assessment/construction project regarding watermain upgrades on in Brampton and Mississauga. I am hoping that you can give me some assistance with tracking down the right contact information for Alexandre Ferland so that they can receive project notices. We got a bounce-back from the notice that was sent to them on February 28, 2020. The contact information that I have is provided below.
If they no longer work for Parks Canada, Historic Site & Monument Board can you please provide me with the information of the person that has taken over the EA Coordinator role so that they can receive the notices?

Group/Organization	Contact Name	Role	Phone	Fax
Parks Canada, Historic Site & Monument Board	Alexandre Ferland	EA Coordinator	819-997-4905	

Regards,

Heather James
Administrative Assistant / Proposal Coordinator

www.ainleygroup.com
Tel: (905) 452-5172
Cell: (780) 994-0417

Heather James

From: Merey, Sabina (MTO) <Sabina.Merey@ontario.ca>
Sent: March 4, 2020 10:30 AM
To: Heather James; Nong, Vantha (MTO)
Cc: Khan, Moin (MTO)
Subject: RE: Ministry of Transportation: Bounceback of Project Notice

Hi Heather,

I am not aware of who Tiola Seaton is.

For the project notice, please send it to Moin Khan, Area Manager Peel Halton. He would then be able to send it to the appropriate MTO Planning and Design team member.

Thanks,

Sabina

From: Heather James <james.h@ainleygroup.com>
Sent: March-04-20 9:58 AM
To: Merey, Sabina (MTO) <Sabina.Merey@ontario.ca>; Nong, Vantha (MTO) <Vantha.Nong@ontario.ca>
Subject: RE: Ministry of Transportation: Bounceback of Project Notice

Ok, thank you.

We were provided with a list of contacts to send project notices to and he was on the list.
We sent out a notice on February 28 and received a bounceback so I am just following up on behalf of my team to make sure that the contact information is correct.

Are you able to assist with the contact information for Tiola Seaton?

Regards,

Heather James
Administrative Assistant / Proposal Coordinator

www.ainleygroup.com
Tel: (905) 452-5172
Cell: (780) 994-0417

From: Merey, Sabina (MTO) [mailto:Sabina.Merey@ontario.ca]
Sent: March 4, 2020 9:51 AM
To: Heather James; Nong, Vantha (MTO)
Subject: RE: Ministry of Transportation: Bounceback of Project Notice

Hi Heather,

Thanga no longer works for the MTO. Could you please clarify what you needed from him?

Thanks,

Sabina

Sabina Mérey, P. Eng.
Senior Project Engineer
Peel Halton Section
Planning and Design
Ministry of Transportation of Ontario
4th Floor
159 Sir William Hearst Avenue
Toronto ON M3M 0B7

Phone: 416-235-4876
Fax: 416-235-3576

From: Heather James <james.h@ainleygroup.com>
Sent: March-04-20 9:38 AM
To: Nong, Vantha (MTO) <Vantha.Nong@ontario.ca>; Merey, Sabina (MTO) <Sabina.Merey@ontario.ca>
Subject: Ministry of Transportation: Bounceback of Project Notice

Good morning Vantha and Sabina,

My name is Heather James and I work for an engineering firm (Ainley Group) in Brampton. Ainley Group has been retained by the Region of Peel for an environmental assessment/construction project regarding watermain upgrades on in Brampton and Mississauga. I am hoping that you can give me some assistance with tracking down the right contact information for Tiola Seaton and Thanga Murugesu so that they can receive project notices. We got a bounce-back from the notice that was sent to them on February 28, 2020. The contact information that I have is provided below.

Group/Organization	Contact Name	Role	Phone	Fax

Ministry of Transportation	Tiola Seaton	Administrative Assistant	905-704-2104	
Ministry of Transportation - Central Division	Thanga Murugesu	Senior Project Engineer, highway Engineering - Peel & Halton Section	416-235-4689	

Regards,

Heather James
Administrative Assistant / Proposal Coordinator

www.ainleygroup.com
Tel: (905) 452-5172
Cell: (780) 994-0417

Re: 119042 - Heritage Road Brampton Class Environmental Assessment for Water Distribution System Upgrades

Rebecca Weatherall <weatherall@ainleygroup.com>

Wed 5/27/2020 7:50 AM

To: Fawn Sault <Fawn.Sault@mncfn.ca>
Cc: Megan DeVries <Megan.DeVries@mncfn.ca>

1 attachments (6 MB)
19EA-103 Stage 1 Report.pdf;

Good morning Fawn,

Please see a ached both the archaeological (stage 1) and cultural heritage assessments completed by our subconsultant ASI for Heritage Road. Please note that the archaeological assessment does not recommend going forward with a stage 2 assessment. I will a ach the cultural heritage assessment in a second email as it's too big to a ach to this one.

Please let us know if you have any comments/concerns with either of the assessments and we'll pass them on to ASI.

Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern

Ainley GROUP
CONSULTING ENGINEERS & PLANNERS

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

From: Fawn Sault <Fawn.Sault@mncfn.ca>
Sent: Tuesday, May 26, 2020 8:31 PM
To: Rebecca Weatherall <weatherall@ainleygroup.com>
Cc: Megan DeVries <Megan.DeVries@mncfn.ca>
Subject: Re: 119042 - Heritage Road Brampton Class Environmental Assessment for Water Distribu on System Upgrades

Hi Becca,

Can you tell me what stages of the archaeological assessment was completed and when approximately that report will be ready for Megan's review?

Miigwetch
Fawn Sault

/

Consultation Coordinator

Sent from my iPhone

On May 12, 2020, at 12:48 PM, Rebecca Weatherall <weatherall@ainleygroup.com> wrote:

Hi Fawn,

Please find a ached a Noce of Study Commencement, dated February 20, 2020, for a Class Environment Assessment (Class EA) that Ainley & Associates Ltd. has been retained to complete on behalf of the Region of Peel, associated with water distribuon s ystem upgrades for Heritage Road in Brampton.

The a ached Noce signifies the beginning of the Class EA process and as we proceed through the process all stakeholders and interested pares will ha ve an opportunity, through Noce s and Public Informaon Cen tres (PIC's), to provide comments. Please note that we have also commenced our archaeological assessment of Heritage Road and can forward you the draft report once it is available.

Please email comments to the pares lis ted in the Noce of Study Commencement.

Thank you in advance and we look forward to receiving your feedback.

Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern
<Outlook-0govye3u.png>

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062
<119042 - Notice of Commencement - Published.pdf>

Wendy Smeh

From: Rebecca Weatherall
Sent: March 30, 2020 3:09 PM
To: Rebecca Weatherall
Subject: Fw: 15-1138 FW: Watermain Construction Heritage Road, Brampton and Mississauga (MAR20-017)

From: Ballaro, Sean <sean.ballaro@peelregion.ca>
Sent: Monday, March 16, 2020 10:52 AM
To: Dave Ellis <ellis@ainleygroup.com>; Wendy Smeh <smeh@ainleygroup.com>
Cc: Chris Ewen <ewen@ainleygroup.com>
Subject: 15-1138 FW: Watermain Construction Heritage Road, Brampton and Mississauga (MAR20-017)

Keeping you in the loop.

Sean Ballaro
Project Manager, Capital Works
Water Linear Engineering & Reliability
Water Division, Public Works
(905) 791-7800 x 7917
Mobile (905) 866-8588

Region of Peel
working with you

From: Sharday James <shardayj@ramafirstnation.ca>
Sent: March 16, 2020 10:22 AM
To: Ballaro, Sean <sean.ballaro@peelregion.ca>; ewen@ainleygroup.com
Subject: Watermain Construction Heritage Road, Brampton and Mississauga (MAR20-017)

CAUTION: EXTERNAL MAIL. DO NOT CLICK ON LINKS OR OPEN ATTACHMENTS YOU DO NOT TRUST.

Good morning.
Thank you for contacting us about your upcoming project. At this time we have no comments or concerns. Please keep us updated as this project moves forward.

Thanks,
Sharday James

Sharday James
Community Consultation Worker, Communications
Chippewas of Rama First Nation
(ph) 705-325-3611,1633
(cell)
(fax)
(url) www.ramafirstnation.ca

Re: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Maxime Picard <maxime.picard@cnhw.qc.ca>

Tue 5/19/2020 9:36 AM

To: Rebecca Weatherall <weatherall@ainleygroup.com>

Good morning Becca,

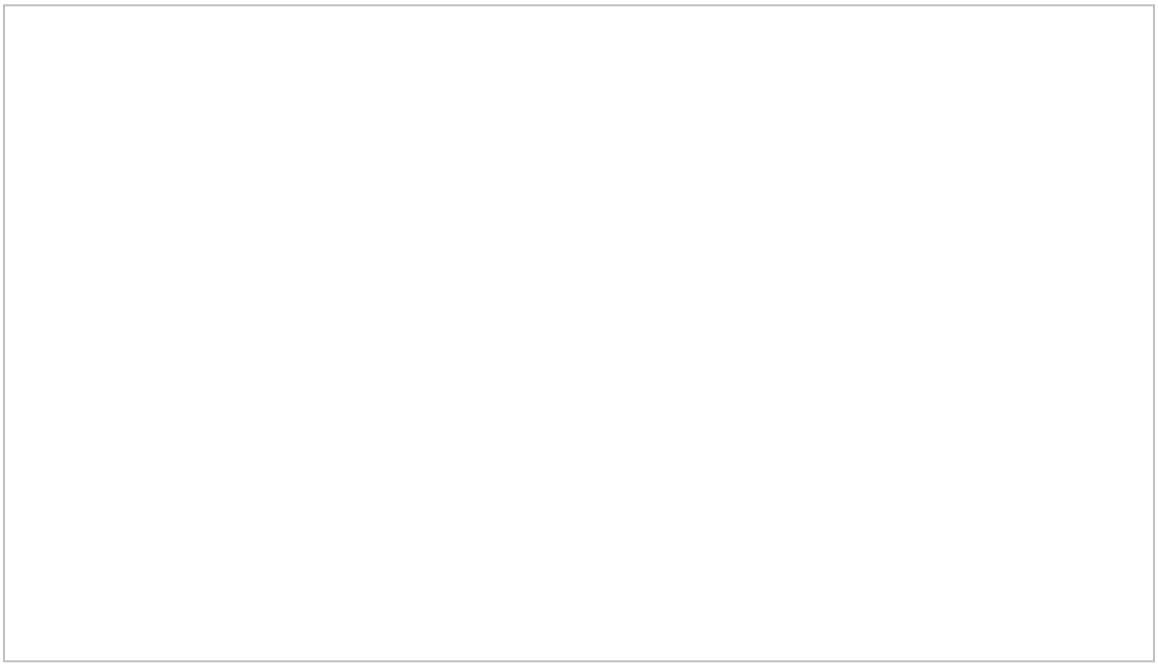
Thanks for providing us with the Draft Stage 1 report.

After review we do not have specific comments.

Please keep us updated in the event that any further archaeological assessment is initiated as part of the next project phases.

Best regards,

Maxime



De: "weatherall" <weatherall@ainleygroup.com>
À: "Maxime Picard" <maxime.picard@cnhw.qc.ca>
Envoyé: Vendredi 15 Mai 2020 13:43:09
Objet: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Good a. ernoon Maxime,

Please find attached the dra ar chaeological report for the Heritage Road project we discussed earlier. Please let us know if there are any comments that you would like to contribute to the dra and w e would be happy to pass them on to ASI. I hope you have a good long weekend!

Take Care,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

From: Eliza Brandy <ebrandy@asiheritage.ca>
Sent: Friday, May 15, 2020 1:37 PM
To: Rebecca Weatherall <weatherall@ainleygroup.com>; Johanna Kelly <jkelly@asiheritage.ca>
Subject: RE: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Hi Becca,

Attached is the draft stage 1 report for review. Please advise if there are any comments or changes required.

Have a good weekend!

Eliza Brandy, MA
Associate Archaeologist | Project Manager • Environmental Assessment Division

ASI • Providing Archaeological & Cultural Heritage Services
EBrandy@asiheritage.ca • 416 966 1069 x 222 • Fax: 416 966 9723
528 Bathurst Street, Toronto, Ontario, M5S 2P9 • asiheritage.ca

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From: Eliza Brandy
Sent: Monday, May 11, 2020 3:26 PM
To: Rebecca Weatherall <weatherall@ainleygroup.com>; Johanna Kelly <jkelly@asiheritage.ca>
Subject: RE: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Hi Becca,

That sounds great, please do forward the report after the ini□al review phase. We typically expect any First Na□ons involved in the project to be sent the draft documents, in order to provide comment prior to our submission to the MHSTCI.

The Stage 1 is currently going through QA/QC and we'll have it to you shortly.

Regards,

Eliza Brandy, MA
Associate Archaeologist | Project Manager • Environmental Assessment Division

ASI • Providing Archaeological & Cultural Heritage Services
EBrandy@asiheritage.ca • 416 966 1069 x 222 • Fax: 416 966 9723

/

From: Rebecca Weatherall <weatherall@ainleygroup.com>
Sent: Monday, May 11, 2020 2:42 PM
To: Eliza Brandy <ebrandy@asiheritage.ca>; Johanna Kelly <jkelly@asiheritage.ca>
Subject: Re: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Hi Eliza,

I hope you and you're doing well! We have had Huron-Wendat Naon r each out to us about sending them the Archaeological Assessment of Heritage Road once it has been finalized. I'm not sure what ASI's typical protocol is for sharing final documents, but I wanted to request ASI's permission to share the final document with Huron-Wendat Naon when it has been issued.

Thanks,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

From: Eliza Brandy <ebrandy@asiheritage.ca>
Sent: Wednesday, April 29, 2020 3:54 PM
To: Rebecca Weatherall <weatherall@ainleygroup.com>; Johanna Kelly <jkelly@asiheritage.ca>
Subject: RE: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Hi Becca,

Things are well over here. The necessary fieldwork was completed earlier this month with no issues. We won't need a letter.

The Stage 1 report is nearly complete – the draft will be going through internal QC in the coming week prior to submitting it to you. FYI no Stage 2 will be recommended as the en re study area has been previously assessed or is disturbed with no archaeological poten al.

Take care!

Eliza Brandy, MA
Associate Archaeologist | Project Manager • Environmental Assessment Division

ASI • Providing Archaeological & Cultural Heritage Services
EBrandy@asiheritage.ca • 416 966 1069 x 222 • Fax: 416 966 9723
528 Bathurst Street, Toronto, Ontario, M5S 2P9 • asiheritage.ca

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From: Rebecca Weatherall <weatherall@ainleygroup.com>
Sent: Wednesday, April 29, 2020 3:30 PM
To: Eliza Brandy <ebrandy@asiheritage.ca>; Johanna Kelly <jkelly@asiheritage.ca>
Subject: Re: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Hi Eliza and Johanna,

I hope you and the ASI team are doing well and staying safe! We had a brief meeng with the R egion about this project and were wondering how you are progressing with the studies? The Region also noted that they have had police arrive on other sites where environmental studies are being done and quesoned ho w "essenal" the w ork was. The Region is preparing a letter for consultants and subconsultants to keep with them in their vehicles should the authories arriv e on site. Is this something you and your team would be interested in having?

Thanks and take care,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

From: Eliza Brandy <ebrandy@asiheritage.ca>
Sent: Tuesday, April 7, 2020 5:49 PM
To: Rebecca Weatherall <weatherall@ainleygroup.com>; Johanna Kelly <jkelly@asiheritage.ca>
Subject: RE: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Hi Becca,

I just wanted to let you know, in light of the announcements from the provincial government last week, we are preparing to go ahead with the site visit for this project, either Thursday or Friday this week. This will consist of one person in a vehicle, taking precau□ons in line with updated internal health and safety procedures. Let us know if anything changes with the project status or schedule on your end!

Regards,

Eliza Brandy, MA
Associate Archaeologist | Project Manager • Environmental Assessment Division

ASI • Providing Archaeological & Cultural Heritage Services
EBrandy@asiheritage.ca • 416 966 1069 x 222 • Fax: 416 966 9723
528 Bathurst Street, Toronto, Ontario, M5S 2P9 • asiheritage.ca

From: Rebecca Weatherall <weatherall@ainleygroup.com>
Sent: Thursday, March 19, 2020 12:02 PM
To: Johanna Kelly <jkelly@asiheritage.ca>
Cc: Eliza Brandy <ebrandy@asiheritage.ca>
Subject: Re: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Hi Johanna,

To follow up on the property parcel data; the Region's realtor wants to know if you're referring to the underlying property fabric?

Thanks,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

From: Rebecca Weatherall <weatherall@ainleygroup.com>
Sent: Thursday, March 19, 2020 11:53 AM
To: Johanna Kelly <jkelly@asiheritage.ca>
Cc: Eliza Brandy <ebrandy@asiheritage.ca>
Subject: Re: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Hi Johanna,

We have sent a Noce of Commencemen t to George Carlson (who is the chair of the Heritage Advisory Commi ee for Mississauga) and to the City of Brampton's Clerk's office as that was the email that Brampton's Heritage Commi ee has available. You can absolutely contact the heritage staff at the municipalies and the minis try.

I have also requested the property parcel data from the Region and should have it to you shortly. Please let me know if you're missing any other informaon.

Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

From: Johanna Kelly <jkelly@asiheritage.ca>
Sent: Thursday, March 19, 2020 7:24 AM
To: Rebecca Weatherall <weatherall@ainleygroup.com>
Cc: Eliza Brandy <ebrandy@asiheritage.ca>
Subject: RE: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Hi Becca,

That schedule should be fine for the CH side of things as well.

A few more housekeeping things for the CH assessment:

1. Can you tell me if you've already had any communica□ons/direc□ons from heritage staff at either the City of Brampton or the City of Mississauga? Are you comfortable with us contac□ng heritage staff at the municipali□es as well as the ministry as part of our assessment?
2. Can you please also send along property parcel data for the study area.

Thanks so much,

Johanna Kelly, MSc
Associate Bioarchaeologist | Cultural Heritage Associate • Cultural Heritage Division

ASI • Providing Archaeological & Cultural Heritage Services
JKelly@asiheritage.ca • 416 966 1069 x225 • Fax: 416 966 9723
528 Bathurst Street, Toronto, Ontario, M5S 2P9 • asiheritage.ca

---

From: Eliza Brandy <ebrandy@asiheritage.ca>
Sent: Wednesday, March 18, 2020 4:49 PM
To: Rebecca Weatherall <weatherall@ainleygroup.com>; Johanna Kelly <jkelly@asiheritage.ca>
Subject: RE: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Thanks for clarifying Becca, that schedule works for me.

Eliza Brandy, MA
Associate Archaeologist | Project Manager • Environmental Assessment Division

ASI • Providing Archaeological & Cultural Heritage Services
EBrandy@asiheritage.ca • 416 966 1069 x 222 • Fax: 416 966 9723
528 Bathurst Street, Toronto, Ontario, M5S 2P9 • asiheritage.ca

From: Rebecca Weatherall <weatherall@ainleygroup.com>
Sent: Wednesday, March 18, 2020 4:43 PM
To: Eliza Brandy <ebrandy@asiheritage.ca>; Johanna Kelly <jkelly@asiheritage.ca>
Subject: Re: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Hi Eliza,

The end of April/ early May would be ideal; but we understand that weather and our current circumstances may cause delays. Let me know if that sounds like a reasonable meline and w e can go from there. Thanks!

Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern

Ainley GROUP
CONSULTING ENGINEERS & PLANNERS

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

From: Eliza Brandy <ebrandy@asiheritage.ca>
Sent: Wednesday, March 18, 2020 3:53 PM
To: Rebecca Weatherall <weatherall@ainleygroup.com>; Johanna Kelly <jkelly@asiheritage.ca>
Subject: RE: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Hi Becca,

We are doing well and hopefully you are too!

We have begun with the background research for this project. Can you clarify your schedule for the EA? Our season is star ng to ramp up, and we'd like to know how soon you might need these.

Thanks,

Eliza Brandy, MA
Associate Archaeologist | Project Manager • Environmental Assessment Division

ASI • Providing Archaeological & Cultural Heritage Services
EBrandy@asiheritage.ca • 416 966 1069 x 222 • Fax: 416 966 9723
528 Bathurst Street, Toronto, Ontario, M5S 2P9 • asiheritage.ca

---

From: Rebecca Weatherall <weatherall@ainleygroup.com>
Sent: Wednesday, March 18, 2020 3:13 PM
To: Eliza Brandy <ebrandy@asiheritage.ca>; Johanna Kelly <jkelly@asiheritage.ca>
Subject: 119042 - Heritage Road Stage 1 Archaeological & Cultural Heritage Resource Assessment

Good afternoon Eliza and Johanna,

I hope you're both well and staying safe! With the situaon tha t we have with COVID-19, I was curious to know if you have made any progress on the Archaeological and Culture Heritage Assessments? Thanks!

Take care,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

Re: 119042 - Notice of Commencement - Municipal Class Environmental Assessment - Heritage Road -Local Businesses/ Interest Groups

Rebecca Weatherall <weatherall@ainleygroup.com>

Fri 2/28/2020 10:57 AM

To: Jeff Meiusi <jeff.meiusi@gmail.com>

Good morning Jeff,

You are receiving this email because Kevin Pulis idenfied y ou at the Totoredaca Dog Park representav e on behalf of Jack Darling (please refer to email correspondence between Kevin and I on February 5th where you are cc'ed).

As idenfied in the a ached noce, the w atermain upgrades on Heritage Road/ Meadowvale Boulevard may have the potenal t o impact the dog park. This poron of the pr oject includes determining the construcon me thods that are best suited not only for the installaon of a ne w watermain, but to minimize the impact construcon acvies will ha ve on local businesses and interest groups such as you and the patrons of the dog park. We would like to keep you informed on the decisions we make as stakeholder communicaons and f eedback are an integral part of the environmental assessment process.

Please let us know if you have any further quesons.

Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

From: Jeff Meiusi <jeff.meiusi@gmail.com>
Sent: Friday, February 28, 2020 10:46 AM
To: Rebecca Weatherall <weatherall@ainleygroup.com>
Subject: Re: 119042 - No ce of Commencement - Municipal Class Environmental Assessment - Heritage Road -Local Businesses/ Interest Groups

Why am i receiving this email?

On Fri, Feb 28, 2020 at 10:44 AM Rebecca Weatherall <weatherall@ainleygroup.com> wrote:

> To Whom It May Be Concerned:
>
> Please find a ached a Noce of Study Commencement, dated February 20, 2020, for a Class Environment Assessment (Class EA) that Ainley & Associates Ltd. has been retained to complete on behalf of the Region of Peel, associated with water distribuon s ystem upgrades for Heritage Road in Brampton.

/

The a ached Noce signifies the beginning of the Class EA process and as we proceed through the process all stakeholders and interested pares will ha ve an opportunity, through Noce s and Public Informaon Cen tres (PIC's), to provide comments.

Please email comments to the pares lis ted in the Noce of Study Commencement.

Thank you in advance and we look forward to receiving your feedback.

Warm regards,

Becca Weatherall, E.I.T.
Engineering Intern

www.ainleygroup.com
Phone: (905)452-5172 ext 217
Cell: (519)270-6062

--

Keller Williams Realty Solutions
1270 Central Parkway W Unit 101
Mississauga, ON L5C 4P4
Dir: 416-894-4373
Tel: 905-949-8866
Fax: 416-987-0092

From:	Jessica Lytle
To:	Hannah Brouwers
Subject:	FW: FILED: ARCHAEOLOGICAL REPORT for P1066-0126-2020 / * [19EA-103]
Date:	April 13, 2021 1:25:06 PM

From: pastport <pastport@ontario.ca>
Sent: April 13, 2021 1:25:00 PM (UTC-05:00) Eastern Time (US & Canada)
To: Jessica Lytle <jlytle@asiheritage.ca>
Cc: PastPort@ontario.ca <PastPort@ontario.ca>
Subject: FILED: ARCHAEOLOGICAL REPORT for P1066-0126-2020 / *

Dear Jessica Lytle,

The ministry has screened the project report package for P1066-0126-2020 that you submitted on Mar 26, 2021 for completeness.

The package is complete and the report is now considered 'filed' with the ministry.

Next, we will either add it to our queue to be reviewed or enter it into the register without technical review.

Please do not reply to this e-mail. The message will be undeliverable and we are unable to respond from this address.

If you have any questions about this report email us at: Archaeology@ontario.ca

Thank you,

Zeeshan Abedin

Zeeshan.Abedin@ontario.ca

Region of Peel Watermain
Heritage Road/Meadowvale Boulevard
Project 15-1138



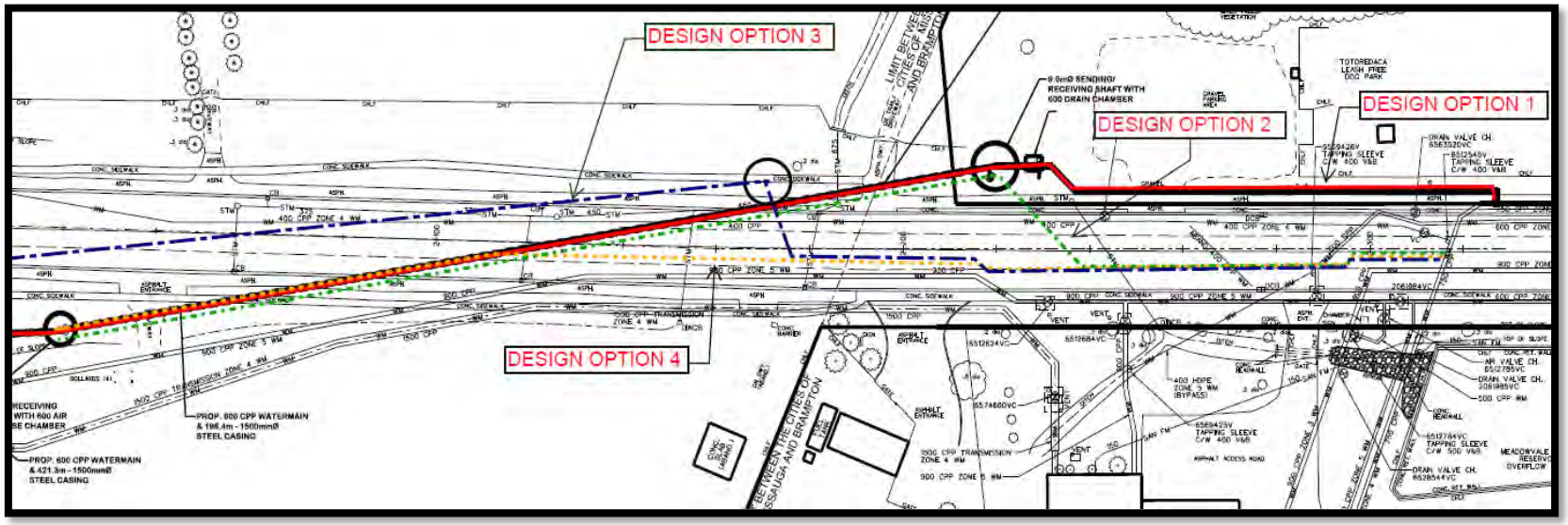
June 2021

WATERMAIN PROJECT - OVERVIEW

- Project Design - Description
- Environmental Assessment – Design Options
  - Preferred Design
- Considerations to Dog Park
  - Construction Staging
  - Duration of Work
  - Noise and Vibration
  - Mitigation of impacts
- Questions

Project Design - Description

Environmental Assessment
Design Options



Dog Park Considerations

QUESTIONS?

DOG PARK PRESENTATION NOTES

SLIDE 1 - INTRO

This project is for a water transmission main design and construction project on Heritage Road and Meadowvale Boulevard.

SLIDE 2 – PROJECT OVERVIEW

As per notes on slide.

SLIDE 3 - PROJECT DESCRIPTION

This slide shows an aerial view of the project area.

To the south is the reservoir and pumping station just across from the dog park to Steeles Avenue. Much of the project will be constructed by tunneling methods due to a number of important crossings that include the hydro corridor, two high pressure gas mains, the highway 407 crossing and the crossing at Mullet Creek. After the last shaft just north of Mullet Creek we will shift back onto the road and complete the project again by open cut methods.

SLIDE 4 - ENVIRONMENTAL ASSESSMENT – DESIGN OPTIONS

As a part of project planning, we are completing a schedule 'B' Environmental Assessment. This is a public decision-making process which considers best alternative designs taking into account the natural, social and economic environments.

Stakeholders related to the dog park - A Notice of Study comments with a brief description of the project was sent out in February 2020.

- Leash-Free Mississauga/ Totoredaca Dog Park Kevin Pulis President
- Jeff Meiusi Totoredaca Park Representative

As a part of that process, we need to review and consider all possible design alternatives.

Discuss options specifically related to the dog park.

Option 1, our preferred design in red, shows the new watermain connecting into the Zone 4 transmission main just outside of the roadway in the vicinity of the dog park property. The main then runs north to the first tunneling shaft still within the city property. The watermain would then be tunneled from this location to just past the hydro transmission corridor. It is tunneled twice more passing under the 407 and Mullet creek a then will be constructed by open cut methods to Steeles Avenue.

Option 2, in green is connected to the 750mm transmission main just off the center of the roadway. This and the connection shown in Option 1 are the only two feasible options because of all of the infrastructure in the ground. There are several large concrete watermains that block a clear alignment anywhere else on the pipe. Connecting just off the center of the road causes considerable traffic impacts. And due to the number of watermains in the area, we would not be able to move the

alignment to the side of the road for quite some distance depending on the option. Option 2 connects to the same shaft and follows the same alignment as option 1.

Option 3 shows the same connection point as Option 2 but extends further north to an alternative tunneling shaft. This shaft location leads to a tunnel alignment that is quite long and end on the north side of the 407. Longer tunnel shafts create more risk and there is less room for tunneling equipment. Therefore, some of the staging may potentially need to take place on the road.

Option 4 start in the same location as the previous two options. It is completely by open cut until construction reaches the tunneling shaft on the west side of the road. This eliminates the need for one of the shafts, however it creates traffic congestions for a longer period of time.

- **PREFERRED DESIGN**

Option 1 was our preferred option because it significantly reduces traffic congestion. As well, the city recently paved this section of road and does not want it impacted.

SLIDE 5 - CONSIDERATIONS TO DOG PARK

This slide shows an aerial view of the City Parks property. Construction will not have a direct impact on the majority of the dog park but will take place up to the fence along the west section of the park as well as the northerly parking lot.

- **CONSTRUCTION STAGING**

The area shaded in blue shows the construction work zone and the area shaded in yellow is the construction staging compound. This area will be used during the construction of the tunnel shaft and during the first tunnel drive. It is not expected that the contractor will be able to use this area for the

- **DURATION OF WORK**

entire construction contract.

For timelines - After we connect to existing and move northwards until we reach the shaft location. This should take about a week.

Construction of the tunneling shaft is a longer process and will may take approximately six months depending on how the work is staged by the contractor.

- **NOISE AND VIBRATION**

Construction and tunneling operations do produce some noise. As the watermain and shaft are being constructed heavy machinery will be operating. We will specify the use of tall, wood board hoarding/ construction fencing to create a barrier and reduce noise. , as well as heavy duty silt fencing.

- **LOSS OF PARKING**

Because the parking lot will be closed, access will be through the south entrance and parking area for the duration of the work we've described. Will be returned to an equal or better state with refreshed gravel.

Appendix B
Environmental Site Assessment

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
WATERMAIN REPLACEMENT ON HERITAGE ROAD
CITIES OF BRAMPTON AND MISSISSAUGA, ONTARIO

for

THE REGIONAL MUNICIPALITY OF PEEL

Peto MacCallum Ltd.
165 Cartwright Avenue
Toronto, Ontario
M6A 1V5
Phone: (416) 785-5110
Fax: (416) 785-5120
Email: toronto@petomaccallum.com

Distribution:
Electronic Copy: The Regional Municipality of Peel
Electronic Copy: Ainley Group
Electronic Copy: PML Toronto

PML Ref.: 20TF018
August 24, 2021

Peto MacCallum Ltd.
CONSULTING ENGINEERS

EXECUTIVE SUMMARY

Peto MacCallum Ltd. (PML) was retained by The Regional Municipality of Peel to conduct a Phase One Environmental Site Assessment (ESA) along Heritage Road from about 50 m north of Steeles Avenue West and Heritage Road intersection in Brampton to Meadowvale Blvd in Mississauga.

The Phase One ESA was conducted as part of the due diligence process to identify and verify the potential on-site and off-site sources of contamination, if any, in accordance with the protocols outlined in the Canadian Standard Association (CSA) Standard Z76801, reaffirmed 2012.

Historically, agricultural land use occupied the site and the vicinity presumably since the late 1800s to 1990s. At present, the site is double lane local roadways having underground utilities, traffic lights and road lights and the site's surface is mostly covered with asphalt pavement. The subject site and vicinity are surrounded by mixed residential/parkland and industrial/commercial properties.

Based on the evaluation of the historical data and site reconnaissance, fifteen (15) Potential Source Contaminations (PSCs) were identified on the adjacent properties to the road alignment. The PSCs were related to commercial trucking and container terminals, electronic and computer equipment manufacturing, waste water, chlorinated water and fuel oil spills, gasoline and associated products storage in fixed tanks, storage, maintenance, fuelling and repair of equipment, vehicles and material to maintain transportation systems and transformer manufacturing, processing and use.

Based on the evaluation of information, it is understood that there are possibilities of contamination from historical and current land use activities along the alignment.

Recommendation

Based on the findings of Phase One ESA, geoenvironmental sampling and chemical testing programs of soil and ground water are recommended for areas abutting the following properties.

PSC No.	LOCATION	DESCRIPTION
1	8050 Heritage Road	Amazon Fulfillment Center. Shipping and Receiving areas in the rear of the building.

165 Cartwright Avenue, Toronto, Ontario M6A 1V5
Tel: (416) 785-5110 Fax: (416) 785-5120
E-mail: toronto@petomaccallum.on.ca
BARRIE, HAMILTON, KITCHENER, TORONTO

PSC No.	LOCATION	DESCRIPTION
2	8050 Heritage Road	Amazon Fulfillment Center. Light fuels and petroleum distillates were used in 2020.
3	7975 Heritage Road	Shipping and Receiving areas in the rear of the building.
4	7965 Heritage Road	Shipping and Receiving areas in the rear of the building.
5		Survalent. Electronic and Computer Equipment Manufacturing in the western portion of the building.
6		G&W Canada. Transformer Manufacturing, Processing and Use in the eastern portion of the Site.
7	2675 Steeles Avenue West	Matrix Logistics Services. Shipping and Receiving areas in the rear of the building.
8	7726 – 7882 Heritage Road	Shipping and Receiving areas in the rear of the building.
9	7405 E Danbro Crescent	Penske Truck Rental. Gasoline and Associated Products in Fixed Tanks in the eastern portion of the Site and eastern portion of the building.
10		Penske Truck Rental. Storage, maintenance, fuelling and repair of equipment, vehicles and material used to maintain transportation systems throughout the Site. Diesel fuel tank is stored on Site. As per ERIS database, light fuels were used in 2020.
11	2720 Meadowvale Blvd	Ontario Clean Water Agency. As per ERIS database, light fuels were used from 2003 to 2015.
12	7755 Heritage Road	As per ERIS database, 1400 L port-a-pottie waste spilled onto the ground contaminating the soil in 2013.
13	2675 Steeles Avenue West	Canada Cartage Limited. As per ERIS database, 15 L of diesel fuel spilled onto the land in 2009.
14	2720 Meadowvale Blvd	Ontario Clean Water Agency. Unknown amount of chlorinated water spilled into the ditch in 2016.
15	8050 Heritage Road	Amazon Fulfillment Center. 2 - 3 L of diesel fuel spilled to the ground in 2019.

TABLE OF CONTENTS

EXECUTIVE SUMMARY……..……..i-ii

1. INTRODUCTION 1

1.1 Site Description....1

2. SCOPE OF INVESTIGATION 1

3. RECORDS REVIEW 2

3.1 General 2
3.1.1 Phase One ESA Study Area Determination and Rationale....2
3.1.2 First Developed Use Determination and Rationale 2
3.1.3 Fire Insurance Plan....2
3.1.4 MECP Water Well Records Review....3
3.1.5 Previous Environmental Report....3

3.2 Environmental Source Information 3

3.3 Physical Setting Source....6
3.3.1 Aerial Photograph 6
3.3.2 Topography, Hydrology and Geology....7
3.3.3 Fill Material....8
3.3.4 Water Bodies and Areas of Natural Significance 8

4. INTERVIEW....8

5. SITE RECONNAISSANCE....9

5.1 General 9

5.2 The Site Observation....9

5.3 The Study Area Observation 9

6. REVIEW AND EVALUATION OF INFORMATION 10

6.1 Potential Source of Contamination (PSCs) 10

6.2 Contaminants of Potential Concern (COPC)....12

6.3 Conceptual Site Model (CSM) 12

7. CONCLUSION....13

8. RECOMMENDATION....14

9. STATEMENT OF LIMITATION....16

10. QUALIFICATION OF ENVIRONMENTAL CONSULTANT....16

11. REFERENCE....17

ATTACHMENTS

Figure 1 – Key Map

Figure 2 – 1954 Aerial Photograph

Figure 3 – 1969 Aerial Photograph

Figure 4 – 1989 Aerial Photograph

Figure 5 – 2000 Aerial Photograph

Figure 6 – 2010 Aerial Photograph

Figure 7 – 2019 Aerial Photograph

Figure 8 – Topographic Map

Drawings 1 and 1A: Site and Surrounding Area Features

Plates 1 through 11– Site Photographs

Appendix A – Ministry of the Environment, Conservation and Parks (MECP) Water Well Records

Appendix B - ERIS Environmental Risk Information Services Report

Appendix C – Technical Standards and Safety Authority (TSSA) Responses

Appendix D – Statement of Limitations

1. INTRODUCTION

Peto MacCallum Ltd. (PML) was retained by The Regional municipality of Peel to conduct a Phase One Environmental Site Assessment (ESA) for Heritage Road located in the Cities of Brampton and Mississauga, Ontario.

The Phase One ESA was conducted as part of the due diligence process to identify and verify the potential on-site and off-site sources of contamination, if any, in accordance with the protocols outlined in the Canadian Standard Association (CSA) Standard Z768-01, reaffirmed 2012.

1.1 Site Description

The subject site is a roadway along Heritage Road from about 50 m north of Steeles Avenue West and Heritage Road intersection to Meadowvale Blvd (Figure 1).

Historically, agricultural land use occupied the site and the vicinity from the late 1800s to the 1990s.

Currently, mixed residential, industrial, parkland and commercial type structures/developments are noted along both the sides of Heritage Road.

2. SCOPE OF INVESTIGATION

The Phase One ESA involved the following tasks to assess the road alignment's physical and geoenvironmental setting and to document past and present land use activities.

i) A review of available documents including aerial photographs, topographic, geologic and hydrogeologic maps for the subject site prepared by PML, land registry records, Ministry of the Environment, Conservation and Parks (MECP) water well records and fire insurance plans to evaluate the site physical setting and to document past and present land use activities.

ii) Conducting a walk-through visual inspection along the road alignment and a 250 m area on both sides of the alignment to assess current site and surrounding area

conditions and the visual presence of site features or olfactory evidences indicating potential contamination, if any.

iii) Interviews with the knowledgeable individuals regarding the site conditions associated with historical land use activities at the subject site.

iv) Preparation of this report, discussing the information compiled and the pertinent conclusions and recommendations together with the tables, figures, site photographs and drawings as well as other information in Appendices.

3. RECORDS REVIEW

3.1 General

3.1.1 Phase One ESA Study Area Determination and Rationale

The subject site undergo for a watermain replacement. The Heritage Road is surrounded mostly by mixed residential, industrial, parkland and commercial land uses.

The Phase One ESA study area was determined in accordance with the protocols outlined in the Canadian Standard Association (CSA) Standard Z768-01, reaffirmed 2012 to identify and verify the potential on-site and off-site sources of contaminations (PSCs), if any.

3.1.2 First Developed Use Determination and Rationale

Based on information from aerial photographs, site visit and available maps, the first developed use of the site was presumably agriculture in the late 1800s.

3.1.3 Fire Insurance Plan

An attempt was made to review the historical Fire Insurance Plans (FIPs) for the site and surrounding areas. However, no FIPs were available to review.

3.1.4 MECP Water Well Records Review

The Ministry of Environment, Conservation and Parks (MECP) Water Well Records database was searched for well records within 250 m radius of the site and a summary of the well record information is included in Appendix A. Twenty three (23) recorded wells were located within the 250 m radius of the Site. Based on MECP, the purpose of the wells were recorded as domestic water supply (9), industrial water supply (1), livestock water supply (1), monitoring and test holes (7), not used (2) and with no record (3).

3.1.5 Previous Environmental Report

No previous environmental site assessment report for the Site was available for PML's review.

3.2 Environmental Source Information

Environmental source information was obtained from the following sources: Ministry of the Environment, Conservation and Parks (MECP), ERIS Environmental Risk Information Services, Technical Standards and Safety Authority (TSSA), and the National Pollutant Release Inventory website. The environmental source information from ERIS Environmental Risk Information Services and TSSA are attached in Appendices B and C, respectively,

A summary of the environmental source information is presented in Table 1 below.

TABLE 1

ENVIRONMENTAL SOURCE INFORMATION

ITEM	SOURCE	TITLE	PERTINENT INFORMATION	ANY POTENTIAL SOURCE OF CONTAMINATION (PSCs)?
1	Technical Standards and Safety Authority (TSSA)	Release of Public Information - TSSA	No listing was noted within the site and adjacent properties.	None

TABLE 1

ENVIRONMENTAL SOURCE INFORMATION

ITEM	SOURCE	TITLE	PERTINENT INFORMATION	ANY POTENTIAL SOURCE OF CONTAMINATION (PSCs)?
2	Ontario Ministry of Environment and Energy (MOEE) Jul 1993	Ontario Inventory of PCB Storage Sites	No listing was noted within the site and adjacent properties.	None
3	Ontario Ministry of Environment and Energy (MOEE) Apr 1987 and Nov 1988	Inventory of Coal Tar Wastes and Coal Gasification Plants	No listing was noted within the site and adjacent properties.	None
4	Ontario Ministry of Environment and Energy (MOEE) Jun 1991	Waste Disposal Site Inventory of Landfill Sites	No listing was noted within the site and adjacent properties.	None
5	MECP Location of Small Landfill Sites, 2019	http://www.ontario.ca/data/small-landfill-sites	No listing was noted within the site and adjacent properties.	None
6	MECP Location of Large Landfill Sites, 2019	http://www.ontario.ca/environment-and-energy/map-large-landfill-sites	No listing was noted within the site and adjacent properties.	None
7	http://www.ec.gc.ca/inrp-npri/	National Pollutant Release Inventory	No listing found for the site and adjacent properties.	None
8	Technical Standards and Safety Authority (TSSA)	Release of Public Information - TSSA	No listing was noted within the site and adjacent properties	None
9	MECP Water Well Record Search and Site interview	Water Well Information Sytem	Twenty three (23) recorded wells were located within the 250 m radius of the site.	None

TABLE 1

ENVIRONMENTAL SOURCE INFORMATION

ITEM	SOURCE	TITLE	PERTINENT INFORMATION	ANY POTENTIAL SOURCE OF CONTAMINATION (PSCs)?
10	Eris Database	Certificates of Approval	No listing was noted within the site and adjacent properties	None
11	Eris Database	Ontario Spills	Twelve listings were noted within the site and adjacent properties.	Yes, on-site soils and ground water
12	Eris Database	Private and Retail Fuel Storage Tanks	No listing was noted within the site and adjacent properties. During the Site visit, an AST and UST were observed at 7405 E Danbro Crescent.	Yes, on-site soils and ground water
13	Eris Database	Federal Convictions	No listing was noted within the site and adjacent properties.	None
14	Eris Database	Aboveground Storage Tanks	No listing was noted within the site and adjacent properties. During the Site visit, an AST observed at 7405 E Danbro Crescent.	Yes, on-site soils and ground water
15	Eris Database	Record of Site Condition	One listing found within the site and adjacent properties.	None
16	Eris Database	Ontario Regulation 347 Waste Generators Summary	Sixty-five listings found within the site adjacent properties. These include misc. wastes and inorganic and organic chemicals, paint/pigment/ coating residues, emulsified oils, organic laboratory chemicals, polymeric resins, organic tannery wastes, petroleum distillates, waste crankcase oils and lubricants, aromatic solvents and residues, waste compressed gases including cylinders, aliphatic solvents, oil skimmers and sludges, light fuels, other inorganic wastes, waste	Yes, on-site soils and ground water

TABLE 1

ENVIRONMENTAL SOURCE INFORMATION

ITEM	SOURCE	TITLE	PERTINENT INFORMATION	ANY POTENTIAL SOURCE OF CONTAMINATION (PSCs)?
			oils/sludges (petroleum based), aromatic solvents and residues, halogenated pesticides and herbicides, detergents and soaps, pharmaceuticals, wastes containing other receiving anions, organic acids, other inorganic wastes, alkaline solutions- containing other metals and non-metals (not cyanide), other specifies inorganic sludges, slurries or solids, graphic art wastes and amines.	

3.3 Physical Setting Source

3.3.1 Aerial Photograph

Historical and recent aerial photographs for the site and vicinity areas were reviewed in order to assess the development sequence of the site and adjacent properties. Based on the availability, the aerial photographs for the years 1954, 1969, 1989, 2000, 2010 and 2019 were selected for the current investigation and are shown on Figures 2 to 7. The review findings are outlined below.

Based on the aerial photographs of 1954, 1969 and 1989, rural residential and agricultural lands were noted along both the sides of Heritage Road (Figures 2 to 4). Based on the aerial photographs/Google Maps of 2000, 2010 and 2019, residential, industrial, parkland and commercial type structures/developments were noted along both the sides of Heritage Road (Figures 5 to 7).

3.3.2 Topography, Hydrology and Geology

A review of the Topographic Map (Figure 8) was conducted for the site and surrounding areas. The Atlas of Canada (Natural Resources Canada), indicated that the site and surrounding area ground surface elevation ranged from 200 to 207 meters above sea level (masl).

According to Chapman and Putnam (Physiography of Southern Ontario, Ministry of Natural Resources, 1984), the project area is situated in the physiographic region known as Peel Plain bordered by South Slope to the north and south. The physiographic landforms in the area are defined as Bevelled Till Plains.

The OGS Earth Map of Surficial Geology of Southern Ontario (Ontario Geological Survey, 2010), indicates that the majority portion of the project area lies on a region of clay to silt-textured till deposits, derived from glaciolacustrine deposits or shale. Only a small portion of land in the central part lies on a region of modern alluvial deposits comprised of clay, silt, sand and gravel, may contain organic remains.

The OGS Earth Map of Paleozoic Geology of Southern Ontario (Armstrong and Dodge, 2007), indicates that the bedrock geology at the project area comprises shale, limestone, dolostone and siltstone of Queenston Formation.

According to Credit River Conservation Authority, the project area is located within the Credit River Watershed. Credit River is located about 2.7 km east of Heritage Road and Steeles Avenue.

The hydrogeology of the road alignment and the vicinity is primarily controlled by the Mullet Creek, Credit River, topographic elevation, glacial geology and bedrock topography of the region. Locally, shallow ground water flows towards topographic depressions. The deep/regional ground water is expected to flow southerly towards Mullet Creek and finally towards Credit River.

3.3.3 Fill Material

No fill piles were noticed along the alignment. However, engineered fill materials are expected to be present along the road alignment and adjacent developed sites/properties.

3.3.4 Water Bodies and Areas of Natural Significance

Credit River is located about 2.7 km east of Heritage Road and Steeles Avenue. Mullet Creek, a tributary of Credit River, crosses Heritage Road about 465 m south from Heritage Road and Steeles Avenue West. Levi Creek, a tributary of Credit River, crosses Heritage Road about 750 m north from Heritage Road and Steeles Avenue West. Both watercourses flow east/south-easterly towards Credit River.

Based on the Ontario Ministry of Natural Resources and Forestry (MNRF), no area of natural significance (ANSI) existed on the road alignment and adjacent properties.

4. INTERVIEW

During the course of this assessment, PML interviewed the following person on August 7, 2020 as outlined in Table 2 below:

TABLE 2
INTERVIEW SUMMARIZED INFORMATION

PLACE/ METHOD	PERSON INTERVIEWED	RATIONALE	INFORMATION PROVIDED
Penske Truck Rental	Ms. Dani Todaro, 7405 E Danbro Cres, Mississauga	Project Manager	1) The property was built in 1999. 2) There are Aboveground Storage Tanks (ASTs) and Underground Storage Tanks (USTs) and truck maintenance facility on the Site.

5. SITE RECONNAISSANCE

5.1 General

A site reconnaissance along Heritage Road was carried out by a Geoenvironmental Staff Member (Mr. Jason Noronha) of PML on August 7, 2020.

Selected site photographs were taken at the time of site reconnaissance which are shown on Plates 1 to 11. Drawing 1 shows the site and surrounding features, and potential source of contaminations (PSCs) along the road alignments as observed during the site reconnaissance.

5.2 The Site Observation

During the site reconnaissance, it was confirmed that the site is located along Heritage Road from Steeles Avenue West to Meadowvale Blvd in the cities of Brampton and Mississauga, Ontario. The road sections along Heritage Road is about 1.4 km. The subject site and vicinity are surrounded by mixed residential/parkland/industrial and commercial properties (Drawing 1).

At present, the site is double lane local roadways having underground utilities, traffic lights and road lights and the site's surface is mostly covered with asphalt pavement. During the site visit, normal operation of road like movement of vehicles was noticed.

Fill pile was not noticed along the alignment of Heritage Road. There were no unusual noise, odour and vibration noted. No unidentified substance was noted at the site. There was no water well noted on the Site.

5.3 The Study Area Observation

A visual inspection of the study area (250 m on both sides of Heritage Road) was conducted from the limits of the road alignment and publicly accessible areas to check for potential source of contaminations (PSCs), water bodies and areas of natural significance (ANSI).

The road alignment along Heritage Road is surrounded by mixed residential/parkland and industrial/commercial properties.

No Area of Natural Significance (ANSI) existed on the road alignment. Mullet Creek, a tributary of Credit River, is located about 470 m south of Heritage Road and Steeles Avenue West. Levi Creek, a tributary of Credit River, crosses Heritage Road about 750 m north from Heritage Road and Steeles Avenue West. Both watercourses flow east/south-easterly towards Credit River.

6. REVIEW AND EVALUATION OF INFORMATION

6.1 Potential Source of Contamination (PSCs)

Based on the evaluation of the historical data and site reconnaissance, fifteen (15) Potential Source Contaminations (PSCs) were identified on the adjacent properties of Heritage Road.

The PSCs were related to commercial trucking and container terminals, electronic and computer equipment manufacturing, gasoline and associated products storage in fixed tanks, storage, maintenance, fuelling and repair of equipment, vehicles and material to maintain transportation systems and transformer manufacturing processing and use.

The identified PSCs are listed in Table 3 below and shown on attached Drawing 1.

TABLE 3

POTENTIAL SOURCES OF CONTAMINATION (PSCs)
ON / IN / UNDER THE ROAD ALIGNMENT AND ADJACENT PROPERTIES

PSC No.	LOCATION	DESCRIPTION
1	8050 Heritage Road	Amazon Fulfillment Center. Shipping and Receiving areas in the rear of the building.
2		Amazon Fulfillment Center. Light fuels and petroleum distillates were used in 2020.
3	7975 Heritage Road	Shipping and Receiving areas in the rear of the building.

TABLE 3

POTENTIAL SOURCES OF CONTAMINATION (PSCs) ON / IN / UNDER THE ROAD ALIGNMENT AND ADJACENT PROPERTIES

PSC No.	LOCATION	DESCRIPTION
4	7965 Heritage Road	Shipping and Receiving areas in the rear of the building.
5		Survalent. Electronic and Computer Equipment Manufacturing in the western portion of the building.
6		G&W Canada. Transformer Manufacturing, Processing and Use in the eastern portion of the Site.
7	2675 Steeles Avenue West	Matrix Logistics Services. Shipping and Receiving areas in the rear of the building.
8	7726 – 7882 Heritage Road	Shipping and Receiving areas in the rear of the building.
9	7405 E Danbro Crescent	Penske Truck Rental. Gasoline and Associated Products in Fixed Tanks in the eastern portion of the Site and eastern portion of the building.
10		Penske Truck Rental. Storage, maintenance, fuelling and repair of equipment, vehicles and material used to maintain transportation systems throughout the Site. Diesel fuel tank is stored on Site. As per ERIS database, light fuels were used in 2020.
11	2720 Meadowvale Blvd	Ontario Clean Water Agency. As per ERIS database, light fuels were used from 2003 to 2015.
12	7755 Heritage Road	As per ERIS database, 1400 L port-a-pottie waste spilled onto the ground contaminating the soil in 2013.
13	2675 Steeles Avenue West	Canada Cartage Limited. As per ERIS database, 15 L of diesel fuel spilled onto the land in 2009.
14	2720 Meadowvale Blvd	Unknown amount of chlorinated water spilled into the ditch in 2016.
15	8050 Heritage Road	Amazon Fulfillment Center. 2 - 3L of diesel fuel spilled to the ground in 2019.

6.2 Contaminants of Potential Concern (COPC)

Metals, PAHs, VOCs and PHCs are considered as contaminants of potential concern (COPC) for the site. Since Metals, PAHs, VOCs and PHCs are found as frequent contaminants associated with auto/truck maintanance and fuel tanks, those are considered as COPC as well as background level check for the road alignment.

6.3 Conceptual Site Model (CSM)

A Conceptual Site Model (CSM) is presented to demonstrate the current site geoenvironmental conditions. The subject CSM has been prepared based on the site background information compiled to date and a site reconnaissance.

This CSM consists of Figures 1 to 7 and a plan showing Potential Source of Contaminations (PSCs) along the both sides of Heritage Road (Drawings 1 and 1A), which depict the site conditions including surficial features, and present and past land uses in and around the alignment.

The subject site is located along Heritage Road from north of Steeles Avenue West to Meadovwale Blvd (about 1.4 km long, Figure 1).

Historically, agricultural land use occupied the site and the vicinity presumably since the late 1800s to 1990s. At present, the site is double lane local roadways having underground utilities, traffic lights and road lights and the site's surface is mostly covered with asphalt pavement. The subject site and vicinity are surrounded by mixed residential/parkland and industrial/commercial properties.

Based on the evaluation of the historical data and site reconnaissance, fifteen (15) Potential Source of Contaminations (PSCs) were identified on the adjacent properties to the road alignment. The identified PSCs are listed in Section 6.1, Table 3, and shown on attached Drawings 1 and 1A.

The PSCs were related to commercial trucking and container terminals, electronic and computer equipment manufacturing, waste water, chlorinated water and fuel oil spills, gasoline and associated

products storage in fixed tanks, storage, maintenance, fuelling and repair of equipment, vehicles and material to maintain transportation systems and transformer manufacturing processing and use.

Based on the evaluation of information, it is understood that there are possibilities of contamination from historical and current land use activities along the alignment.

Metals, PAHs, VOCs and PHCs are considered as contaminants of potential concern (COPC) for the site. Since Metals, PAHs, VOCs and PHCs are found as frequent contaminants associated with auto/truck maintanance and fuel tanks, those are considered as COPC as well as background level check for the road alignment.

Based on the Ontario Ministry of Natural Resources and Forestry, no area of natural significance (ANSI) existed on the road alignment and adjacent properties.

The project area is located within the Credit River Watershed. Mullet Creek, a tributary of Credit River, crosses Heritage Road about 470 m south from Heritage Road and Steeles Avenue West. Levi Creek, a tributary of Credit River, crosses Heritage Road about 750 m north from Heritage Road and Steeles Avenue West. Both watercourses flow east/south-easterly towards Credit River.

The hydrogeology of the road alignment and the vicinity is primarily controlled by the Mullet Creek, Credit River, topographic elevation, glacial geology and bedrock topography of the region. Locally, shallow ground water flows towards topographic depressions. The deep/regional ground water is expected to flow southerly towards Mullet Creek and finally towards Credit River.

7. CONCLUSION

A Phase One ESA was conducted to assess the potential for contamination of the soil and ground water along Heritage Road from north of Steeles Avenue West to Meadovwale Blvd (about 1.4 km long, Figure 1).

Within the project limit of Heritage Road, potential source of contaminations (PSCs) were identified as shown on Drawings 1 and 1A.

Based on the evaluation of the historical data and site reconnaissance, fifteen (15) Potential Source Contaminations (PSCs) were identified on the adjacent properties to the road alignment.

The PSCs were related to commercial trucking and container terminals, electronic and computer equipment manufacturing, waste water, chlorinated water and fuel oil spills, gasoline and associated products storage in fixed tanks, storage, maintenance, fuelling and repair of equipment, vehicles and material to maintain transportation systems and transformer manufacturing processing and use.

Based on the evaluation of information, it is understood that there are possibilities of contamination from historical and current land use activities along the road.

Based on the Phase One ESA findings, it is understood that a soil and ground water sampling and chemical testing programs should be undertaken in some portions of Heritage Road in order to further assess the soils and ground water environmental quality along the alignment and to delineate potentially impacted areas for the remedial/clean-up measures, if required for the future development.

8. RECOMMENDATION

Based on the findings of Phase One ESA, geoenvironmental sampling and chemical testing programs of soil and ground water are recommended for areas abutting the following properties.

PSC No.	LOCATION	DESCRIPTION
1	8050 Heritage Road	Amazon Fulfillment Center. Shipping and Receiving areas in the rear of the building.
2	8050 Heritage Road	Amazon Fulfillment Center. Light fuels and petroleum distillates were used in 2020.
3	7975 Heritage Road	Shipping and Receiving areas in the rear of the building.
4	7965 Heritage Road	Shipping and Receiving areas in the rear of the building.
5		Survalent. Electronic and Computer Equipment Manufacturing in the western portion of the building.

PSC No.	LOCATION	DESCRIPTION
6	7965 Heritage Road	G&W Canada. Transformer Manufacturing, Processing and Use in the eastern portion of the Site.
7	2675 Steeles Avenue West	Matrix Logistics Services. Shipping and Receiving areas in the rear of the building.
8	7726 – 7882 Heritage Road	Shipping and Receiving areas in the rear of the building.
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11	2720 Meadowvale Blvd	Ontario Clean Water Agency. As per ERIS database, light fuels were used from 2003 to 2015.
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14	2720 Meadowvale Blvd	Ontario Clean Water Agency. Unknown amount of chlorinated water spilled into the ditch in 2016.
15	8050 Heritage Road	Amazon Fulfillment Center. 2 - 3 L of diesel fuel spilled to the ground in 2019.

9. STATEMENT OF LIMITATION

The assignment is subject to the Statement of Limitations that is included in Appendix D and must be read in conjunction with this report.

10. QUALIFICATION OF ENVIRONMENTAL CONSULTANT

PML was established in 1973 as a result of the merger of Peto Associates Ltd., founded in 1956, and the Ontario division of Racey MacCallum and Associates Limited, chartered in 1952. PML is a consulting engineering firm that specializes in the fields of geoenvironmental, hydrogeological and geotechnical engineering, building sciences, construction supervision/inspection and materials engineering/testing. Personnel in our four-branch offices form a network of full time dedicated environmental professionals.

The Site reconnaissance and partial preparation of this report were conducted by Mr. Jason Noronha, BSc in Environmental Science. Mr. Noronha is a Project Supervisor with over seven years of experience in the field of Environmental Site Assessment, supervising field investigations, data gathering, conducting sampling programs, data analyses and report preparation. His main areas of expertise include Phase One and Phase Two ESAs and hydrogeologic investigations.

The investigation and report preparation was conducted by Mr. Shamsul Tarafder, MSc. PhD., P.Geo. Mr. Tarafder is a Senior Geoscientist with over fifteen years of experience in geology, geophysics, physical and contaminant hydrology and hydrogeology, hydrogeochemistry and soil contamination chemistry. His experience includes soil and ground water investigations including Phase One and Two ESAs, aquifer characterization, ground water exploration, soil and ground water quality assessment, hydrogeological assessment, in-situ remediation of organic contaminants involving LNAPLs and DNAPLs such as petroleum products, VOCs and semi-VOCs, PAHs, BTEX and ether compounds using advanced treatment technologies, and solute transport hybrid numerical and analytical modelling. He has completed hundreds of Phase One and Two ESAs and Hydrogeological Site Assessment (HSA) reports for commercial, industrial, and residential properties. Mr. Tarafder is also author and co-author of a number of peer reviewed scientific articles.

This report was reviewed by Mahaboob Alam, MSc., PhD., P.Geo., a Professional Geoscientist registered with the Association of Professional Geoscientists of Ontario. Mr. Alam is a Director of the firm and Discipline Lead, Geoenvironmental and Hydrogeological services and is a Qualified Person (QP) registered with the MECP. He has over 30 years of interdisciplinary professional experience specializing in geoenvironmental and hydrogeologic investigations and project management. His main areas of expertise include Phase One and Phase Two ESAs, site cleanup/remediation planning and supervision, waste management, UST and AST removals, site remediation, Risk Assessment, Records of site Condition and hydrogeologic investigations. He has completed hundreds of Phase One ESAs for commercial, industrial, and residential clients for a wide variety of project types (industrial complexes, commercial developments, entertainment and institutional buildings, and residential development).

11. REFERENCE

The following documents and data were referred to the Phase One ESA Report:

ITEM	DOCUMENT / DATA	DATE	AUTHOR / SOURCE
1	Aerial Photographs	1954, 1989, 2000, and 2010	City of Mississauga Online Archives
2	Aerial Photographs	1969	City of Toronto Online Archives
3	Aerial Photographs	2019	Google Maps
4	Topographic Map	2018	Natural Resources Canada-The Atlas of Canada
5	The Physiography of Southern Ontario, 3rd Edition	1984	Chapman, L.J., and Putnam, D. F.
6	Bedrock Geology of Ontario, Map 2544	1991	Ministry of Northern Development and Mines
7	Quaternary Geology of Toronto and Surrounding Area, Map 2204	1980	Ministry of Natural Resources

ITEM	DOCUMENT / DATA	DATE	AUTHOR / SOURCE
8	Quaternary Geology of Ontario, Southern Sheet, Ontario Geological Survey, Map 2556, Scale 1:1,000,000	1991	Barnett, P.J., W.R. Cowan and A.P. Henry
9	Canadian Standards Association Standard Z768-01 Environmental Technology	2001 (Reaffirmed 2012)	Canadian Standards Association (CSA)
10	MOEE Waste Disposal Inventory	June 1991	MOEE Reference book
11	Inventory of Coal Gasification Plant Waste Sites in Ontario	April 1987	MOEE Reference book
12	Inventory of Industrial Sites Producing Coal or Using Coal Tar and Related Tars Sites in Ontario	November 1988	MOEE Reference book
13	Ontario Inventory of PCB Storage Sites	July 1993	MOEE Reference book
14	MECP Location of Small Landfill Sites	2019	http://www.ontario.ca/data/small-landfill-sites
15	MECP Location of Large Landfill Sites	2019	http://www.ontario.ca/environment-and-energy/map-large-landfill-sites
16	National Pollutant Release Inventory	2019	http://www.ec.gc.ca/inrp-npri/
17	Make A Map: Natural Heritage Area	Current	Ontario Ministry of Natural Resources and Forestry

We trust this report is adequate for your present purposes. Should you have any questions or require further information, please do not hesitate to contact our office.

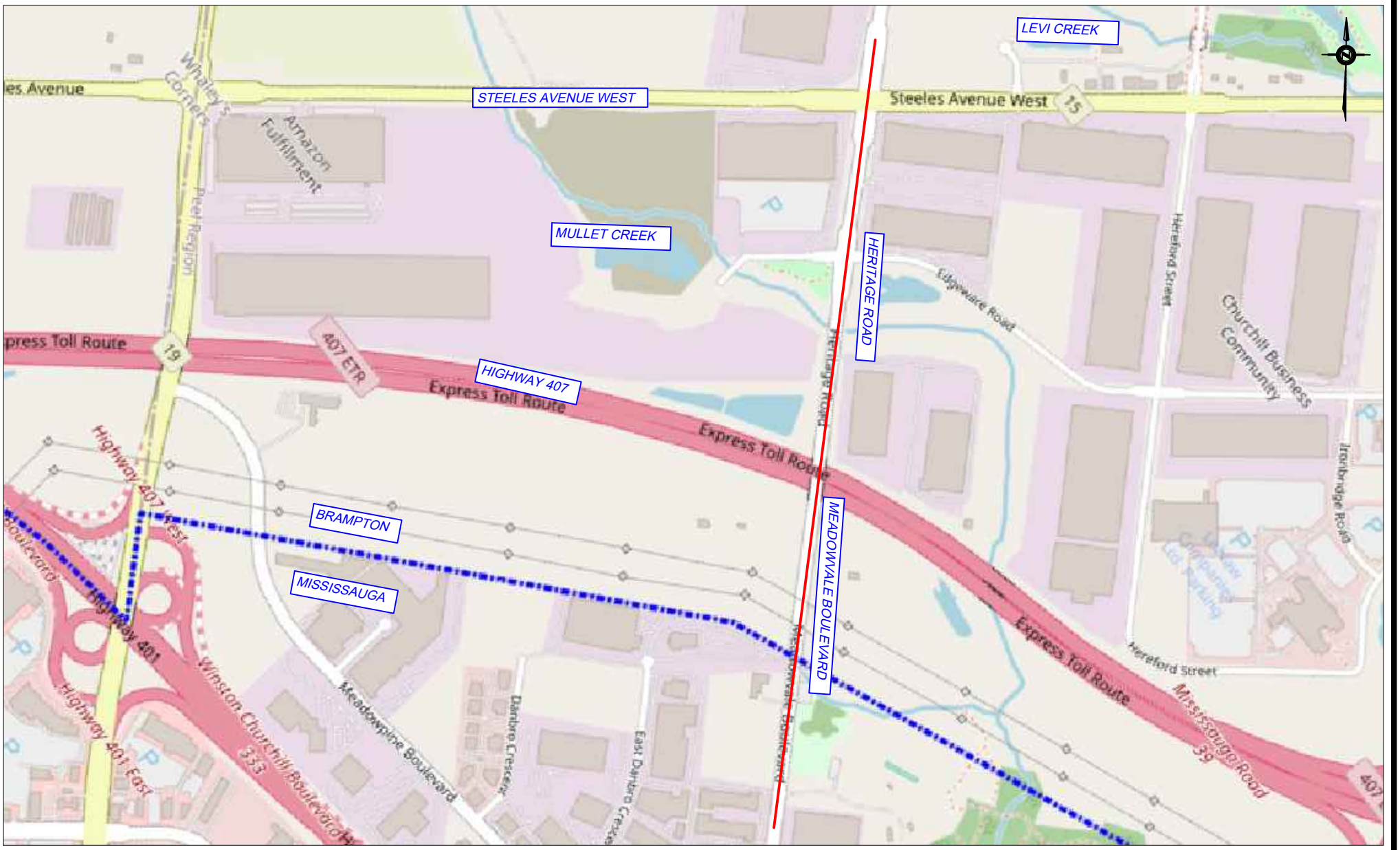
Sincerely

Peto MacCallum Ltd.

Shamsul A. Tarafder, MSc, PhD, P.Geo.
Associate and Senior Geoscientist
Geoenvironmental and Hydrogeological Services

Mahaboob Alam, MSc, PhD, P.Geo.
Director
Discipline Lead, Geoenvironmental and Hydrogeological Services

ST/MA:st



REFERENCE:
THIS FIGURE WAS PREPARED FROM ONTARIO SERVICES WEBSITE WWW6.MISSISSAUGA.CA//MISSMAPS.

LEGEND:

PROPOSED WATERMAIN LINE

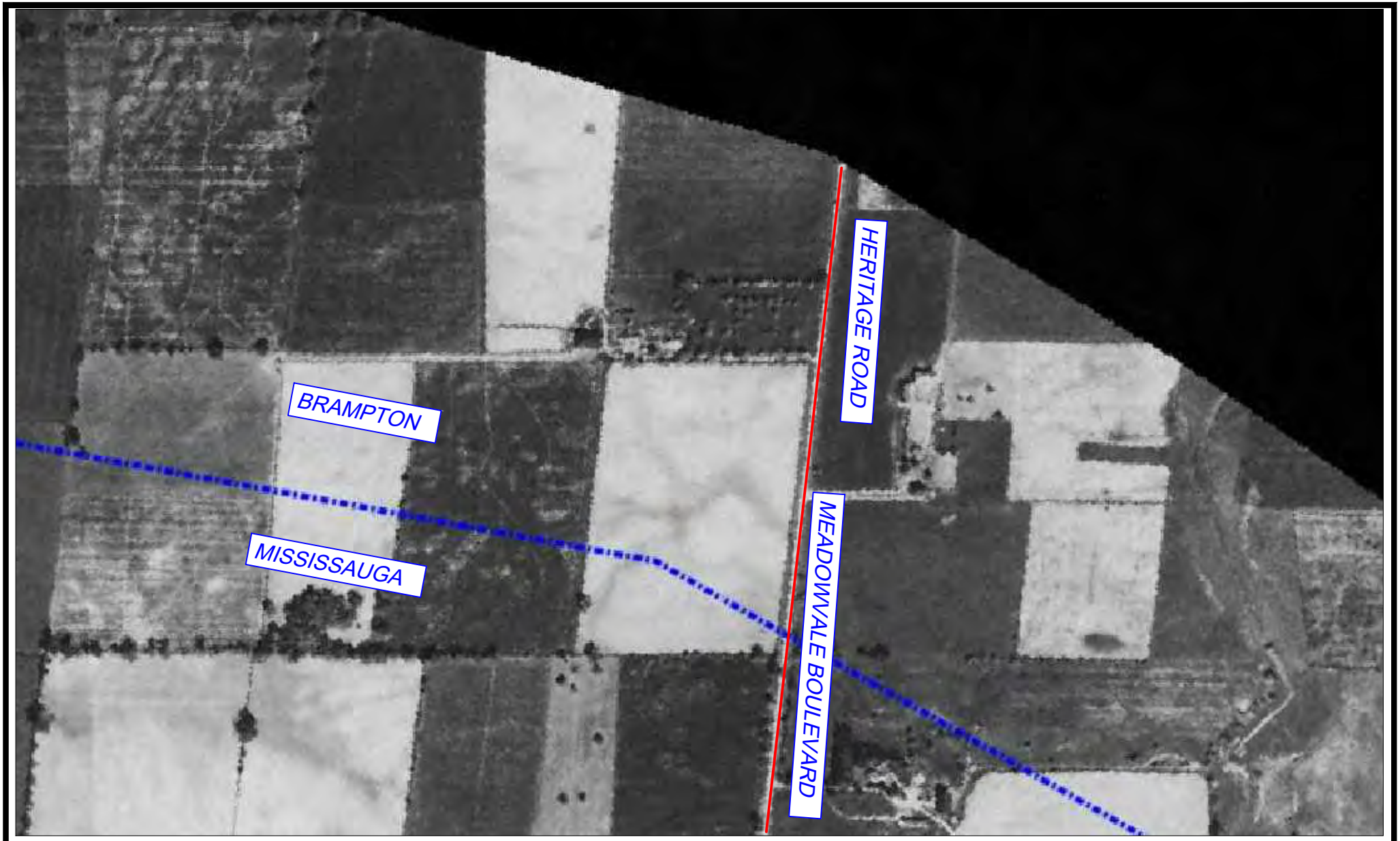
REGION OF MUNICIPALITY OF PEEL.

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
HERITAGE ROAD, BRAMPTON, ONTARIO

KEY MAP

Peto MacCallum Ltd.
CONSULTING ENGINEERS

DRAWN	J.N.	**DATE**	**SCALE**	**PML REF.**	**FIG. NO.**
CHECKED	S.T.	AUG 2021	1:10,000	20TF018	1
APPROVED	M.A.				



REFERENCE:
THIS FIGURE WAS PREPARED FROM ONTARIO SERVICES WEBSITE WWW6.MISSISSAUGA.CA//MISSMAPS.

LEGEND:

PROPOSED WATERMAIN LINE

REGION MUNICIPALITY OF PEEL.

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
HERITAGE ROAD, BRAMPTON, ONTARIO

1954 AERIAL PHOTOGRAPH

Peto MacCallum Ltd.
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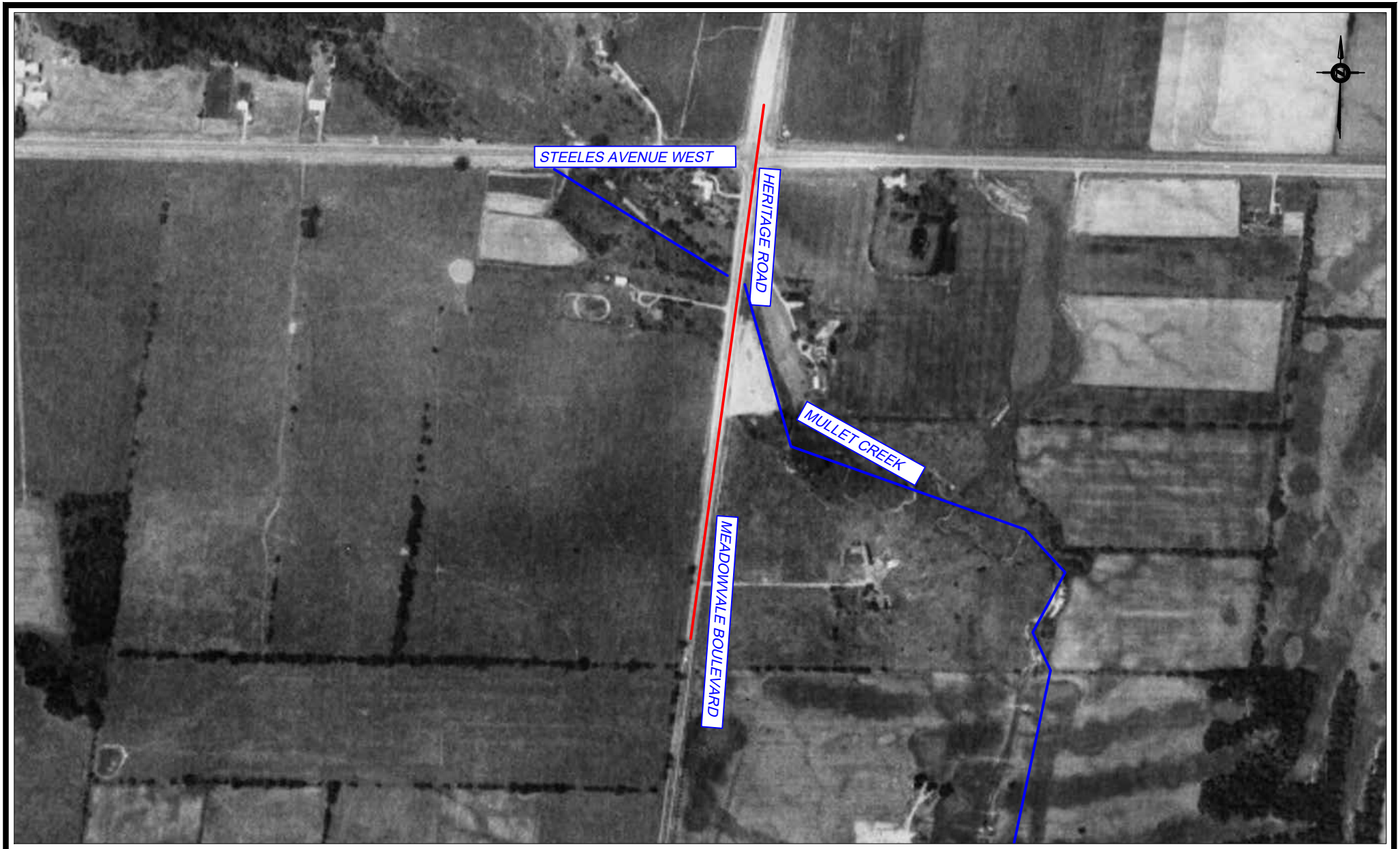
DRAWN	J.N.	DATE	SCALE	PML REF.	FIG. NO.
CHECKED	S.T.	AUG 2021	1:5,000	20TF018	2
APPROVED	M.A.				



REFERENCE:
THIS FIGURE WAS PREPARED FROM ONTARIO SERVICES WEBSITE www.TORONTO.CA/MAPS/AERIAL PHOTOGRAPHS-1969, PLATE NO.230A.

LEGEND:

PROPOSED WATERMAIN LINE

REGION MUNICIPALITY OF PEEL.

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
HERITAGE ROAD, BRAMPTON, ONTARIO

1969 AERIAL PHOTOGRAPH

PML Peto MacCallum Ltd.
CONSULTING ENGINEERS

DRAWN	J.N.	DATE	SCALE	PML REF.	FIG. NO.
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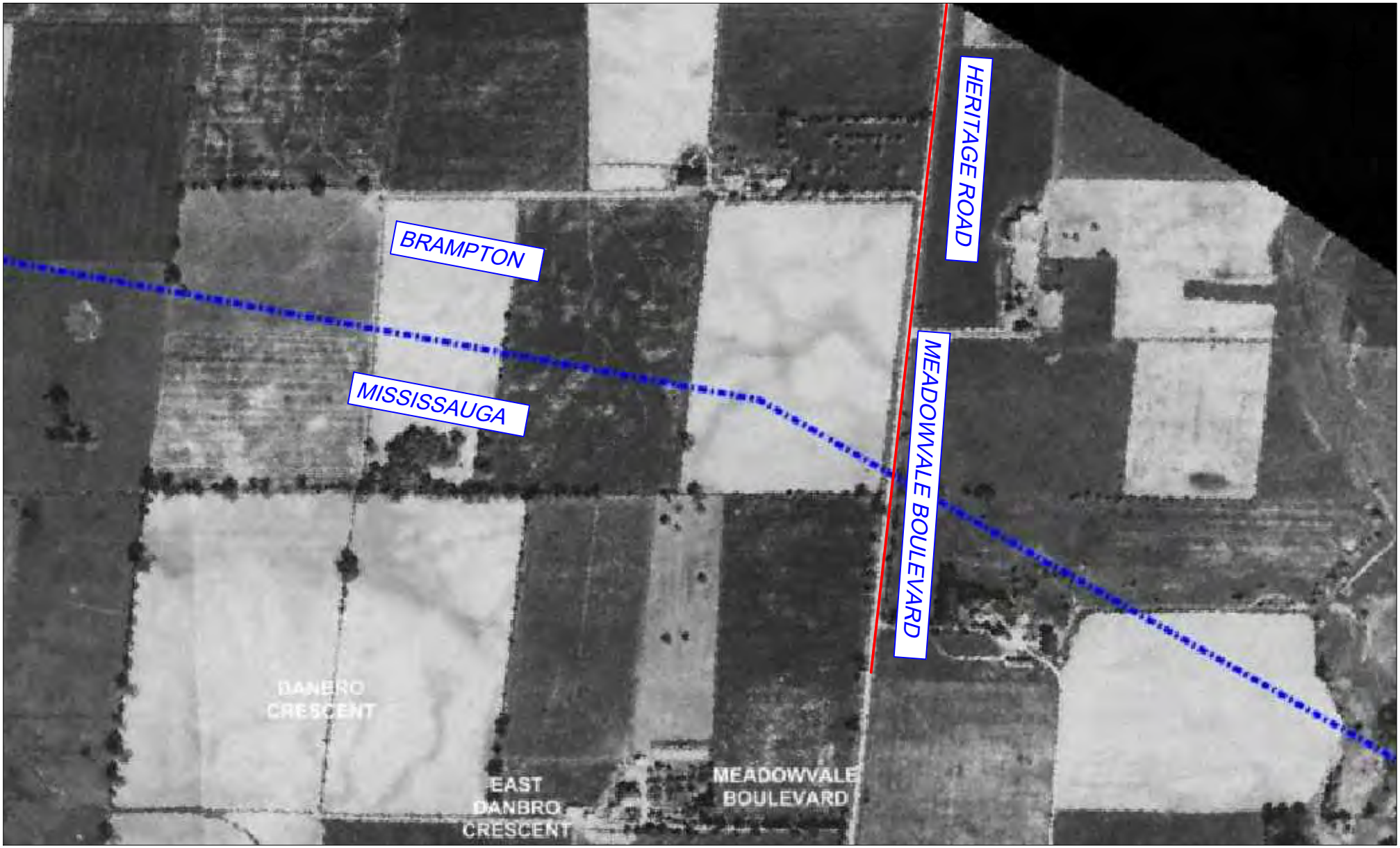
APPROVED	M.A.				



REFERENCE:
THIS FIGURE WAS PREPARED FROM ONTARIO SERVICES WEBSITE WWW6.MISSISSAUGA.CA//MISSMAPS.

LEGEND:

PROPOSED WATERMAIN LINE

REGION MUNICIPALITY OF PEEL.

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
HERITAGE ROAD, BRAMPTON, ONTARIO

1989 AERIAL PHOTOGRAPH

Peto MacCallum Ltd.
CONSULTING ENGINEERS

DRAWN	J.N.	DATE	SCALE	PML REF.	FIG. NO.
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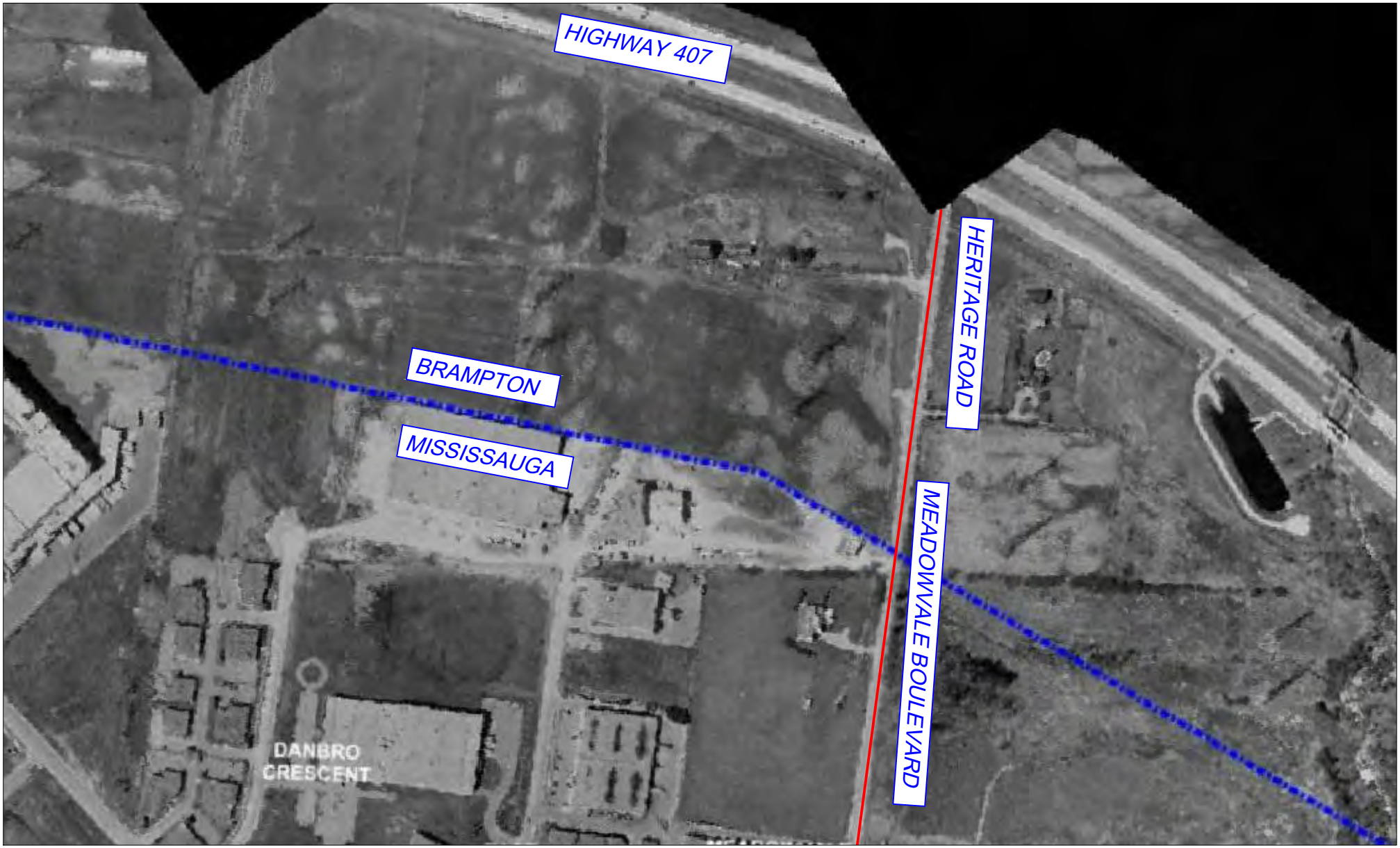
APPROVED	M.A.				



REFERENCE:
THIS FIGURE WAS PREPARED FROM ONTARIO SERVICES WEBSITE WWW6.MISSISSAUGA.CA//MISSMAPS.

LEGEND:

PROPOSED WATERMAIN LINE

REGION MUNICIPALITY OF PEEL.

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
HERITAGE ROAD, BRAMPTON, ONTARIO

2000 AERIAL PHOTOGRAPH

Peto MacCallum Ltd.
CONSULTING ENGINEERS

DRAWN	J.N.	DATE	SCALE	PML REF.	FIG. NO.
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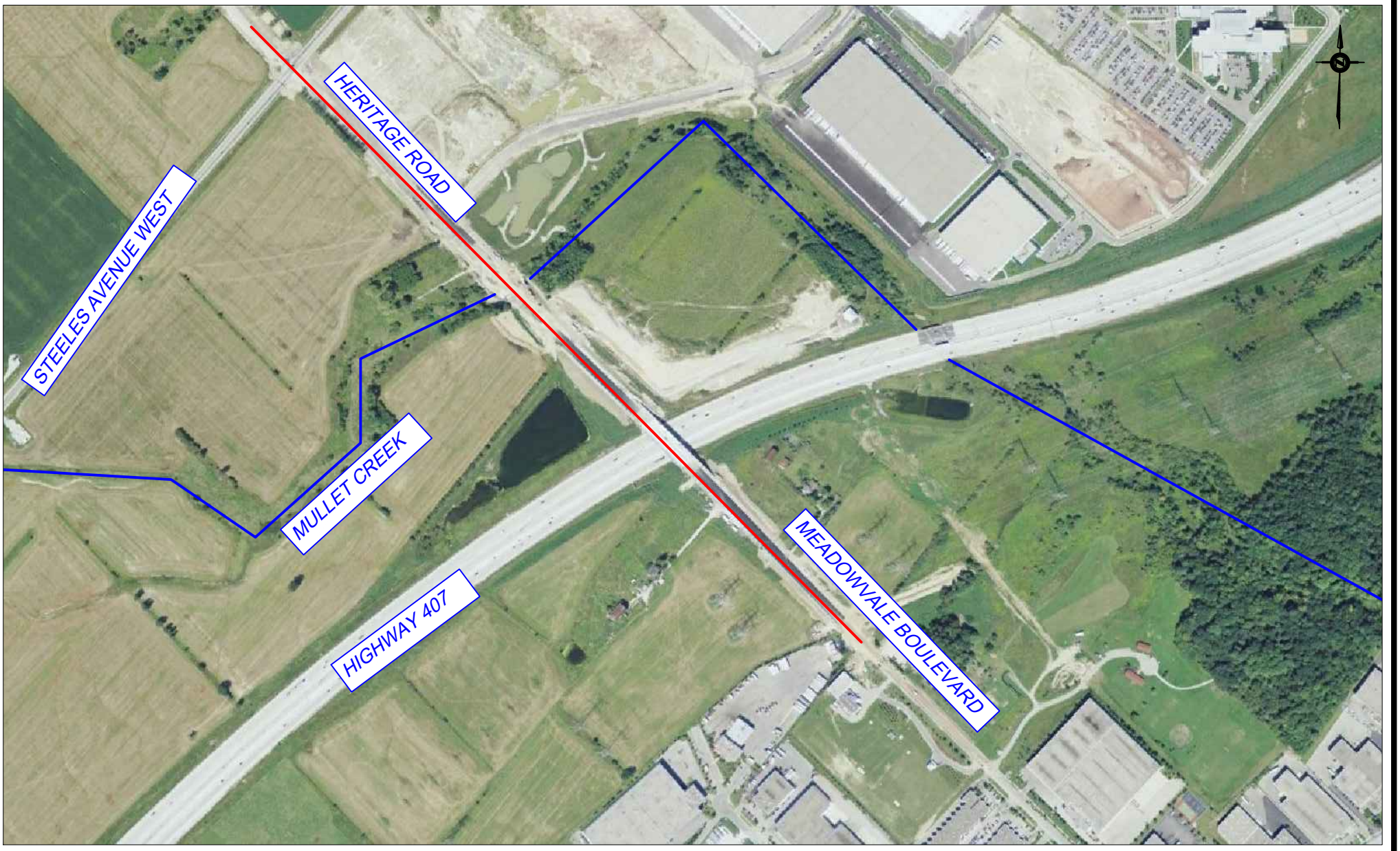
APPROVED	M.A.				



REFERENCE:
THIS FIGURE WAS PREPARED FROM GOOGLE EARTH, IMAGERY DATE 2010

LEGEND:

PROPOSED WATERMAIN LINE

REGION MUNICIPALITY OF PEEL.

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
HERITAGE ROAD, BRAMPTON, ONTARIO

2010 AERIAL PHOTOGRAPH

Peto MacCallum Ltd.
CONSULTING ENGINEERS

DRAWN	J.N	DATE	SCALE	PML REF.	FIG. NO.
CHECKED	S.T.	AUG 2021	1:5,000	20TF018	6
APPROVED	M.A.				

REFERENCE:
THIS FIGURE WAS PREPARED FROM GOOGLE EARTH, IMAGERY DATE 2019

LEGEND:

PROPOSED WATERMAIN LINE

REGION MUNICIPALITY OF PEEL.

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
HERITAGE ROAD, BRAMPTON , ONTARIO

2019 AERIAL PHOTOGRAPH

Peto MacCallum Ltd.
CONSULTING ENGINEERS

DRAWN	J.N.	DATE	SCALE	PML REF.	FIG. NO.
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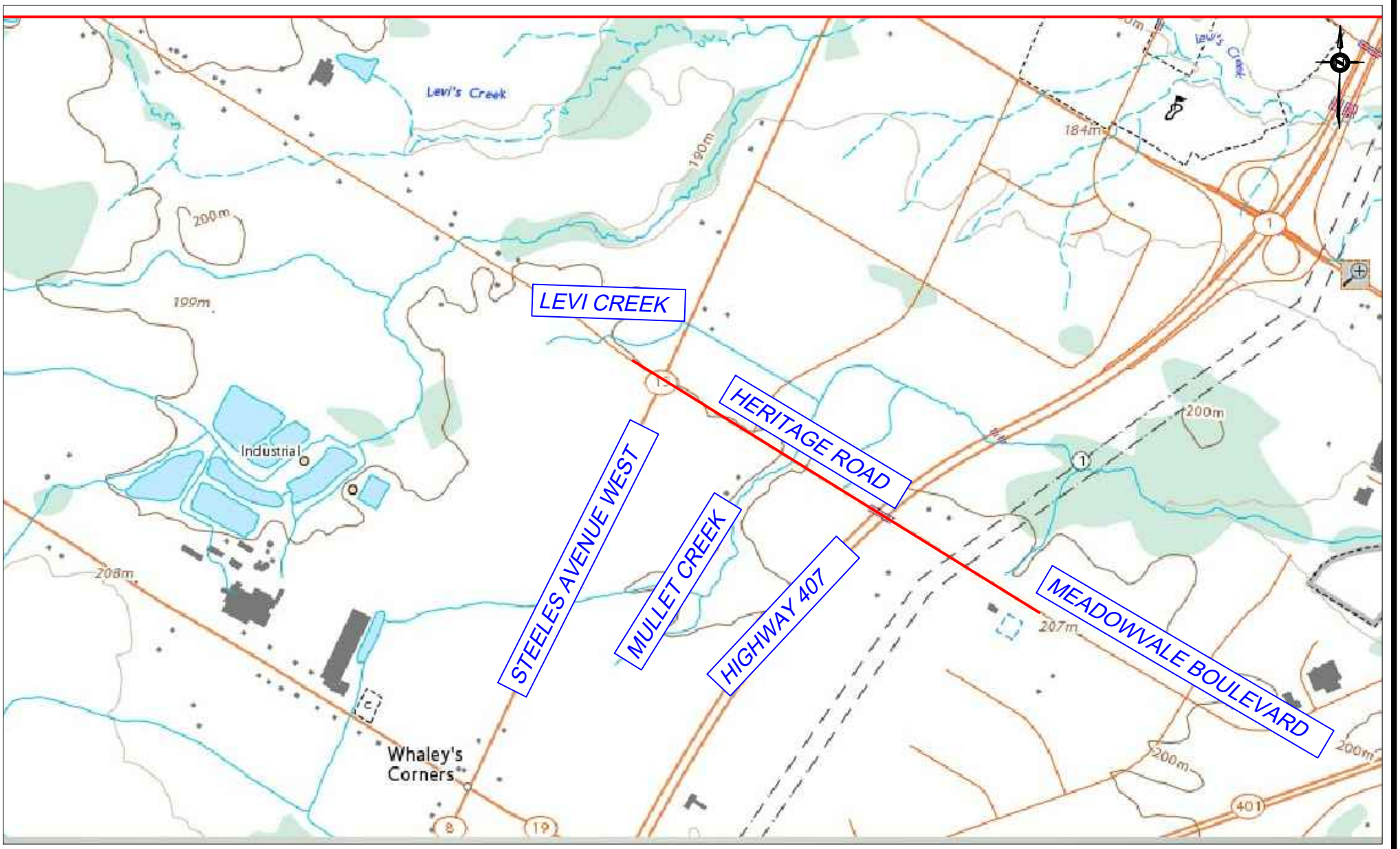
APPROVED	M.A.				



REFERENCE:
THIS FIGURE WAS PREPARED FROM NATURAL RESOURCES CANADA-THE ATLAS OF CANADA, 2018

LEGEND:

PROPOSED WATERMAIN LINE

REGION MUNICIPALITY OF PEEL.

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
HERITAGE ROAD, BRAMPTON, ONTARIO

TOPOGRAPHIC MAP

Peto MacCallum Ltd.
CONSULTING ENGINEERS

		DATE	SCALE	PML REF.	FIG. NO.
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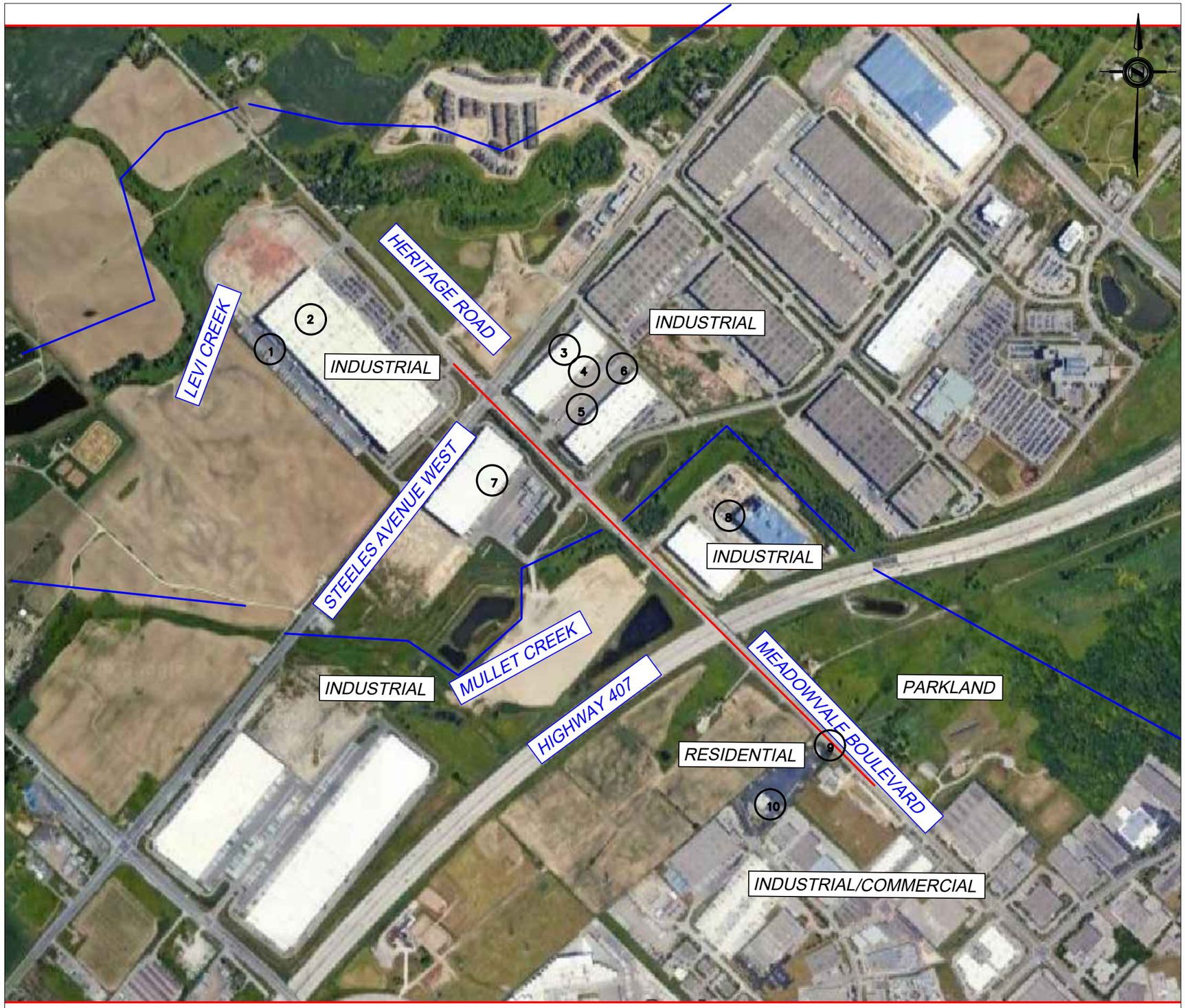
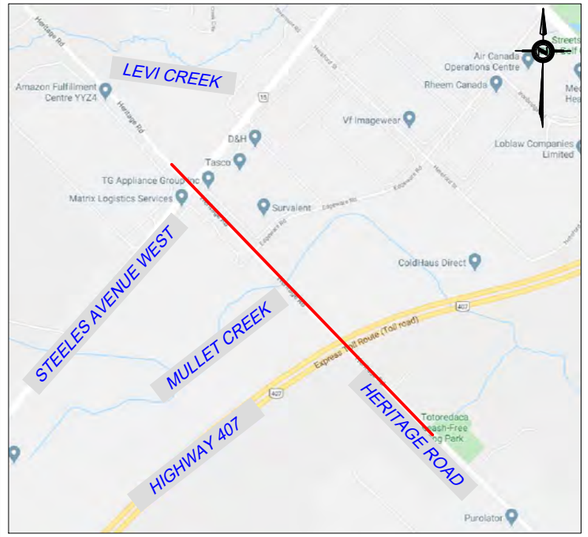
CHECKED	S.T.				
APPROVED	M.A.				





KEY PLAN

HERITAGE ROAD

LEGEND:

- PROPOSED WATERMAIN LINE
- CREEKS
- (1) COMMERCIAL TRUCKING AND CONTAINER TERMINALS (AMAZON FULFILLMENT CENTER)
- (2) LIGHT FUELS AND PETROLEUM DISTILLATES USE (AMAZON FULFILLMENT CENTER)
- (3) COMMERCIAL TRUCKING AND CONTAINER TERMINALS (TASCO AND D & H SERVICES)
- (4) COMMERCIAL TRUCKING AND CONTAINER TERMINALS (SURVALENT & G&W CANADA)
- (5) ELECTRONIC AND COMPUTER EQUIPMENT MANUFACTURING (SURVALENT)
- (6) TRANSFORMER MANUFACTURING, PROCESSING AND USE (G&W CANADA)
- (7) COMMERCIAL TRUCKING AND CONTAINER TERMINALS (MATRIX LOGISTICS SERVICES)
- (8) COMMERCIAL TRUCKING AND CONTAINER TERMINALS (SCI)
- (9) GASOLINE AND ASSOCIATED PRODUCTS IN FIXED TANKS (PENSKE TRUCK RENTAL)
- (10) STORAGE,MAINTENANCE,FUELING AND REPAIR OF EQUIPMENT, VEHICLES AND MATERIAL (PENSKE TRUCK RENTAL)

REFERENCE:

THIS DRAWING WAS PRODUCED FROM GOOGLE MAPS, IMAGERY DATE 2019.

REGIONAL MUNICIPALITY OF PEEL.

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT

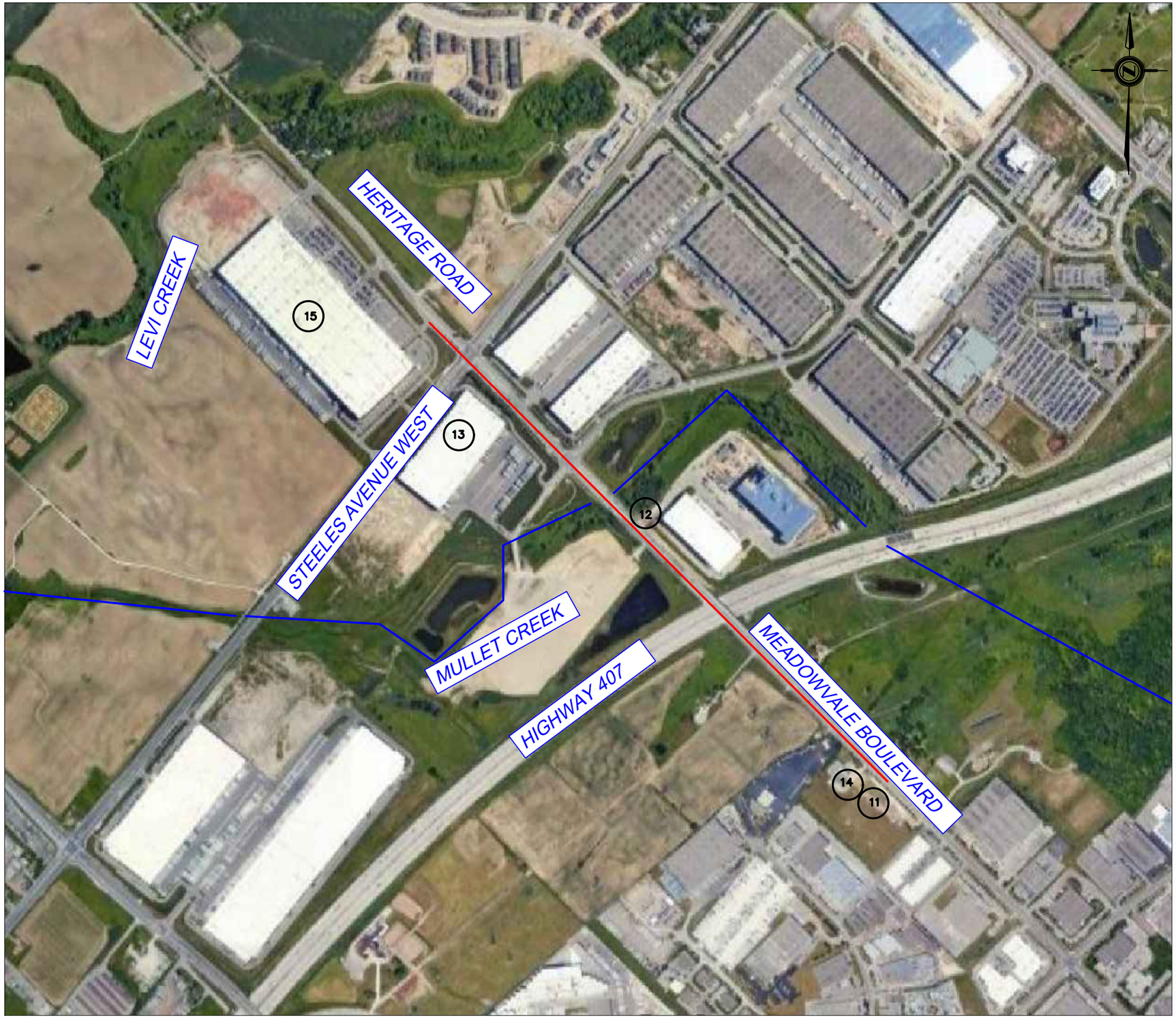
PROPOSED WATERMAIN LINE

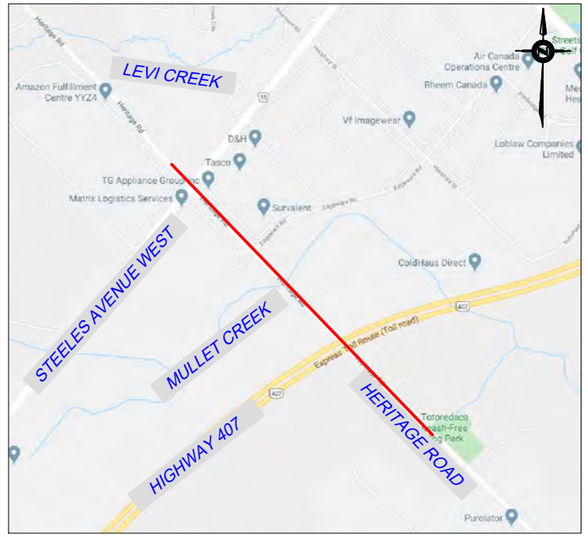
HERITAGE ROAD, BRAMPTON, ONTARIO

SITE AND SURROUNDING AREA FEATURES

PML Peto MacCallum Ltd.
CONSULTING ENGINEERS

DRAWN	J.N.	DATE	SCALE	PML REF.	DWG. NO.
CHECKED	S.T.	AUG 2021	1:10000	20TF018	1
APPROVED	M.A.				





KEY PLAN

HERITAGE ROAD

LEGEND:

- PROPOSED WATERMAIN LINE
- CREEKS

(11) LIGHT FUEL USE (ONTARIO CLEAN WATER AGENCY)
(12) WASTE WATER SPILL
(13) DIESEL FUEL SPILL (CANADA CARTAGE LIMITED)
(14) CHLORINATED WATER SPILL (ONTARIO CLEAN WATER AGENCY)
(15) DIESEL FUEL SPILL (AMAZON FULFILLMENT CENTER)

REFERENCE:

THIS DRAWING WAS PRODUCED FROM GOOGLE MAPS, IMAGERY DATE 2019.

REGIONAL MUNICIPALITY OF PEEL.

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT

PROPOSED WATERMAIN LINE

HERITAGE ROAD, BRAMPTON, ONTARIO

SITE AND SURROUNDING AREA FEATURES

PML Peto MacCallum Ltd.
CONSULTING ENGINEERS

DRAWN	J.N.	*DATE*	*SCALE*	*PML REF.*	*DWG. NO.*
CHECKED	S.T.	AUG 2021	1:10000	20TF018	1A
APPROVED	M.A.				

Plate 1: The Site at Heritage Road and Steeles Avenue West intersection.

Plate 2: 7405 E Danbro Cres (Penske Truck Rental), looking west from the east end of the property.

Plate 3: 7405 E Danbro Cres (Penske Truck Rental), Aboveground Storage Tank (AST), located at the east end of the property.

Plate 4: 7405 E Danbro Cres (Penske Truck Rental), Underground Storage Tank (USTs), located at the east end of the property.

Plate 5: 7405 E Danbro Cres (Penske Truck Rental), truck storage located on the east side of the property.

Plate 6: 7405 E Danbro Cres (Penske Truck Rental), truck maintenance facility located at the west end of the property.

Plate 7: Meadowvale North Reservoir & Pumping Station at 2720 Meadowvale Blvd.

Plate 8: Rural property at 7696 Heritage Rd, looking west from the east end of property.

Plate 9: Highway 407, looking west from the Heritage Road bridge.

Plate 10: Totoredaca Park at 2715 Meadowvale Blvd, looking east from Heritage Road.

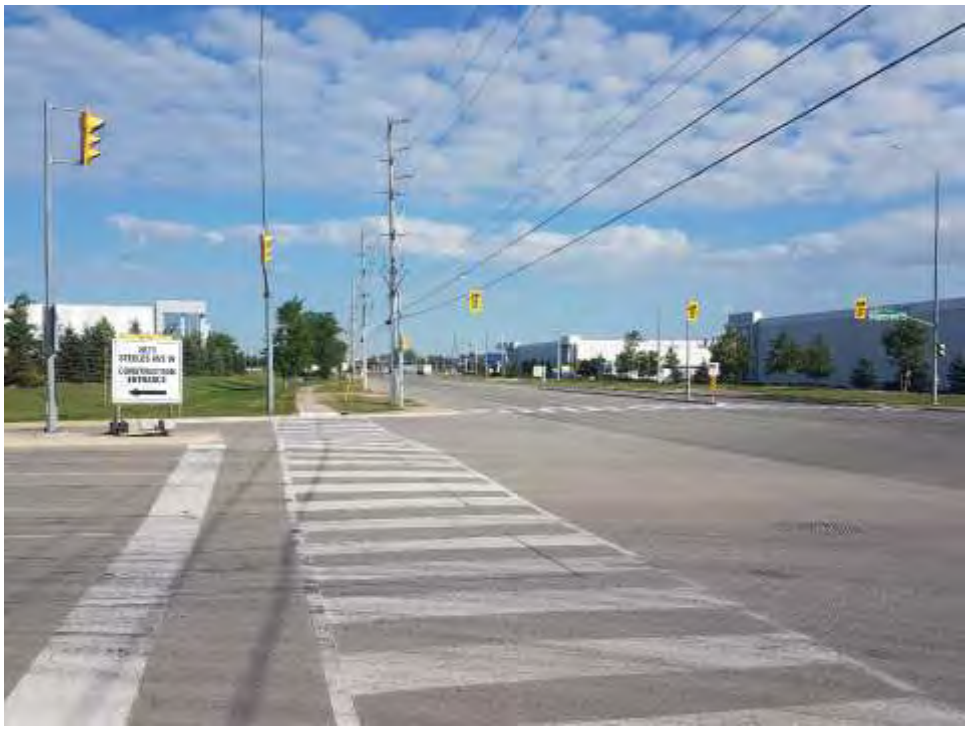


Plate 11: Industrial properties all along the Site, Heritage Road.

APPENDIX A

Ministry of the Environment, Conservation and Parks (MECP) Water Well Records

MECP WELL RECORD TABLE ABBREVIATIONS AND DESCRIPTIONS

Header Descriptions

ABBREVIATION	DESCRIPTION
UTM	UTM in Zone, Easting, Northing and Datum is NAD83
LOT	UTM estimated from Centroid of Lot
W	UTM not from Lot Centroid
DATE CNTR	Date Work Completed and Well Contractor Licence Number
CASING DIA	Casing diameter in inches
WATER	Unit of Depth in Feet. See below for Meaning of Code
PUMP TEST	Static Water Level in Feet / Water Level After Pumping in Feet / Pump Test Rate in GPM / Pump Test Duration in Hour:Minutes
WELL USE	See below for Meaning of Code
SCREEN	Screen Depth and Length in feet
WELL	Well ID, AUDIT #, Well Tag, A for abandonment; P for Partial Data Entry Only
FORMATION	See below for Meaning of Code

Meaning of Core Material and Descriptive Terms

ABBV	DESCRIPTION	ABBV	DESCRIPTION	ABBV	DESCRIPTION	ABBV	DESCRIPTION
CLN	CLEAN	FILL	FILL	MARL	MARL	SILT	SILT
DRY	DRY	FLDS	FELDSPAR	MGRD	MEDIUM-GRAINED	SLTE	SLATE
QTZ	QUARTZ	FLNT	FLINT	MGVL	MEDIUM GRAVEL	SLTY	SILTY
BLDR	BOULDERS	FOSS	FOSILIFEROUS	MRBL	MARBLE	SNDS	SANDSTONE
BSLT	BASALT	FSND	FINE SAND	MSND	MEDIUM SAND	SNDY	SAN DY
CGRD	COARSE-GRAINED	GNIS	GNEISS	MUCK	MUCK	SOFT	SOFT
CGVL	COARSE GRAVEL	GRNT	GRANITE	OBDN	OVERBURDEN	SPST	SOAPSTONE
CHRT	CHERT	GRSN	GREENSTONE	PCKD	PACKED	STKY	STICKY
CLAY	CLAY	GRVL	GRAVEL	PEAT	PEAT	STNS	STONES
CLYY	CLAYEY	GRWK	GREYWACKE	PGVL	PEA GRAVEL	STNY	STONEY
CMTD	CEMENTED	GVLY	GRAVELLY	PORS	POROUS	THIK	THICK
CONG	CONGLOMERATE	GYPS	GYPSUM	PRDG	PREVIOUSLY DUG	THIN	THIN
CRYS	CRYSTALLINE	HARD	HARD	PRDR	PREV. DRILLED	TILL	TILL
CSND	COARSE SAND	HPAN	HARDPAN	QRTZ	QUARTZITE	UNKN	UNKNOWN TYPE
DKCL	DARK-COLOURED	IRFM	IRON FORMATION	QSND	QUICKSAND	VERY	VERY
DLMT	DOLOMITE	LIMY	LIMY	ROCK	ROCK	WBRG	WATER-BEARING
DNSE	DENSE	LMSN	LIMESTONE	SAND	SAND	WDFR	WOOD FRAGMENTS
DRTY	DIRTY	LOAM	TOPSOIL	SHLE	SHALE	WTHD	WEATHERED
FCRD	FRACTURED	LOOS	LOOSE	SHLY	SHALY		
FGRD	FINE-GRAINED	LTCL	LIGHT-COLOURED	SHRP	SHARP		
FGVL	FINE GRAVEL	LYRD	LAYERED	SHST	SCHIST		

Core Color

ABBV	DESCRIPTION
WHIT	WHITE
GREY	GREY
BLUE	BLUE
GREN	GREEN
YLLW	YELLOW
BRWN	BROWN
RED	RED
BLC K	BLACK
BLGY	BLUE-GREY

Well Use

ABBV	DESCRIPTION
DO	Domestic
ST	Livestock
IR	Irrigation
IN	Industrial
CO	Commercial
MN	Municipal
PS	Public
AC	Cooling And AC
NU	Not Used
OT	Other
TH	Test Hole
DE	Dewatering
MO	Monitoring
MT	Monitoring and Test Hole

Water Kind

ABBV	DESCRIPTION
FR	Fresh
SA	Salty
SU	Sulphur
MN	Minerial
UK	Not Stated
GS	Gas
IR	Iron
UT	Untested
OT	Other

MECP WELL RECORD - PML PROJECT 20TF018

TOWNSHIP CON LOT	UTM ZONE	EASTING	NORTHING		DATE CNTR	CASING DIA	WATER	PUMP TEST	WELL USE	SCREEN	WELL	FORMATION
BRAMPTON CITY (TORON HS W 05 014	17	598537	4829518	W	2018/01 7407	6			DO		7306339 (Z247324) A	
MISSISSAUGA CITY	17	598889	4829109	W	2017/03 7221	2			MO		7284262 (Z256282) A177405 A	
MISSISSAUGA CITY	17	598754	4829123	W	2017/03 7221	2			MO		7284261 (Z256283) A165294 A	
BRAMPTON CITY (TORON	17	598695	4829452	W	2015/05 6607		UT		NU		7254116 (Z206016) A	
MISSISSAUGA CITY	17	598746	4828963	W	2015/03 7360						7240961 (C28405) A177405 P	
BRAMPTON CITY (TORON HS W 06 014	17	598579	4829422	W	2015/02 7501				MO		7248915 (Z172788) A146832 A	
MISSISSAUGA CITY	17	598754	4829123	W	2015/02 7501	2	UT 0020		MT	0030 5	7239936 (Z188785) A165294	BRWN CLAY SILT 0020 BRWN CLAY SOFT 0030 BRWN CLAY SILT WBRG 0035
BRAMPTON CITY (TORON	17	598583	4829419	W	2014/04 6607	2	UT 0025		MO	0025 10	7221779 (Z162626) A146832	BRWN SAND FILL 0001 BRWN CLAY SILT HARD 0025 GREY SAND SILT DNSE 0050
MISSISSAUGA CITY	17	598918	4828941	W	2013/03 7241	20			MO	0008 10	7201255 (Z163205) A119398	
MISSISSAUGA CITY	17	599009	4828931	W	2013/03 7241	2			MO		7198900 (Z163206) A119400	
BRAMPTON CITY	17	598007	4830085	W	2007/04 6809	2				0045 10	7044097 (Z70834) A052981	BRWN LOAM 0002 GREY SILT CLAY TILL 0045 SAND SILT GRVL 0055
BRAMPTON CITY (TORON	17	598251	4829751	W	2004/11 7230	0.75	7		NU	0015 5	4909675 (Z22511) A019975	BRWN FILL SAND CLAY 0005 BRWN SILT CLAY SAND 0020
BRAMPTON CITY (TORON HS W 05 014	17	598553	4829446	W	2002/03 4868	30 24 20	0069 FR 00	16/37/3/ 3:30	DO		4908919 (207055)	BRWN LOAM 0001 GREY CLAY BLDR SAND 0067 RED CLAY HARD 0068 RED SHLE LMSN VERY 0074
BRAMPTON CITY (TORON HS W 05 014	17	598553	4829446	W	2002/03 4868				DO		4908920 (207054) A	
BRAMPTON CITY (TORON HS W 05 014	17	598553	4829446	W	2002/03 4868				DO		4908918 (207056) A	
BRAMPTON CITY (CHING HS W 05 014	17	598650	4829377	W	2001/07 1737						4908913 (233982) A	
BRAMPTON CITY (CHING HS W 05 014	17	598650	4829377	W	2001/03 1737	6	FR 0049	14/39/2/ 2:	DO	0050 3	4908752 (218077)	BRWN CLAY SAND SILT 0018 GREY CLAY SAND SILT 0050 RED SHLE SOFT 0053
BRAMPTON CITY (CHING HS W 013	17	598170	4829788	W	1987/05 1660	6 6			IN		4906652 (NA) A	BRWN CLAY HARD 0027 GREY CLAY HARD 0052 GREY SILT SOFT 0064 GREY SILT STNS HARD 0065 RED SHLE ROCK 0160

BRAMPTON CITY (TORON HS W 05 014	17	598654	4829473	W	1986/10 4005	6	FR 0068	50/75//2:0	DO		4906501 (00296)	BRWN CLAY SAND LOOS 0003 BRWN CLAY SAND BLDR 0005 BRWN CLAY SNDY LOOS 0011 GREY FSND GRVL LOOS 0025 GREY CLAY SAND GRVL 0030 GREY CLAY LOOS 0036 GREY CLAY FGVL PCKD 0052 RED SHLE HARD 0075
BRAMPTON CITY (TORON HS W 06 015	17	598034	4829703	W	1972/07 1307	30	FR 0067	20/60/0/1:0	DO		4903872 ()	BRWN OBDN 0010 GREY CLAY 0064 GREY SAND BLDR 0067
BRAMPTON CITY (TORON HS W 06 015	17	598110	4829757	W	1962/11 1612	5	FR 0080	34/64/4/2:0	DO		4902696 ()	PRDR 0080 MSND GRVL 0088
BRAMPTON CITY (TORON HS W 06 015	17	598148	4829679	W	1962/03 4101	5	FR 0078	35/40/10/3:0	DO		4902695 ()	BRWN CLAY 0035 BLUE CLAY STNS 0050 HPAN 0078 BLUE GRVL 0080
MISSISSAUGA CITY HS W 06 014	17	598616	4829355	W	1961/08 1325	30	FR 0060	35///:	ST		4902693 ()	BRWN CLAY 0016 BLUE CLAY MSND 0060

APPENDIX B

ERIS Environmental Risk Information Services Report

ENVIRONMENTAL RISK INFORMATION SERVICES

DATABASE REPORT

Project Property:	*Watermain Replacement on Heritage Road* *Heritage Road* *Brampton ON L6Y 0B3*
Project No:	*starafder@petomaccallum.com*
Report Type:	*Quote - Custom-Build Your Own Report*
Order No:	*20200806070*
Requested by:	*Peto MacCallum Ltd.*
Date Completed:	*August 10, 2020*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Table of Contents

Table of Contents.....2
Executive Summary.....3
Executive Summary: Report Summary.....4
Executive Summary: Site Report Summary - Project Property.....6
Executive Summary: Site Report Summary - Surrounding Properties.....7
Executive Summary: Summary By Data Source.....15
Map.....24
Aerial.....25
Topographic Map.....26
Detail Report.....27
Unplottable Summary.....72
Unplottable Report.....74
Appendix: Database Descriptions.....86
Definitions.....95

Executive Summary

Property Information:

Project Property:	*Watermain Replacement on Heritage Road* *Heritage Road Brampton ON L6Y 0B3*
Project No:	*starafder@petomaccallum.com*

Order Information:

Order No:	*20200806070*
Date Requested:	*August 6, 2020*
Requested by:	*Peto MacCallum Ltd.*
Report Type:	*Quote - Custom-Build Your Own Report*

Historical/Products:

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Boundary to 0.25km	Total
AAGR	Abandoned Aggregate Inventory	N	-	-	-
AGR	Aggregate Inventory	N	-	-	-
AMIS	Abandoned Mine Information System	N	-	-	-
ANDR	Anderson's Waste Disposal Sites	N	-	-	-
AST	Aboveground Storage Tanks	Y	0	0	0
AUWR	Automobile Wrecking & Supplies	N	-	-	-
BORE	Borehole	N	-	-	-
CA	Certificates of Approval	Y	1	12	13
CDRY	Dry Cleaning Facilities	N	-	-	-
CFOT	Commercial Fuel Oil Tanks	N	-	-	-
CHEM	Chemical Register	N	-	-	-
CNG	Compressed Natural Gas Stations	N	-	-	-
COAL	Inventory of Coal Gasification Plants and Coal Tar Sites	N	-	-	-
CONV	Compliance and Convictions	N	-	-	-
CPU	Certificates of Property Use	N	-	-	-
DRL	Drill Hole Database	N	-	-	-
EASR	Environmental Activity and Sector Registry	N	-	-	-
EBR	Environmental Registry	N	-	-	-
ECA	Environmental Compliance Approval	N	-	-	-
EEM	Environmental Effects Monitoring	N	-	-	-
EHS	ERIS Historical Searches	N	-	-	-
EIIS	Environmental Issues Inventory System	N	-	-	-
EMHE	Emergency Management Historical Event	N	-	-	-
EPAR	Environmental Penalty Annual Report	N	-	-	-
EXP	List of Expired Fuels Safety Facilities	N	-	-	-
FCON	Federal Convictions	Y	0	0	0
FCS	Contaminated Sites on Federal Land	N	-	-	-
FOFT	Fisheries & Oceans Fuel Tanks	N	-	-	-
FRST	Federal Identification Registry for Storage Tank Systems (FIRSTS)	N	-	-	-
FST	Fuel Storage Tank	N	-	-	-
FSTH	Fuel Storage Tank - Historic	N	-	-	-
GEN	Ontario Regulation 347 Waste Generators Summary	Y	0	65	65
GHG	Greenhouse Gas Emissions from Large Facilities	N	-	-	-
HINC	TSSA Historic Incidents	N	-	-	-
IAFT	Indian & Northern Affairs Fuel Tanks	N	-	-	-
INC	Fuel Oil Spills and Leaks	N	-	-	-

Database	Name	Searched	Project Property	Boundary to 0.25km	Total
LIMO	Landfill Inventory Management Ontario	N	-	-	-
MINE	Canadian Mine Locations	N	-	-	-
MNR	Mineral Occurrences	N	-	-	-
NATE	National Analysis of Trends in Emergencies System (NATES)	N	-	-	-
NCPL	Non-Compliance Reports	N	-	-	-
NDFT	National Defense & Canadian Forces Fuel Tanks	N	-	-	-
NDSP	National Defense & Canadian Forces Spills	N	-	-	-
NDWD	National Defence & Canadian Forces Waste Disposal Sites	N	-	-	-
NEBI	National Energy Board Pipeline Incidents	N	-	-	-
NEBP	National Energy Board Wells	N	-	-	-
NEES	National Environmental Emergencies System (NEES)	N	-	-	-
NPCB	National PCB Inventory	Y	0	0	0
NPRI	National Pollutant Release Inventory	N	-	-	-
OGWE	Oil and Gas Wells	N	-	-	-
OOGW	Ontario Oil and Gas Wells	N	-	-	-
OPCB	Inventory of PCB Storage Sites	N	-	-	-
ORD	Orders	N	-	-	-
PAP	Canadian Pulp and Paper	N	-	-	-
PCFT	Parks Canada Fuel Storage Tanks	N	-	-	-
PES	Pesticide Register	N	-	-	-
PINC	Pipeline Incidents	N	-	-	-
PRT	Private and Retail Fuel Storage Tanks	Y	0	0	0
PTTW	Permit to Take Water	N	-	-	-
REC	Ontario Regulation 347 Waste Receivers Summary	N	-	-	-
RSC	Record of Site Condition	Y	0	1	1
RST	Retail Fuel Storage Tanks	N	-	-	-
SCT	Scott's Manufacturing Directory	N	-	-	-
SPL	Ontario Spills	Y	0	12	12
SRDS	Wastewater Discharger Registration Database	N	-	-	-
TANK	Anderson's Storage Tanks	N	-	-	-
TCFT	Transport Canada Fuel Storage Tanks	N	-	-	-
VAR	Variances for Abandonment of Underground Storage Tanks	N	-	-	-
WDS	Waste Disposal Sites - MOE CA Inventory	N	-	-	-
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	N	-	-	-
WWIS	Water Well Information System	N	-	-	-
	Total:		1	90	91

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number
4	CA	R.M. OF PEEL	HERITAGE RD/MEADOWVALE N.P.S. BRAMPTON CITY ON	SE/9.5	1.32	27

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
1	GEN	Gay Lea Foods Co-operative Ltd BDC	7855 Heritage Road Brampton ON L6Y 0N3	ENE/201.2	-5.14	27
2	SPL	The Regional Municipality of Peel	7755 Heritage Rd Brampton ON	ENE/232.9	-4.26	27
2	SPL		7755 Heritage Rd Brampton ON L6Y 0N3	ENE/232.9	-4.26	28
2	SPL		7755 Heritage Rd Brampton ON	ENE/232.9	-4.26	28
3	GEN	G&W CANADA CORPORATION	7965 Heritage Road Brampton ON L6Y5X5	NW/93.9	-2.88	29
3	GEN	G&W CANADA CORPORATION	7965 Heritage Road Brampton ON L6Y5X5	NW/93.9	-2.88	29
3	GEN	G&W CANADA CORPORATION	7965 Heritage Road Brampton ON L6Y5X5	NW/93.9	-2.88	30
5	RSC	Orlando Corporation	2675 STEELES AVENUE WEST, BRAMPTON, ONTARIO L6Y 0B2 Brampton ON	WNW/103.5	0.00	30
5	GEN	Matrix Logistics	2675 Steeles Ave.West Brampton ON L6Y 0B2	WNW/103.5	0.00	32
5	GEN	Matrix Logistics	2675 Steeles Ave.West Brampton ON L6Y 0B2	WNW/103.5	0.00	32
5	GEN	Matrix Logistics	2675 Steeles Ave.West Brampton ON L6Y 0B2	WNW/103.5	0.00	33
5	GEN	Matrix Logistics Churchill	2675 Steeles Ave.West Brampton ON L6Y 0B2	WNW/103.5	0.00	33

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
5	GEN	Matrix Logistics Churchill	2675 Steeles Ave.West Brampton ON L6Y 0B2	WNW/103.5	0.00	33
5	SPL	Canada Cartage Limited	2675 Steeles Ave W Brampton ON L6Y 0B3	WNW/103.5	0.00	34
6	SPL	TRANSPORT TRUCK	2377 STEELES AVE WEST/HERITAGE RD. MOTOR VEHICLE (OPERATING FLUID) BRAMPTON CITY ON L6V 3N2	NW/64.9	-1.97	34
7	GEN	RENTWAY LTD.	7405 EAST DANBRO COURT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	35
7	GEN	RENT(SEE & USE ON2055713)	7405 EAST DANBRO COURT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	35
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO COURT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	36
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	36
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	37
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	37
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	37
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	38
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON	SE/181.0	3.18	38

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	39
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	39
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	39
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	40
7	GEN	PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	SE/181.0	3.18	40
8	GEN	Regional Municipality of Peel	2625Steeles Ave Brampton ON	WNW/89.3	0.00	41
9	CA		Steeles Avenue West and Heritage Road Brampton ON	NW/13.6	-0.44	41
10	SPL		STEELES AVENUE,200 M WEST OF HERITAGE ROAD<UNOFFICIAL> Brampton ON	WNW/198.0	0.00	41
11	CA	DI BLASIO CONSTRUCTION LTD.	7385 DANBRO CRESCENT (SWM) MISSISSAUGA ON	SSE/237.0	4.00	42
11	GEN	BUSCH VACUUM TECHNICS	7385 EAST DANBRO CRESCENT MISSISSAUGA ON L5N6P8	SSE/237.0	4.00	42
11	GEN	BUSCH VACUUM TECHNICS	7385 EAST DANBRO CRESCENT MISSISSAUGA ON L5N6P8	SSE/237.0	4.00	43
12	GEN	ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON L5E1W6	SE/95.8	2.00	43
12	GEN	ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON L5E1W6	SE/95.8	2.00	44

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
12	GEN	ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON L5E1W6	SE/95.8	2.00	44
12	GEN	ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON L5E1W6	SE/95.8	2.00	44
12	GEN	ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON L5E1W6	SE/95.8	2.00	45
13	GEN	ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	SE/95.8	2.00	45
13	SPL	Lexsan Electrical<UNOFFICIAL>	2720 Meadowvale Blvd. Mississauga ON	SE/95.8	2.00	45
13	CA	The Regional Municipality of Peel	2720 Meadowvale Blvd Mississauga ON	SE/95.8	2.00	46
13	GEN	ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	SE/95.8	2.00	46
13	GEN	Region of peel pumping station	2720 meadowvale Blvd. mississauga ON	SE/95.8	2.00	47
13	GEN	ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	SE/95.8	2.00	47
13	GEN	ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	SE/95.8	2.00	47
13	GEN	ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	SE/95.8	2.00	48
13	GEN	ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	SE/95.8	2.00	48
13	SPL		2720 Meadowvale Boulevard Mississauga ON	SE/95.8	2.00	48

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
14	CA		7345 Danbro Crescent, Pt. Lot 12, Conc. 6 Mississauga ON	SE/241.3	4.35	49
14	GEN	Danbro Distribution Centre	7345 East Danbro Crescent Mississauga ON L5N 6P8	SE/241.3	4.35	49
14	GEN	SKD Danbro Division	7345 East Danbro Crescent Mississauga ON L5N 6P8	SE/241.3	4.35	50
14	GEN	SKD Danbro Division	7345 East Danbro Crescent Mississauga ON L5N 6P8	SE/241.3	4.35	50
14	GEN	Envirotech Office Systems	7345 East Danbro Cres Mississauga ON	SE/241.3	4.35	51
14	GEN	Envirotech Office Systems	7345 East Danbro Cres Mississauga ON L5N 6P8	SE/241.3	4.35	51
14	GEN	Envirotech Office Systems	7345 East Danbro Cres Mississauga ON L5N 6P8	SE/241.3	4.35	51
14	GEN	Envirotech Office Systems	7345 East Danbro Cres Mississauga ON L5N 6P8	SE/241.3	4.35	52
14	GEN	Envirotech Office Systems	7345 East Danbro Cres Mississauga ON L5N 6P8	SE/241.3	4.35	52
14	GEN	Envirotech Office Systems	7345 East Danbro Cres Mississauga ON L5N 6P8	SE/241.3	4.35	52
15	GEN	Amazon Canada Fulfillment Services, Inc	8050 Heritage Parkway Brampton ON L6Y0C9	WNW/119.6	0.00	53
15	GEN	Amazon Canada Fulfillment Services, Inc YYZ4	8050 Heritage Parkway Brampton ON L6Y0C9	WNW/119.6	0.00	53
15	GEN	Amazon Canada Fulfillment Services, Inc YYZ4	8050 Heritage Parkway Brampton ON L6Y0C9	WNW/119.6	0.00	54

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
15	SPL	Amazon Canada Fulfillment Services Inc.	8050 Heritage Rd Brampton ON L6Y 0C9	WNW/119.6	0.00	56
16	CA	The Corporation of the City of Brampton	Heritage Road, 200 metres north of Steeles Avenue West to City of Brampton south Brampton ON	NW/104.0	-1.27	56
17	GEN	Medical Environmental Instrument Components Inc	2660 Meadowvale Blvd, Unit 5 Mississauga ON L5N 6M6	SE/178.4	2.99	56
18	SPL	RYDER TRUCK RENTAL CANADA LTD.	2650 MEADOWVALE BLVD. MOTOR VEHICLE (OPERATING FLUID) MISSISSAUGA CITY ON L5N 6M5	SE/198.2	3.09	57
18	CA	121625 Canada Inc.	2650 Meadowvale Blvd Units 8-12 Mississauga ON L5N 6M5	SE/198.2	3.09	57
18	SPL		2650 Meodowvale Blvd Mississauga ON	SE/198.2	3.09	57
19	CA	KEANALL HOLDINGS LIMITED	SWM-2695 MEADOWVALE BLVD. MISSISSAUGA ON L5N 8A3	ESE/233.8	1.00	58
19	GEN	CFM CANADA	2695 MEADOWVALE BLVD MISSISSAUGA ON L5N 8A3	ESE/233.8	1.00	58
19	CA	CFM Majestic Inc.	2695 Meadowale Boulevard Mississauga ON	ESE/233.8	1.00	59
19	GEN	Lorama Group Inc.	2695 Meadowvale Blvd. Mississauga ON L5N 8A3	ESE/233.8	1.00	59
19	GEN	Lorama Group Inc.	2695 Meadowvale Blvd. Mississauga ON L5N 8A3	ESE/233.8	1.00	59
20	CA		2600 Meadowvale Boulevard Mississauga ON L5N 8C2	SE/249.6	2.00	60
20	GEN	PUROLATOR COURIER LTD.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	SE/249.6	2.00	60

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
20	CA	Purolator Courier Ltd.	2600 Meadowvale Blvd Mississauga ON L5N 8C2	SE/249.6	2.00	61
20	CA	Purolator Courier Ltd.	2600 Meadowvale Blvd Mississauga ON L5N 8C2	SE/249.6	2.00	61
20	GEN	PUROLATOR COURIER LTD.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	SE/249.6	2.00	62
20	GEN	PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	SE/249.6	2.00	63
20	GEN	PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	SE/249.6	2.00	63
20	GEN	PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	SE/249.6	2.00	64
20	GEN	PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON	SE/249.6	2.00	65
20	GEN	PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	SE/249.6	2.00	66
20	GEN	PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	SE/249.6	2.00	67
20	GEN	PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	SE/249.6	2.00	68
20	GEN	PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	SE/249.6	2.00	68
20	SPL	Alectra Utilities Corporation	2600 Meadowvale blvd Mississauga ON	SE/249.6	2.00	69
20	GEN	PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	SE/249.6	2.00	70

Map Key	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number

Executive Summary: Summary By Data Source

CA - Certificates of Approval

A search of the CA database, dated 1985-Oct 30, 2011* has found that there are 12 CA site(s) within approximately 0.25 kilometers of the project property.

Site	Address	Distance (m)	Map Key
R.M. OF PEEL	HERITAGE RD/MEADOWVALE N.P.S. BRAMPTON CITY ON	9.5	4
	Steeles Avenue West and Heritage Road Brampton ON	13.6	9
DI BLASIO CONSTRUCTION LTD.	7385 DANBRO CRESCENT (SWM) MISSISSAUGA ON	237.0	11
The Regional Municipality of Peel	2720 Meadowvale Blvd Mississauga ON	95.8	13
	7345 Danbro Crescent, Pt. Lot 12, Conc. 6 Mississauga ON	241.3	14
The Corporation of the City of Brampton	Heritage Road, 200 metres north of Steeles Avenue West to City of Brampton south Brampton ON	104.0	16
121625 Canada Inc.	2650 Meadowvale Blvd Units 8-12 Mississauga ON L5N 6M5	198.2	18
KEANALL HOLDINGS LIMITED	SWM-2695 MEADOWVALE BLVD. MISSISSAUGA ON L5N 8A3	233.8	19
CFM Majestic Inc.	2695 Meadowale Boulevard Mississauga ON	233.8	19

Site	Address	Distance (m)	Map Key
	2600 Meadowvale Boulevard Mississauga ON L5N 8C2	249.6	20
Purolator Courier Ltd.	2600 Meadowvale Blvd Mississauga ON L5N 8C2	249.6	20
Purolator Courier Ltd.	2600 Meadowvale Blvd Mississauga ON L5N 8C2	249.6	20

GEN - Ontario Regulation 347 Waste Generators Summary

A search of the GEN database, dated 1986-Apr 30, 2020 has found that there are 65 GEN site(s) within approximately 0.25 kilometers of the project property.

Site	Address	Distance (m)	Map Key
Gay Lea Foods Co-operative Ltd BDC	7855 Heritage Road Brampton ON L6Y 0N3	201.2	1
G&W CANADA CORPORATION	7965 Heritage Road Brampton ON L6Y5X5	93.9	3
G&W CANADA CORPORATION	7965 Heritage Road Brampton ON L6Y5X5	93.9	3
G&W CANADA CORPORATION	7965 Heritage Road Brampton ON L6Y5X5	93.9	3
Matrix Logistics	2675 Steeles Ave.West Brampton ON L6Y 0B2	103.5	5
Matrix Logistics	2675 Steeles Ave.West Brampton ON L6Y 0B2	103.5	5
Matrix Logistics	2675 Steeles Ave.West Brampton ON L6Y 0B2	103.5	5

Site	Address	Distance (m)	Map Key
Matrix Logistics Churchill	2675 Steeles Ave.West Brampton ON L6Y 0B2	103.5	5
Matrix Logistics Churchill	2675 Steeles Ave.West Brampton ON L6Y 0B2	103.5	5
RENTWAY LTD.	7405 EAST DANBRO COURT MISSISSAUGA ON L5N 6P8	181.0	7
RENT(SEE & USE ON2055713)	7405 EAST DANBRO COURT MISSISSAUGA ON L5N 6P8	181.0	7
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO COURT MISSISSAUGA ON L5N 6P8	181.0	7
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	181.0	7
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	181.0	7
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	181.0	7
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	181.0	7
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	181.0	7
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON	181.0	7

Site	Address	Distance (m)	Map Key
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	181.0	7
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	181.0	7
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	181.0	7
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	181.0	7
PENSKE TRUCK LEASING CANADA INC.	7405 EAST DANBRO CRESCENT MISSISSAUGA ON L5N 6P8	181.0	7
Regional Municipality of Peel	2625Steeles Ave Brampton ON	89.3	8
BUSCH VACUUM TECHNICS	7385 EAST DANBRO CRESCENT MISSISSAUGA ON L5N6P8	237.0	11
BUSCH VACUUM TECHNICS	7385 EAST DANBRO CRESCENT MISSISSAUGA ON L5N6P8	237.0	11
ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON L5E1W6	95.8	12
ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON L5E1W6	95.8	12
ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON L5E1W6	95.8	12
ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON L5E1W6	95.8	12

Site	Address	Distance (m)	Map Key
ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON L5E1W6	95.8	12
ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	95.8	13
ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	95.8	13
Region of peel pumping station	2720 meadowvale Blvd. mississauga ON	95.8	13
ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	95.8	13
ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	95.8	13
ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	95.8	13
ONTARIO CLEAN WATER AGENCY	2720 MEADOWVALE BLVD, MISSISSAUGA ON	95.8	13
Danbro Distribution Centre	7345 East Danbro Crescent Mississauga ON L5N 6P8	241.3	14
SKD Danbro Division	7345 East Danbro Crescent Mississauga ON L5N 6P8	241.3	14
SKD Danbro Division	7345 East Danbro Crescent Mississauga ON L5N 6P8	241.3	14

Site	Address	Distance (m)	Map Key
Envirotech Office Systems	7345 East Danbro Cres Mississauga ON	241.3	14
Envirotech Office Systems	7345 East Danbro Cres Mississauga ON L5N 6P8	241.3	14
Envirotech Office Systems	7345 East Danbro Cres Mississauga ON L5N 6P8	241.3	14
Envirotech Office Systems	7345 East Danbro Cres Mississauga ON L5N 6P8	241.3	14
Envirotech Office Systems	7345 East Danbro Cres Mississauga ON L5N 6P8	241.3	14
Envirotech Office Systems	7345 East Danbro Cres Mississauga ON L5N 6P8	241.3	14
Amazon Canada Fulfillment Services, Inc	8050 Heritage Parkway Brampton ON L6Y0C9	119.6	15
Amazon Canada Fulfillment Services, Inc YYZ4	8050 Heritage Parkway Brampton ON L6Y0C9	119.6	15
Amazon Canada Fulfillment Services, Inc YYZ4	8050 Heritage Parkway Brampton ON L6Y0C9	119.6	15
Medical Environmental Instrument Components Inc	2660 Meadowvale Blvd, Unit 5 Mississauga ON L5N 6M6	178.4	17
CFM CANADA	2695 MEADOWVALE BLVD MISSISSAUGA ON L5N 8A3	233.8	19
Lorama Group Inc.	2695 Meadowvale Blvd. Mississauga ON L5N 8A3	233.8	19

Site	Address	Distance (m)	Map Key
Lorama Group Inc.	2695 Meadowvale Blvd. Mississauga ON L5N 8A3	233.8	19
PUROLATOR COURIER LTD.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	249.6	20
PUROLATOR COURIER LTD.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	249.6	20
PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	249.6	20
PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	249.6	20
PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	249.6	20
PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON	249.6	20
PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	249.6	20
PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	249.6	20
PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	249.6	20
PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	249.6	20

Site	Address	Distance (m)	Map Key
PUROLATOR INC.	2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2	249.6	20

RSC - Record of Site Condition

A search of the RSC database, dated 1997-Sept 2001, Oct 2004-May 2020 has found that there are 1 RSC site(s) within approximately 0.25 kilometers of the project property.

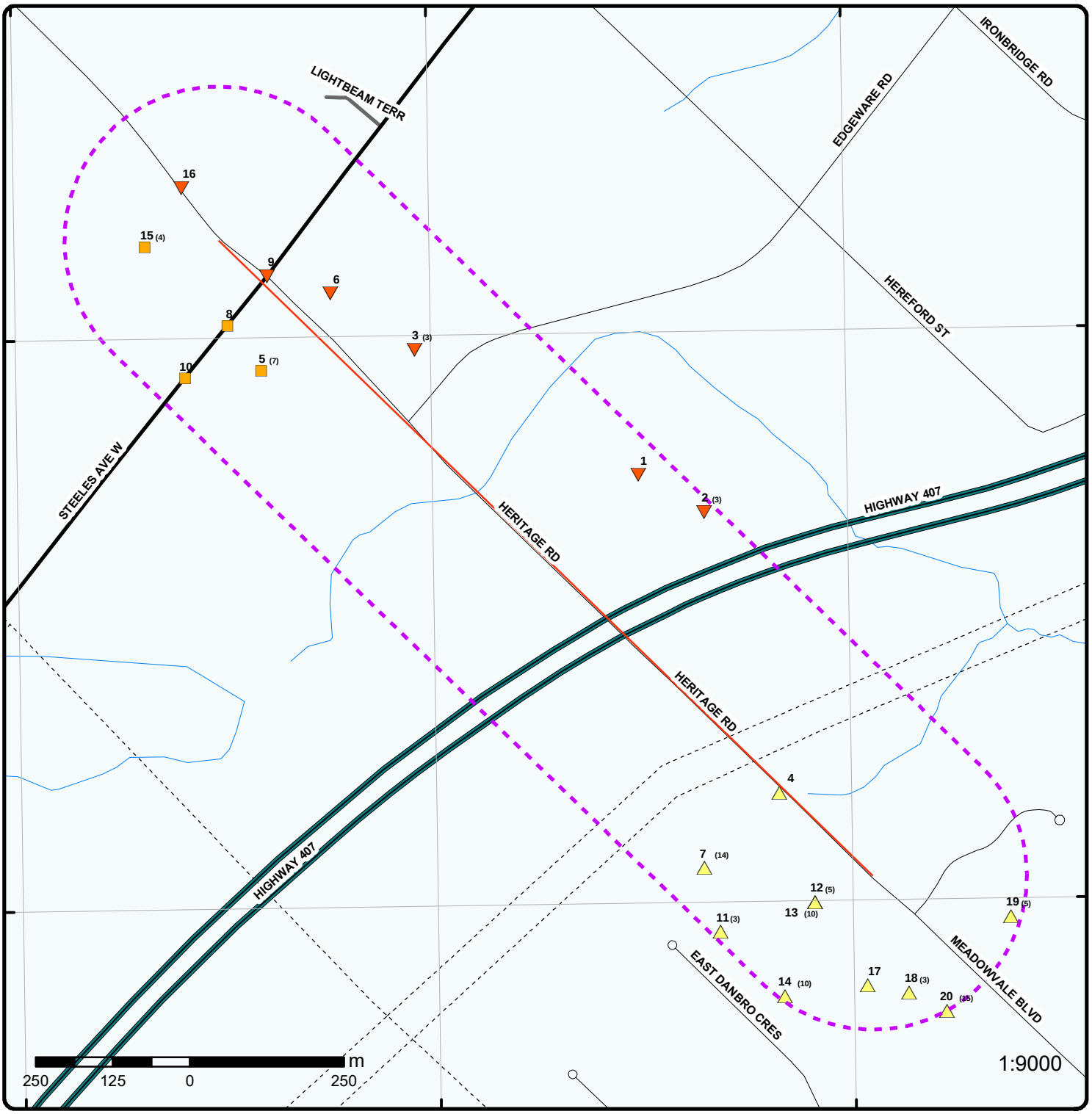
Site	Address	Distance (m)	Map Key
Orlando Corporation	2675 STEELES AVENUE WEST, BRAMPTON, ONTARIO L6Y 0B2 Brampton ON	103.5	5

SPL - Ontario Spills

A search of the SPL database, dated 1988-Nov 2019 has found that there are 12 SPL site(s) within approximately 0.25 kilometers of the project property.

Site	Address	Distance (m)	Map Key
The Regional Municipality of Peel	7755 Heritage Rd Brampton ON	232.9	2
	7755 Heritage Rd Brampton ON L6Y 0N3	232.9	2
	7755 Heritage Rd Brampton ON	232.9	2
Canada Cartage Limited	2675 Steeles Ave W Brampton ON L6Y 0B3	103.5	5
TRANSPORT TRUCK	2377 STEELES AVE WEST/HERITAGE RD. MOTOR VEHICLE (OPERATING FLUID) BRAMPTON CITY ON L6V 3N2	64.9	6
	STEELES AVENUE,200 M WEST OF HERITAGE ROAD<UNOFFICIAL> Brampton ON	198.0	10

Site	Address	Distance (m)	Map Key
Lexsan Electrical<UNOFFICIAL>	2720 Meadowvale Blvd. Mississauga ON	95.8	13
	2720 Meadowvale Boulevard Mississauga ON	95.8	13
Amazon Canada Fulfillment Services Inc.	8050 Heritage Rd Brampton ON L6Y 0C9	119.6	15
RYDER TRUCK RENTAL CANADA LTD.	2650 MEADOWVALE BLVD. MOTOR VEHICLE (OPERATING FLUID) MISSISSAUGA CITY ON L5N 6M5	198.2	18
	2650 Meodowvale Blvd Mississauga ON	198.2	18
Alectra Utilities Corporation	2600 Meadowvale blvd Mississauga ON	249.6	20



Map : 0.25 Kilometer Radius

Order Number: 20200806070

Address: Heritage Road, Brampton, ON

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES

Project Property	Expressway	Industrial and Resource - Regions	National Park
Buffer Outline	Principal Highway	Main Line	Provincial or Territorial Park
Eris Sites with Higher Elevation	Secondary Highway	Sidetrack	Other Park
Eris Sites with Same Elevation	Major Road	Transit Line	Golf Course or Driving Range
Eris Sites with Lower Elevation	Local road	Abandoned Line	Park or Sports Field
Eris Sites with Unknown Elevation	Trail		Other Recreation Area
	Proposed Road		
	Ferry Route/Ice Road		

79°46'30"W

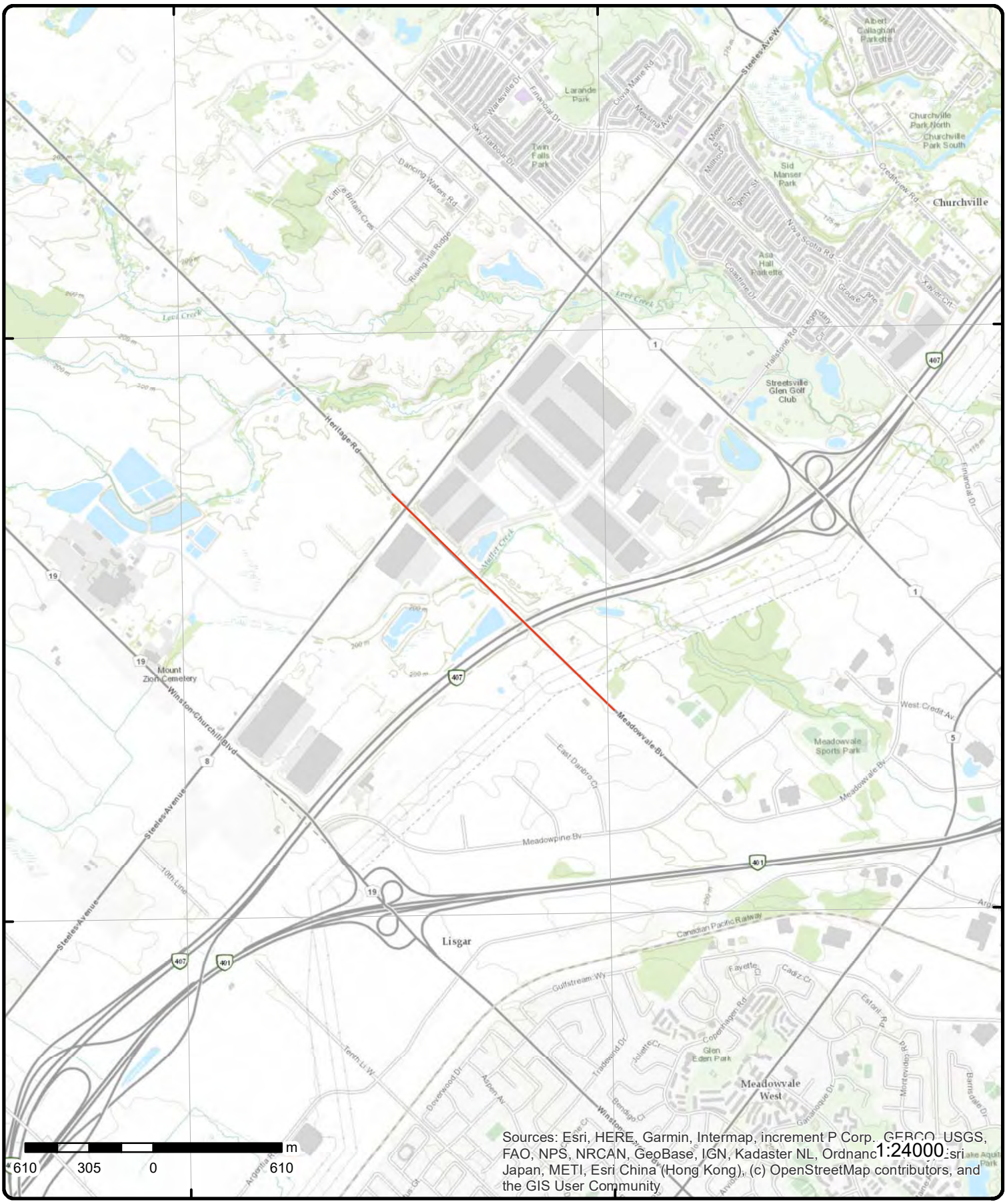
Aerial **Year: 2018**

Address: Heritage Road, Brampton, ON

Source: ESRI World Imagery

Order Number: 20200806070

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES



Topographic Map

Address: Heritage Road, ON

Source: ESRI World Topographic Map

Order Number: 20200806070

ENVIRONMENTAL RISK INFORMATION SERVICES

Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
4	1 of 1	SE/9.5	201.2 / 1.32	R.M. OF PEEL HERITAGE RD/MEADOWVALE N.P.S. BRAMPTON CITY ON	CA

Certificate #: 7-1018-97-
Application Year: 97
Issue Date: 9/22/1997
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
1	1 of 1	ENE/201.2	194.7 / -5.14	Gay Lea Foods Co-operative Ltd BDC 7855 Heritage Road Brampton ON L6Y 0N3	GEN

Generator No: ON5289566
Status: Registered
Approval Years: As of Apr 2020
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 263 L
Waste Class Desc: Misc. waste organic chemicals

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
2	1 of 3	ENE/232.9	195.6 / -4.26	The Regional Municipality of Peel 7755 Heritage Rd Brampton ON	SPL

Ref No: 6868-9C2MGT
Site No:
Incident Dt: 2013/09/30
Year:
Incident Cause: Unknown / N/A
Incident Event:
Contaminant Code: 41
Contaminant Name: WASTEWATER N.O.S.
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Environment Impact: Confirmed
Nature of Impact: Soil Contamination
Receiving Medium:

Discharger Report:
Material Group:
Health/Env Conseq:
Client Type:
Sector Type: Truck - Transport/Hauling
Agency Involved:
Nearest Watercourse:
Site Address: 7755 Heritage Rd
Site District Office:
Site Postal Code:
Site Region:
Site Municipality: Brampton
Site Lot:
Site Conc:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Receiving Env:		**Northing:**	
MOE Response:	No Field Response	**Easting:**	
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	
MOE Reported Dt:	2013/09/30	**Site Map Datum:**	
Dt Document Closed:	2013/10/17	**SAC Action Class:**	Land Spills
Incident Reason:	Unknown / N/A	**Source Type:**	
Site Name:	7755 Heritage Rd<UNOFFICIAL>		
Site County/District:			
Site Geo Ref Meth:			
Incident Summary:	Est. 1400L port-a-pottie waste to grd, Region cleaning		
Contaminant Qty:	1400 L		

2	2 of 3	ENE/232.9	195.6 / -4.26	7755 Heritage Rd Brampton ON L6Y 0N3	SPL

Ref No:	3328-9NPP8S	**Discharger Report:**	
Site No:	1326-9DESAV	**Material Group:**	
Incident Dt:	2014/09/06	**Health/Env Conseq:**	
Year:		**Client Type:**	
Incident Cause:	Overflow/Surcharge	**Sector Type:**	Truck - Transport/Hauling
Incident Event:		**Agency Involved:**	
Contaminant Code:	44	**Nearest Watercourse:**	
Contaminant Name:	SEWAGE,RAW UNCHLORINATED	**Site Address:**	7755 Heritage Rd
Contaminant Limit 1:		**Site District Office:**	
Contam Limit Freq 1:		**Site Postal Code:**	L6Y 0N3
Contaminant UN No 1:		**Site Region:**	
Environment Impact:	Not Anticipated	**Site Municipality:**	Brampton
Nature of Impact:	Surface Water Pollution	**Site Lot:**	
Receiving Medium:		**Site Conc:**	
Receiving Env:		**Northing:**	4829591
MOE Response:	Deferred Field Response	**Easting:**	598478
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	GPS
MOE Reported Dt:	2014/09/06	**Site Map Datum:**	NAD83
Dt Document Closed:	2014/09/23	**SAC Action Class:**	Watercourse Spills
Incident Reason:	Equipment Failure	**Source Type:**	
Site Name:	7755 Heritage Road		
Site County/District:			
Site Geo Ref Meth:	1-10 metres eg. Good Quality GPS		
Incident Summary:	DWMD Region Peel;: sewage/water leak		
Contaminant Qty:	10000 L		

2	3 of 3	ENE/232.9	195.6 / -4.26	7755 Heritage Rd Brampton ON	SPL

Ref No:	4830-9NVSZH	**Discharger Report:**	
Site No:	NA	**Material Group:**	
Incident Dt:	2014/09/12	**Health/Env Conseq:**	
Year:		**Client Type:**	
Incident Cause:	Operator/Human error	**Sector Type:**	Unknown / N/A
Incident Event:		**Agency Involved:**	
Contaminant Code:	44	**Nearest Watercourse:**	
Contaminant Name:	SEWAGE,RAW UNCHLORINATED	**Site Address:**	7755 Heritage Rd
Contaminant Limit 1:		**Site District Office:**	
Contam Limit Freq 1:		**Site Postal Code:**	
Contaminant UN No 1:		**Site Region:**	
Environment Impact:	Not Anticipated	**Site Municipality:**	Brampton
Nature of Impact:	Soil Contamination	**Site Lot:**	
Receiving Medium:		**Site Conc:**	
Receiving Env:		**Northing:**	
MOE Response:		**Easting:**	
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	
MOE Reported Dt:	2014/09/12	**Site Map Datum:**	

Dt Document Closed:
SAC Action Class: Land Spills
Incident Reason: Intentional Discharge
Source Type:
Site Name: Porta Potty Fluid to Grnd<UNOFFICIAL>
Site County/District:
Site Geo Ref Meth:
Incident Summary: RofP: 300L Septic Waste to Ditch
Contaminant Qty: 300 L

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3 **1 of 3** **NW/93.9** **197.0 / -2.88** **G&W CANADA CORPORATION** **GEN**
7965 Heritage Road
Brampton ON L6Y5X5

Generator No: ON4273183
Status:
Approval Years: 2016
Contam. Facility: No
MHSW Facility: No
SIC Code: 335315
SIC Description: SWITCHGEAR AND SWITCHBOARD, AND RELAY AND INDUSTRIAL CONTROL APPARATUS MANUFACTURING

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: Miranda Morris
Phone No Admin: 9052852238 Ext.

Detail(s)

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 253
Waste Class Desc: EMULSIFIED OILS

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 232
Waste Class Desc: POLYMERIC RESINS

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3 **2 of 3** **NW/93.9** **197.0 / -2.88** **G&W CANADA CORPORATION** **GEN**
7965 Heritage Road
Brampton ON L6Y5X5

Generator No: ON4273183
Status: Registered
Approval Years: As of Dec 2018
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 145 H
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 145 I
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 145 L
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 232 L
Waste Class Desc: Polymeric resins

Waste Class: 253 L

Waste Class Desc: Emulsified oils

Waste Class: 263 L
Waste Class Desc: Misc. waste organic chemicals

Waste Class: 311 I
Waste Class Desc: Organic tannery wastes

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3 | ***3 of 3*** | ***NW/93.9*** | ***197.0 / -2.88*** | ***G&W CANADA CORPORATION***
7965 Heritage Road
Brampton ON L6Y5X5 | ***GEN***

Generator No: ON4273183
Status: Registered
Approval Years: As of Apr 2020
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 232 L
Waste Class Desc: Polymeric resins

Waste Class: 145 H
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 145 I
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 263 I
Waste Class Desc: Misc. waste organic chemicals

Waste Class: 311 I
Waste Class Desc: Organic tannery wastes

Waste Class: 253 L
Waste Class Desc: Emulsified oils

Waste Class: 145 L
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 213 L
Waste Class Desc: Petroleum distillates

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

Waste Class: 148 C
Waste Class Desc: Misc. wastes and inorganic chemicals

Waste Class: 211 B
Waste Class Desc: Aromatic solvents and residues

Waste Class: 331 I
Waste Class Desc: Waste compressed gases including cylinders

Waste Class: 263 L
Waste Class Desc: Misc. waste organic chemicals

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5 | ***1 of 7*** | ***WNW/103.5*** | ***199.9 / 0.00*** | ***Orlando Corporation***
2675 STEELES AVENUE WEST, BRAMPTON, | ***RSC***

ONTARIO L6Y 0B2
Brampton ON

RSC ID:	207488	***Cert Date:***	
RA No:		***Cert Prop Use No:***	
RSC Type:	Phase 1 RSC	***Intended Prop Use:***	Industrial
Curr Property Use:	Agricultural/Other	***Qual Person Name:***	Vic Nersesian
Ministry District:	Halton-Peel District Office	***Stratified (Y/N):***	
Filing Date:	2013/04/05	***Audit (Y/N):***	
Date Ack:		***Entire Leg Prop. (Y/N):***	
Date Returned:		***Accuracy Estimate:***	
Restoration Type:		***Telephone:***	
Soil Type:		***Fax:***	
Criteria:		***Email:***	
CPU Issued Sect 1686:			

Asmt Roll No: 21 10 140 099 00200 0000,
21 10 140 098 02300 0000,
21 10 140 099 00300 0000

Prop ID No (PIN): 14089-0536

Property Municipal Address: 2675 STEELES AVENUE WEST, BRAMPTON, ONTARIO L6Y 0B2, 7995 WINSTON CHURCHILL BOULEVARD, BRAMPTON, ONTARIO L6Y 0B2, 7825 WINSTON CHURCHILL BOULEVARD, BRAMPTON, ONTARIO L6Y 0B2

Mailing Address:
Latitude & Latitude:
UTM Coordinates:
Consultant:
Legal Desc:
Measurement Method:
Applicable Standards:

RSC PDF: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=18721&fileName=BROWNFIELDS-E-FILE.pdf

Document(s) Detail

Document Heading: Supporting Documents
Document Name: Certificate of Status.pdf
Document Type: Certificate of Status
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=18723&fileName=Certificate+of+Status.pdf

Document Heading: Supporting Documents
Document Name: RSC Ltr Churchill Phase 3.pdf
Document Type: Lawyer's letter consisting of a legal description of the property
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=18725&fileName=RSC+Ltr+Churchill+Phase+3.pdf

Document Heading: Supporting Documents
Document Name: property ownership.pdf
Document Type: Copy of any deed(s), transfer(s) or other document(s)
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=18726&fileName=property+ownership.pdf

Document Heading: Supporting Documents
Document Name: Table of Current and Past Uses.pdf
Document Type: Table of Current and Past Property Use
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=18724&fileName=Table+of+Current+and+Past+Uses.pdf

Document Heading: Supporting Documents
Document Name: CSM.pdf
Document Type: Phase 1 Conceptual Site Model
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=18720&fileName=CSM.pdf

Document Heading: Supporting Documents
Document Name: current plan of survey.pdf

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Document Type: A Current plan of Survey
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=18719&fileName=current+plan+of+survey.pdf

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5 **2 of 7** **WNW/103.5** **199.9 / 0.00** **Matrix Logistics** **GEN**
2675 Steeles Ave.West
Brampton ON L6Y 0B2

Generator No: ON4556095
Status:
Approval Years: 2016
Contam. Facility: No
MHSW Facility: No
SIC Code: 493190
SIC Description: OTHER WAREHOUSING AND STORAGE

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: Melissa Main
Phone No Admin: 905.795.2200 Ext.3126

Detail(s)

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

Waste Class: 148
Waste Class Desc: INORGANIC LABORATORY CHEMICALS

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

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5 **3 of 7** **WNW/103.5** **199.9 / 0.00** **Matrix Logistics** **GEN**
2675 Steeles Ave.West
Brampton ON L6Y 0B2

Generator No: ON4556095
Status:
Approval Years: 2015
Contam. Facility: No
MHSW Facility: No
SIC Code: 493190
SIC Description: OTHER WAREHOUSING AND STORAGE

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: Melissa Main
Phone No Admin: 905.795.2200 Ext.3126

Detail(s)

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 148
Waste Class Desc: INORGANIC LABORATORY CHEMICALS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
5	4 of 7	WNW/103.5	199.9 / 0.00	Matrix Logistics 2675 Steeles Ave.West Brampton ON L6Y 0B2	GEN

Generator No: ON4556095
Status:
Approval Years: 2014
Contam. Facility: No
MHSW Facility: No
SIC Code: 493190
SIC Description: OTHER WAREHOUSING AND STORAGE

PO Box No:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 148
Waste Class Desc: INORGANIC LABORATORY CHEMICALS

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
5	5 of 7	WNW/103.5	199.9 / 0.00	Matrix Logistics Churchill 2675 Steeles Ave.West Brampton ON L6Y 0B2	GEN

Generator No: ON4556095
Status: Registered
Approval Years: As of Dec 2018
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 145 L
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 148 L
Waste Class Desc: Misc. wastes and inorganic chemicals

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

Waste Class: 263 A
Waste Class Desc: Misc. waste organic chemicals

Waste Class: 331 I
Waste Class Desc: Waste compressed gases including cylinders

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
5	6 of 7	WNW/103.5	199.9 / 0.00	Matrix Logistics Churchill 2675 Steeles Ave.West Brampton ON L6Y 0B2	GEN

Generator No: ON4556095

PO Box No:

Status:	Registered	**Country:**	Canada
Approval Years:	As of Oct 2019	**Choice of Contact:**	
Contam. Facility:		**Co Admin:**	
MHSW Facility:		**Phone No Admin:**	
SIC Code:			
SIC Description:			

Detail(s)

Waste Class:	148 L
Waste Class Desc:	Misc. wastes and inorganic chemicals
Waste Class:	263 A
Waste Class Desc:	Misc. waste organic chemicals
Waste Class:	145 L
Waste Class Desc:	Wastes from the use of pigments, coatings and paints
Waste Class:	331 I
Waste Class Desc:	Waste compressed gases including cylinders
Waste Class:	252 L
Waste Class Desc:	Waste crankcase oils and lubricants

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5 | ***7 of 7*** | ***WNW/103.5*** | ***199.9 / 0.00*** | ***Canada Cartage Limited*** ***2675 Steeles Ave W*** ***Brampton ON L6Y 0B3*** | ***SPL***

Ref No:	4654-BG4JV3	**Discharger Report:**	
Site No:	7488-BG5KGK	**Material Group:**	
Incident Dt:	9/17/2019	**Health/Env Conseq:**	2 - Minor Environment
Year:		**Client Type:**	Corporation
Incident Cause:		**Sector Type:**	Miscellaneous Industrial
Incident Event:	Leak/Break	**Agency Involved:**	
Contaminant Code:	13	**Nearest Watercourse:**	
Contaminant Name:	DIESEL FUEL	**Site Address:**	2675 Steeles Ave W
Contaminant Limit 1:		**Site District Office:**	Halton-Peel
Contam Limit Freq 1:		**Site Postal Code:**	L6Y 0B3
Contaminant UN No 1:	1202	**Site Region:**	Central
Environment Impact:		**Site Municipality:**	Brampton
Nature of Impact:		**Site Lot:**	
Receiving Medium:		**Site Conc:**	NA
Receiving Env:	Land	**Northing:**	NA
MOE Response:	No	**Easting:**	NA
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	NA
MOE Reported Dt:	9/17/2019	**Site Map Datum:**	NA
Dt Document Closed:	11/16/2019	**SAC Action Class:**	Land Spills
Incident Reason:	Operator/Human Error	**Source Type:**	Motor Vehicle
Site Name:	2675 Steeles Avenue West		
Site County/District:	Regional Municipality of Peel		
Site Geo Ref Meth:	NA		
Incident Summary:	CanadaCartege: ~ 15 L of dsl to asphalt, cntd, clnup ongng		
Contaminant Qty:	15 L		

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6 | ***1 of 1*** | ***NW/64.9*** | ***197.9 / -1.97*** | ***TRANSPORT TRUCK*** ***2377 STEELES AVE WEST/HERITAGE RD.*** ***MOTOR VEHICLE (OPERATING FLUID)*** ***BRAMPTON CITY ON L6V 3N2*** | ***SPL***

Ref No:	161393	**Discharger Report:**	
Site No:		**Material Group:**	
Incident Dt:	10/26/1998	**Health/Env Conseq:**	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Year:		**Client Type:**	
Incident Cause:	TRUCK/TRAILER OVERTURN	**Sector Type:**	
Incident Event:		**Agency Involved:**	
Contaminant Code:		**Nearest Watercourse:**	
Contaminant Name:		**Site Address:**	
Contaminant Limit 1:		**Site District Office:**	
Contam Limit Freq 1:		**Site Postal Code:**	
Contaminant UN No 1:		**Site Region:**	
Environment Impact:	CONFIRMED	**Site Municipality:**	21101
Nature of Impact:	Soil contamination	**Site Lot:**	
Receiving Medium:	LAND	**Site Conc:**	
Receiving Env:		**Northing:**	
MOE Response:		**Easting:**	REGION OF PEEL
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	
MOE Reported Dt:	10/26/1998	**Site Map Datum:**	
Dt Document Closed:		**SAC Action Class:**	
Incident Reason:	UNKNOWN	**Source Type:**	
Site Name:			
Site County/District:			
Site Geo Ref Meth:			
Incident Summary:	MATCOR AUTOMOTIVE- MVA, TRUCK OVERTURN IN DITCH, 250 L DIESEL LEAK,CLEANIG		
Contaminant Qty:			

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7 | ***1 of 14*** | ***SE/181.0*** | ***203.0 / 3.18*** | ***RENTWAY LTD.***
7405 EAST DANBRO COURT
MISSISSAUGA ON L5N 6P8 | ***GEN***

Generator No:	ON0148727	**PO Box No:**	
Status:		**Country:**	
Approval Years:	99	**Choice of Contact:**	
Contam. Facility:		**Co Admin:**	
MHSW Facility:		**Phone No Admin:**	
SIC Code:	9921		
SIC Description:	AUTO./TRUCK RENTAL		

Detail(s)

Waste Class:	212
Waste Class Desc:	ALIPHATIC SOLVENTS
Waste Class:	213
Waste Class Desc:	PETROLEUM DISTILLATES
Waste Class:	251
Waste Class Desc:	OIL SKIMMINGS & SLUDGES
Waste Class:	252
Waste Class Desc:	WASTE OILS & LUBRICANTS

---

7 | ***2 of 14*** | ***SE/181.0*** | ***203.0 / 3.18*** | ***RENT(SEE & USE ON2055713)***
7405 EAST DANBRO COURT
MISSISSAUGA ON L5N 6P8 | ***GEN***

Generator No:	ON0148727	**PO Box No:**	
Status:		**Country:**	
Approval Years:	00,01	**Choice of Contact:**	
Contam. Facility:		**Co Admin:**	
MHSW Facility:		**Phone No Admin:**	
SIC Code:	9921		
SIC Description:	AUTO./TRUCK RENTAL		

Detail(s)

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

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7 **3 of 14** **SE/181.0** **203.0 / 3.18** **PENSKE TRUCK LEASING CANADA INC.** **GEN**
7405 EAST DANBRO COURT
MISSISSAUGA ON L5N 6P8

Generator No: ON2055713
Status:
Approval Years: 00,01
Contam. Facility:
MHSW Facility:
SIC Code: 9921
SIC Description: AUTO./TRUCK RENTAL

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

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7 **4 of 14** **SE/181.0** **203.0 / 3.18** **PENSKE TRUCK LEASING CANADA INC.** **GEN**
7405 EAST DANBRO CRESCENT
MISSISSAUGA ON L5N 6P8

Generator No: ON2055713
Status:
Approval Years: 02,03,04,05,06,07,08
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 252

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class Desc: WASTE OILS & LUBRICANTS

---

7 **5 of 14** **SE/181.0** **203.0 / 3.18** **PENSKE TRUCK LEASING CANADA INC.** **GEN**
7405 EAST DANBRO CRESCENT
MISSISSAUGA ON L5N 6P8

Generator No: ON2055713
Status:
Approval Years: 2009
Contam. Facility:
MHSW Facility:
SIC Code: 532120
SIC Description: Truck Utility Trailer and RV (Recreational Vehicle) Rental and Leasing

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

---

7 **6 of 14** **SE/181.0** **203.0 / 3.18** **PENSKE TRUCK LEASING CANADA INC.** **GEN**
7405 EAST DANBRO CRESCENT
MISSISSAUGA ON L5N 6P8

Generator No: ON2055713
Status:
Approval Years: 2010
Contam. Facility:
MHSW Facility:
SIC Code: 532120
SIC Description: Truck Utility Trailer and RV (Recreational Vehicle) Rental and Leasing

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

---

7 **7 of 14** **SE/181.0** **203.0 / 3.18** **PENSKE TRUCK LEASING CANADA INC.** **GEN**
7405 EAST DANBRO CRESCENT
MISSISSAUGA ON L5N 6P8

Generator No: ON2055713
Status:
Approval Years: 2011
Contam. Facility:

PO Box No:
Country:
Choice of Contact:
Co Admin:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

MHSW Facility: ***Phone No Admin:***
SIC Code: 532120
SIC Description: Truck Utility Trailer and RV (Recreational Vehicle) Rental and Leasing

Detail(s)

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

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7 ***8 of 14*** ***SE/181.0*** ***203.0 / 3.18*** ***PENSKE TRUCK LEASING CANADA INC.***
7405 EAST DANBRO CRESCENT
MISSISSAUGA ON L5N 6P8 ***GEN***

Generator No: ON2055713 ***PO Box No:***
Status: ***Country:***
Approval Years: 2012 ***Choice of Contact:***
Contam. Facility: ***Co Admin:***
MHSW Facility: ***Phone No Admin:***
SIC Code: 532120
SIC Description: Truck Utility Trailer and RV (Recreational Vehicle) Rental and Leasing

Detail(s)

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

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7 ***9 of 14*** ***SE/181.0*** ***203.0 / 3.18*** ***PENSKE TRUCK LEASING CANADA INC.***
7405 EAST DANBRO CRESCENT
MISSISSAUGA ON ***GEN***

Generator No: ON2055713 ***PO Box No:***
Status: ***Country:***
Approval Years: 2013 ***Choice of Contact:***
Contam. Facility: ***Co Admin:***
MHSW Facility: ***Phone No Admin:***
SIC Code: 532120
SIC Description: TRUCK, UTILITY TRAILER AND RV (RECREATIONAL VEHICLE) RENTAL AND LEASING

Detail(s)

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 251

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

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7 **10 of 14** **SE/181.0** **203.0 / 3.18** **PENSKE TRUCK LEASING CANADA INC.** **GEN**
7405 EAST DANBRO CRESCENT
MISSISSAUGA ON L5N 6P8

Generator No: ON2055713
Status:
Approval Years: 2016
Contam. Facility: No
MHSW Facility: No
SIC Code: 532120
SIC Description: TRUCK, UTILITY TRAILER AND RV (RECREATIONAL VEHICLE) RENTAL AND LEASING

PO Box No:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin: CHRIS HAWK
Phone No Admin: 610-775-6123 Ext.

Detail(s)

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

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7 **11 of 14** **SE/181.0** **203.0 / 3.18** **PENSKE TRUCK LEASING CANADA INC.** **GEN**
7405 EAST DANBRO CRESCENT
MISSISSAUGA ON L5N 6P8

Generator No: ON2055713
Status:
Approval Years: 2015
Contam. Facility: No
MHSW Facility: No
SIC Code: 532120
SIC Description: TRUCK, UTILITY TRAILER AND RV (RECREATIONAL VEHICLE) RENTAL AND LEASING

PO Box No:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin: CHRIS HAWK
Phone No Admin: 610-775-6123 Ext.

Detail(s)

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

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7 **12 of 14** **SE/181.0** **203.0 / 3.18** **PENSKE TRUCK LEASING CANADA INC.** **GEN**
7405 EAST DANBRO CRESCENT

MISSISSAUGA ON L5N 6P8

Generator No:	ON2055713	***PO Box No:***	
Status:		***Country:***	Canada
Approval Years:	2014	***Choice of Contact:***	CO_ADMIN
Contam. Facility:	No	***Co Admin:***	CHRIS HAWK
MHSW Facility:	No	***Phone No Admin:***	610-775-6123 Ext.
SIC Code:	532120		

SIC Description: TRUCK, UTILITY TRAILER AND RV (RECREATIONAL VEHICLE) RENTAL AND LEASING

Detail(s)

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

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7 ***13 of 14*** ***SE/181.0*** ***203.0 / 3.18*** ***GEN***

PENSKE TRUCK LEASING CANADA INC.
7405 EAST DANBRO CRESCENT
MISSISSAUGA ON L5N 6P8

Generator No:	ON2055713	***PO Box No:***	
Status:	Registered	***Country:***	Canada
Approval Years:	As of Dec 2018	***Choice of Contact:***	
Contam. Facility:		***Co Admin:***	
MHSW Facility:		***Phone No Admin:***	
SIC Code:			

SIC Description:

Detail(s)

Waste Class: 212 L
Waste Class Desc: Aliphatic solvents and residues

Waste Class: 213 I
Waste Class Desc: Petroleum distillates

Waste Class: 213 T
Waste Class Desc: Petroleum distillates

Waste Class: 251 L
Waste Class Desc: Waste oils/sludges (petroleum based)

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

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7 ***14 of 14*** ***SE/181.0*** ***203.0 / 3.18*** ***GEN***

PENSKE TRUCK LEASING CANADA INC.
7405 EAST DANBRO CRESCENT
MISSISSAUGA ON L5N 6P8

Generator No:	ON2055713	***PO Box No:***	
Status:	Registered	***Country:***	Canada
Approval Years:	As of Apr 2020	***Choice of Contact:***	
Contam. Facility:		***Co Admin:***	
MHSW Facility:		***Phone No Admin:***	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

SIC Code:
SIC Description:

Detail(s)

Waste Class: 213 T
Waste Class Desc: Petroleum distillates

Waste Class: 213 I
Waste Class Desc: Petroleum distillates

Waste Class: 212 L
Waste Class Desc: Aliphatic solvents and residues

Waste Class: 251 L
Waste Class Desc: Waste oils/sludges (petroleum based)

Waste Class: 221 L
Waste Class Desc: Light fuels

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

8	1 of 1	WNW/89.3	199.9 / 0.00	***Regional Municipality of Peel*** ***2625Steeles Ave*** ***Brampton ON***	GEN

Generator No: ON2826182
Status:
Approval Years: 2013
Contam. Facility:
MHSW Facility:
SIC Code: 913910
SIC Description:

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 114
Waste Class Desc: OTHER INORGANIC ACID WASTES

9	1 of 1	NW/13.6	199.4 / -0.44	***Steeles Avenue West and Heritage Road*** ***Brampton ON***	CA

Certificate #: 2812-4Y2M39
Application Year: 01
Issue Date: 7/11/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name: Corporation of the Regional Municipality of Peel
Client Address: 4th Floor, 10 Peel Centre Dr.,
Client City: Brampton
Client Postal Code: L6T 4B9
Project Description: Construction of watermains
Contaminants:
Emission Control:

10	1 of 1	WNW/198.0	199.9 / 0.00	***STEELES AVENUE,200 M WEST OF HERITAGE ROAD<UNOFFICIAL>*** ***Brampton ON***	SPL

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Ref No:	6650-5WJKL9	**Discharger Report:**	
Site No:		**Material Group:**	OIL
Incident Dt:	2/26/2004	**Health/Env Conseq:**	
Year:		**Client Type:**	
Incident Cause:		**Sector Type:**	
Incident Event:		**Agency Involved:**	
Contaminant Code:		**Nearest Watercourse:**	
Contaminant Name:	OIL (PETROLEUM BASED, NOT SPECIFIED)	**Site Address:**	
Contaminant Limit 1:		**Site District Office:**	Halton-Peel
Contam Limit Freq 1:		**Site Postal Code:**	
Contaminant UN No 1:		**Site Region:**	Central
Environment Impact:		**Site Municipality:**	Brampton
Nature of Impact:		**Site Lot:**	
Receiving Medium:	Land	**Site Conc:**	
Receiving Env:		**Northing:**	
MOE Response:		**Easting:**	
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	
MOE Reported Dt:	2/26/2004	**Site Map Datum:**	
Dt Document Closed:		**SAC Action Class:**	
Incident Reason:		**Source Type:**	

Site Name: STEELES AVENUE,200 M WEST OF HERITAGE ROAD<UNOFFICIAL>
Site County/District:
Site Geo Ref Meth:
Incident Summary: Linc-50 L Operating Fluids to Road
Contaminant Qty:

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11 | ***1 of 3*** | ***SSE/237.0*** | ***203.9 / 4.00*** | ***DI BLASIO CONSTRUCTION LTD.*** ***7385 DANBRO CRESCENT (SWM)*** ***MISSISSAUGA ON*** | ***CA***

Certificate #: 3-0905-98-
Application Year: 98
Issue Date: 7/7/1998
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

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11 | ***2 of 3*** | ***SSE/237.0*** | ***203.9 / 4.00*** | ***BUSCH VACUUM TECHNICS*** ***7385 EAST DANBRO CRESCENT*** ***MISSISSAUGA ON L5N6P8*** | ***GEN***

Generator No:	ON4078885	**PO Box No:**	
Status:	Registered	**Country:**	Canada
Approval Years:	As of Dec 2018	**Choice of Contact:**	
Contam. Facility:		**Co Admin:**	
MHSW Facility:		**Phone No Admin:**	
SIC Code:			
SIC Description:			

Detail(s)

Waste Class: 145 H
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 211 H
Waste Class Desc: Aromatic solvents and residues

Waste Class: 212 L
Waste Class Desc: Aliphatic solvents and residues

Waste Class: 213 I
Waste Class Desc: Petroleum distillates

Waste Class: 213 L
Waste Class Desc: Petroleum distillates

Waste Class: 251 L
Waste Class Desc: Waste oils/sludges (petroleum based)

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

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11 | ***3 of 3*** | ***SSE/237.0*** | ***203.9 / 4.00*** | ***BUSCH VACUUM TECHNICS 7385 EAST DANBRO CRESCENT MISSISSAUGA ON L5N6P8*** | ***GEN***

Generator No: ON4078885
Status: Registered
Approval Years: As of Apr 2020
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 212 L
Waste Class Desc: Aliphatic solvents and residues

Waste Class: 145 H
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

Waste Class: 211 H
Waste Class Desc: Aromatic solvents and residues

Waste Class: 251 L
Waste Class Desc: Waste oils/sludges (petroleum based)

Waste Class: 213 I
Waste Class Desc: Petroleum distillates

Waste Class: 213 L
Waste Class Desc: Petroleum distillates

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12 | ***1 of 5*** | ***SE/95.8*** | ***201.9 / 2.00*** | ***ONTARIO CLEAN WATER AGENCY 2720 MEADOWVALE BLVD, MISSISSAUGA ON L5E1W6*** | ***GEN***

Generator No: ON1808638
Status:
Approval Years: 2016
Contam. Facility: No
MHSW Facility: No
SIC Code: 221310

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: Gregory Barber
Phone No Admin: 905-274-6710 Ext.2217

SIC Description: WATER SUPPLY AND IRRIGATION SYSTEMS

Detail(s)

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

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12 ***2 of 5*** ***SE/95.8*** ***201.9 / 2.00*** ***ONTARIO CLEAN WATER AGENCY***
2720 MEADOWVALE BLVD,
MISSISSAUGA ON L5E1W6 ***GEN***

Generator No: ON1808638
Status:
Approval Years: 2015
Contam. Facility: No
MHSW Facility: No
SIC Code: 221310
SIC Description: WATER SUPPLY AND IRRIGATION SYSTEMS

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: Gregory Barber
Phone No Admin: 905-274-6710 Ext.2217

Detail(s)

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

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12 ***3 of 5*** ***SE/95.8*** ***201.9 / 2.00*** ***ONTARIO CLEAN WATER AGENCY***
2720 MEADOWVALE BLVD,
MISSISSAUGA ON L5E1W6 ***GEN***

Generator No: ON1808638
Status:
Approval Years: 2014
Contam. Facility: No
MHSW Facility: No
SIC Code: 221310
SIC Description: WATER SUPPLY AND IRRIGATION SYSTEMS

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: Gregory Barber
Phone No Admin: 905-274-6710 Ext.2217

Detail(s)

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 221
Waste Class Desc: LIGHT FUELS

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12 ***4 of 5*** ***SE/95.8*** ***201.9 / 2.00*** ***ONTARIO CLEAN WATER AGENCY***
2720 MEADOWVALE BLVD, ***GEN***

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
				MISSISSAUGA ON L5E1W6	

Generator No: ON1808638
Status: Registered
Approval Years: As of Dec 2017
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

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12 | **5 of 5** | **SE/95.8** | **201.9 / 2.00** | **ONTARIO CLEAN WATER AGENCY**
2720 MEADOWVALE BLVD,
MISSISSAUGA ON L5E1W6 | **GEN**

Generator No: ON1808638
Status: Registered
Approval Years: As of Apr 2020
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

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13 | **1 of 10** | **SE/95.8** | **201.9 / 2.00** | **ONTARIO CLEAN WATER AGENCY**
2720 MEADOWVALE BLVD,
MISSISSAUGA ON | **GEN**

Generator No: ON1808638
Status:
Approval Years: 03,04,05,06,07,08
Contam. Facility:
MHSW Facility:
SIC Code: 221310
SIC Description: Water Supply & Irrigation Systems

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 221
Waste Class Desc: LIGHT FUELS

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13 | **2 of 10** | **SE/95.8** | **201.9 / 2.00** | **Lexsan Electrical<UNOFFICIAL>**
2720 Meadowvale Blvd.
Mississauga ON | **SPL**

Ref No: 0033-5YXNLS
Site No:
Incident Dt: 5/13/2004
Year:

Discharger Report:
Material Group: Oil
Health/Env Conseq:
Client Type:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Incident Cause:	Container Leak (Fuel Tank Barrels)	**Sector Type:**	Transformer
Incident Event:		**Agency Involved:**	
Contaminant Code:	15	**Nearest Watercourse:**	
Contaminant Name:	TRANSMISSION OIL	**Site Address:**	
Contaminant Limit 1:		**Site District Office:**	Halton-Peel
Contam Limit Freq 1:		**Site Postal Code:**	
Contaminant UN No 1:		**Site Region:**	Central
Environment Impact:	Possible	**Site Municipality:**	Mississauga
Nature of Impact:	Soil Contamination	**Site Lot:**	
Receiving Medium:	Land	**Site Conc:**	
Receiving Env:		**Northing:**	
MOE Response:		**Easting:**	
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	
MOE Reported Dt:	5/13/2004	**Site Map Datum:**	
Dt Document Closed:		**SAC Action Class:**	Spill to Land
Incident Reason:	Negligence (Apparent) - Caused by lack of diligence	**Source Type:**	

Site Name: 2720 MEADOWVALE BLVD.<UNOFFICIAL>
Site County/District:
Site Geo Ref Meth:
Incident Summary: Lexsan Electrical: 57 L Transformer Oil to Grd
Contaminant Qty: 57 L

13	3 of 10	SE/95.8	201.9 / 2.00	**The Regional Municipality of Peel** **2720 Meadowvale Blvd** **Mississauga ON**	CA

Certificate #: 7866-7YBK2E
Application Year: 2009
Issue Date: 12/2/2009
Approval Type: Air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

13	4 of 10	SE/95.8	201.9 / 2.00	**ONTARIO CLEAN WATER AGENCY** **2720 MEADOWVALE BLVD,** **MISSISSAUGA ON**	GEN

Generator No:	ON1808638	**PO Box No:**	
Status:		**Country:**	
Approval Years:	2009	**Choice of Contact:**	
Contam. Facility:		**Co Admin:**	
MHSW Facility:		**Phone No Admin:**	
SIC Code:	221310		
SIC Description:	Water Supply and Irrigation Systems		

Detail(s)

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
13	5 of 10	SE/95.8	201.9 / 2.00	Region of peel pumping station 2720 meadowvale Blvd. mississauga ON	GEN

Generator No: ON7076180
Status:
Approval Years: 2010
Contam. Facility:
MHSW Facility:
SIC Code: , , 231211
SIC Description:

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
13	6 of 10	SE/95.8	201.9 / 2.00	ONTARIO CLEAN WATER AGENCY 2720 MEADOWVALE BLVD, MISSISSAUGA ON	GEN

Generator No: ON1808638
Status:
Approval Years: 2010
Contam. Facility:
MHSW Facility:
SIC Code: 221310
SIC Description: Water Supply and Irrigation Systems

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
13	7 of 10	SE/95.8	201.9 / 2.00	ONTARIO CLEAN WATER AGENCY 2720 MEADOWVALE BLVD, MISSISSAUGA ON	GEN

Generator No: ON1808638
Status:
Approval Years: 2011
Contam. Facility:
MHSW Facility:
SIC Code: 221310
SIC Description: Water Supply and Irrigation Systems

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
13	8 of 10	SE/95.8	201.9 / 2.00	ONTARIO CLEAN WATER AGENCY 2720 MEADOWVALE BLVD, MISSISSAUGA ON	GEN

Generator No: ON1808638
Status:
Approval Years: 2012
Contam. Facility:
MHSW Facility:
SIC Code: 221310
SIC Description: Water Supply and Irrigation Systems

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
13	9 of 10	SE/95.8	201.9 / 2.00	ONTARIO CLEAN WATER AGENCY 2720 MEADOWVALE BLVD, MISSISSAUGA ON	GEN

Generator No: ON1808638
Status:
Approval Years: 2013
Contam. Facility:
MHSW Facility:
SIC Code: 221310
SIC Description: WATER SUPPLY AND IRRIGATION SYSTEMS

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
13	10 of 10	SE/95.8	201.9 / 2.00	2720 Meadowvale Boulevard Mississauga ON	SPL

Ref No: 6364-AFWHK7
Site No: NA
Incident Dt: 2016/11/21
Year:
Incident Cause:
Incident Event: Overflow/Surcharge
Contaminant Code: 99
Contaminant Name: CHLORINATED WATER
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Environment Impact:

Discharger Report:
Material Group:
Health/Env Conseq:
Client Type:
Sector Type: Miscellaneous Communal
Agency Involved:
Nearest Watercourse:
Site Address: 2720 Meadowvale Boulevard
Site District Office:
Site Postal Code:
Site Region:
Site Municipality: Mississauga

Nature of Impact:		**Site Lot:**	
Receiving Medium:		**Site Conc:**	
Receiving Env:	Land	**Northing:**	4829098
MOE Response:	No	**Easting:**	598793
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	
MOE Reported Dt:	2016/11/21	**Site Map Datum:**	
Dt Document Closed:		**SAC Action Class:**	Land Spills
Incident Reason:	Unknown / N/A	**Source Type:**	

Site Name: Meadowvale Pumping Station<UNOFFICIAL>
Site County/District:
Site Geo Ref Meth:
Incident Summary: DWMD: OCWA: Unknown qnty chlorinated water to ditch; contd & clng
Contaminant Qty: 1720 m³

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14 | ***1 of 10*** | ***SE/241.3*** | ***204.2 / 4.35*** | ***7345 Danbro Crescent, Pt. Lot 12, Conc. 6 Mississauga ON*** | ***CA***

Certificate #: 5463-4PRHEH
Application Year: 00
Issue Date: 11/8/00
Approval Type: Industrial sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name: Stellarbridge Management Inc.
Client Address: 111 Creditstone Road
Client City: Vaughan
Client Postal Code: L4K 1N3
Project Description: This application is for construction of a storm water management facility for a total site area of 0.872 ha with 0.467 ha roof top providing detention volume of approximately 213 cubic metres, with 11 control roof drains and 0.405 ha parking lot providing a total required detention volume of approximately 96 cubic metres at a maximum ponding depth of 0.40 metres with one control manhole equipped with 125mm diameter orifice control plate, restricting the peak discharge rate during the 1:100 year design storm to 59.7 L/s.
Contaminants:
Emission Control:

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14 | ***2 of 10*** | ***SE/241.3*** | ***204.2 / 4.35*** | ***Danbro Distribution Centre 7345 East Danbro Crescent Mississauga ON L5N 6P8*** | ***GEN***

Generator No:	ON7596658	**PO Box No:**	
Status:		**Country:**	
Approval Years:	03,04,05	**Choice of Contact:**	
Contam. Facility:		**Co Admin:**	
MHSW Facility:		**Phone No Admin:**	
SIC Code:	336211		

SIC Description: Motor Vehicle Body Mfg.

Detail(s)

Waste Class: 146
Waste Class Desc: OTHER SPECIFIED INORGANICS

Waste Class: 232
Waste Class Desc: POLYMERIC RESINS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 253
Waste Class Desc: EMULSIFIED OILS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	3 of 10	SE/241.3	204.2 / 4.35	SKD Danbro Division 7345 East Danbro Crescent Mississauga ON L5N 6P8	GEN

Generator No: ON7596658
Status:
Approval Years: 06,07,08
Contam. Facility:
MHSW Facility:
SIC Code: 336211 336330 336390
SIC Description: Motor Vehicle Body Manufacturing, Motor Vehicle Steering and Suspension Components (, Other Motor Vehicle Parts Manufacturing

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 146
Waste Class Desc: OTHER SPECIFIED INORGANICS

Waste Class: 232
Waste Class Desc: POLYMERIC RESINS

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 253
Waste Class Desc: EMULSIFIED OILS

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	4 of 10	SE/241.3	204.2 / 4.35	SKD Danbro Division 7345 East Danbro Crescent Mississauga ON L5N 6P8	GEN

Generator No: ON7596658
Status:
Approval Years: 2009
Contam. Facility:
MHSW Facility:
SIC Code: 336211, 336330, 336390
SIC Description: Motor Vehicle Body Manufacturing, Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing, Other Motor Vehicle Parts Manufactur

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 146
Waste Class Desc: OTHER SPECIFIED INORGANICS

Waste Class: 232
Waste Class Desc: POLYMERIC RESINS

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 253
Waste Class Desc: EMULSIFIED OILS

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

Waste Class: 252

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class Desc: WASTE OILS & LUBRICANTS

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14 **5 of 10** **SE/241.3** **204.2 / 4.35** **Envirotech Office Systems** **GEN**
7345 East Danbro Cres
Mississauga ON

Generator No: ON2928295
Status:
Approval Years: 2013
Contam. Facility:
MHSW Facility:
SIC Code: 337214
SIC Description: OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 211
Waste Class Desc: AROMATIC SOLVENTS

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14 **6 of 10** **SE/241.3** **204.2 / 4.35** **Envirotech Office Systems** **GEN**
7345 East Danbro Cres
Mississauga ON L5N 6P8

Generator No: ON2928295
Status:
Approval Years: 2016
Contam. Facility: No
MHSW Facility: No
SIC Code: 337214
SIC Description: OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: Glenn Fitzgerald
Phone No Admin: 905-363-4799 Ext.421

Detail(s)

Waste Class: 211
Waste Class Desc: AROMATIC SOLVENTS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

---

14 **7 of 10** **SE/241.3** **204.2 / 4.35** **Envirotech Office Systems** **GEN**
7345 East Danbro Cres
Mississauga ON L5N 6P8

Generator No: ON2928295
Status:
Approval Years: 2015
Contam. Facility: No
MHSW Facility: No
SIC Code: 337214
SIC Description: OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: Glenn Fitzgerald
Phone No Admin: 905-363-4799 Ext.421

Detail(s)

Waste Class: 211
Waste Class Desc: AROMATIC SOLVENTS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	8 of 10	SE/241.3	204.2 / 4.35	Envirotech Office Systems 7345 East Danbro Cres Mississauga ON L5N 6P8	GEN

Generator No: ON2928295
Status:
Approval Years: 2014
Contam. Facility: No
MHSW Facility: No
SIC Code: 337214
SIC Description: OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: Glenn Fitzgerald
Phone No Admin: 905-363-4799 Ext.421

Detail(s)

Waste Class: 211
Waste Class Desc: AROMATIC SOLVENTS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	9 of 10	SE/241.3	204.2 / 4.35	Envirotech Office Systems 7345 East Danbro Cres Mississauga ON L5N 6P8	GEN

Generator No: ON2928295
Status: Registered
Approval Years: As of Dec 2018
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 146 T
Waste Class Desc: Other specified inorganic sludges, slurries or solids

Waste Class: 211 H
Waste Class Desc: Aromatic solvents and residues

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
14	10 of 10	SE/241.3	204.2 / 4.35	Envirotech Office Systems 7345 East Danbro Cres Mississauga ON L5N 6P8	GEN

Generator No: ON2928295
Status: Registered
Approval Years: As of Apr 2020
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 146 T
Waste Class Desc: Other specified inorganic sludges, slurries or solids

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

Waste Class: 211 H
Waste Class Desc: Aromatic solvents and residues

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15 **1 of 4** **WNW/119.6** **199.9 / 0.00** **Amazon Canada Fulfillment Services, Inc**
8050 Heritage Parkway
Brampton ON L6Y0C9
GEN

Generator No: ON4108679
Status:
Approval Years: 2016
Contam. Facility: No
MHSW Facility: No
SIC Code: 493110
SIC Description: GENERAL WAREHOUSING AND STORAGE

PO Box No:
Country: Canada
Choice of Contact: CO_OFFICIAL
Co Admin: Samantha Conte
Phone No Admin: 905-450-4034 Ext.

Detail(s)

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 211
Waste Class Desc: AROMATIC SOLVENTS

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15 **2 of 4** **WNW/119.6** **199.9 / 0.00** **Amazon Canada Fulfillment Services, Inc YYZ4**
8050 Heritage Parkway
Brampton ON L6Y0C9
GEN

Generator No: ON4108679
Status: Registered
Approval Years: As of Dec 2018
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 252 I
Waste Class Desc: Waste crankcase oils and lubricants

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

Waste Class: 114 C
Waste Class Desc: Other inorganic acid wastes

Waste Class: 122 C
Waste Class Desc: Alkaline slutions - containing other metals and non-metals (not cyanide)

Waste Class: 145 I
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 148 C
Waste Class Desc: Misc. wastes and inorganic chemicals

Waste Class: 263 I
Waste Class Desc: Misc. waste organic chemicals

Waste Class: 263 L
Waste Class Desc: Misc. waste organic chemicals

Waste Class: 269 T
Waste Class Desc: Organic non-halogenated pesticide and herbicide wastes

Waste Class: 331 I
Waste Class Desc: Waste compressed gases including cylinders

Waste Class: 148 I
Waste Class Desc: Misc. wastes and inorganic chemicals

Waste Class: 211 I
Waste Class Desc: Aromatic solvents and residues

Waste Class: 212 L
Waste Class Desc: Aliphatic solvents and residues

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15 | **3 of 4** | **WNW/119.6** | **199.9 / 0.00** | **Amazon Canada Fulfillment Services, Inc YYZ4**
8050 Heritage Parkway
Brampton ON L6Y0C9 | **GEN**

Generator No: ON4108679
Status: Registered
Approval Years: As of Apr 2020
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 262 L
Waste Class Desc: Detergents and soaps

Waste Class: 135 I
Waste Class Desc: Wastes containing other reactive anions

Waste Class: 331 I
Waste Class Desc: Waste compressed gases including cylinders

Waste Class: 331 L
Waste Class Desc: Waste compressed gases including cylinders

Waste Class: 252 I
Waste Class Desc: Waste crankcase oils and lubricants

Waste Class: 212 I
Waste Class Desc: Aliphatic solvents and residues

Waste Class: 269 T
Waste Class Desc: Organic non-halogenated pesticide and herbicide wastes

Waste Class: 263 L
Waste Class Desc: Misc. waste organic chemicals

Waste Class: 232 L
Waste Class Desc: Polymeric resins

Waste Class: 242 T
Waste Class Desc: Halogenated pesticides and herbicides

Waste Class: 213 I

Waste Class Desc:	Petroleum distillates
Waste Class:	252 L
Waste Class Desc:	Waste crankcase oils and lubricants
Waste Class:	261 T
Waste Class Desc:	Pharmaceuticals
Waste Class:	135 C
Waste Class Desc:	Wastes containing other reactive anions
Waste Class:	221 I
Waste Class Desc:	Light fuels
Waste Class:	145 I
Waste Class Desc:	Wastes from the use of pigments, coatings and paints
Waste Class:	267 C
Waste Class Desc:	Organic acids
Waste Class:	263 I
Waste Class Desc:	Misc. waste organic chemicals
Waste Class:	233 L
Waste Class Desc:	Other polymeric wastes
Waste Class:	114 C
Waste Class Desc:	Other inorganic acid wastes
Waste Class:	122 C
Waste Class Desc:	Alkaline slutions - containing other metals and non-metals (not cyanide)
Waste Class:	146 T
Waste Class Desc:	Other specified inorganic sludges, slurries or solids
Waste Class:	212 L
Waste Class Desc:	Aliphatic solvents and residues
Waste Class:	242 B
Waste Class Desc:	Halogenated pesticides and herbicides
Waste Class:	211 I
Waste Class Desc:	Aromatic solvents and residues
Waste Class:	265 C
Waste Class Desc:	Graphic arts wastes
Waste Class:	113 C
Waste Class Desc:	Acid solutions - containing other metals and non-metals
Waste Class:	213 L
Waste Class Desc:	Petroleum distillates
Waste Class:	148 I
Waste Class Desc:	Misc. wastes and inorganic chemicals
Waste Class:	148 C
Waste Class Desc:	Misc. wastes and inorganic chemicals
Waste Class:	148 B
Waste Class Desc:	Misc. wastes and inorganic chemicals
Waste Class:	261 L
Waste Class Desc:	Pharmaceuticals
Waste Class:	267 I

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Waste Class Desc: Organic acids

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15 | **4 of 4** | **WNW/119.6** | **199.9 / 0.00** | **Amazon Canada Fulfillment Services Inc.**
8050 Heritage Rd
Brampton ON L6Y 0C9 | **SPL**

Ref No:	4305-BC5W5B	**Discharger Report:**	
Site No:	9847-BC6DWQ	**Material Group:**	
Incident Dt:	5/13/2019	**Health/Env Conseq:**	4 - Medium Environment
Year:		**Client Type:**	Corporation
Incident Cause:		**Sector Type:**	Miscellaneous Industrial
Incident Event:	Leak/Break	**Agency Involved:**	
Contaminant Code:	13	**Nearest Watercourse:**	
Contaminant Name:	DIESEL FUEL	**Site Address:**	8050 Heritage Rd
Contaminant Limit 1:		**Site District Office:**	Halton-Peel
Contam Limit Freq 1:		**Site Postal Code:**	L6Y 0C9
Contaminant UN No 1:	1202	**Site Region:**	Central
Environment Impact:		**Site Municipality:**	Brampton
Nature of Impact:		**Site Lot:**	
Receiving Medium:		**Site Conc:**	NA
Receiving Env:	Land; Surface Water	**Northing:**	NA
MOE Response:	No	**Easting:**	NA
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	NA
MOE Reported Dt:	5/13/2019	**Site Map Datum:**	NA
Dt Document Closed:	5/18/2019	**SAC Action Class:**	Watercourse Spills
Incident Reason:	Operator/Human Error	**Source Type:**	Unknown / N/A

Site Name: 8050 Heritage Road
Site County/District: Regional Municipality of Peel
Site Geo Ref Meth: NA
Incident Summary: Amazon: 2-3L Diesel to Ground and CB, Contained
Contaminant Qty: 3 L

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16 | **1 of 1** | **NW/104.0** | **198.6 / -1.27** | **The Corporation of the City of Brampton**
Heritage Road, 200 metres north of Steeles Avenue West to City of Brampton south
Brampton ON | **CA**

Certificate #: 0062-7BUPUZ
Application Year: 2008
Issue Date: 2/22/2008
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

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17 | **1 of 1** | **SE/178.4** | **202.8 / 2.99** | **Medical Environmental Instrument Components Inc**
2660 Meadowvale Blvd, Unit 5
Mississauga ON L5N 6M6 | **GEN**

Generator No:	ON9006029	**PO Box No:**	
Status:	Registered	**Country:**	Canada
Approval Years:	As of Apr 2020	**Choice of Contact:**	
Contam. Facility:		**Co Admin:**	
MHSW Facility:		**Phone No Admin:**	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

SIC Code:
SIC Description:

Detail(s)

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

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18 ***1 of 3*** ***SE/198.2*** ***202.9 / 3.09*** ***RYDER TRUCK RENTAL CANADA LTD.***
2650 MEADOWVALE BLVD. MOTOR VEHICLE (OPERATING FLUID)
MISSISSAUGA CITY ON L5N 6M5 ***SPL***

Ref No: 127003
Site No:
Incident Dt: 5/27/1996
Year:
Incident Cause: OTHER CONTAINER LEAK
Incident Event:
Contaminant Code:
Contaminant Name:
Contaminant Limit 1:
Contam Limit Freq 1:
Contaminant UN No 1:
Environment Impact: NOT ANTICIPATED
Nature of Impact:
Receiving Medium: WATER
Receiving Env:
MOE Response:
Dt MOE Arvl on Scn:
MOE Reported Dt: 5/27/1996
Dt Document Closed:
Incident Reason: EQUIPMENT FAILURE
Site Name:
Site County/District:
Site Geo Ref Meth:
Incident Summary: RYDER TRUCK RENTAL - 135 L OF DIESEL FUEL TO CATCHBASIN FROM SADDLE TANK.
Contaminant Qty:

Discharger Report:
Material Group:
Health/Env Conseq:
Client Type:
Sector Type:
Agency Involved:
Nearest Watercourse:
Site Address:
Site District Office:
Site Postal Code:
Site Region:
Site Municipality: 21102
Site Lot:
Site Conc:
Northing:
Easting: REGION OF PEEL
Site Geo Ref Accu:
Site Map Datum:
SAC Action Class:
Source Type:

---

18 ***2 of 3*** ***SE/198.2*** ***202.9 / 3.09*** ***121625 Canada Inc.***
2650 Meadowvale Blvd Units 8-12
Mississauga ON L5N 6M5 ***CA***

Certificate #: 3346-7X3RHF
Application Year: 2009
Issue Date: 10/31/2009
Approval Type: Air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

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18 ***3 of 3*** ***SE/198.2*** ***202.9 / 3.09*** ***2650 Meodowvale Blvd***
Mississauga ON ***SPL***

Ref No: 7241-9TKRPT
Discharger Report:

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Site No:	NA	**Material Group:**	
Incident Dt:	2/9/2015	**Health/Env Conseq:**	
Year:		**Client Type:**	
Incident Cause:	Leak/Break	**Sector Type:**	
Incident Event:		**Agency Involved:**	
Contaminant Code:	35	**Nearest Watercourse:**	
Contaminant Name:	METHANE GAS, COMPRESSED (NATURAL GAS)	**Site Address:**	2650 Meodowvale Blvd
Contaminant Limit 1:		**Site District Office:**	
Contam Limit Freq 1:		**Site Postal Code:**	
Contaminant UN No 1:		**Site Region:**	
Environment Impact:		**Site Municipality:**	Mississauga
Nature of Impact:	Air	**Site Lot:**	
Receiving Medium:		**Site Conc:**	
Receiving Env:		**Northing:**	
MOE Response:	N	**Easting:**	
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	
MOE Reported Dt:	2/9/2015	**Site Map Datum:**	
Dt Document Closed:		**SAC Action Class:**	Air Spills - Gases and Vapours
Incident Reason:	Operator/Human Error	**Source Type:**	
Site Name:	tssa<UNOFFICIAL>		
Site County/District:			
Site Geo Ref Meth:			
Incident Summary:	TSSA: gas meter due to MVA		
Contaminant Qty:	1 other - see incident description		

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19 **1 of 5** **ESE/233.8** **200.9 / 1.00** **KEANALL HOLDINGS LIMITED**
SWM-2695 MEADOWVALE BLVD.
MISSISSAUGA ON L5N 8A3 **CA**

Certificate #:	3-1582-98-
Application Year:	98
Issue Date:	10/8/1998
Approval Type:	Municipal sewage
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

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19 **2 of 5** **ESE/233.8** **200.9 / 1.00** **CFM CANADA**
2695 MEADOWVALE BLVD
MISSISSAUGA ON L5N 8A3 **GEN**

Generator No:	ON4245356	**PO Box No:**	
Status:		**Country:**	
Approval Years:	07,08	**Choice of Contact:**	
Contam. Facility:		**Co Admin:**	
MHSW Facility:		**Phone No Admin:**	
SIC Code:	339990		
SIC Description:	All Other Miscellaneous Manufacturing		

Detail(s)

Waste Class:	252
Waste Class Desc:	WASTE OILS & LUBRICANTS

Waste Class: 122
Waste Class Desc: ALKALINE WASTES - OTHER METALS

Waste Class: 148
Waste Class Desc: INORGANIC LABORATORY CHEMICALS

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 265
Waste Class Desc: GRAPHIC ART WASTES

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19 | **3 of 5** | **ESE/233.8** | **200.9 / 1.00** | **CFM Majestic Inc.**
2695 Meadowale Boulevard
Mississauga ON | **CA**

Certificate #: 9645-5VUMDE
Application Year: 2004
Issue Date: 2/10/2004
Approval Type: Air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

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19 | **4 of 5** | **ESE/233.8** | **200.9 / 1.00** | **Lorama Group Inc.**
2695 Meadowvale Blvd.
Mississauga ON L5N 8A3 | **GEN**

Generator No: ON3024065
Status: Registered
Approval Years: As of Dec 2018
Contam. Facility:
MHSW Facility:
SIC Code:
SIC Description:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 233 L
Waste Class Desc: Other polymeric wastes

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19 | **5 of 5** | **ESE/233.8** | **200.9 / 1.00** | **Lorama Group Inc.**
2695 Meadowvale Blvd.
Mississauga ON L5N 8A3 | **GEN**

Generator No: ON3024065
Status: Registered
Approval Years: As of Apr 2020
Contam. Facility:
MHSW Facility:

PO Box No:
Country: Canada
Choice of Contact:
Co Admin:
Phone No Admin:

SIC Code:
SIC Description:

Detail(s)

Waste Class: 212 I
Waste Class Desc: Aliphatic solvents and residues

Waste Class: 145 L
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 232 L
Waste Class Desc: Polymeric resins

Waste Class: 212 L
Waste Class Desc: Aliphatic solvents and residues

Waste Class: 268 C
Waste Class Desc: Amines

Waste Class: 148 C
Waste Class Desc: Misc. wastes and inorganic chemicals

Waste Class: 263 I
Waste Class Desc: Misc. waste organic chemicals

Waste Class: 145 I
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 233 L
Waste Class Desc: Other polymeric wastes

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20 ***1 of 15*** ***SE/249.6*** ***201.9 / 2.00*** ***2600 Meadowvale Boulevard Mississauga ON L5N 8C2*** ***CA***

Certificate #: 5011-4SNJX6
Application Year: 01
Issue Date: 1/23/01
Approval Type: Industrial air
Status: Approved
Application Type: New Certificate of Approval
Client Name: Purolator Courier Ltd.
Client Address: 2600 Meadowvale Boulevard
Client City: Mississauga
Client Postal Code: L5N 8C2
Project Description: This is an application for an Air Certificate of Approval to install an emergency 450 kilowatt diesel generator.
Contaminants:
Emission Control: Enclosure

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20 ***2 of 15*** ***SE/249.6*** ***201.9 / 2.00*** ***PUROLATOR COURIER LTD. 2600 MEADOWVALE BOULEVARD MISSISSAUGA ON L5N 8C2*** ***GEN***

Generator No: ON0223865
Status:
Approval Years: 99,00,01,02,03,04,05,06,07,08
Contam. Facility:
MHSW Facility:
SIC Code: 4842
SIC Description: COURIER SERV. IND.

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class:	242
Waste Class Desc:	HALOGENATED PESTICIDES
Waste Class:	269
Waste Class Desc:	NON-HALOGENATED PESTICIDES
Waste Class:	148
Waste Class Desc:	INORGANIC LABORATORY CHEMICALS
Waste Class:	212
Waste Class Desc:	ALIPHATIC SOLVENTS
Waste Class:	213
Waste Class Desc:	PETROLEUM DISTILLATES
Waste Class:	251
Waste Class Desc:	OIL SKIMMINGS & SLUDGES
Waste Class:	252
Waste Class Desc:	WASTE OILS & LUBRICANTS
Waste Class:	261
Waste Class Desc:	PHARMACEUTICALS
Waste Class:	263
Waste Class Desc:	ORGANIC LABORATORY CHEMICALS
Waste Class:	312
Waste Class Desc:	PATHOLOGICAL WASTES
Waste Class:	331
Waste Class Desc:	WASTE COMPRESSED GASES
Waste Class:	221
Waste Class Desc:	LIGHT FUELS
Waste Class:	145
Waste Class Desc:	PAINT/PIGMENT/COATING RESIDUES

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
20	3 of 15	SE/249.6	201.9 / 2.00	**Purolator Courier Ltd.** **2600 Meadowvale Blvd** **Mississauga ON L5N 8C2**	CA

Certificate #:	1416-7PCQR2
Application Year:	2009
Issue Date:	2/18/2009
Approval Type:	Air
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
20	4 of 15	SE/249.6	201.9 / 2.00	**Purolator Courier Ltd.** **2600 Meadowvale Blvd** **Mississauga ON L5N 8C2**	CA

Certificate #:	4588-7NWRRP

Application Year: 2009
Issue Date: 2/5/2009
Approval Type: Air
Status: Revoked and/or Replaced
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

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20 | **5 of 15** | **SE/249.6** | **201.9 / 2.00** | **PUROLATOR COURIER LTD.**
2600 MEADOWVALE BOULEVARD
MISSISSAUGA ON L5N 8C2 | **GEN**

Generator No: ON0223865
Status:
Approval Years: 2009
Contam. Facility:
MHSW Facility:
SIC Code: 492110
SIC Description: Couriers

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 148
Waste Class Desc: INORGANIC LABORATORY CHEMICALS

Waste Class: 242
Waste Class Desc: HALOGENATED PESTICIDES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 261
Waste Class Desc: PHARMACEUTICALS

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 269
Waste Class Desc: NON-HALOGENATED PESTICIDES

Waste Class: 312
Waste Class Desc: PATHOLOGICAL WASTES

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

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20 **6 of 15** **SE/249.6** **201.9 / 2.00** **PUROLATOR INC.**
2600 MEADOWVALE BOULEVARD
MISSISSAUGA ON L5N 8C2 **GEN**

Generator No: ON0223865
Status:
Approval Years: 2010
Contam. Facility:
MHSW Facility:
SIC Code: 492110
SIC Description: Couriers

PO Box No:
Country:
Choice of Contact:
Co Admin:
Phone No Admin:

Detail(s)

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

Waste Class: 242
Waste Class Desc: HALOGENATED PESTICIDES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 269
Waste Class Desc: NON-HALOGENATED PESTICIDES

Waste Class: 312
Waste Class Desc: PATHOLOGICAL WASTES

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 261
Waste Class Desc: PHARMACEUTICALS

Waste Class: 148
Waste Class Desc: INORGANIC LABORATORY CHEMICALS

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

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20 **7 of 15** **SE/249.6** **201.9 / 2.00** **PUROLATOR INC.**
2600 MEADOWVALE BOULEVARD
MISSISSAUGA ON L5N 8C2 **GEN**

Generator No: ON0223865
Status:
Approval Years: 2011

PO Box No:
Country:
Choice of Contact:

Contam. Facility: ***Co Admin:***
MHSW Facility: ***Phone No Admin:***
SIC Code: 492110
SIC Description: Couriers

Detail(s)

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 242
Waste Class Desc: HALOGENATED PESTICIDES

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 261
Waste Class Desc: PHARMACEUTICALS

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 148
Waste Class Desc: INORGANIC LABORATORY CHEMICALS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 312
Waste Class Desc: PATHOLOGICAL WASTES

Waste Class: 269
Waste Class Desc: NON-HALOGENATED PESTICIDES

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

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20 ***8 of 15*** ***SE/249.6*** ***201.9 / 2.00*** ***PUROLATOR INC.***
2600 MEADOWVALE BOULEVARD
MISSISSAUGA ON L5N 8C2 ***GEN***

Generator No: ON0223865 ***PO Box No:***
Status: ***Country:***
Approval Years: 2012 ***Choice of Contact:***
Contam. Facility: ***Co Admin:***
MHSW Facility: ***Phone No Admin:***
SIC Code: 492110
SIC Description: Couriers

Detail(s)

Waste Class: 242
Waste Class Desc: HALOGENATED PESTICIDES

Waste Class:	261
Waste Class Desc:	PHARMACEUTICALS
Waste Class:	263
Waste Class Desc:	ORGANIC LABORATORY CHEMICALS
Waste Class:	331
Waste Class Desc:	WASTE COMPRESSED GASES
Waste Class:	269
Waste Class Desc:	NON-HALOGENATED PESTICIDES
Waste Class:	212
Waste Class Desc:	ALIPHATIC SOLVENTS
Waste Class:	221
Waste Class Desc:	LIGHT FUELS
Waste Class:	148
Waste Class Desc:	INORGANIC LABORATORY CHEMICALS
Waste Class:	145
Waste Class Desc:	PAINT/PIGMENT/COATING RESIDUES
Waste Class:	312
Waste Class Desc:	PATHOLOGICAL WASTES
Waste Class:	251
Waste Class Desc:	OIL SKIMMINGS & SLUDGES
Waste Class:	252
Waste Class Desc:	WASTE OILS & LUBRICANTS
Waste Class:	213
Waste Class Desc:	PETROLEUM DISTILLATES

20 | ***9 of 15*** | ***SE/249.6*** | ***201.9 / 2.00*** | ***PUROLATOR INC.***
2600 MEADOWVALE BOULEVARD
MISSISSAUGA ON | ***GEN***

Generator No:	ON0223865	***PO Box No:***	
Status:		***Country:***	
Approval Years:	2013	***Choice of Contact:***	
Contam. Facility:		***Co Admin:***	
MHSW Facility:		***Phone No Admin:***	
SIC Code:	492110		
SIC Description:	COURIERS		

Detail(s)

Waste Class:	221
Waste Class Desc:	LIGHT FUELS
Waste Class:	212
Waste Class Desc:	ALIPHATIC SOLVENTS
Waste Class:	251
Waste Class Desc:	OIL SKIMMINGS & SLUDGES
Waste Class:	252
Waste Class Desc:	WASTE OILS & LUBRICANTS
Waste Class:	269
Waste Class Desc:	NON-HALOGENATED PESTICIDES

Waste Class: 148
Waste Class Desc: INORGANIC LABORATORY CHEMICALS

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 312
Waste Class Desc: PATHOLOGICAL WASTES

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 261
Waste Class Desc: PHARMACEUTICALS

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

Waste Class: 242
Waste Class Desc: HALOGENATED PESTICIDES

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20 | **10 of 15** | **SE/249.6** | **201.9 / 2.00** | **PUROLATOR INC.**
2600 MEADOWVALE BOULEVARD
MISSISSAUGA ON L5N 8C2 | **GEN**

Generator No: ON0223865
Status:
Approval Years: 2016
Contam. Facility: No
MHSW Facility: No
SIC Code: 492110
SIC Description: COURIERS

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: MARIETTE LINCOLN
Phone No Admin: 905-934-8799 Ext.300

Detail(s)

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 312
Waste Class Desc: PATHOLOGICAL WASTES

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 242
Waste Class Desc: HALOGENATED PESTICIDES

Waste Class: 269
Waste Class Desc: NON-HALOGENATED PESTICIDES

Waste Class: 261
Waste Class Desc: PHARMACEUTICALS

Waste Class: 148
Waste Class Desc: INORGANIC LABORATORY CHEMICALS

Waste Class: 331

Waste Class Desc: WASTE COMPRESSED GASES

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

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20 | **11 of 15** | **SE/249.6** | **201.9 / 2.00** | **PUROLATOR INC.**
2600 MEADOWVALE BOULEVARD
MISSISSAUGA ON L5N 8C2 | **GEN**

Generator No: ON0223865
Status:
Approval Years: 2015
Contam. Facility: No
MHSW Facility: No
SIC Code: 492110
SIC Description: COURIERS

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: MARIETTE LINCOLN
Phone No Admin: 905-934-8799 Ext.300

Detail(s)

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 269
Waste Class Desc: NON-HALOGENATED PESTICIDES

Waste Class: 261
Waste Class Desc: PHARMACEUTICALS

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

Waste Class: 242
Waste Class Desc: HALOGENATED PESTICIDES

Waste Class: 148
Waste Class Desc: INORGANIC LABORATORY CHEMICALS

Waste Class: 312
Waste Class Desc: PATHOLOGICAL WASTES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 221
Waste Class Desc: LIGHT FUELS

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20 **12 of 15** **SE/249.6** **201.9 / 2.00** **PUROLATOR INC.** **GEN**
2600 MEADOWVALE BOULEVARD
MISSISSAUGA ON L5N 8C2

Generator No: ON0223865
Status:
Approval Years: 2014
Contam. Facility: No
MHSW Facility: No
SIC Code: 492110
SIC Description: COURIERS

PO Box No:
Country: Canada
Choice of Contact: CO_ADMIN
Co Admin: MARIETTE LINCOLN
Phone No Admin: 905-934-8799 Ext.300

Detail(s)

Waste Class: 221
Waste Class Desc: LIGHT FUELS

Waste Class: 331
Waste Class Desc: WASTE COMPRESSED GASES

Waste Class: 261
Waste Class Desc: PHARMACEUTICALS

Waste Class: 212
Waste Class Desc: ALIPHATIC SOLVENTS

Waste Class: 263
Waste Class Desc: ORGANIC LABORATORY CHEMICALS

Waste Class: 269
Waste Class Desc: NON-HALOGENATED PESTICIDES

Waste Class: 148
Waste Class Desc: INORGANIC LABORATORY CHEMICALS

Waste Class: 251
Waste Class Desc: OIL SKIMMINGS & SLUDGES

Waste Class: 252
Waste Class Desc: WASTE OILS & LUBRICANTS

Waste Class: 145
Waste Class Desc: PAINT/PIGMENT/COATING RESIDUES

Waste Class: 213
Waste Class Desc: PETROLEUM DISTILLATES

Waste Class: 312
Waste Class Desc: PATHOLOGICAL WASTES

Waste Class: 242
Waste Class Desc: HALOGENATED PESTICIDES

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20 **13 of 15** **SE/249.6** **201.9 / 2.00** **PUROLATOR INC.** **GEN**
2600 MEADOWVALE BOULEVARD
MISSISSAUGA ON L5N 8C2

Generator No: ON0223865
Status: Registered
Approval Years: As of Dec 2018

PO Box No:
Country: Canada
Choice of Contact:

Contam. Facility: ***Co Admin:***
MHSW Facility: ***Phone No Admin:***
SIC Code:
SIC Description:

Detail(s)

Waste Class: 145 I
Waste Class Desc: Wastes from the use of pigments, coatings and paints

Waste Class: 148 C
Waste Class Desc: Misc. wastes and inorganic chemicals

Waste Class: 148 L
Waste Class Desc: Misc. wastes and inorganic chemicals

Waste Class: 212 L
Waste Class Desc: Aliphatic solvents and residues

Waste Class: 213 I
Waste Class Desc: Petroleum distillates

Waste Class: 213 L
Waste Class Desc: Petroleum distillates

Waste Class: 213 T
Waste Class Desc: Petroleum distillates

Waste Class: 221 L
Waste Class Desc: Light fuels

Waste Class: 251 L
Waste Class Desc: Waste oils/sludges (petroleum based)

Waste Class: 252 L
Waste Class Desc: Waste crankcase oils and lubricants

Waste Class: 261 L
Waste Class Desc: Pharmaceuticals

Waste Class: 263 B
Waste Class Desc: Misc. waste organic chemicals

Waste Class: 263 L
Waste Class Desc: Misc. waste organic chemicals

Waste Class: 331 I
Waste Class Desc: Waste compressed gases including cylinders

Waste Class: 331 L
Waste Class Desc: Waste compressed gases including cylinders

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20 ***14 of 15*** ***SE/249.6*** ***201.9 / 2.00*** ***Alectra Utilities Corporation***
2600 Meadowvale blvd
Mississauga ON ***SPL***

Ref No: 5336-B64SC4
Site No: NA
Incident Dt: 2018/11/01
Year:
Incident Cause:
Incident Event: Leak/Break
Contaminant Code: 13
Contaminant Name: MINERAL OIL

Discharger Report:
Material Group:
Health/Env Conseq: 2 - Minor Environment
Client Type: Corporation
Sector Type: Electric Power Generation
Agency Involved:
Nearest Watercourse:
Site Address: 2600 Meadowvale blvd

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB

Contaminant Limit 1:		**Site District Office:**	Halton-Peel
Contam Limit Freq 1:		**Site Postal Code:**	
Contaminant UN No 1:	n/a	**Site Region:**	Central
Environment Impact:		**Site Municipality:**	Mississauga
Nature of Impact:		**Site Lot:**	
Receiving Medium:		**Site Conc:**	
Receiving Env:	Land	**Northing:**	4828922
MOE Response:	No	**Easting:**	599107
Dt MOE Arvl on Scn:		**Site Geo Ref Accu:**	
MOE Reported Dt:	2018/11/01	**Site Map Datum:**	
Dt Document Closed:		**SAC Action Class:**	Land Spills
Incident Reason:	Equipment Failure	**Source Type:**	Transformer
Site Name:	transformer spill<UNOFFICIAL>		
Site County/District:	Regional Municipality of Peel		
Site Geo Ref Meth:			
Incident Summary:	Alectra: ~125 L mineral oil, PCB (2ppm) to soil, cntd & clng		
Contaminant Qty:	125 L		

20	15 of 15	SE/249.6	201.9 / 2.00	**PUROLATOR INC.** **2600 MEADOWVALE BOULEVARD** **MISSISSAUGA ON L5N 8C2**	GEN

Generator No:	ON0223865	**PO Box No:**	
Status:	Registered	**Country:**	Canada
Approval Years:	As of Apr 2020	**Choice of Contact:**	
Contam. Facility:		**Co Admin:**	
MHSW Facility:		**Phone No Admin:**	
SIC Code:			
SIC Description:			

Detail(s)

Waste Class:	213 L
Waste Class Desc:	Petroleum distillates
Waste Class:	252 L
Waste Class Desc:	Waste crankcase oils and lubricants
Waste Class:	263 L
Waste Class Desc:	Misc. waste organic chemicals
Waste Class:	221 L
Waste Class Desc:	Light fuels
Waste Class:	148 C
Waste Class Desc:	Misc. wastes and inorganic chemicals
Waste Class:	212 L
Waste Class Desc:	Aliphatic solvents and residues
Waste Class:	213 I
Waste Class Desc:	Petroleum distillates
Waste Class:	251 L
Waste Class Desc:	Waste oils/sludges (petroleum based)
Waste Class:	331 I
Waste Class Desc:	Waste compressed gases including cylinders
Waste Class:	331 L
Waste Class Desc:	Waste compressed gases including cylinders
Waste Class:	261 L

Waste Class Desc:	Pharmaceuticals
Waste Class:	263 B
Waste Class Desc:	Misc. waste organic chemicals
Waste Class:	213 T
Waste Class Desc:	Petroleum distillates
Waste Class:	145 I
Waste Class Desc:	Wastes from the use of pigments, coatings and paints
Waste Class:	148 L
Waste Class Desc:	Misc. wastes and inorganic chemicals

Unplottable Summary

Total: 36 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
CA	Orlando Corporation		Brampton ON	
CA	The Regional Municipality of Peel	Heritage Rd	Brampton ON	
CA	The Regional Municipality of Peel	Steeles Avenue	Brampton ON	
CA	Casa-North Investment Inc.	Part of West Lot 15, Conc. 6	Brampton ON	
CA	The Regional Municipality of Peel	Heritage Road, Lot 14, Concession 5	Brampton ON	
CA	Steeles Avenue West and Mississauga Road	Steeles Ave w from Mississauga Rd to Heritage Rd	Brampton ON	
CA	Steeles Avenue at Credit River Valley	Steeles Ave.	Brampton ON	
CA	Regional Municipality of Peel	Pt. Lot 13, Conc. 6, Pt. Blocks 7 & 8, RP. 43M-936	MISSISSAUGA ON	
CA	ONTARIO CLEAN WATER AGENCY	STREETSVILLE PUMPING STATION	MISSISSAUGA CITY ON	
CA	Sandringham Place Inc.	Part of Lot 13, Concession 6	Brampton ON	
CA	Sandringham Place Inc.	Part of Lot 13, Concession 6	Brampton ON	
CA	Sandringham Place Inc.	Part of Lot 13, Concession 6	Brampton ON	
CA	R.M. OF PEEL	HWY. 407/CN HALTON SUBD.	BRAMPTON CITY ON	
CA	TORSTEELE DEVELOPMENTS LTD.	STEELES AVE.	BRAMPTON CITY ON	
CA	MARKBOROUGH PROPERTIES LTD.	MEADOWVALE BLVD. N. PH.III-A	MISSISSAUGA CITY ON	
CA	MARKBOROUGH PROPERTIES LIMITED	MEADOWVALE BLVD. N.PH.III-A	MISSISSAUGA CITY ON	
CA	MARKBOROUGH PROPERTIES LIMITED	MEADOWVALE BLVD. IND. PARK N.	MISSISSAUGA CITY ON	

CA	Orlando Corporation		Brampton ON	
CA	Orlando Corporation		Brampton ON	
CA	Orlando Corporation	Edgeware Rd	Brampton ON	
CA	The Corporation of the City of Mississauga	Meadowvale Blvd	Mississauga ON	
CA	Orlando Corporation		Brampton ON	
CA	Orlando Corporation		Brampton ON	
CA	Orlando Corporation	Edgeware Rd	Brampton ON	
CA	The Regional Municipality of Peel	Lots 14 and 15, Concession 6	Brampton ON	
CA	CANTAY HOLDINGS INC. KENNEDY RD.	STREET A. ORLANDO CORP.	MISSISSAUGA CITY ON	
CA	MIN. OF THE ENVIRONMENT S. P.WATER SYSTEM	LOT 13 CONC. 6 W. HURONTARIO	MISSISSAUGA CITY ON	
GEN	J.C.H. CONTRACTING LTD.	Lot 1 concession 6	Brampton ON	L6Y0B3
PRT	C CORP (ONTARIO) INC ATTN ACCOUNTS PAYABLE	LOT 15 CON 5	BRAMPTON ON	
RSC	Orlando Corporation	No Municipal Address	Brampton ON	
SPL		Steeles Ave from Heritage Rd to Rutherford Rd	Mississauga ON	
SPL	OK Transport<UNOFFICIAL>	WESTBOUND LANE OF STEELES AVE. EAST AT HWY 407<UNOFFICIAL>	Brampton ON	
SPL		just north of Steeles Ave	Brampton ON	
SPL	Canada Cartage Diversified Gp. Inc.		Mississauga ON	
SPL	Canada Cartage Systems Limited		Brampton ON	
SPL	The Regional Municipality of Peel	Heritage Road	Brampton ON	

Unplottable Report

Site: ***Orlando Corporation***
Brampton ON

Database: ***CA***

Certificate #: 3333-74RK7C
Application Year: 2007
Issue Date: 8/10/2007
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***The Regional Municipality of Peel***
Heritage Rd Brampton ON

Database: ***CA***

Certificate #: 3324-758GWU
Application Year: 2007
Issue Date: 7/20/2007
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***The Regional Municipality of Peel***
Steeles Avenue Brampton ON

Database: ***CA***

Certificate #: 1243-6Y8TKK
Application Year: 2007
Issue Date: 2/12/2007
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Casa-North Investment Inc.***
Part of West Lot 15, Conc. 6 Brampton ON

Database: ***CA***

Certificate #: 0917-672R59

Application Year: 2004
Issue Date: 11/29/2004
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***The Regional Municipality of Peel***
Heritage Road, Lot 14, Concession 5 Brampton ON

Database: ***CA***

Certificate #: 2071-75HKBT
Application Year: 2007
Issue Date: 8/2/2007
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Steeles Avenue West and Mississauga Road***
Steeles Ave w from Mississauga Rd to Heritage Rd Brampton ON

Database: ***CA***

Certificate #: 6230-4Z6QAQ
Application Year: 01
Issue Date: 7/31/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name: Corporation of the Regional Municipality of Peel
Client Address: 10 Peel Centre Drive
Client City: Brampton
Client Postal Code: L6T 4B9
Project Description: Construction of watermains on Steeles Avenue west approximitely 45 meters east of Mississauga Road to approximitely 30 meters east of Heritage Road and Mississauga Road from Steeles Avenue West to approximitely 520 meters northerly.
Contaminants:
Emission Control:

Site: ***Steeles Avenue at Credit River Valley***
Steeles Ave. Brampton ON

Database: ***CA***

Certificate #: 2455-4L8S5J
Application Year: 00
Issue Date: 6/15/00
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name: Corporation of the Regional Municipality of Peel
Client Address: 10 Peel Centre Drive
Client City: Brampton
Client Postal Code: L6T 4B9
Project Description: Installation of 900 and 400 mm Diameter Watermain in Common Trench on the South Side of Steeles Ave.
Contaminants:

Emission Control:

Site: ***Regional Municipality of Peel*** ***Database:*** ***CA***
Pt. Lot 13, Conc. 6, Pt. Blocks 7 & 8, RP. 43M-936 MISSISSAUGA ON

Certificate #: 0237-4ETSXX
Application Year: 99
Issue Date: 12/24/99
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name: Corporation of the Regional Municipality of Peel
Client Address: 10 Peel Centre Drive
Client City: BRAMPTON
Client Postal Code:
Project Description: Construction of watermain and appurtenances in the City of Mississauga
Contaminants:
Emission Control:

Site: ***ONTARIO CLEAN WATER AGENCY*** ***Database:*** ***CA***
STREETSVILLE PUMPING STATION MISSISSAUGA CITY ON

Certificate #: 7-0921-95-006
Application Year: 95
Issue Date: 11/3/95
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Sandringham Place Inc.*** ***Database:*** ***CA***
Part of Lot 13, Concession 6 Brampton ON

Certificate #: 1747-4UTRYD
Application Year: 01
Issue Date: 3/28/01
Approval Type: Municipal & Private water
Status: Approved
Application Type: New Certificate of Approval
Client Name: Casa-North Investments Inc.
Client Address: 1700 Langstaff Road, Suite 2003
Client City: Vaughan
Client Postal Code: L4K 3S3
Project Description: Installation of watermains on Icecap Court, Kootenay Place, Kamloops Drive, Tangleridge Boulevard, Crevice Gate, Mountainash Road, Mountain Gorge Road, Falling Rock Drive, Okanagan Drive, Northface Crescent, Castle Mountain Drive, Pika Trail, Sparkling Place and Stonecrest Drive.
Contaminants:
Emission Control:

Site: ***Sandringham Place Inc.*** ***Database:*** ***CA***
Part of Lot 13, Concession 6 Brampton ON

Certificate #: 0441-4UTREV
Application Year: 01
Issue Date: 3/28/01
Approval Type: Municipal & Private sewage
Status: Approved

Application Type: New Certificate of Approval
Client Name: Casa-North Investments Inc.
Client Address: 1700 Langstaff Road, Suite 2003
Client City: Vaughan
Client Postal Code: L4K 3S3
Project Description: Installation of storm and sanitary sewers on Icecap Court, Kootenay Place, Kamloops Drive, Tangleridge Boulevard, Crevice Gate, Mountainash Road, Mountain Gorge Road, Falling Rock Drive, Okanagan Drive, Northface Crescent, Airport Road, Castle Mountain Drive, Pika Trail, Sparkling Place and Stonecrest Drive, and storm sewers on Block 397 and Easement (Lots 19 and 20).
Contaminants:
Emission Control:

Site: ***Sandringham Place Inc.***
Part of Lot 13, Concession 6 Brampton ON

Database: ***CA***

Certificate #: 2646-4VMQGP
Application Year: 01
Issue Date: 5/1/01
Approval Type: Municipal & Private sewage
Status: Approved
Application Type: New Certificate of Approval
Client Name: Casa-North Investments Inc.
Client Address: 1700 Langstaff Road, Suite 2003
Client City: Vaughan
Client Postal Code: L4K 3S3
Project Description: Construction of a storm water management facility to serve the Sandringham Place Inc. subdivision located on part of Lot 13, Concession 6 in the City of Brampton. The facility includes a permanent wet pond and an extended detention (active storage) capacity of 7,200 m3.
Contaminants:
Emission Control:

Site: ***R.M. OF PEEL***
HWY. 407/CN HALTON SUBD. BRAMPTON CITY ON

Database: ***CA***

Certificate #: 3-0936-95-
Application Year: 95
Issue Date: 7/17/1995
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***TORSTEELE DEVELOPMENTS LTD.***
STEELES AVE. BRAMPTON CITY ON

Database: ***CA***

Certificate #: 7-1886-87-
Application Year: 87
Issue Date: 12/23/1987
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***MARKBOROUGH PROPERTIES LTD.***
MEADOWVALE BLVD. N. PH.III-A MISSISSAUGA CITY ON

Database: ***CA***

Certificate #: 7-1066-89-
Application Year: 89
Issue Date: 7/7/1989
Approval Type: Municipal water
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***MARKBOROUGH PROPERTIES LIMITED***
MEADOWVALE BLVD. N.PH.III-A MISSISSAUGA CITY ON

Database: ***CA***

Certificate #: 3-1272-89-
Application Year: 89
Issue Date: 7/7/1989
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***MARKBOROUGH PROPERTIES LIMITED***
MEADOWVALE BLVD. IND. PARK N. MISSISSAUGA CITY ON

Database: ***CA***

Certificate #: 3-0095-86-
Application Year: 86
Issue Date: 2/14/1986
Approval Type: Municipal sewage
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Orlando Corporation***
Brampton ON

Database: ***CA***

Certificate #: 5409-7KPSEQ
Application Year: 2008
Issue Date: 11/18/2008
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:

Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Orlando Corporation***
Brampton ON

Database: ***CA***

Certificate #: 5790-5LURMN
Application Year: 2003
Issue Date: 5/26/2003
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Orlando Corporation***
Edgeware Rd Brampton ON

Database: ***CA***

Certificate #: 7437-7G7PUV
Application Year: 2008
Issue Date: 7/3/2008
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***The Corporation of the City of Mississauga***
Meadowvale Blvd Mississauga ON

Database: ***CA***

Certificate #: 8113-7CDTF6
Application Year: 2008
Issue Date: 3/4/2008
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Orlando Corporation***
Brampton ON

Database: ***CA***

Certificate #: 8262-5MKN6G

Application Year: 2003
Issue Date: 5/16/2003
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Orlando Corporation***
Brampton ON

Database: ***CA***

Certificate #: 9174-5LVR5S
Application Year: 2003
Issue Date: 4/25/2003
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***Orlando Corporation***
Edgeware Rd Brampton ON

Database: ***CA***

Certificate #: 9695-7R6R6V
Application Year: 2009
Issue Date: 4/21/2009
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***The Regional Municipality of Peel***
Lots 14 and 15, Concession 6 Brampton ON

Database: ***CA***

Certificate #: 9945-6DBHCP
Application Year: 2005
Issue Date: 6/29/2005
Approval Type: Municipal and Private Sewage Works
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Site: ***CANTAY HOLDINGS INC. KENNEDY RD.***
STREET A. ORLANDO CORP. MISSISSAUGA CITY ON

Database: ***CA***

Certificate #:	3-1686-87-
Application Year:	87
Issue Date:	9/29/1987
Approval Type:	Municipal sewage
Status:	Approved
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Site: ***MIN. OF THE ENVIRONMENT S.P.WATER SYSTEM***
LOT 13 CONC. 6 W. HURONTARIO MISSISSAUGA CITY ON

Database: ***CA***

Certificate #:	8-3076-86-
Application Year:	86
Issue Date:	5/14/1987
Approval Type:	Industrial air
Status:	Approved in 1987
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	PROJECT#5-0020-37 COMBUSTION FACILTIES
Contaminants:	Nitrogen Oxides
Emission Control:	No Controls

Site: ***J.C.H. CONTRACTING LTD.***
Lot 1 concession 6 Brampton ON L6Y0B3

Database: ***GEN***

Generator No:	ON3646365	***PO Box No:***	
Status:	Registered	***Country:***	Canada
Approval Years:	As of Dec 2017	***Choice of Contact:***	
Contam. Facility:		***Co Admin:***	
MHSW Facility:		***Phone No Admin:***	
SIC Code:			
SIC Description:			

Detail(s)

Waste Class:	146 L
Waste Class Desc:	Other specified inorganic sludges, slurries or solids

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Site: ***C CORP (ONTARIO) INC ATTN ACCOUNTS PAYABLE***
LOT 15 CON 5 BRAMPTON ON

Database: ***PRT***

Location ID:	1956
Type:	retail
Expiry Date:	1996-02-28
Capacity (L):	81700
Licence #:	0054360001

Site: ***Orlando Corporation***
No Municipal Address Brampton ON

Database: ***RSC***

RSC ID:	207746	***Cert Date:***	
RA No:		***Cert Prop Use No:***	
RSC Type:	Phase 1 RSC	***Intended Prop Use:***	Industrial
Curr Property Use:	Agricultural/Other	***Qual Person Name:***	Vic Nersesian
Ministry District:	Halton-Peel District Office	***Stratified (Y/N):***	
Filing Date:	2013/04/18	***Audit (Y/N):***	
Date Ack:		***Entire Leg Prop. (Y/N):***	
Date Returned:		***Accuracy Estimate:***	
Restoration Type:		***Telephone:***	
Soil Type:		***Fax:***	
Criteria:		***Email:***	
CPU Issued Sect 1686:			

Asmt Roll No: 21 10 080 012 07700-0000
Prop ID No (PIN): 14090-0138
Property Municipal Address: No Municipal Address
Mailing Address:
Latitude & Latitude:
UTM Coordinates:
Consultant:
Legal Desc:
Measurement Method:
Applicable Standards:
RSC PDF: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=19298&fileName=BROWNFIELDS-E-FILE.pdf

Document(s) Detail

Document Heading: Supporting Documents
Document Name: Site survey plan.pdf
Document Type: A Current plan of Survey
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=19304&fileName=Site+survey+plan.pdf

Document Heading: Supporting Documents
Document Name: Certificate of Status.pdf
Document Type: Certificate of Status
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=19305&fileName=Certificate+of+Status.pdf

Document Heading: Supporting Documents
Document Name: CONCEPTUAL SITE MODEL.pdf
Document Type: Phase 1 Conceptual Site Model
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=19299&fileName=CONCEPTUAL+SITE+MODEL.pdf

Document Heading: Supporting Documents
Document Name: transfer document.pdf
Document Type: Copy of any deed(s), transfer(s) or other document(s)
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=19302&fileName=transfer+document.pdf

Document Heading: Supporting Documents
Document Name: Legal Description of Property.pdf
Document Type: Lawyer's letter consisting of a legal description of the property
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=19303&fileName=Legal+Description+of+Property.pdf

Document Heading: Supporting Documents
Document Name: Table of Current and Past Uses.pdf
Document Type: Table of Current and Past Property Use
Document Link: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/viewDocument.action?attachmentId=19300&fileName=Table+of+Current+and+Past+Uses.pdf

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Site:
Steeles Ave from Heritage Rd to Rutherford Rd Mississauga ON

Database: ***SPL***

Ref No:	7011-8YRVL3	***Discharger Report:***	
Site No:		***Material Group:***	
Incident Dt:	04-OCT-12	***Health/Env Conseq:***	
Year:		***Client Type:***	
Incident Cause:	Leak/Break	***Sector Type:***	Truck - Transport/Hauling
Incident Event:		***Agency Involved:***	
Contaminant Code:	96	***Nearest Watercourse:***	
Contaminant Name:	CHICKEN SOUP BLEND	***Site Address:***	Steeles Ave from Heritage Rd to Rutherford Rd
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site Postal Code:***	
Contaminant UN No 1:		***Site Region:***	
Environment Impact:	Confirmed	***Site Municipality:***	Mississauga
Nature of Impact:	Soil Contamination	***Site Lot:***	
Receiving Medium:		***Site Conc:***	
Receiving Env:		***Northing:***	
MOE Response:	Planned Field Response	***Easting:***	
Dt MOE Arvl on Scn:	05-OCT-12	***Site Geo Ref Accu:***	
MOE Reported Dt:	04-OCT-12	***Site Map Datum:***	
Dt Document Closed:	22-OCT-12	***SAC Action Class:***	Highway Spills (usually highway accidents)
Incident Reason:	Unknown / N/A	***Source Type:***	
Site Name:	Steeles Ave from Heritage Rd to Rutherford Rd<UNOFFICIAL>		
Site County/District:			
Site Geo Ref Meth:			
Incident Summary:	Keltic Transp.- trail of chicken soup to road, cleaning		
Contaminant Qty:	0 other - see incident description		

Site: ***OK Transport<UNOFFICIAL>*** ***Database:*** ***SPL***
WESTBOUND LANE OF STEELES AVE. EAST AT HWY 407<UNOFFICIAL> Brampton ON

Ref No:	8578-673HYB	***Discharger Report:***	
Site No:		***Material Group:***	Oil
Incident Dt:	11/25/2004	***Health/Env Conseq:***	
Year:		***Client Type:***	
Incident Cause:	Other Transport Accident	***Sector Type:***	Other Motor Vehicle
Incident Event:		***Agency Involved:***	
Contaminant Code:	13	***Nearest Watercourse:***	
Contaminant Name:	DIESEL FUEL	***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	Halton-Peel
Contam Limit Freq 1:		***Site Postal Code:***	
Contaminant UN No 1:		***Site Region:***	Central
Environment Impact:	Possible	***Site Municipality:***	Brampton
Nature of Impact:	Soil Contamination	***Site Lot:***	
Receiving Medium:	Land	***Site Conc:***	
Receiving Env:		***Northing:***	
MOE Response:		***Easting:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Accu:***	
MOE Reported Dt:	11/25/2004	***Site Map Datum:***	
Dt Document Closed:		***SAC Action Class:***	Spill to Highway (Accident)
Incident Reason:	Unknown - Reason not determined	***Source Type:***	
Site Name:	WESTBOUND LANE OF STEELES AVE. EAST AT HWY 407<UNOFFICIAL>		
Site County/District:			
Site Geo Ref Meth:			
Incident Summary:	OK Transport: 250 L diesel to road, MVA, no c/b		
Contaminant Qty:	250 L		

Site: ***Database:*** ***SPL***
just north of Steeles Ave Brampton ON

Ref No:	4086-9JEN2H	***Discharger Report:***	
Site No:	NA	***Material Group:***	
Incident Dt:	2014/04/22	***Health/Env Conseq:***	
Year:		***Client Type:***	
Incident Cause:	Leak/Break	***Sector Type:***	Truck - Only Saddle Tanks
Incident Event:		***Agency Involved:***	
Contaminant Code:	13	***Nearest Watercourse:***	
Contaminant Name:	DIESEL FUEL	***Site Address:***	just north of Steeles Ave

Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site Postal Code:***	
Contaminant UN No 1:		***Site Region:***	
Environment Impact:	Not Anticipated	***Site Municipality:***	Brampton
Nature of Impact:	Soil Contamination	***Site Lot:***	
Receiving Medium:		***Site Conc:***	
Receiving Env:		***Northing:***	
MOE Response:		***Easting:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Accu:***	
MOE Reported Dt:	2014/04/22	***Site Map Datum:***	
Dt Document Closed:		***SAC Action Class:***	Land Spills
Incident Reason:	Road Conditions	***Source Type:***	
Site Name:	Southbound lanes on airport Rd<UNOFFICIAL>		
Site County/District:			
Site Geo Ref Meth:			
Incident Summary:	Holmes Freight - 400 L diesel to road & c/b, clng		
Contaminant Qty:	400 L		

Site: ***Canada Cartage Diversified Gp. Inc.***
Mississauga ON

Database: ***SPL***

Ref No:	7348-B2URSW	***Discharger Report:***	
Site No:	NA	***Material Group:***	
Incident Dt:	2018/07/20	***Health/Env Conseq:***	2 - Minor Environment
Year:		***Client Type:***	Corporation
Incident Cause:		***Sector Type:***	Miscellaneous Industrial
Incident Event:	Unknown / N/A	***Agency Involved:***	
Contaminant Code:	13	***Nearest Watercourse:***	
Contaminant Name:	DIESEL FUEL	***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	Halton-Peel
Contam Limit Freq 1:	n/a	***Site Postal Code:***	
Contaminant UN No 1:	1202	***Site Region:***	Central
Environment Impact:		***Site Municipality:***	Mississauga
Nature of Impact:		***Site Lot:***	
Receiving Medium:		***Site Conc:***	
Receiving Env:	Land	***Northing:***	
MOE Response:	No	***Easting:***	
Dt MOE Arvl on Scn:		***Site Geo Ref Accu:***	
MOE Reported Dt:	2018/07/20	***Site Map Datum:***	
Dt Document Closed:		***SAC Action Class:***	Primary Assessment of Spills
Incident Reason:	Unknown / N/A	***Source Type:***	Truck - Only Saddle Tanks
Site Name:	2460 Stanfield Road<UNOFFICIAL>		
Site County/District:	Regional Municipality of Peel		
Site Geo Ref Meth:			
Incident Summary:	Canada Cartage: 50 L diesel to asphalt parking lot, cntd		
Contaminant Qty:	50 L		

Site: ***Canada Cartage Systems Limited***
Brampton ON

Database: ***SPL***

Ref No:	0401-8E4K3A	***Discharger Report:***	
Site No:		***Material Group:***	
Incident Dt:	2/15/2011	***Health/Env Conseq:***	
Year:		***Client Type:***	
Incident Cause:	Other Transport Accident	***Sector Type:***	Transport Truck
Incident Event:		***Agency Involved:***	
Contaminant Code:	13	***Nearest Watercourse:***	
Contaminant Name:	DIESEL FUEL	***Site Address:***	
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site Postal Code:***	
Contaminant UN No 1:		***Site Region:***	
Environment Impact:	Confirmed	***Site Municipality:***	Brampton
Nature of Impact:	Other Impact(s)	***Site Lot:***	
Receiving Medium:		***Site Conc:***	
Receiving Env:		***Northing:***	
MOE Response:	No Field Response	***Easting:***	

Dt MOE Arvl on Scn:		***Site Geo Ref Accu:***	
MOE Reported Dt:	2/15/2011	***Site Map Datum:***	
Dt Document Closed:	3/18/2011	***SAC Action Class:***	Land Spills
Incident Reason:	Spill	***Source Type:***	
Site Name:	Airport Rd and Bovaird in intersection<UNOFFICIAL>		
Site County/District:			
Site Geo Ref Meth:			
Incident Summary:	TT and vehicle accident; 75 L to road		
Contaminant Qty:	75 L		

Site: ***The Regional Municipality of Peel***
Heritage Road Brampton ON

Database: ***SPL***

Ref No:	1157-9NYH9K	***Discharger Report:***	
Site No:	2782-6RPPPD	***Material Group:***	
Incident Dt:	2014/09/15	***Health/Env Conseq:***	
Year:		***Client Type:***	
Incident Cause:	Leak/Break	***Sector Type:***	Truck - Transport/Hauling
Incident Event:		***Agency Involved:***	
Contaminant Code:	44	***Nearest Watercourse:***	
Contaminant Name:	SEWAGE,RAW UNCHLORINATED	***Site Address:***	Heritage Road
Contaminant Limit 1:		***Site District Office:***	
Contam Limit Freq 1:		***Site Postal Code:***	NA
Contaminant UN No 1:		***Site Region:***	
Environment Impact:	Not Anticipated	***Site Municipality:***	Brampton
Nature of Impact:	Surface Water Pollution	***Site Lot:***	
Receiving Medium:		***Site Conc:***	
Receiving Env:		***Northing:***	NA
MOE Response:		***Easting:***	NA
Dt MOE Arvl on Scn:		***Site Geo Ref Accu:***	NA
MOE Reported Dt:	2014/09/15	***Site Map Datum:***	NA
Dt Document Closed:		***SAC Action Class:***	Land Spills
Incident Reason:	Operator/Human Error	***Source Type:***	
Site Name:	Mullet Creek Sewage Pumping Station		
Site County/District:			
Site Geo Ref Meth:	NA		
Incident Summary:	Region of Peel: raw swge pooling at drop off site		
Contaminant Qty:	0 No Set Limit		

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ***Note:*** *Databases denoted with " * " indicates that the database will no longer be updated. See the individual database description for more information.*

Abandoned Aggregate Inventory: Provincial AAGR

The MAAP Program maintains a database of abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.*

Government Publication Date: Sept 2002*

Aggregate Inventory: Provincial AGR

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. The database provides information regarding the registered owner/operator, location name, operation type, approval type, and maximum annual tonnage.

Government Publication Date: Up to Sep 2019

Abandoned Mine Information System: Provincial AMIS

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Government Publication Date: 1800-Oct 2018

Anderson's Waste Disposal Sites: Private ANDR

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1860s-Present

Aboveground Storage Tanks: Provincial AST

Historical listing of aboveground storage tanks made available by the Department of Natural Resources and Forestry. Includes tanks used to hold water or petroleum. This dataset has been retired as of September 25, 2014 and will no longer be updated.

Government Publication Date: May 31, 2014

Automobile Wrecking & Supplies: Private AUWR

This database provides an inventory of known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Government Publication Date: 1999-Jan 31, 2020

Borehole: Provincial BORE

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

Government Publication Date: 1875-Jul 2018

Certificates of Approval: Provincial CA

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CofA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

Government Publication Date: 1985-Oct 30, 2011*

Dry Cleaning Facilities: Federal CDRY

List of dry cleaning facilities made available by Environment and Climate Change Canada. Environment and Climate Change Canada's Tetrachloroethylene (Use in Dry Cleaning and Reporting Requirements) Regulations (SOR/2003-79) are intended to reduce releases of tetrachloroethylene to the environment from dry cleaning facilities.
Environment and Climate Change Canada cites the coronavirus pandemic as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: Jan 2004-Dec 2017

Commercial Fuel Oil Tanks: Provincial CFOT

Locations of commercial underground fuel oil tanks. This is not a comprehensive or complete inventory of commercial fuel tanks in the province; this listing is a copy of records of registered commercial underground fuel oil tanks obtained under Access to Public Information.
Note that the following types of tanks do not require registration: waste oil tanks in apartments, office buildings, residences, etc.; aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.
The coronavirus pandemic is cited by the agency responsible for tank regulations and data as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: Feb 28, 2017

Chemical Register: Private CHEM

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

Government Publication Date: 1999-Jan 31, 2020

Compressed Natural Gas Stations: Private CNG

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance.

Government Publication Date: Dec 2012 - Jun 2020

Inventory of Coal Gasification Plants and Coal Tar Sites: Provincial COAL

This inventory includes both the "Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987" and the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.*

Government Publication Date: Apr 1987 and Nov 1988*

Compliance and Convictions: Provincial CONV

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Government Publication Date: 1989-Dec 2019

Certificates of Property Use: Provincial CPU

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

Government Publication Date: 1994-Jun 30, 2020

Drill Hole Database: Provincial DRL

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

Government Publication Date: 1886 - Sep 2019

Environmental Activity and Sector Registry: Provincial EASR

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval), Please see our ECA database.

Government Publication Date: Oct 2011-Jun 30, 2020

Environmental Registry: Provincial EBR

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

Government Publication Date: 1994-Jun 30, 2020

Environmental Compliance Approval: Provincial ECA

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For certificates of approval prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

Government Publication Date: Oct 2011-Jun 30, 2020

Environmental Effects Monitoring: Federal EEM

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

Government Publication Date: 1992-2007*

ERIS Historical Searches: Private EHS

ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Government Publication Date: 1999-Apr 30, 2020

Environmental Issues Inventory System: Federal EIIS

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

Government Publication Date: 1992-2001*

Emergency Management Historical Event: Provincial EMHE

List of locations of historical occurrences of emergency events, including those assigned to the Ministry of Natural Resources by Order-In-Council (OIC) under the Emergency Management and Civil Protection Act, as well as events where MNR provided requested emergency response assistance. Many of these events will have involved community evacuations, significant structural loss, and/or involvement of MNR emergency response staff. These events fall into one of ten (10) type categories: Dam Failure; Drought / Low Water; Erosion; Flood; Forest Fire; Soil and Bedrock Instability; Petroleum Resource Center Event, EMO Requested Assistance, Continuity of Operations Event, Other Requested Assistance. EMHE record details are reproduced by ERIS under License with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2017.

Government Publication Date: Dec 31, 2016

Environmental Penalty Annual Report: Provincial EPAR

This database contains data from Ontario's annual environmental penalty report published by the Ministry of the Environment and Climate Change. These reports provide information on environmental penalties for land or water violations issued to companies in one of the nine industrial sectors covered by the Municipal Industrial Strategy for Abatement (MISA) regulations.

Government Publication Date: Jan 1, 2011 - Dec 31, 2019

List of Expired Fuels Safety Facilities: Provincial EXP

List of facilities and tanks for which there was once a fuel registration. This is not a comprehensive or complete inventory of expired tanks/tank facilities in the province; this listing is a copy of previously registered tanks and facilities obtained under Access to Public Information. Includes private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc; includes tanks which have been removed from the ground.
Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.
The coronavirus pandemic is cited by the agency responsible for tank regulations and data as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: Feb 28, 2017

Federal Convictions: Federal FCON

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Government Publication Date: 1988-Jun 2007*

Contaminated Sites on Federal Land: Federal FCS

The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government. Includes fire training sites and sites at which Per- and Polyfluoroalkyl Substances (PFAS) are a concern.

Government Publication Date: Jun 2000-Apr 2020

Fisheries & Oceans Fuel Tanks: Federal FOFT

Fisheries & Oceans Canada maintains an inventory of aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

Government Publication Date: 1964-Sep 2019

Federal Identification Registry for Storage Tank Systems (FIRSTS): Federal FRST

A list of federally regulated Storage tanks from the Federal Identification Registry for Storage Tank Systems (FIRSTS). FIRSTS is Environment and Climate Change Canada's database of storage tank systems subject to the Storage Tank for Petroleum Products and Allied Petroleum Products Regulations. The main objective of the Regulations is to prevent soil and groundwater contamination from storage tank systems located on federal and aboriginal lands. Storage tank systems that do not have a valid identification number displayed in a readily visible location on or near the storage tank system may be refused product delivery.

Government Publication Date: May 31, 2018

Fuel Storage Tank: Provincial FST

List of registered private and retail fuel storage tanks. This is not a comprehensive or complete inventory of private and retail fuel storage tanks in the province; this listing is a copy of registered private and retail fuel storage tanks, obtained under Access to Public Information.
Notes: registration was not required for private fuel underground/aboveground storage tanks prior to January 1990, nor for furnace oil tanks prior to May 1, 2002; registration is not required for waste oil tanks in apartments, office buildings, residences, etc., or aboveground gas or diesel tanks. Records are not verified for accuracy or completeness.
The coronavirus pandemic is cited by the agency responsible for tank regulations and data as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: Feb 28, 2017

Fuel Storage Tank - Historic: Provincial FSTH

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

Government Publication Date: Pre-Jan 2010*

Ontario Regulation 347 Waste Generators Summary: Provincial GEN

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

Government Publication Date: 1986-Apr 30, 2020

Greenhouse Gas Emissions from Large Facilities: Federal GHG

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO2 eq).

Government Publication Date: 2013-Dec 2017

TSSA Historic Incidents: Provincial HINC

List of historic incidences of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen recorded by the TSSA in their previous incident tracking system. The TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, the TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Records are not verified for accuracy or completeness. This is not a comprehensive or complete inventory of historical fuel spills and leaks in the province. This listing is a copy of the data captured at one moment in time and is hence limited by the record date provided here.

Government Publication Date: 2006-June 2009*

Indian & Northern Affairs Fuel Tanks: Federal IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

Government Publication Date: 1950-Aug 2003*

Fuel Oil Spills and Leaks: Provincial INC

Listing of spills and leaks of diesel, fuel oil, gasoline, natural gas, propane, and hydrogen reported to the Spills Action Centre (SAC). This is not a comprehensive or complete inventory of fuel-related leaks, spills, and incidents in the province; this listing in a copy of incidents reported to the SAC, obtained under Access to Public Information. Includes incidents from fuel-related hazards such as spills, fires, and explosions. Records are not verified for accuracy or completeness.
The coronavirus pandemic is cited by the agency responsible for tank regulations and data as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: Feb 28, 2017

Landfill Inventory Management Ontario: Provincial LIMO

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the ministry compiles new and updated information. The inventory will include small and large landfills. Additionally, each year the ministry will request operators of the larger landfills complete a landfill data collection form that will be used to update LIMO and will include the following information from the previous operating year. This will include additional information such as estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills will include information such as site owner, site location and certificate of approval # and status.

Government Publication Date: Feb 28, 2019

Canadian Mine Locations: Private MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Government Publication Date: 1998-2009*

Mineral Occurrences: Provincial MNR

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the plan metric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Government Publication Date: 1846-Jan 2020

National Analysis of Trends in Emergencies System (NATES): Federal NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Government Publication Date: 1974-1994*

Non-Compliance Reports: Provincial NCPL

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Government Publication Date: Dec 31, 2018

National Defense & Canadian Forces Fuel Tanks: Federal NDFT

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

Government Publication Date: Up to May 2001*

National Defense & Canadian Forces Spills: Federal NDSP

The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

Government Publication Date: Mar 1999-Apr 2018

National Defence & Canadian Forces Waste Disposal Sites: Federal NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

Government Publication Date: 2001-Apr 2007*

National Energy Board Pipeline Incidents: Federal NEBI

Locations of pipeline incidents from 2008 to present, made available by the Canada Energy Regulator (CER) - previously the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

Government Publication Date: 2008-Mar 31, 2020

National Energy Board Wells: Federal NEBP

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release date.

Government Publication Date: 1920-Feb 2003*

National Environmental Emergencies System (NEES): Federal NEES

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

Government Publication Date: 1974-2003*

National PCB Inventory: Federal NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

Government Publication Date: 1988-2008*

National Pollutant Release Inventory: Federal NPRI

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

Government Publication Date: 1993-May 2017

Oil and Gas Wells: Private OGWE

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Government Publication Date: 1988-May 31, 2020

Ontario Oil and Gas Wells: Provincial OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, and well cap date, license No., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

Government Publication Date: 1800-Jun 2019

Inventory of PCB Storage Sites: Provincial OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Government Publication Date: 1987-Oct 2004; 2012-Dec 2013

Orders: Provincial ORD

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

Government Publication Date: 1994-Jun 30, 2020

Canadian Pulp and Paper: Private PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Government Publication Date: 1999, 2002, 2004, 2005, 2009-2014

Parks Canada Fuel Storage Tanks: Federal PCFT

Canadian Heritage maintains an inventory of known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Government Publication Date: 1920-Jan 2005*

Pesticide Register: Provincial PES

The Ontario Ministry of the Environment and Climate Change maintains a database of licensed operators and vendors of registered pesticides.

Government Publication Date: Oct 2011-Jun 30, 2020

Pipeline Incidents: Provincial PINC

List of pipeline incidents (strikes, leaks, spills). This is not a comprehensive or complete inventory of pipeline incidents in the province; this listing in an historical copy of records previously obtained under Access to Public Information. Records are not verified for accuracy or completeness.
The coronavirus pandemic is cited by the agency responsible for tank regulations and data as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: Feb 28, 2017

Private and Retail Fuel Storage Tanks: Provincial PRT

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Government Publication Date: 1989-1996*

Permit to Take Water: Provincial PTTW

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Government Publication Date: 1994-Jun 30, 2020

Ontario Regulation 347 Waste Receivers Summary: Provincial REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Government Publication Date: 1986-2016

Record of Site Condition: Provincial RSC

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up.
RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

Government Publication Date: 1997-Sept 2001, Oct 2004-May 2020

Retail Fuel Storage Tanks: Private RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Government Publication Date: 1999-Jan 31, 2020

Scott's Manufacturing Directory: Private SCT

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

Government Publication Date: 1992-Mar 2011*

Ontario Spills: Provincial SPL

List of spills and incidents made available the Ministry of the Environment, Conservation and Parks. This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.
The Ministry of the Environment, Conservation and Parks cites the coronavirus pandemic as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: 1988-Nov 2019

Wastewater Discharger Registration Database: Provincial SRDS

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

Government Publication Date: 1990-Dec 31, 2017

Anderson's Storage Tanks: Private TANK

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Government Publication Date: 1915-1953*

Transport Canada Fuel Storage Tanks: Federal TCFT

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 7,530 hectares (18,600 acres) of land in Pickering, Markham, and Uxbridge owned by the Government of Canada since 1972; properties on this land has been leased by the government since 1975, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

Government Publication Date: 1970-Aug 2018

Variances for Abandonment of Underground Storage Tanks: Provincial VAR

Listing of variances granted for storage tank abandonment. This is not a comprehensive or complete inventory of tank abandonment variances in the province; this listing is a copy of tank abandonment variance records previously obtained under Access to Public Information. In Ontario, registered underground storage tanks must be removed within two years of disuse; if removal of a tank is not feasible, an application may be sought for a variance from this code requirement.
Records are not verified for accuracy or completeness.
The coronavirus pandemic is cited by the agency responsible for tank regulations and data as an explanation for delays in releasing data pursuant to requests.

Government Publication Date: Feb 28, 2017

Waste Disposal Sites - MOE CA Inventory: Provincial WDS

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

Government Publication Date: Oct 2011-Jun 30, 2020

Waste Disposal Sites - MOE 1991 Historical Approval Inventory: Provincial WDSH

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Government Publication Date: Up to Oct 1990*

Water Well Information System: Provincial WWIS

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

Government Publication Date: Apr 30, 2020

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

APPENDIX C

Technical Standards and Safety Authority (TSSA) Responses

From: Jason Noronha
To: Shamsul Tarafder
Subject: FW: list of fuel tanks Heritage rd
Date: Wednesday, August 12, 2020 1:37:27 PM
Attachments: image002.png
image003.png
image004.png
411F556910454176AF2FCD6E24626387.png
6B4F97DE67EE495ABE6C8F9429ACDE09.png

Sent from Mail for Windows 10

From: Public Information Services
Sent: July 2, 2020 2:50 PM
To: Jason Noronha
Subject: RE: list of fuel tanks

No Records Found

Thank you for your request for confirmation of public information.

- We confirm that there are **no fuel storage tanks records** in our database at the subject address(es).

For a further search in our archives please complete our release of public information form found at https://www.tssa.org/en/about-tssa/release-of-public-information.aspx?_mid_=392 and email the completed form to publicinformationservices@tssa.org or through mail along with a fee of $56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.
Although TSSA believes the information provided pursuant to your request is accurate, please note that TSSA does not warrant this information in any way whatsoever.
Kind regards,

Connie Hill | Public Information Agent
Facilities
345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel: +1-416-734-3383 | Fax: +1-416-231-6183 | E-Mail: publicinformationservices@tssa.org
www.tssa.org

From: Jason Noronha <jnoronha@petomaccallum.com>
Sent: July 2, 2020 10:34 AM
To: Public Information Services <publicinformationservices@tssa.org>
Subject: list of fuel tanks

Good morning,

I would like to request a list of fuel tanks for the following locations in Brampton/Mississauga

1) 8050 Heritage Road, Brampton

2) 7975 Heritage Road

3) 2675 Steeles Ave W

4) 7965 Heritage Road

5) 7726-7882 Heritage Rd

6) 7405 Danbro Cres, Mississauga

7) 7696 Heritage Road

8) 7755 Heritage Road

9) 7845 Heritage Road

10) 7855 Heritage Road

Thank you

Jason Noronha, BSc

Project Supervisor
Geoenvironmental and Hydrogeological Services

Peto MacCallum Ltd.
165 Cartwright Avenue
Toronto, Ontario M6A 1V5
Tel: (416) 785-5110
Fax: (416) 785-5120
Cell: (647) 401-4604

jnoronha@petomaccallum.com

APPENDIX D

Statement of Limitations

STATEMENT OF LIMITATIONS

This report is prepared for and made available for the sole use of the client named. Peto MacCallum Ltd. (PML) hereby disclaims any liability or responsibility to any person or entity, other than those for whom this report is specifically issued, for any loss, damage, expenses, or penalties that may arise or result from the use of any information or recommendations contained in this report. The contents of this report may not be used or relied upon by any other person without the express written consent and authorization of PML.

This report shall not be relied upon for any purpose other than as agreed with the client named without the written consent of PML. It shall not be used to express or imply warranty as to the fitness of the property for a particular purpose. A portion of this report may not be used as a separate entity: that is to say the report is to be read in its entirety at all times.

The report is based solely on the scope of services which are specifically referred to in this report. No physical or intrusive testing has been performed, except as specifically referenced in this report. This report is not a certification of compliance with past or present regulations, codes, guidelines and policies.

The scope of services carried out by PML is based on details of the proposed development and land use to address certain issues, purposes and objectives with respect to the specific site as identified by the client. Services not expressly set forth in writing are expressly excluded from the services provided by PML. In other words, PML has not performed any observations, investigations, study analysis, engineering evaluation or testing that is not specifically listed in the scope of services in this report. PML assumes no responsibility or duty to the client for any such services and shall not be liable for failing to discover any condition, whose discovery would require the performance of services not specifically referred to in this report.

The findings and comments made by PML in this report are based on the conditions observed at the time of PML's site reconnaissance. No assurances can be made and no assurances are given with respect to any potential changes in site conditions following the time of completion of PML's field work. Furthermore, regulations, codes and guidelines may change at any time subsequent to the date of this report and these changes may affect the validity of the findings and recommendations given in this report.

The results and conclusions with respect to site conditions are therefore in no way intended to be taken as a guarantee or representation, expressed or implied, that the site is free from any contaminants from past or current land use activities or that the conditions in all areas of the site and beneath or within structures are the same as those areas specifically sampled.

Any investigation, examination, measurements or sampling explorations at a particular location may not be representative of conditions between sampled locations. Soil, groundwater, surface water, or building material conditions between and beyond the sampled locations may differ from those encountered at the sampling locations and conditions may become apparent during construction which could not be detected or anticipated at the time of the intrusive sampling investigation.

Budget estimates contained in this report are to be viewed as an engineering estimate of probable costs and provided solely for the purposes of assisting the client in its budgeting process. It is understood and agreed that PML will not in any way be held liable as a result of any budget figures provided by it.

The Client expressly waives its right to withhold PML's fees, either in whole or in part, or to make any claim or commence an action or bring any other proceedings, whether in contract, tort, or otherwise against PML in any way connected with advice or information given by PML relating to the cost estimate or Environmental Remediation/Cleanup and Restoration or Soil and Groundwater Management Plan Cost Estimate.

Appendix C
Cultural Heritage Assessment

CULTURAL HERITAGE REPORT:
EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT

HERITAGE ROAD WATERMAIN CONSTRUCTION
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

CITY OF BRAMPTON AND CITY OF MISSISSAUGA
REGION OF PEEL, ONTARIO

FINAL REPORT

Prepared for:

Ainley Group
280 Pretty River Parkway
Collingwood, ON L9Y 4J5

ASI File: 19CH-080

May 2020 (Updated August 2021)

ASI Providing Archaeological & Cultural Heritage Services
528 Bathurst Street Toronto, ONTARIO M5S 2P9
416-966-1069 F 416-966-9723 asiheritage.ca

CULTURAL HERITAGE REPORT:
EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT

HERITAGE ROAD WATERMAIN CONSTRUCTION
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

CITY OF BRAMPTON AND CITY OF MISSISSAUGA
REGION OF PEEL, ONTARIO

EXECUTIVE SUMMARY

ASI was contracted by Ainley Group, on behalf of the Region of Peel, to conduct a Cultural Heritage Report as part of the Heritage Road Watermain Construction Municipal Class Environmental Assessment (EA). The EA involves the construction of a watermain on Heritage Road between Steeles Avenue West in the City of Brampton to the Meadowvale North Pumping Station in the City of Mississauga. The project study area consists of Heritage Road and Meadowvale Boulevard from Steeles Avenue West to 2660 Meadowvale Boulevard and is generally bounded by commercial and industrial properties northwest of the Highway 407 and agricultural and commercial properties to the southwest of the Highway 407.

The purpose of this report is to present an inventory of known and potential built heritage resources (BHRs) and cultural heritage landscapes (CHLs), identify existing conditions of the project study area, provide a preliminary impact assessment, and propose appropriate mitigation measures.

The results of background historical research and a review of secondary source material, including historical mapping, indicate a study area with a rural land use history dating back to the nineteenth century. A review of federal, provincial, and municipal registers, inventories, and databases revealed that there is one previously identified feature of cultural heritage value within the Heritage Road Watermain Construction Municipal Class EA study area. An additional potential cultural heritage resource was identified during background research.

Based on the results of the assessment, the following recommendations have been developed:

1. Construction activities and staging should be suitably planned and undertaken to avoid unintended negative impacts to the identified CHLs. Avoidance measures may include, but are not limited to: erecting temporary fencing, establishing buffer zones, issuing instructions to construction crews to avoid identified cultural heritage resources, etc.

2. As the property at 7696 Heritage Road (CHL 1) is listed by the City of Brampton and there are indirect impacts anticipated, a resource-specific Heritage Impact Assessment (HIA) may be required as per the City of Brampton Official Plan clause 4.10.1.11. However, given that no structures or apparent landscape features of significant cultural heritage value or interest are anticipated to be impacted on the property, it is recommended that the City of Brampton

consider waiving the requirement of a HIA in these cases in favour of suitable mitigation measures including post-construction rehabilitation which could include sympathetic plantings where required

3. Should future work require an expansion of the study area then a qualified heritage consultant should be contacted in order to confirm the impacts of the proposed work on known and potential heritage resources.

4. The report should be submitted by the proponent to the City of Brampton, City of Mississauga, and the Ministry of Heritage, Sport, Tourism and Culture Industries for review and comment, and any other local heritage stakeholders that may have an interest in this project. Feedback received will be considered and incorporated into the final report, as appropriate. The final report should be submitted to the City of Brampton and the City of Mississauga for their records.

PROJECT PERSONNEL

Senior Project Manager:	Lindsay Graves, MA, CAHP Senior Cultural Heritage Specialist |Senior Project Manager - Cultural Heritage Division
Project Coordinator:	Katrina Thach, Hon. BA Associate Archaeologist | Project Coordinator - Environmental Assessment Division
Project Manager:	Johanna Kelly, MSc Cultural Heritage Analyst | Project Manager - Cultural Heritage Division
	Rebecca Sciarra, MA, CAHP Partner | Director - Cultural Heritage Division
Field Review:	Jessica Lytle Associate Archaeologist | Project Manager – Environmental Assessment Division
Report Production:	Johanna Kelly
	Kirstyn Allam, BA (Hon), Advanced Diploma in Applied Museum Studies Cultural Heritage Technician | Technical Writer and Researcher - Cultural Heritage Division
Graphics Production:	Jonas Fernandez, MSc Manager, Geomatics - Operations Division
	Adam Burwell, MSc Geomatics Specialist - Operations Division
	Eric Bongelli, MES Archaeologist | Geomatics Specialist - Operations Division
Report Reviewer(s):	John Sleath, MA Cultural Heritage Specialist | Project Manager - Cultural Heritage Division
	Lindsay Graves
	Rebecca Sciarra

QUALIFIED PERSONS INVOLVED IN THE PROJECT

Lindsay Graves, MA, CAHP
Senior Cultural Heritage Specialist |Senior Project Manager - Cultural Heritage Division

The Senior Project Manager for this Cultural Heritage Report is **Lindsay Graves** (MA, Heritage Conservation), Senior Cultural Heritage Specialist and the Environmental Assessment Coordinator for the Cultural Heritage Division at ASI. She was responsible for: overall project scoping and approach; development and confirmation of technical findings and study recommendations; application of relevant standards, guidelines and regulations; and implementation of quality control procedures. Lindsay is academically trained in the fields of heritage conservation, cultural anthropology, archaeology, and collections management and has over 15 years of experience in the field of cultural heritage resource management. This work has focused on the assessment, evaluation, and protection of above ground cultural heritage resources. Lindsay has extensive experience undertaking archival research, heritage survey work, heritage evaluation and heritage impact assessment. She has also contributed to cultural heritage landscape studies and heritage conservation plans, led heritage commemoration and interpretive programs, and worked collaboratively with multidisciplinary teams to sensitively plan interventions at historic sites/places. In addition, she is a leader in the completion of heritage studies required to fulfill Class EA processes and has served as Project Manager for over 100 heritage assessments during her time at ASI. Lindsay is a member of the Canadian Association of Heritage Professionals.

Johanna Kelly, MSc
Cultural Heritage Analyst, Project Manager - Cultural Heritage Division

A Project Manager for this Cultural Heritage Report is **Johanna Kelly** (MSc), who is a Cultural Heritage Analyst and Project Manager within the Cultural Heritage Division. She was responsible for the day-to-day management activities, including scoping of research activities and drafting of study findings and recommendations. With over ten years of experience in the field, Johanna has focused on the identification and evaluation of cultural heritage resources both above and below ground. With a background in archaeology, her current focus is the assessment, evaluation, and protection of above ground cultural heritage resources. Johanna has been involved in numerous large scale and high profile projects in various capacities, including built heritage and cultural heritage landscape assessments under the *Ontario Environmental Assessment Act* for Class Environmental Assessments and Individual Environmental Assessments, and as required for various planning studies throughout the Province of Ontario.

Rebecca Sciarra, MA, CAHP
Partner | Director - Cultural Heritage Division

The Project Manager for this Cultural Heritage Report, as of August 2021, is **Rebecca Sciarra** (MA, Canadian Studies). She was responsible for: overall project scoping and approach; development and confirmation of technical findings and study recommendations; application of relevant standards, guidelines and regulations; and implementation of quality control procedures. Rebecca is a Partner and Director of the Cultural Heritage Division. She is responsible for the highest-level management of a busy

and diverse team of heritage professionals who apply their expertise across a broad range of public and private sector clientele. Rebecca also provides oversight and quality assurance for all deliverables, maintaining responsive and prompt client communications, and providing heritage clients with a direct connection to corporate ownership. In addition to her role as Director of the Cultural Heritage Division, Rebecca is academically trained in heritage conservation principles and practices. She has led a range of high profile and complex heritage planning and conservation management projects for public and private sector clients. Her experience in both the private and public sectors has involved providing expertise around the strategic development of policies and programs to conserve Ontario's cultural heritage resources as part of environmental and land-use planning processes. She has worked with municipal, provincial, federal and private sector clients to lead heritage evaluations and assessment as part of area planning studies, including secondary plans, heritage conservation district studies, and master plans. Rebecca is a member of ICOMOS Canada and the Canadian Association of Heritage Professionals.

Kirstyn Allam, BA (Hon), Advanced Diploma in Applied Museum Studies
Cultural Heritage Technician | Technical Writer and Researcher - Cultural Heritage Division

One of the report writers for this Cultural Heritage Report is **Kirstyn Allam** (BA (Hon), Advanced Diploma in Applied Museum Studies), who is a Cultural Heritage Technician and Technical Writer and Researched within the Cultural Heritage Division with ASI. She was responsible for preparing and contributing to research and technical reporting. Kirstyn Allam's education and experience in cultural heritage, historical research, archaeology, and collections management has provided her with a deep knowledge and strong understanding of the issues facing the cultural heritage industry and best practices in the field. Kirstyn has experience in heritage conservation principles and practices in cultural resource management. Kirstyn also has experience being involved with Stage 1-4 archaeological excavations in the Province of Ontario.

GLOSSARY

Term	Definition
Adjacent	"contiguous properties as well as properties that are separated from a heritage property by narrow strip of land used as a public or private road, highway, street, lane, trail, right-of-way, walkway, green space, park, and/or easement or as otherwise defined in the municipal official plan" (Ministry of Tourism, Culture and Sport 2010).
Built Heritage Resource (BHR)	"…a building, structure, monument, installation or any manufactured remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. Built heritage resources are located on property that may be designated under Parts IV or V of the *Ontario Heritage Act*, or that may be included on local, provincial, federal and/or international registers" (Government of Ontario 2020:41).
Cultural Heritage Landscape (CHL)	"…a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the *Ontario Heritage Act*, or have been included on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms" (Government of Ontario 2020:42).
Cultural Heritage Resource	Includes above-ground resources such as built heritage resources and cultural heritage landscapes, and built or natural features below-ground including archaeological resources (Government of Ontario 2020).
Known Cultural Heritage Resource	A known cultural heritage resource is a property that has recognized cultural heritage value or interest. This can include a property listed on a Municipal Heritage Register, designated under Part IV or V of the *Ontario Heritage Act*, or protected by a heritage agreement, covenant or easement, protected by the *Heritage Railway Stations Protection Act or* the *Heritage Lighthouse Protection Act*, identified as a Federal Heritage Building, or located within a UNESCO World Heritage Site (Ministry of Tourism, Culture and Sport 2016).
Impact	Includes negative and positive, direct and indirect effects to an identified cultural heritage resource. Direct impacts include destruction of any, or part of any, significant heritage attributes or features and/or unsympathetic or incompatible alterations to an identified resource. Indirect impacts include, but are not limited to, creation of shadows, isolation of heritage attributes, direct or indirect obstruction of significant views, change in land use, land disturbances (Ministry of Tourism and Culture 2006). Indirect impacts also include potential vibration impacts

	(See Section 2.5 for complete definition and discussion of potential impacts).
Mitigation	Mitigation is the process of lessening or negating anticipated adverse impacts to cultural heritage resources and may include, but are not limited to, such actions as avoidance, monitoring, protection, relocation, remedial landscaping, and documentation of the cultural heritage landscape and/or built heritage resource if to be demolished or relocated.
Potential Cultural Heritage Resource	A potential cultural heritage resource is a property that has the potential for cultural heritage value or interest. This can include properties/project area that contain a parcel of land that is the subject of a commemorative or interpretive plaque, is adjacent to a known burial site and/or cemetery, is in a Canadian Heritage River Watershed, or contains buildings or structures that are 40 or more years old (Ministry of Tourism, Culture and Sport 2016).
Significant	With regard to cultural heritage and archaeology resources, significant means "resources that have been determined to have cultural heritage value or interest. Processes and criteria for determining cultural heritage value or interest are established by the Province under the authority of the *Ontario Heritage Act.* While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation" (Government of Ontario 2020:51).
Vibration Zone of Influence	Area within a 50 m buffer of construction-related activities in which there is potential to affect an identified cultural heritage resource. A 50 m buffer is applied in the absence of a project-specific defined vibration zone of influence based on existing secondary source literature and direction provided from the MHSTCI (Wiss 1981; Rainer 1982; Ellis 1987; Crispino and D'Apuzzo 2001; Carman et al. 2012). This buffer accommodates the additional threat from collisions with heavy machinery or subsidence (Randl 2001).

TABLE OF CONTENTS

EXECUTIVE SUMMARY i
PROJECT PERSONNEL iii
QUALIFIED PERSONS INVOLVED IN THE PROJECT iv
GLOSSARY vi
TABLE OF CONTENTS viii
1.0 INTRODUCTION 1
1.1 Report Purpose 1
1.2 Project Overview 1
1.3 Description of Study Area 1
2.0 METHODOLOGY 2
2.1 Regulatory Requirements 2
2.2 Municipal/Regional Heritage Policies 3
2.3 Identification of Built Heritage Resources and Cultural Heritage Landscapes 3
2.4 Background Information Review 4
2.4.1 Review of Existing Heritage Inventories 4
2.4.2 Review of Previous Heritage Reporting 5
2.4.3 Stakeholder Data Collection 5
2.5 Preliminary Impact Assessment Methodology 6
3.0 SUMMARY OF HISTORICAL DEVELOPMENT WITHIN THE STUDY AREA 7
3.1 Physiography 7
3.2 Summary of Early Indigenous History in Southern Ontario 8
3.3 Historical Euro-Canadian Township Survey and Settlement 9
3.3.1 Former Township of Toronto 9
3.4 Review of Historical Mapping 9
4.0 EXISTING CONDITIONS 14
4.1 Description of Field Review 14
4.2 Identification of Known and Potential Built Heritage Resources and Cultural Heritage Landscapes 18
5.0 PRELIMINARY IMPACT ASSESSMENT 22
5.1 Description of Proposed Undertaking 22
5.2 Analysis of Potential Impacts 22
6.0 RESULTS AND MITIGATION RECOMMENDATIONS 24
6.1 Key Findings 24
6.2 Recommendations 25
7.0 REFERENCES 26
APPENDIX A: PROPOSED ALIGNMENT DESIGNS 31

List of Tables

Table 1: Nineteenth-century property owner(s) and historical features(s) 10
Table 2: Inventory of Known and Potential Cultural Heritage Landscapes within the Study Area 19
Table 3: Preliminary Impact Assessment and Recommended Mitigation Measures 23

List of Figures

Figure 1: Location of the study area 2
Figure 2: The study area overlaid on the 1859 Tremaine's Map of the County of Peel 11

Figure 3: The study area overlaid on the 1877 Historical Atlas of the County of Peel 12
Figure 4: The study area overlaid on the 1922 topographic map of Brampton 12
Figure 5: The study area overlaid on the 1954 aerial photograph 13
Figure 6: The study area overlaid on the 1973 topographic map of Hornby 13
Figure 7: The study area overlaid on the 1994 NTS map of Brampton 14
Figure 8: Location of Identified Cultural Heritage Landscapes in the Study Area 21

List of Plates

Plate 1: North end of the study area, looking south across commercial and industrial properties. 15
Plate 2: Looking south along Heritage Road, at Edgeware Road. 15
Plate 3: View south along the bridge carrying Heritage Road over Highway 407. 16
Plate 4: View south towards the agricultural fields and hydro corridor located south of Highway 407. 16
Plate 5: Looking north across agricultural fields towards Highway 407. 17
Plate 6: Meadowvale Boulevard, looking southeast. Visible on the left of the photo is recreational space (dog park) and on the right, the Meadowvale North Pumping Station. 17

1.0 INTRODUCTION

1.1 Report Purpose

ASI was contracted by Ainley Group, on behalf of the Region of Peel, to conduct a Cultural Heritage Report as part of the Heritage Road Watermain Construction Municipal Class Environmental Assessment. The purpose of this report is to present an inventory of known and potential built heritage resources (BHRs) and cultural heritage landscapes (CHLs), identify existing conditions of the project study area, provide a preliminary impact assessment, and propose appropriate mitigation measures.

1.2 Project Overview

The Heritage Road Watermain Construction Municipal Class Environmental Assessment involves the construction of a watermain on Heritage Road between Steeles Avenue West in the City of Brampton to the Meadowvale North Pumping Station in the City of Mississauga. The project study area consists of Heritage Road and Meadowvale Boulevard from Steeles Avenue West to 2660 Meadowvale Boulevard and is generally bounded by commercial and industrial properties northwest of the Highway 407 and agricultural and commercial properties to the southwest of the Highway 407.

1.3 Description of Study Area

This Cultural Heritage Report will focus on the project study area study area consists of a 25 m buffer to the east and west from the centerline of Heritage Road (City of Brampton) and Meadowvale Boulevard (City of Mississauga) between Steeles Avenue West and 2660 Meadowvale Boulevard (Figure 1). This project study area has been defined as inclusive of those lands that may contain BHRs or CHLs that may be subject to direct or indirect impacts as a result of the proposed undertaking. Properties within the study area are located in the City of Brampton and the City of Mississauga.

Figure 1: Location of the study area

Base Map: ©OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)

2.0 METHODOLOGY

2.1 Regulatory Requirements

The *Ontario Heritage Act* (OHA) (Ministry of Culture 1990) is the primary piece of legislation that determines policies, priorities and programs for the conservation of Ontario's heritage. There are many other provincial acts, regulations and policies governing land use planning and resource development support heritage conservation including:

- The *Planning Act* (Ministry of Municipal Affairs and Housing 1990), which states that "conservation of features of significant architectural, cultural, historical, archaeological or scientific interest" (cultural heritage resources) is a "matter of provincial interest". The Provincial Policy Statement (Government of Ontario 2020), issued under the Planning Act, links heritage conservation to long-term economic prosperity and requires municipalities and the Crown to conserve significant cultural heritage resources.
- The *Environmental Assessment Act* (Ministry of the Environment 1990), which defines "environment" to include cultural conditions that influence the life of humans or a community. Cultural heritage resources, which includes archaeological resources, built heritage resources and cultural heritage landscapes, are important components of those cultural conditions.

The Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) is charged under Section 2.0 of the OHA with the responsibility to determine policies, priorities, and programs for the conservation,

protection, and preservation of the heritage of Ontario. The Ministry of Tourism, Culture and Sport (now administered by MHSTCI) published *Standards and Guidelines for Conservation of Provincial Heritage Properties* (Ministry of Tourism, Culture and Sport 2010) (hereinafter "Standards and Guidelines"). These Standards and Guidelines apply to properties the Government of Ontario owns or controls that have cultural heritage value or interest (CHVI). The Standards and Guidelines provide a series of guidelines that apply to provincial heritage properties in the areas of identification and evaluation; protection; maintenance; use; and disposal. For the purpose of this report, the Standards and Guidelines provide points of reference to aid in determining potential heritage significance in identification of BHRs and CHLs. While not directly applicable for use in properties not under provincial ownership, the Standards and Guidelines are regarded as best practice for guiding heritage assessments and ensure that additional identification and mitigation measures are considered.

Similarly, the *Ontario Heritage Tool Kit* (Ministry of Culture 2006) provides a guide to evaluate heritage properties. To conserve a BHR or CHL, the *Ontario Heritage Tool Kit* states that a municipality or approval authority may require a heritage impact assessment and/or a conservation plan to guide the approval, modification, or denial of a proposed development.

2.2 Municipal/Regional Heritage Policies

The study area is located within the City of Brampton and the City of Mississauga, in the Region of Peel. Policies relating to cultural heritage resources were reviewed from the following sources:

- City of Brampton's *Official Plan* (2020b)
- City of Mississauga's *Official Plan* (2020)
- Region of Peel's *Official Plan* (2018)

2.3 Identification of Built Heritage Resources and Cultural Heritage Landscapes

This Cultural Heritage Report follows guidelines presented in the *Ontario Heritage Tool Kit* (Ministry of Culture 2006) and *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (Ministry of Tourism, Culture and Sport 2016). The objective of this report is to present an inventory of known and potential BHRs and CHLs, and to provide a preliminary understanding of known and potential BHRs and CHLs located within areas anticipated to be directly or indirectly impacted by the proposed project.

In the course of the cultural heritage assessment process, all potentially affected BHRs and CHLs are subject to identification and inventory. Generally, when conducting an identification of BHRs and CHLs within a study area, three stages of research and data collection are undertaken to appropriately establish the potential for and existence of BHRs and CHLs in a geographic area: background research and desktop data collection; field review; and identification.

Background historical research, which includes consultation of primary and secondary source research and historical mapping, is undertaken to identify early settlement patterns and broad agents or themes of change in a study area. This stage in the data collection process enables the researcher to determine

the presence of sensitive heritage areas that correspond to nineteenth- and twentieth-century settlement and development patterns. To augment data collected during this stage of the research process, federal, provincial, and municipal databases and/or agencies are consulted to obtain information about specific properties that have been previously identified and/or designated as having cultural heritage value. Typically, resources identified during these stages of the research process are reflective of particular architectural styles or construction methods, associated with an important person, place, or event, and contribute to the contextual facets of a particular place, neighbourhood, or intersection.

A field review is then undertaken to confirm the location and condition of previously identified BHRs and CHLs. The field review is also used to identify potential BHRs or CHLs that have not been previously identified on federal, provincial, or municipal databases or through other appropriate agency data sources.

During the cultural heritage assessment process, a property is identified as a potential BHR or CHL based on research, the MHSTCI screening tool, and professional expertise. In addition, use of a 40-year-old benchmark is a guiding principle when conducting a preliminary identification of BHRs and CHLs. While identification of a resource that is 40 years old or older does not confer outright heritage significance, this benchmark provides a means to collect information about resources that may retain heritage value. Similarly, if a resource is slightly younger than 40 years old, this does not preclude the resource from having cultural heritage value or interest.

2.4 Background Information Review

To make an identification of previously identified known or potential BHRs and CHLs within the study area, the following resources were consulted as part of this Cultural Heritage Report.

2.4.1 Review of Existing Heritage Inventories

A number of resources were consulted in order to identify previously identified BHRs and CHLs within the study area. These resources, reviewed on 13 April, 2020, include:

- The City of Brampton's Heritage Register (City of Brampton 2019; City of Brampton 2020a);
- The City of Mississauga's Heritage Register (City of Mississauga 2018)
- The City of Mississauga's Cultural Landscape Inventory (City of Mississauga 2005)
- The *Ontario Heritage Act Register* (Ontario Heritage Trust n.d.);
- The inventory of Ontario Heritage Trust easements (Ontario Heritage Trust n.d.);
- The *Places of Worship Inventory* (Ontario Heritage Trust n.d.);
- *Ontario Heritage Plaque Database* (Ontario Heritage Trust n.d.);
- *Ontario's Historical Plaques* website (Brown 2019);
- Database of known cemeteries/burial sites curated by the Ontario Genealogical Society (Ontario Genealogical Society n.d.);
- *Canada's Historic Places* website (Parks Canada n.d.);
- *Directory of Federal Heritage Designations* (Parks Canada n.d.);

- Canadian Heritage River System (Canadian Heritage Rivers Board and Technical Planning Committee n.d.); and,
- United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites (UNESCO World Heritage Centre n.d.).

2.4.2 Review of Previous Heritage Reporting

Additional cultural heritage studies undertaken within parts of the study area were also reviewed. These include:

- *Built Heritage Resources and Cultural Heritage Landscapes Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment 407 Transitway TPAP From West of Brant Street to West of Hurontario Street G.W.P. 16-20003 City of Brampton and City of Mississauga, Peel Region; Town of Halton Hills, Town of Milton, Town of Oakville, and City of Burlington; Halton Region, Ontario* (ASI 2020a)
- *Cultural Heritage Evaluation Report 7655 Heritage Road, 407 Transitway TPAP From West of Brant Street to West of Hurontario Street G.W.P. 16-20003, City of Brampton, Region of Peel, Ontario* (ASI 2020b)
- *Cultural Heritage Evaluation Report 7696 Heritage Road, 407 Transitway TPAP From West of Brant Street to West of Hurontario Street G.W.P. 16-20003, City of Brampton, Region of Peel, Ontario* (ASI 2020c)

2.4.3 Stakeholder Data Collection

The following individuals, groups, and/or organizations were contacted to gather information on known and potential BHRs and CHLs, active and inactive cemeteries, and areas of identified Indigenous interest within the study area:

- Cassandra Jasinski, Heritage Planner, City of Brampton (email communication 13 April 2020). A response was still outstanding at the time of report submission.
- Brooke Herczog, Heritage Analyst, City of Mississauga (email communication 13 and 14 April 2020). A response confirmed that there are no additional previously identified heritage resources or concerns regarding the study area.
- The MHSTCI (email communication 13 and 15 April 2020). Email correspondence confirmed that there are no additional previously identified heritage resources or concerns regarding the study area.
- The Ontario Heritage Trust (email communications 13 and 20 April 2020). A response indicated that there are no conservation easements or Trust-owned properties within or adjacent to the study area.

2.5 Preliminary Impact Assessment Methodology

To assess the potential impacts of the undertaking, identified BHRs and CHLs are considered against a range of possible negative impacts, based on the *Ontario Heritage Tool Kit InfoSheet #5: Heritage Impact Assessments and Conservation Plans* (Ministry of Tourism and Culture 2006). These include:

- Direct impacts:
  - Destruction of any, or part of any, significant heritage attributes or features; and
  - Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance.
- Indirect impacts
  - Shadows created that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden;
  - Isolation of a heritage attribute from its surrounding environment, context or a significant relationship;
  - Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features;
  - A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces; and
  - Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect an archaeological resource.

Indirect impacts from construction-related vibration have the potential to negatively affect BHRs or CHLs depending on the type of construction methods and machinery selected for the project and proximity and composition of the identified resources. Potential vibration impacts are defined as having potential to affect an identified BHRs and CHLs where work is taking place within 50 m of features on the property. A 50 m buffer is applied in the absence of a project-specific defined vibration zone of influence based on existing secondary source literature and direction provided from the MHSTCI (Wiss 1981; Rainer 1982; Ellis 1987; Crispino and D'Apuzzo 2001; Carman et al. 2012). This buffer accommodates any additional or potential threat from collisions with heavy machinery or subsidence (Randl 2001).

Several additional factors are also considered when evaluating potential impacts on identified BHRs and CHLs. These are outlined in a document set out by the Ministry of Culture and Communications (now MHSTCI) and the Ministry of the Environment entitled *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (1992) and include:

- Magnitude: the amount of physical alteration or destruction which can be expected;
- Severity: the irreversibility or reversibility of an impact;
- Duration: the length of time an adverse impact persists;
- Frequency: the number of times an impact can be expected;
- Range: the spatial distribution, widespread or site specific, of an adverse impact; and
- Diversity: the number of different kinds of activities to affect a heritage resource.

The proposed undertaking should endeavor to avoid adversely affecting known and potential BHRs and CHLs and interventions should be managed in such a way that identified significant cultural heritage resources are conserved. When the nature of the undertaking is such that adverse impacts are

unavoidable, it may be necessary to implement alternative approaches or mitigation strategies that alleviate the negative effects on identified BHRs and CHLs. Mitigation is the process of lessening or negating anticipated adverse impacts to cultural heritage resources and may include, but are not limited to, such actions as avoidance, monitoring, protection, relocation, remedial landscaping, and documentation of the BHR or CHL if to be demolished or relocated.

Various works associated with infrastructure improvements have the potential to affect BHRs and CHLs in a variety of ways, and as such, appropriate mitigation measures for the undertaking need to be considered.

3.0 SUMMARY OF HISTORICAL DEVELOPMENT WITHIN THE STUDY AREA

This section provides a brief summary of historical research. A review of available primary and secondary source material was undertaken to produce a contextual overview of the study area, including a general description of physiography, Indigenous land use, and Euro-Canadian settlement.

3.1 Physiography

The study area is situated within the Peel Plain physiographic region of southern Ontario (Chapman and Putnam 1984). The Peel Plain is a level-to-undulating area of clay soil which covers an area of approximately 77,700 hectares across the central portions of the Regional Municipalities of York, Peel, and Halton. The Peel Plain has a general elevation of between 500 and 750 feet above sea level with a gradual uniform slope towards Lake Ontario. The Peel Plain is sectioned by the Credit, Humber, Don, and Rouge Rivers with deep valleys as well as a number of other streams such as the Bronte, Oakville, and Etobicoke Creeks. These valleys are in places bordered by trains of sandy alluvium. The region is devoid of large undrained depressions, swamps, and bogs though nevertheless the dominant soil possesses imperfect drainage.

The Peel Plain overlies shale and limestone till which in many places is veneered by occasionally varved clay. This clay is heavy in texture and more calcareous than the underlying till and was presumably deposited by meltwater from limestone regions and deposited in a temporary lake impounded by higher ground and the ice lobe of the Lake Ontario basin. The Peel Plain straddles across the contact of the grey and red shales of the Georgian Bay and Queenston Formations, respectively, which consequently gives the clay southwest of the Credit River a more reddish hue and lower lime content than the clay in the eastern part of the plain. Additionally, the region exhibits exceptional isolated tracts of sandy soil specifically in Trafalgar Township, near Unionville, and north of Brampton where in the latter location there is a partly buried esker. The region does not possess any good aquifers and the high level of evaporation from the clay's now deforested surface is a disabling factor in ground-water recharge. Further, deep groundwater accessed by boring is often found to be saline (Chapman and Putnam 1984).

3.2 Summary of Early Indigenous History in Southern Ontario

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier approximately 13,000 years ago, or 11,000 Before the Common Era (B.C.E.) (Ferris 2013).[1] During the Paleo period (c. 11,000 B.C.E. to 9,000 B.C.E), groups tended to be small, nomadic, and non-stratified. The population relied on hunting, fishing, and gathering for sustenance, though their lives went far beyond subsistence strategies to include cultural practices including but not limited to art and astronomy. Fluted points, beaked scrapers, and gravers are among the most important artifacts to have been found at various sites throughout southern Ontario, and particularly along the shorelines of former glacial lakes. Given the low regional population levels at this time, evidence concerning Paleo-Indian period groups is very limited (Ellis and Deller 1990).

Moving into the Archaic period (c. 9,000 B.C.E. to 1,000 B.C.E.), many of the same roles and responsibilities continued as they had for millennia, with groups generally remaining small, nomadic, and non-hierarchical. The seasons dictated the size of groups (with a general tendency to congregate in the spring/summer and disperse in the fall/winter), as well as their various sustenance activities, including fishing, foraging, trapping, and food storage and preparation. There were extensive trade networks which involved the exchange of both raw materials and finished objects such as polished or ground stone tools, beads, and notched or stemmed projectile points. Furthermore, mortuary ceremonialism was evident, meaning that there were burial practices and traditions associated with a group member's death (Ellis and Deller 1990; Ellis et al. 2009).

The Woodland period (c. 1,000 B.C.E. to 1650 C.E.) saw several trends and aspects of life remain consistent with previous generations. Among the more notable changes, however, was the introduction of pottery, the establishment of larger occupations and territorial settlements, incipient horticulture, more stratified societies, and more elaborate burials. Later in this period, settlement patterns, foods, and the socio-political system continued to change. A major shift to agriculture occurred in some regions, and the ability to grow vegetables and legumes such as corn, beans, and squash ensured long-term settlement occupation and less dependence upon hunting and fishing. This development contributed to population growth as well as the emergence of permanent villages and special purpose sites supporting those villages. Furthermore, the socio-political system shifted from one which was strongly kinship based to one that involved tribal differentiation as well as political alliances across and between regions (Ellis and Deller 1990; Williamson 1990; Dodd et al. 1990; Birch and Williamson 2013).

The arrival of European trade goods in the sixteenth century, Europeans themselves in the seventeenth century, and increasing settlement efforts in the eighteenth century all significantly impacted traditional ways of life in Southern Ontario. Over time, war and disease contributed to death, dispersion, and displacement of many Indigenous peoples across the region. The Euro-Canadian population grew in both numbers and power through the eighteenth and nineteenth centuries and treaties between colonial administrators and First Nations representatives began to be negotiated.

[1] While many types of information can inform the precontact settlement of Ontario, such as oral traditions and histories, this summary provides information drawn from archaeological research conducted in southern Ontario over the last century.

The study area is within Treaty 13a, signed on August 2, 1805 by the Mississaugas and the British Crown in Port Credit at the Government Inn. A provisional agreement was reached with the Crown on August 2, 1805, in which the Mississaugas ceded 70,784 acres of land bounded by the Toronto Purchase of 1787 in the east, the Brant Tract in the west, and a northern boundary that ran six miles back from the shoreline of Lake Ontario. The Mississaugas also reserved the sole right of fishing at the Credit River and were to retain a 1-mile strip of land on each of its banks, which became the Credit Indian Reserve. On September 5, 1806, the signing of Treaty 14 confirmed the Head of the Lake Purchase between the Mississaugas of the Credit and the Crown (Mississauga of the New Credit First Nation 2001; Mississaugas of the Credit First Nation 2017).

3.3 Historical Euro-Canadian Township Survey and Settlement

Historically, the study area is located in the Former Township of Toronto, County of Peel in part of Lots 13-15, Concession 5 and 6 West of Centre Road/Hurontario Street.

3.3.1 Former Township of Toronto

The Township of Toronto was originally surveyed in 1806 by Mr. Wilmot, Deputy Surveyor. The first settler in this Township, and also the County of Peel, was Colonel Thomas Ingersoll. The whole population of the Township in 1808 consisted of seven families, scattered along Dundas Street. The number of inhabitants gradually increased until the war broke out in 1812, which gave considerable check to its progress. When the war was over, the Township's growth revived, and the rear part of the Township was surveyed and called the "New Survey". The greater part of the New Survey was granted to a colony of Irish settlers from New York City, who suffered persecution during the war.

The Credit River runs through the western portion of the Township and proved to be a great source of wealth to its inhabitants, as it was not only a good watering stream, but there were endless mill privileges along the entire length of the river.

Several villages of varying sizes had developed by the end of the nineteenth century, including Streetsville, Meadowvale, Churchville, and Malton. A number of crossroad communities also began to grow by the end of the nineteenth century. These included Britannia, Derry, Frasers Corners, Palestine, Mount Charles, and Grahamsville.

3.4 Review of Historical Mapping

The 1859 *Map of the County of Peel* (Tremaine 1859), and the 1877 *Illustrated Historical Atlas of the County of Peel* (Walker and Miles 1877), were examined to determine the presence of historical features within the study area during the nineteenth century (Figure 2 and Figure 3).

It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases. For instance, they were often financed by subscription limiting the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope

of the atlases. The use of historical map sources to reconstruct or predict the location of former features within the modern landscape generally begins by using common reference points between the various sources. The historical maps are geo-referenced to provide the most accurate determination of the location of any property on a modern map. The results of this exercise can often be imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including differences of scale and resolution, and distortions introduced by reproduction of the sources.

Historically, the study area is located on part of Lots 13-15, Concession 5 and 6 West of Centre Road/Hurontario Street in the Township of Toronto, County of Peel. Details of historical property owners and historical features in the study area are listed in Table 1.

Table 1: Nineteenth-century property owner(s) and historical features(s)

		1859 Map of the County of Peel		1877 Illustrated Historical Atlas of the County of Peel	
Con #	**Lot #**	**Property Owner(s)**	**Historical Feature(s)**	**Property Owner(s)**	**Historical Feature(s)**
5	13	John Atchinson	n/a	Thos (Thomas) Brownridge	Farmstead and driveway Orchard
	14	John M. Forster	n/a	Jno (John) McClure	Farmstead and driveway Orchard
	15	Geo. (George) Sutton	n/a	Wm (William) Hillis	Farmstead and driveway Orchard Small creek
6	13	Wm (William) Sibbold	n/a	Hugh Hainen	Farmstead and driveway Orchard
	14	Jas (James) Hillis	n/a	James Hillis	Farmstead and driveway Creek
	15	Wm (William) Whaley	n/a	David Whaley	Farmstead and driveway Orchard Creek

Nineteenth-century mapping shows the study area in a rural, agricultural context (Figure 2 and Figure 3). The roadway (present day Heritage Road and Meadowvale Boulevard) is present and illustrated in its current alignment as early as 1859, indicating that this roadway was an established concession road in the nineteenth century. No structures are pictured on properties fronting the roadway in 1859 but the crossroad community of Whaleys Corners is labeled one intersection to the west of the study area, around the intersection of present day Steeles Avenue West and Winston Churchill Boulevard. By 1877, mapping shows long driveways leading to farmhouses and orchards on the adjacent properties (Figure 3). Mullet Creek is seen crossing the study area on both maps, following a similar path to its present-day course.

In addition to nineteenth-century mapping, historical topographic mapping and aerial photographs from the twentieth century were examined. This report presents maps and aerial photographs from 1922, 1954, 1973, and 1994 (Figure 4 to Figure 7).

Early twentieth-century topographic mapping shows few changes to the rural context of the study area over the turn of the century (Figure 4). Greater detail reveals two farmhouses adjacent to the study area on the west side of the study area, fronting Heritage Road, one frame (shown in black) and one brick

(shown in red). The brick farmhouse is in the same location as present day 7696 Heritage Road and is shown on earlier mapping as within John McClure's property. Two frame houses are shown on the east side of the study area. The northern house is in the same location as present day 7655 Heritage Road and is shown on earlier mapping as within James Hillis' property. Heritage Road is illustrated as an "unmetalled" (or unpaved) road. A bridge is illustrated carrying Heritage Road over Mullet Creek, though it is unlabeled as to type. Aerial photography and topographic maps show the continued agricultural nature of the study area through the twentieth century. A patchwork of agricultural fields and vegetation is identifiable in 1954 aerial photography (Figure 5). Barns and other farm outbuildings are illustrated alongside all four farmsteads present in 1922 on the 1973 topographic map (Figure 6). The road within the study area is labelled as Fifth Line West and is illustrated as a "two lane, hard surface, all weather" roadway. Steeles Avenue West is labelled and noted as the Mississauga Town Limits. Topographic mapping from 1994 shows an increase in development around the study area (Figure 7). A hydro corridor has been constructed, bisecting the southern half of the study area. The Mississauga City Limits have been moved further south, to its present location. Three of the four farmsteads remain intact, the farms at 7655 and 7696 Heritage Road as well as the one to the north of Mullet Creek, on the west side of the study area. Based on satellite imagery, Highway 407 was complete and bisecting the study area by 2004 and industrial and commercial development took place between 2009 and 2018.

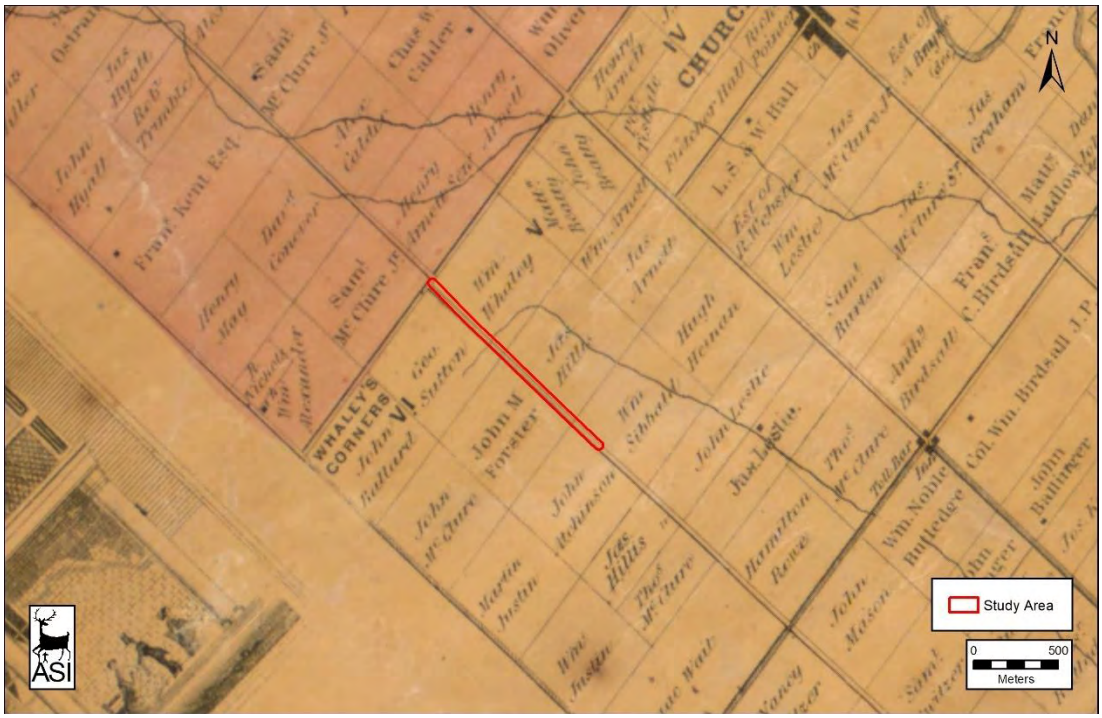

Figure 2: The study area overlaid on the 1859 Tremaine's Map of the County of Peel
Base Map: (Tremaine 1859)

Figure 3: The study area overlaid on the 1877 Historical Atlas of the County of Peel
Base Map: (Walker and Miles 1877)

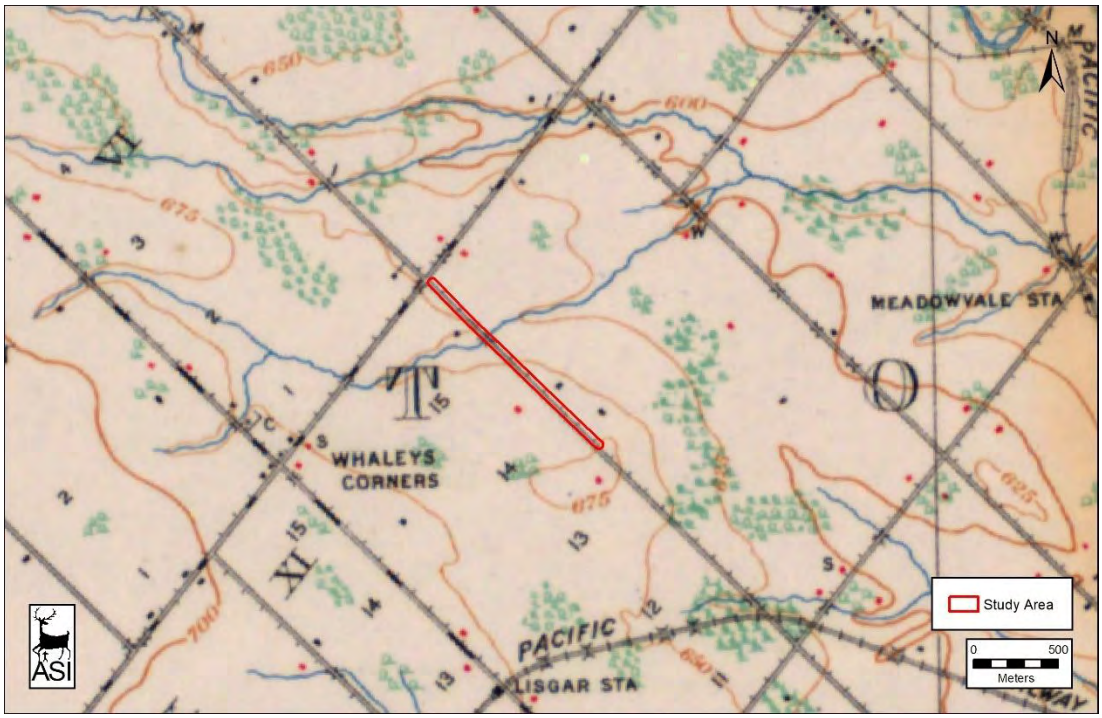

Figure 4: The study area overlaid on the 1922 topographic map of Brampton
Base Map: (Department of Militia and Defence 1922)

Figure 5: The study area overlaid on the 1954 aerial photograph
Base Map: (Hunting Survey Corporation Limited 1954)

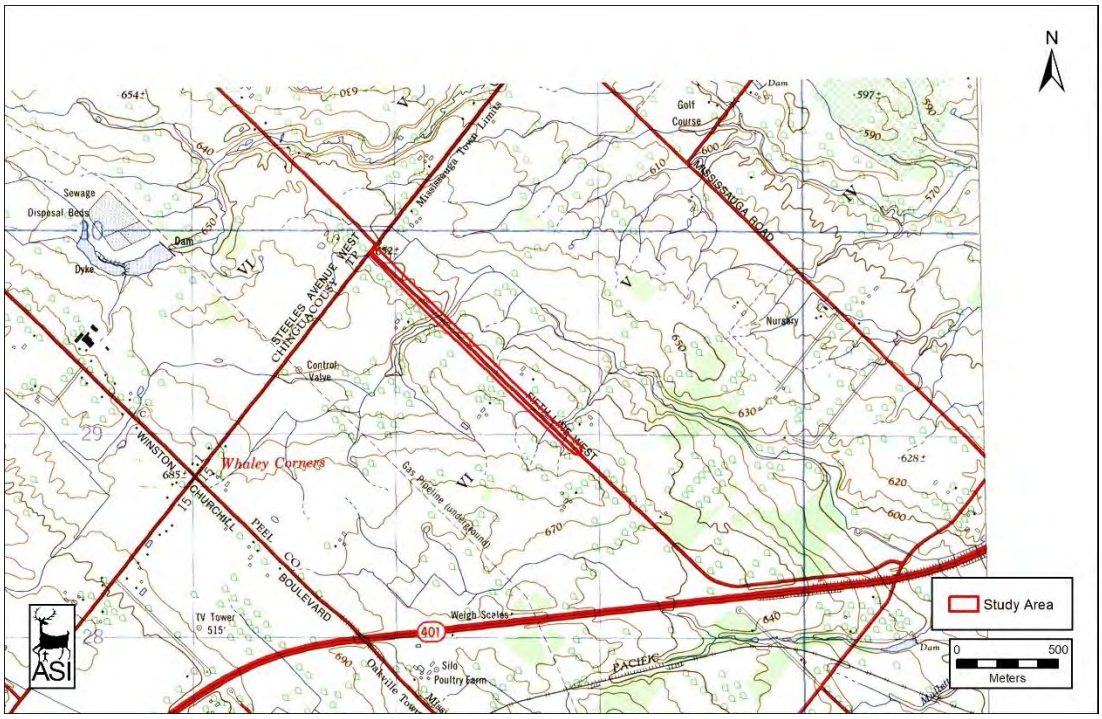

Figure 6: The study area overlaid on the 1973 topographic map of Hornby
Base Map: (Department of Energy, Mines and Resources 1973)

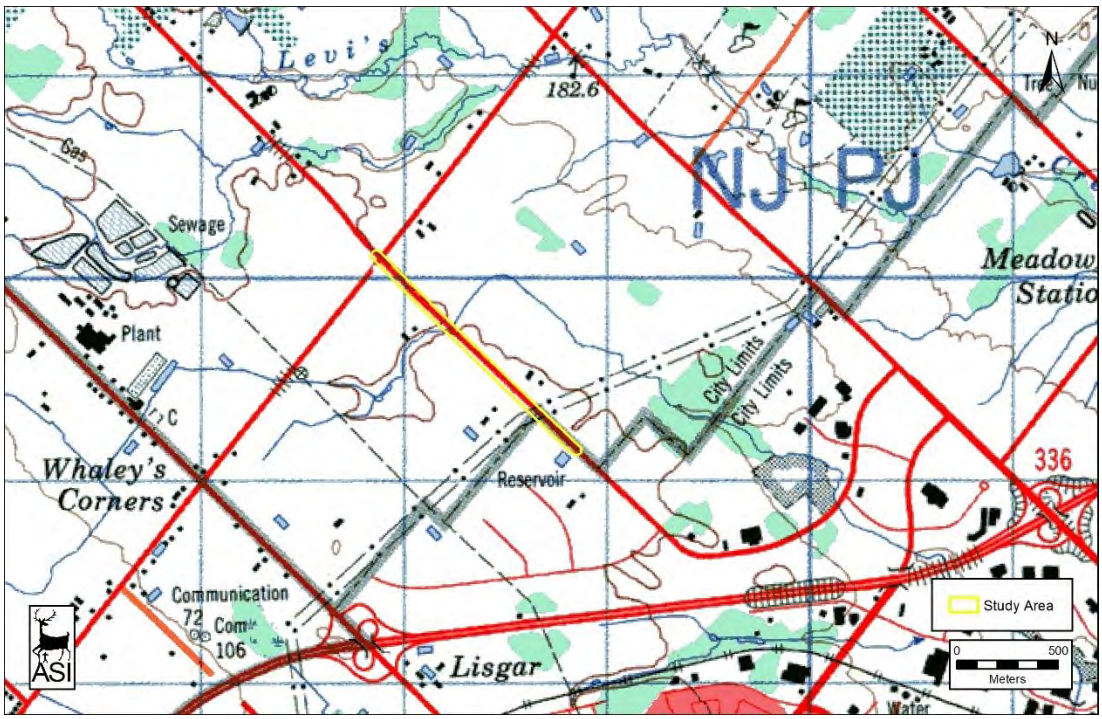

Figure 7: The study area overlaid on the 1994 NTS map of Brampton
Base Map: (Department of Energy, Mines and Resources 1994)

4.0 EXISTING CONDITIONS

4.1 Description of Field Review

A field review of the study area was undertaken by Jessica Lytle of ASI, on 9 April 2020 to document the existing conditions of the study area from existing rights-of-way. The existing conditions of the study area are described below and captured in Plate 1 to Plate 6.

The study area crosses the boundary between the Cities of Brampton and Mississauga. The road the study area follows is called Heritage Road in the City of Brampton (between Steeles Avenue East and the municipal boundary) and Meadowvale Boulevard in the City of Mississauga (between the municipal boundary and the southern terminus of the study area). The study area is oriented in a northwest to southeast direction. Throughout the study area, the right-of-way (ROW) for Heritage Road/Meadowvale Boulevard consists of two lanes of traffic in either direction and pedestrian sidewalks on both sides. The topography throughout the study area is relatively flat.

The study area is bisected by Highway 407, which intersects with Heritage Road to the north of the Brampton-Mississauga municipal boundary. The area to the north of Highway 407 is dominated by industrial and commercial properties, while the area to the south contains agricultural fields, a hydro corridor, recreational space, a reservoir and pumping station, as well as commercial properties. A concrete culvert directs Mullet Creek under Heritage Road.

Plate 1: North end of the study area, looking south across commercial and industrial properties.

Plate 2: Looking south along Heritage Road, at Edgeware Road.

Plate 3: View south along the bridge carrying Heritage Road over Highway 407.

Plate 4: View south towards the agricultural fields and hydro corridor located south of Highway 407.

Plate 5: Looking north across agricultural fields towards Highway 407.

Plate 6: Meadowvale Boulevard, looking southeast. Visible on the left of the photo is recreational space (dog park) and on the right, the Meadowvale North Pumping Station.

4.2 Identification of Known and Potential Built Heritage Resources and Cultural Heritage Landscapes

Based on the results of the background research and field review, two CHLs were identified within the Heritage Road Watermain Construction study area. There is one known CHL, which is listed by the City of Brampton and one potential CHL that was identified during background research. A detailed inventory of the known and potential CHLs within the study area is presented in Table 2. See Figure 8 for mapping showing the location of identified CHLs.

Table 2: Inventory of Known and Potential Cultural Heritage Landscapes within the Study Area

Feature ID	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known or Potential CHVI	Photographs/ Digital Image
CHL 1	Farmscape	7696 Heritage Road (Dolson Farm)	Known CHL - Listed by the City of Brampton	- Nineteenth-century mapping indicate the property was owned by John M. Forster, in 1859 and John McClure, in 1877 (Figure 2 and Figure 3). A farmstead, orchard, and driveway are illustrated in the location of the standing house on 1879 mapping (Figure 3). - Associated with the Dolson family, a prominent settlement family in Chinguacousy Township. - The property features a one-and-a-half storey red brick vernacular farmhouse, outbuildings, and active agricultural fields. - Located on the west side of Heritage Road, a nineteenth-century roadway, to the south of Highway 407.	 Plate 8: Looking southwest across agricultural fields towards the farmstead (ASI 2020).  Plate 8: Aerial view of the farmscape (Google Earth 2018).

Feature ID	Type of Property	Address or Location	Heritage Status and Recognition	Description of Property and Known or Potential CHVI	Photographs/ Digital Image
CHL 2	Farmscape	7655 Heritage Road	Potential CHL - Identified during background research Evaluated in March 2020 and found to meet criteria outlined in O. Reg 9/06 (ASI 2020b)	Draft Statement of Cultural Heritage Value or Interest (taken from ASI 2020b): The remnant agricultural property at 7655 Heritage Road was established by James Hillis in the 1830s and subsequently farmed by two generations of his family into the late 1940s. The c. 1830 log house, contained in the north part of the house, is a rare surviving example of an early nineteenth-century log house. Rectangular in plan and measuring approximately 10 metres by 7 metres, the log house was altered in the 1880s by adding a half-storey above, and through the addition of a one-and-a-half storey frame extension to the south. While the exterior finish of the log house is not visible due to vinyl cladding added in the 1970s, the interior finish of the log house was identified as large hewn flat-sided logs on the main floor, and rounded logs on the second floor, all with mortar chinking applied. Description of Heritage Attributes (taken from ASI 2020b)*:* The design/physical value of this early nineteenth-century log house is reflected through retention of: - rectangular footprint of the log house measuring approximately 10 metres by 7 metres; - one-and-a-half storey log construction; - gable roof; - three-bay front facade with central entrance flanked by window openings; and - fieldstone foundations.	 Plate 8: The west elevation of the residence at 7655 Heritage Road (ASI 2020).  Plate 8: Aerial view of the farmscape at 7655 Heritage Road (Google Earth 2018).

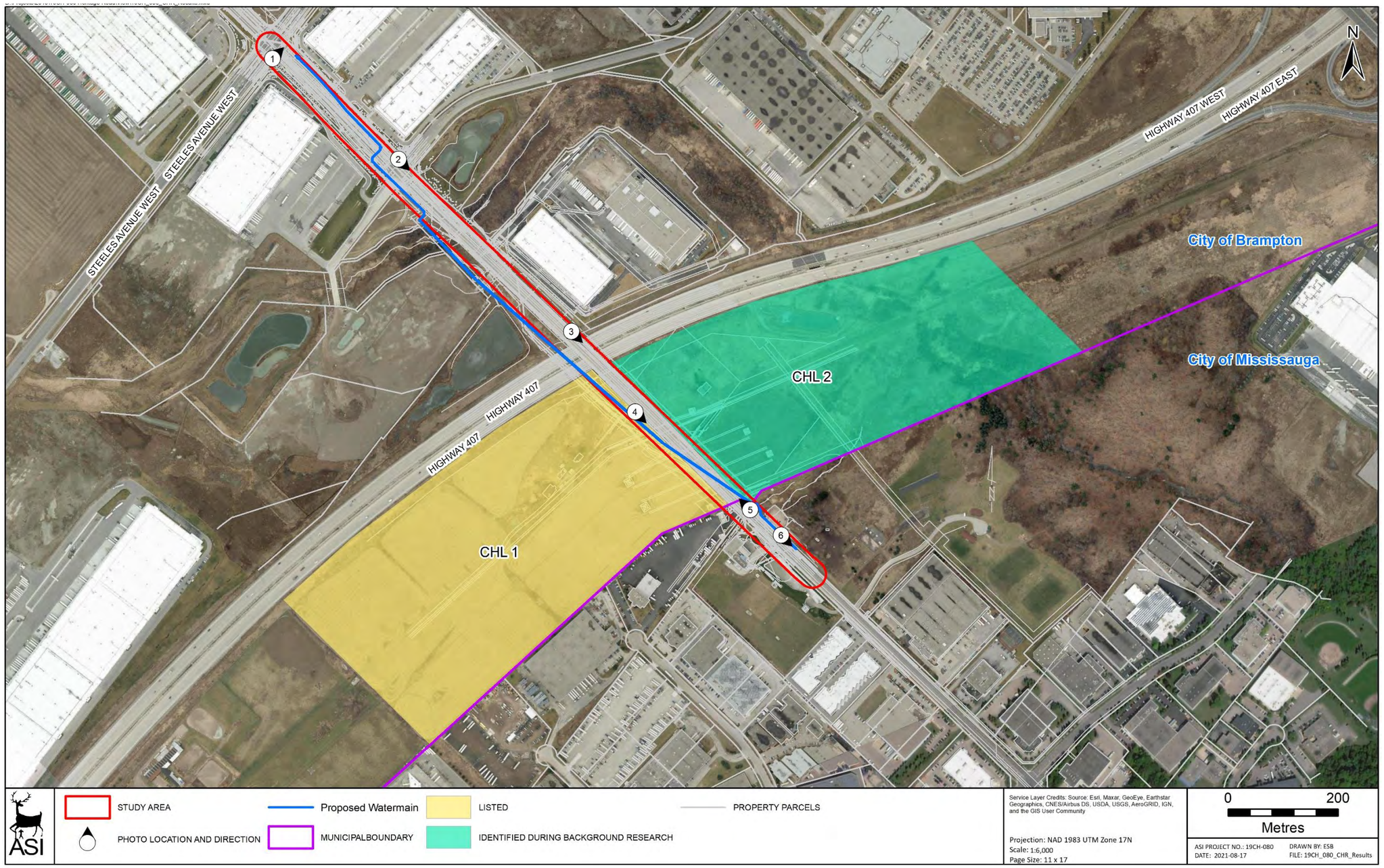

Figure 8: Location of Identified Cultural Heritage Landscapes in the Study Area

5.0 PRELIMINARY IMPACT ASSESSMENT

5.1 Description of Proposed Undertaking

The proposed undertaking for the Heritage Road Watermain Construction study area involves the construction of a watermain on Heritage Road between Steeles Avenue West in the City of Brampton to the Meadowvale North Pumping Station in the City of Mississauga. The project will involve the construction of approximately 1,300 m of 600 mm watermain, including all chambers, temporary and permanent connections and appurtenances, commissioning, ancillary works and restoration. The proposed watermain will follow the alignment of Heritage Road from Steeles Avenue West to the Meadowvale North Pumping Station. Within the City of Mississauga, the construction is intended to be within the boulevard or by trenchless methods and crossing of Highway 407 must also be done by trenchless methods. The proposed 600 mm watermain is to be constructed directly into the Meadowvale North Pumping Station and connected into the discharge header; and in the north end of the project limits, the proposed watermain will connect to the existing 400 mm watermain on Steeles Avenue. Other connections will be included at Countryside Drive, Heritage Road, and other locations as determined by street layout. Mapping of the proposed alignment, including staging areas, proposed shaft locations, and study area showing photographic plate locations and the location of the identified cultural heritage resources is provided in Figure 8 in Section 4.2. Proposed alignment designs are provided in Appendix A and show plans in relation to identified cultural heritage resources.

One receiving shaft is planed immediately west of Heritage Road and approximately 62 m south of Edgeware Road, a second is planned approximately 210 m south of Edgeware Road also immediately west of Heritage Road. A third receiving shaft is planned within the property of 7696 Heritage Road, immediately west of Heritage Road and approximately 143 m east from the residence. The fourth receiving shaft is located immediately east of Heritage Road and approximately 56 m north of the pumping station.

5.2 Analysis of Potential Impacts

Table 3 outlines the potential impacts on all identified CHLs within the study area.

Table 3: Preliminary Impact Assessment and Recommended Mitigation Measures

Feature ID	Location/Name	Type and Description of Potential/Anticipated Impact	Mitigation Strategies
CHL 1	7696 Heritage Road (Dolson Farm)	• Indirect impacts to CHL 1 are anticipated to include grading within the subject property and a proposed receiving shaft. • No direct impacts to any structures or landscape features of potential cultural heritage value or interest are anticipated.	• Where feasible, excavation, grading, and staging activities should be planned and executed to limit impacts to this CHL. • Post construction rehabilitation including planting with sympathetic plant species should be considered to mitigate any impacts. • As CHL 1 is listed on the City of Brampton's Heritage Register (City of Brampton 2019; City of Brampton 2020a), a resource-specific Heritage Impact Assessment (HIA) may be required as per clause 4.10.1.11 of the City of Brampton Official Plan. Given that potential impacts are anticipated to be minimal encroachment on to the property and no structures or apparent landscape features of significant cultural heritage value or interest are anticipated to be impacted, it is recommended that the City of Brampton consider waiving the requirement for a HIA in this case if suitable mitigation measures including post construction rehabilitation with sympathetic plantings can be implemented. • Suitable mitigation measures may also include establishing no-go zones with fencing and issuing instructions to construction crews to avoid the cultural heritage resources.
CHL 2	7655 Heritage Road	• It is understood that the limits of the proposed alignment will be confined to the ROW and adjacent properties. • As the proposed work is located more than 50 m from the structure within CHL 2, no vibration-related impacts are anticipated.	• No further work required.

Indirect impacts to CHL 1 (7696 Heritage Road) are anticipated to include grading within the subject property and a proposed receiving shaft. No impacts to any structures or landscape features of potential CHVI, including mature vegetation or agricultural fields are anticipated.

As the property at 7696 Heritage Road (CHL 1) is listed by the City of Brampton and there are indirect impacts anticipated, a resource-specific HIA may be required as per the City of Brampton Official Plan

clauses 4.10.1.11. However, given that no structures or apparent landscape features of significant CHVI are anticipated to be impacted on the property, it is recommended that the City of Brampton consider waiving the requirement of a HIA in these cases in favour of suitable mitigation measures including post-construction rehabilitation which could include sympathetic plantings where required. Suitable mitigation measures could also include the establishment of no-go zones with fencing and issuing instructions to construction crews to avoid the cultural heritage resources.

As the limits of the proposed alignment will be confined to the ROW and adjacent properties to 7655 Heritage Road (CHL 2) which will be more than 50 m from the structure within CHL 2, no further cultural heritage reporting is recommended.

6.0 RESULTS AND MITIGATION RECOMMENDATIONS

The results of background historical research and a review of secondary source material, including historical mapping, indicate a study area with a rural land use history dating back to the nineteenth century. A review of federal, provincial, and municipal registers, inventories, and databases revealed that there is one previously identified feature of cultural heritage value within the Heritage Road Watermain Construction Municipal Class EA study area. An additional potential cultural heritage resource was identified during background research.

6.1 Key Findings

- A total of two CHLs, were within the study area.
- One cultural heritage resource (CHR 1) is listed on the City of Brampton's *Municipal Register of Cultural Heritage Resources* (City of Brampton 2020a)and one potential cultural heritage resource (CHR 2) was identified during background research as having recently been evaluated and found to meet criteria outlined in O. Reg. 9/06 (ASI 2020b).
- Identified cultural heritage resources are historically, architecturally, and contextually associated with land use patterns in the City of Brampton and former Township of Toronto and more specifically representative of the early settlement of small communities along Heritage Road/Meadowvale Boulevard, a nineteenth century rural roadway.

Results of Preliminary Impact Assessment

- The proposed alignment may result in indirect impacts to CHL 1, due to grading within the property and a proposed receiving shaft.
- No direct impacts to any potential cultural heritage resources are anticipated as a result of the preferred alternative.

6.2 Recommendations

Based on the results of the assessment, the following recommendations have been developed:

1. Construction activities and staging should be suitably planned and undertaken to avoid unintended negative impacts to the identified CHLs. Avoidance measures may include, but are not limited to: erecting temporary fencing, establishing buffer zones, issuing instructions to construction crews to avoid identified cultural heritage resources, etc.

2. As the property at 7696 Heritage Road (CHL 1) is listed by the City of Brampton and there are indirect impacts anticipated, a resource-specific HIA may be required as per the City of Brampton Official Plan clause 4.10.1.11. However, given that no structures or apparent landscape features of significant CHVI are anticipated to be impacted on the property, it is recommended that the City of Brampton consider waiving the requirement of a HIA in these cases in favour of suitable mitigation measures including post-construction rehabilitation which could include sympathetic plantings where required

3. Should future work require an expansion of the study area then a qualified heritage consultant should be contacted in order to confirm the impacts of the proposed work on known and potential heritage resources.

4. The report should be submitted by the proponent to the City of Brampton, City of Mississauga, and the MHSTCI for review and comment, and any other local heritage stakeholders that may have an interest in this project. Feedback received will be considered and incorporated into the final report, as appropriate. The final report should be submitted to the City of Brampton and the City of Mississauga for their records.

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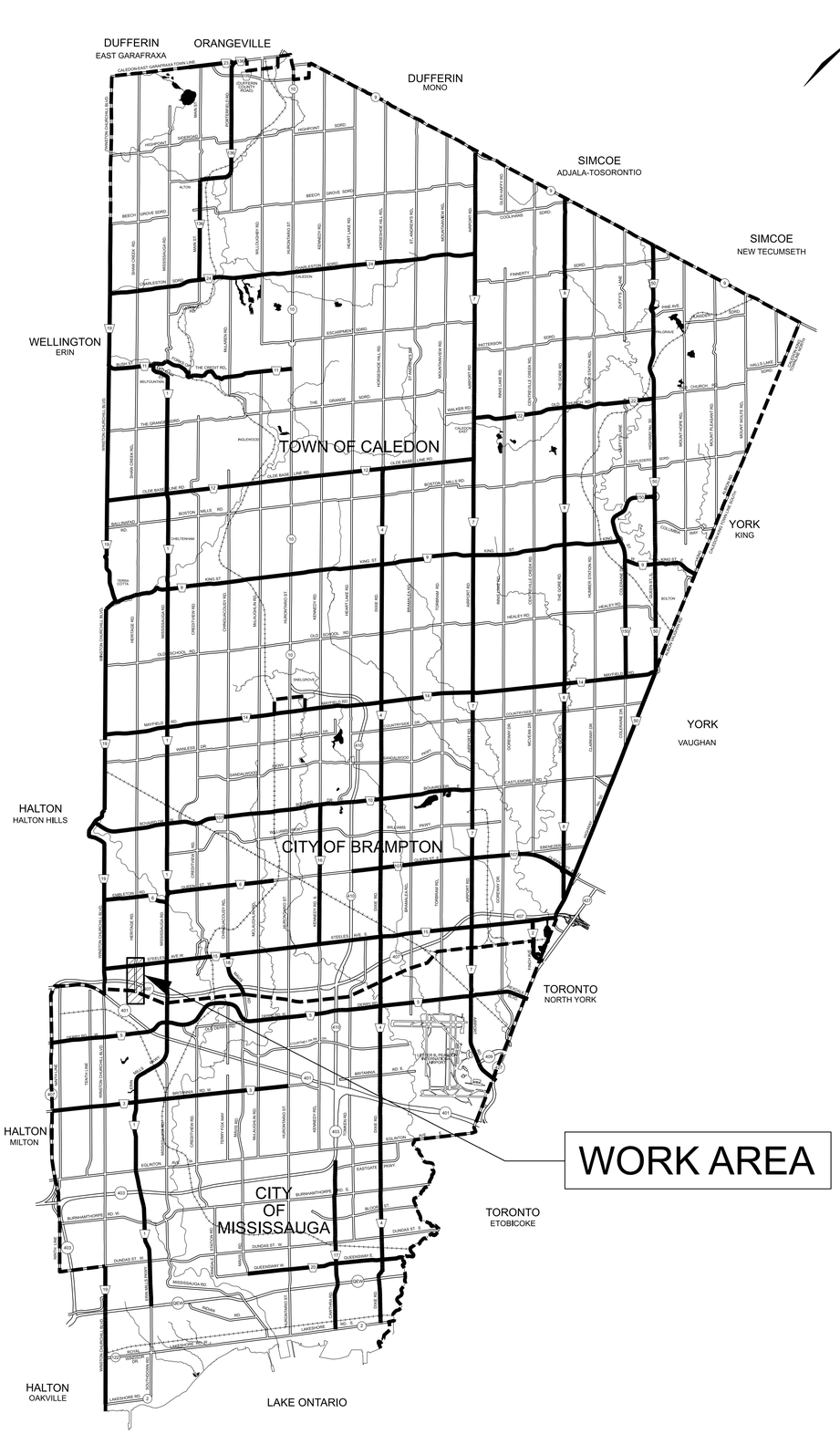
APPENDIX A: PROPOSED ALIGNMENT DESIGNS



PROJECT No.15-1138
WATERMAIN INSTALLATION ON HERITAGE ROAD CITIES OF BRAMPTON AND MISSISSAUGA

HERITAGE ROAD
(FROM STEELES AVENUE WEST TO MEADOWVALE NORTH PUMPING STATION)

MEADOWVALE BOULEVARD
(FROM BRAMPTON CITY LIMITS TO MEADOWVALE NORTH PUMPING STATION)

LIST OF DRAWINGS:

	TITLE SHEET
WM1-D	HERITAGE ROAD STA. 1+051.0 TO STA. 1+150.0
WM2-D	HERITAGE ROAD STA. 1+150.0 TO STA. 1+435.0
WM3-D	HERITAGE ROAD STA. 1+435.0 TO STA. 1+685.0
WM4-D	HERITAGE ROAD STA. 1+685.0 TO STA. 1+960.0
WM5-D	HERITAGE ROAD STA. 1+960.0 TO STA. 2+190.0
WM6-D	HERITAGE ROAD STA. 2+190.0 TO STA. 2+327.0
WM7-D	EDGEWARE ROAD CROSSING STA. 1+275.5 TO STA. 1+322.2 AND STA. 0-005.8 TO STA. 0+024.4
WM8-D	HERITAGE ROAD HORIZONTAL AND VERTICAL ALIGNMENT
WM9-D	HERITAGE ROAD - CVC MULLET CREEK CROSSING STA. 1+380.0 TO STA. 1+640.0
WM10-D	2715 MEADOWVALE BOULEVARD TOTOREDACA LEASH FREE DOG PARK CONSTRUCTION LIMIT WITH EROSION AND SEDIMENT CONTROL PLAN
WM11-D	GENERAL NOTES, LEGEND AND CONSTRUCTION DETAILS
WM12-D	EXISTING VALVE PLAN
WM13-D	TRAFFIC MANAGEMENT - STEELES AVENUE WEST INTERSECTION
WM14-D	TRAFFIC MANAGEMENT - EDGEWARE ROAD INTERSECTION
WM15-D	TRAFFIC MANAGEMENT - EDGEWARE ROAD INTERSECTION

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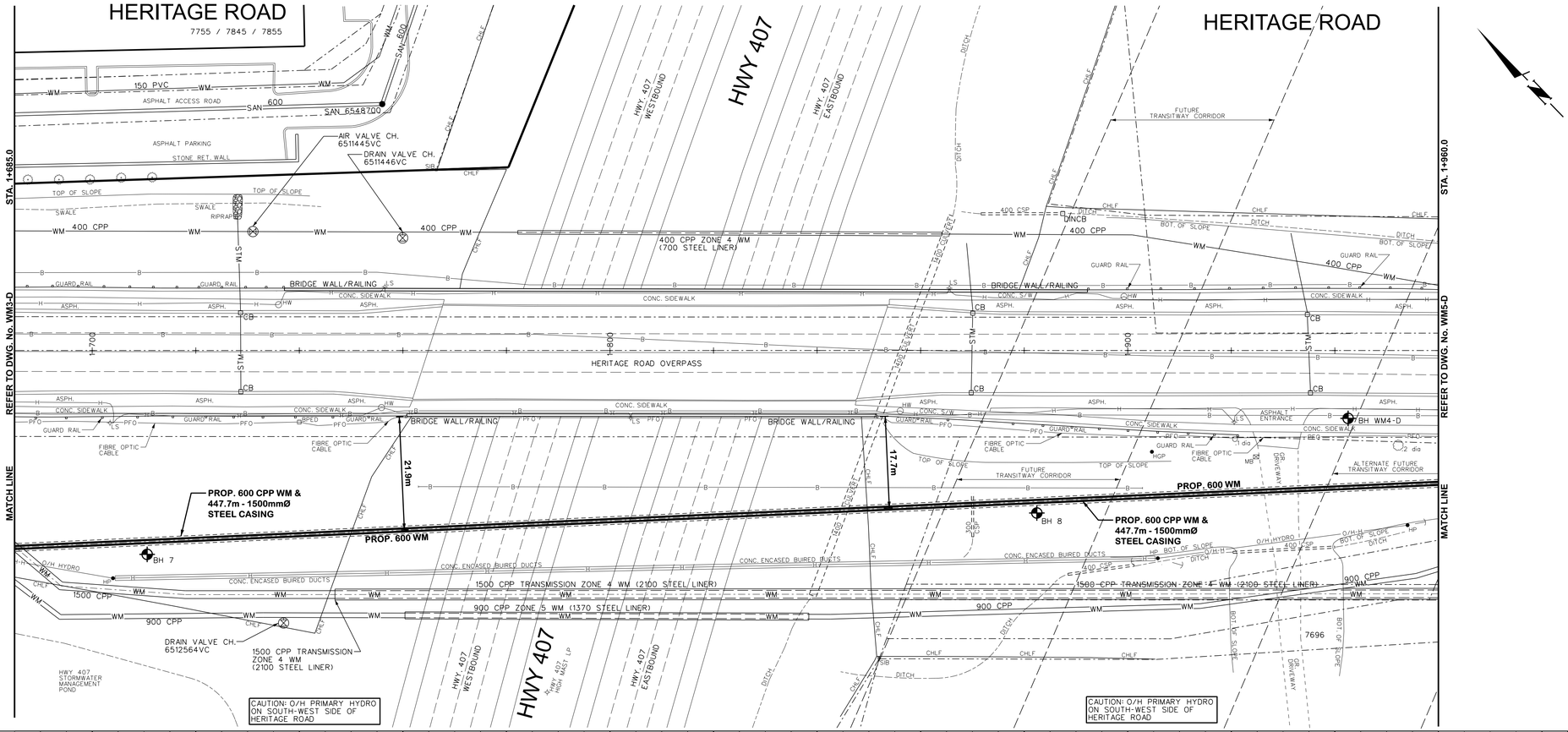
Document 2020-087T

HERITAGE ROAD

7755 / 7845 / 7855



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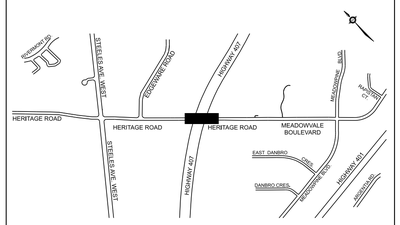
STORM SEWERS	AUG. 8,19	D.E.	BELL U/G CABLE	AUG. 28,19	T.H.
WATERMAINS	AUG. 15,19	D.E.	HYDRO U/G CABLE	AUG. 15,19	M.S.
TRANSIT	AUG. 14,19	N/A	HYDRO ONE	SEPT. 12,19	J.M.
PARKS & REC.	AUG. 14,19	N/A	CTV	AUG. 21,19	D.D.
ONT. CLEAN WATER	AUG. 14,19	N/A	COMMUNIC. CABLES	AUG. 14,19	M.T.

REVISIONS		
DATE	DETAILS	INIT.



KEY PLAN (N.T.S.)

NOTE:

1. FOR GENERAL NOTES, DETAILS AND LEGEND SEE DWG. WM11-D
2. HYDRANTS AND VALVES ARE NOT SHOWN TO SCALE ON DRAWINGS. ALL HYDRANTS AND VALVES ARE AMPLIFIED FOR VISUAL REPRESENTATION.

UTILITY NOTES:

1) HAND DIG WITHIN 1m OF (OR WHEN CROSSING) CABLE TV, BELL, GAS OR HYDRO PLANT
2) MAINTAIN A MINIMUM OF 0.6m HORIZONTAL CLEARANCE TO GASMAINS
3) MAINTAIN A MINIMUM OF 0.3m VERTICAL CLEARANCE TO GASMAINS OR HYDRO PLANT
4) TESTHOLES REQUIRED PRIOR TO CONSTRUCTION TO DETERMINE ACTUAL DEPTHS OF GASMAINS
5) MAINTAIN A MINIMUM OF 0.6m HORIZONTAL CLEARANCE TO BELL PLANT, MAINTAIN A MINIMUM OF 1.5m HORIZONTAL CLEARANCE FROM BELL PLANT TO PROPOSED HYDRANTS
6) PROPOSED HYDRANT OFFSET TO BE DETERMINED IN THE FIELD (MIN. 1.2m OFFSET TO BELL OR HYDRO POLES) (MIN. 1.2m OFFSET FROM SIDEWALKS)

CONTRACT DRAWINGS

Contractor must verify all dimensions and be responsible for same. Any discrepancies must be reported to the Engineer before commencing work. Drawings are not to be scaled. Drawings may not be used for any purpose other than that stipulated in the contract agreement between the owner/client and the Engineer without the express written consent of Ainley & Associates Limited. Use of these drawings by any party for any other purpose is subject to the following caution.

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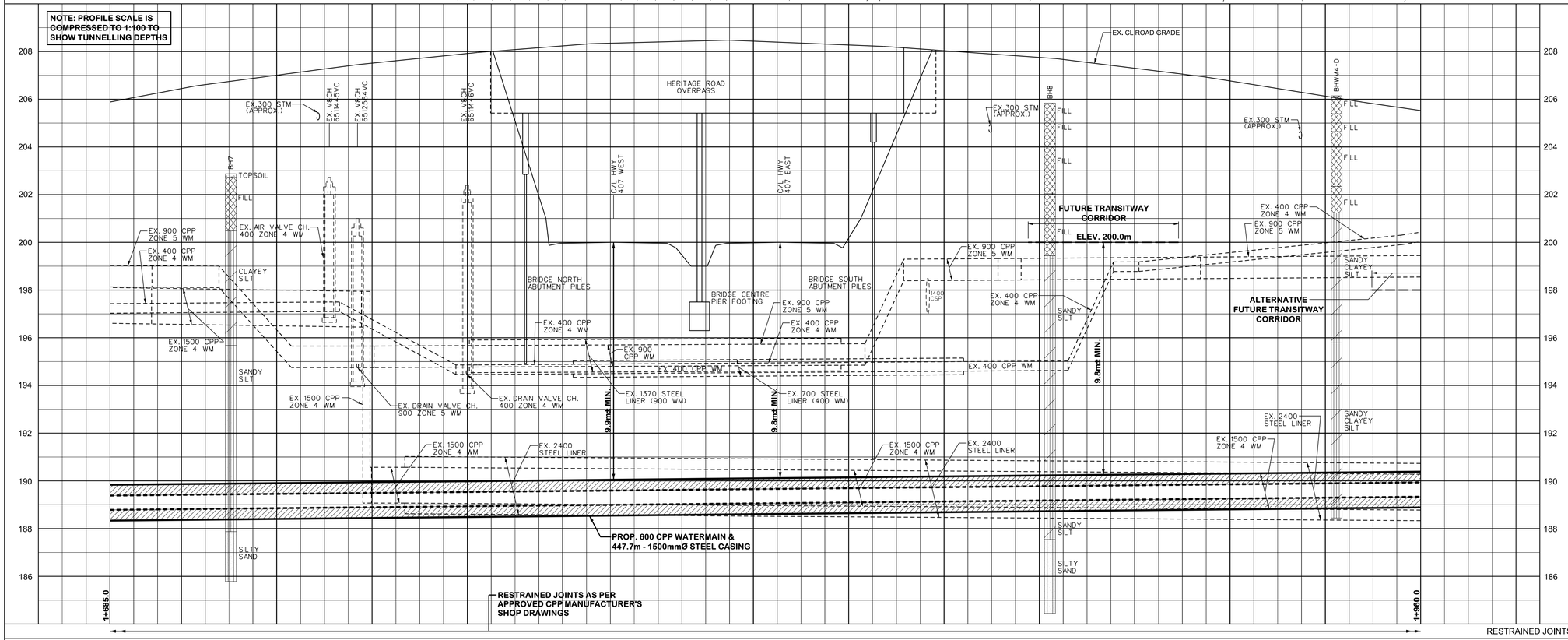
THIS DRAWING TO BE USED FOR WATERMAIN CONSTRUCTION ONLY

NOTE: PROFILE SCALE IS COMPRESSED TO 1:100 TO SHOW TUNNELLING DEPTHS



RESTRAINED JOINTS															
188.81	188.85	188.89	188.93	188.97	189.01	189.05	189.09	189.13	189.17	189.21	189.26	189.30	189.34	BOT.EL. OF WM.
206.45	207.01	207.51	207.92	208.24	208.40	208.43	208.27	208.04	207.75	207.30	206.77	206.13	205.53	EX. ROAD ELEV.
1+700	1+720	1+740	1+760	1+780	1+800	1+820	1+840	1+860	1+880	1+900	1+920	1+940	1+960	ROAD CHAINAGE

General Notes

All Driveways Are ASPHALT Unless Otherwise Noted

All Water And Sanitary Service Locations Are Approximate And Must Be Located Accurately In The Field

All Horizontal And Vertical Bends Are In Degrees

All Pipes Size In mm

20C Existing Water Service, Size In mm

WS25 Proposed Water Service, Size In mm

B.M. No. 042010227 Elev. 200.069
Description: Brass cap in concrete
Location: 0.6km North od Steeles Ave., 7.4m East of centreline of Heritage Road and 2.2m West of fence

The Contractor Is Responsible For Locating And Protecting All Existing Utilities Prior To And During Construction. Location Of Existing Utilities Approximate Only, To Be Verified In Field By Contractor.

Ainley CONSULTING ENGINEERS PLANNERS

Approved by

NOTICE TO CONTRACTOR

48 HOURS PRIOR TO COMMENCING WORK NOTIFY THE FOLLOWING

THE REGIONAL MUNICIPALITY OF PEEL	CABLE TELEVISION/FIBREOPTIC PROVIDERS:
CITY OF MISSISSAUGA WORKS DEPT.	BELL CANADA
CITY OF BRAMPTON WORKS DEPT.	ENERSOURCE TELECOM
TOWN OF CALEDON WORKS DEPT.	HYDRO ONE TELECOM
BELL CANADA	ROGERS CABLE
ENBRIDGE INCORPORATED-GAS DISTRIBUTION	ALLSTREAM
ONTARIO MINISTRY OF TRANSPORTATION	PSN (PUBLIC SECTOR NETWORK)
ONTARIO CLEAN WATER AGENCY	FUTUREWAY (FCI BROADBAND)
HYDRO ONE NETWORKS	
ENERSOURCE, HYDRO MISSISSAUGA	
HYDRO ONE BRAMPTON	

10m 0 10 20 30m — HORIZONTAL SCALE

2m 0 2 4 6m — VERTICAL SCALE

Region of Peel working with you

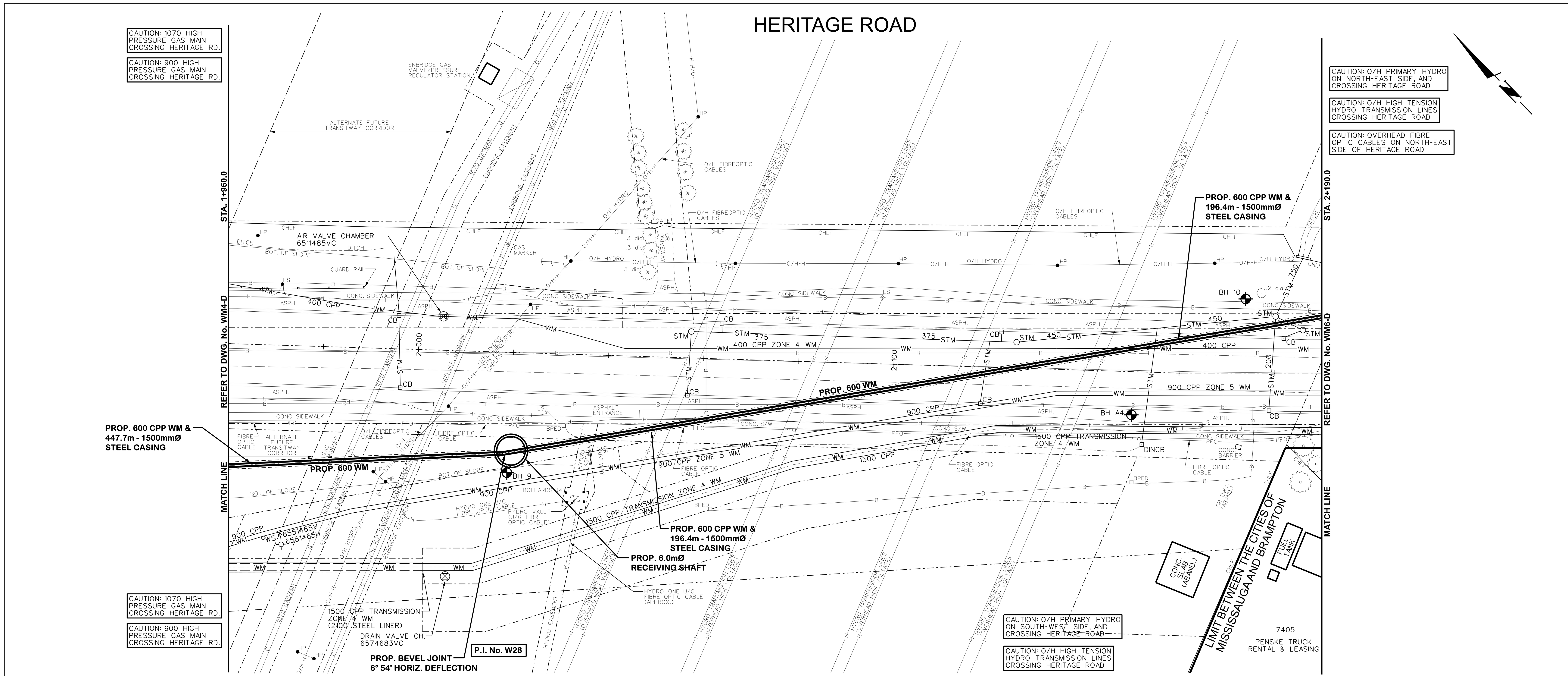
HERITAGE ROAD

(FROM STEELES AVENUE WEST TO MEADOWVALE NORTH PUMPING STATION)

PROP. 600mm WATERMAIN

STA. 1+685.0 TO STA. 1+960.0

CAD Area	Area	B-8	Project No. 15-1138
Checked by D.B.E.	Drawn by	D.E.	
Date AUGUST 2019	Sheet	4 of 15	Plan No. **WM4-D**



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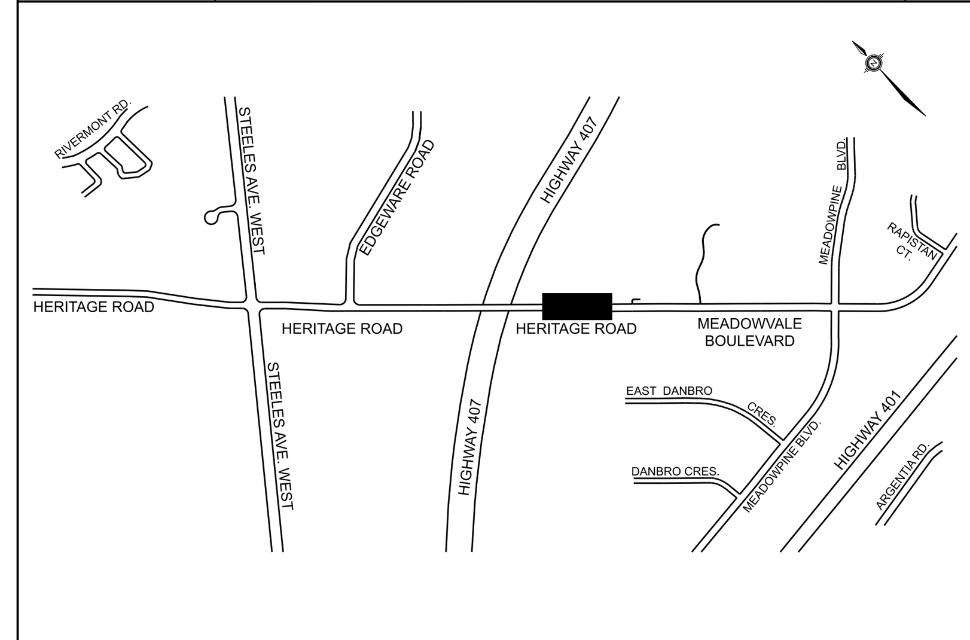
REVISIONS

DATE	DETAILS	INIT.



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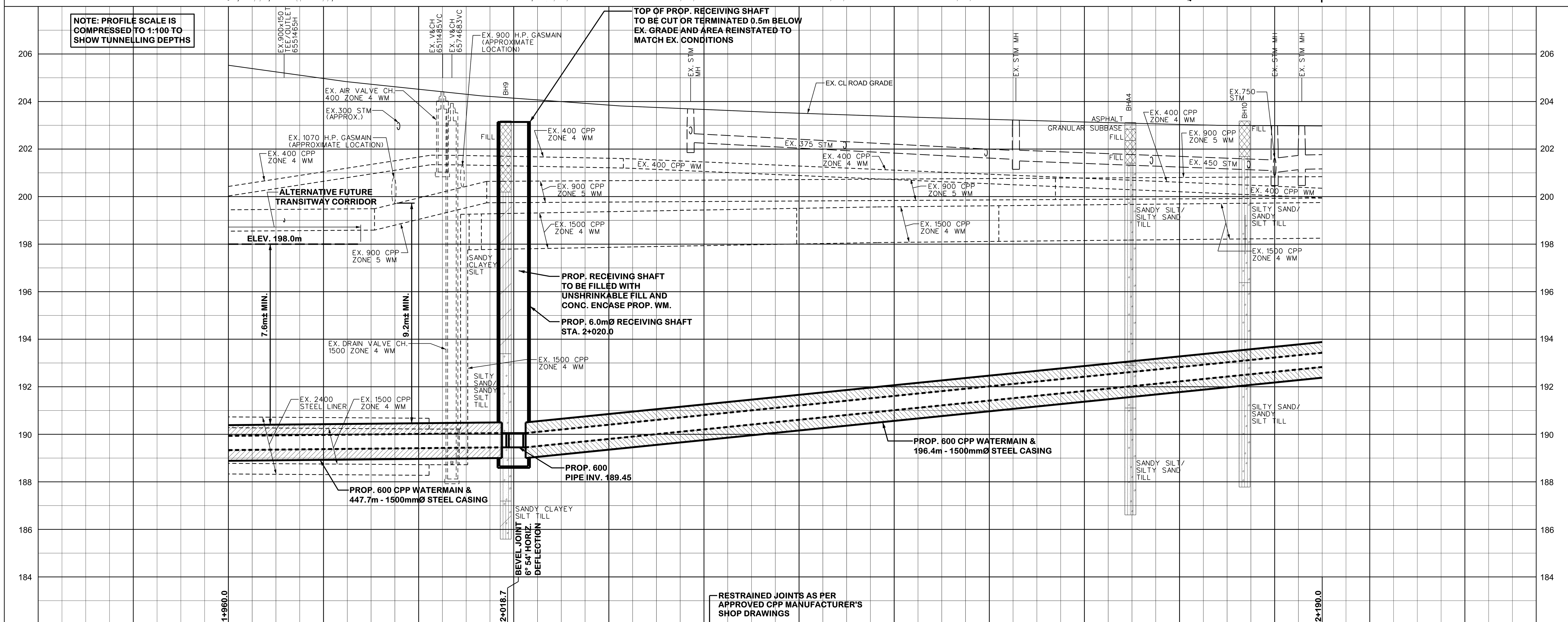
THIS DRAWING TO BE USED FOR WATERMAIN CONSTRUCTION ONLY



												RESTRAINED JOINTS
189.34	189.38	189.42	189.45	189.80	190.21	190.61	191.01	191.41	191.82	192.23	192.63	BOT.EL. OF WM.
205.53	204.97	204.52	204.14	203.85	203.67	203.51	203.37	203.25	203.14	203.04	202.98	EX. ROAD ELEV.
1+960	1+980	2+000	2+020	2+040	2+060	2+080	2+100	2+120	2+140	2+160	2+180	ROAD CHAINAGE

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Ainley CONSULTING ENGINEERS PLANNERS

Approved by

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ENERSOURCE, HYDRO MISSISSAUGA	
HYDRO ONE BRAMPTON	

10m 0 10 20 30m HORIZONTAL SCALE

2m 0 2 4 6m VERTICAL SCALE

Region of Peel
working with you

HERITAGE ROAD

(FROM STEELES AVENUE WEST TO MEADOWVALE NORTH PUMPING STATION)

PROP. 600mm WATERMAIN

STA. 1+960.0 TO STA. 2+190.0

CAD Area		Area	B-8	Project No.	15-1138
Checked by	D.B.E.	Drawn by	D.E.		
Date	AUGUST 2019	Sheet	5 of 15	Plan No.	WM5-D

STANDARD ENVIRONMENTAL NOTES

SECTION 1: SITE MANAGEMENT

1) EROSION AND SEDIMENT CONTROL (ESC) MEASURES WILL BE IMPLEMENTED PRIOR TO, AND MAINTAINED DURING THE CONSTRUCTION PHASES, TO PREVENT ENTRY OF SEDIMENT INTO THE WATER. ALL DAMAGED EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE REPAIRED AND/OR REPLACED WITHIN 48 HOURS OF THE INSPECTION.

2) DISTURBED AREAS WILL BE MINIMIZED TO THE EXTENT POSSIBLE, AND TEMPORARILY OR PERMANENTLY STABILIZED OR RESTORED AS THE WORK PROGRESSES (SEE PROPOSED STAGING, ITEM 7).

3) ALL IN-WATER AND NEAR WATER WORKS WILL BE CONDUCTED IN THE DRY WITH APPROPRIATE EROSION AND SEDIMENT CONTROLS.

4) THE EROSION AND SEDIMENT CONTROL STRATEGIES OUTLINED ON THE PLANS ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO MINIMIZE SEDIMENT LADEN RUNOFF FROM LEAVING THE WORK AREAS. IF THE PRESCRIBED MEASURES ON THE PLANS ARE NOT EFFECTIVE IN PREVENTING THE RELEASE OF A DELETERIOUS SUBSTANCE, INCLUDING SEDIMENT, THEN ALTERNATIVE MEASURES MUST BE IMPLEMENTED IMMEDIATELY TO MINIMIZE POTENTIAL ECOLOGICAL IMPACTS. CVC ENFORCEMENT OFFICER SHOULD BE IMMEDIATELY CONTACTED. ADDITIONAL ESC MEASURES TO BE KEPT ON SITE AND USED AS NECESSARY.

5) AN ENVIRONMENTAL MONITOR WILL ATTEND THE SITE TO INSPECT ALL NEW CONTROLS, AS WELL AS ON A REGULAR BASIS, OR FOLLOWING RAIN/SNOWMELT EVENT, TO MONITOR ALL WORKS, AND IN PARTICULAR WORKS RELATED TO EROSION AND SEDIMENT CONTROLS, DEWATERING OR UNWATERING, RESTORATION AND IN- OR NEAR- WATER WORKS. SHOULD CONCERNS ARISE ON SITE THE ENVIRONMENTAL MONITOR WILL CONTACT THE CVC ENFORCEMENT OFFICER AS WELL AS THE PROPONENT.

6) ALL ACTIVITIES, INCLUDING MAINTENANCE PROCEDURES, WILL BE CONTROLLED TO PREVENT THE ENTRY OF PETROLEUM PRODUCTS, DEBRIS, RUBBLE, CONCRETE OR OTHER DELETERIOUS SUBSTANCES INTO THE WATER. VEHICULAR REFUELING AND MAINTENANCE WILL BE CONDUCTED A MINIMUM OF 30 METRES FROM THE WATER.

7) ALL GRADES WITHIN THE REGULATORY FLOOD PLAIN WILL BE MAINTAINED OR MATCHED.

8) THE PROPONENT/CONTRACTOR SHALL MONITOR THE WEATHER SEVERAL DAYS IN ADVANCE OF THE ONSET OF THE PROJECT TO ENSURE THAT THE WORKS WILL BE CONDUCTED DURING FAVOURABLE WEATHER CONDITIONS. SHOULD AN UNEXPECTED STORM ARISE, THE CONTRACTOR WILL REMOVE ALL UNFIXED ITEMS FROM THE REGIONAL STORM FLOOD PLAIN THAT WOULD HAVE THE POTENTIAL TO CAUSE A SPILL OR AN OBSTRUCTION TO FLOW, E.G., FUEL TANKS, PORTA-POTTIES, MACHINERY, EQUIPMENT, CONSTRUCTION MATERIALS, ETC.

9) ALL DEWATERING/UNWATERING SHALL BE TREATED AND RELEASED TO THE ENVIRONMENT AT LEAST 30 METRES FROM A WATERCOURSE OR WETLAND AND ALLOWED TO DRAIN THROUGH A WELL-VEGETATED AREA. NO DEWATERING EFFLUENT SHALL BE SENT DIRECTLY TO ANY WATERCOURSE, WETLAND OR FOREST, OR ALLOWED TO DRAIN ONTO DISTURBED SOILS WITHIN THE WORK AREA. THESE CONTROL MEASURES SHALL BE MONITORED FOR EFFECTIVENESS AND MAINTAINED OR REVISED TO MEET THE OBJECTIVE OF PREVENTING THE RELEASE OF SEDIMENT LADEN WATER.

10) ALL ACCESS TO THE WORK SITE SHALL BE FROM EITHER SIDE OF THE WATERCOURSE. NO EQUIPMENT OR VEHICLES ARE PERMITTED TO CROSS THROUGH THE WATERCOURSE UNLESS APPROVED BY CVC.

SECTION 2: CONSTRUCTION TIMING

11) IN ORDER TO COMPLY WITH THE MIGRATORY BIRDS CONVENTION ACT, CVC RECOMMENDS THAT TREE REMOVALS BE COMPLETED BETWEEN AUGUST 1 AND APRIL 1.

12) TO PROTECT LOCAL FISH POPULATIONS DURING THEIR SPAWNING, NURSERY AND MIGRATORY PERIODS, IN-WATER/NEAR-WATER ACTIVITIES, MAY ONLY OCCUR DURING THE FOLLOWING TIMING WINDOW OF JULY 1 TO SEPTEMBER 15.

SECTION 3: FISH AND WILDLIFE RELOCATION

13) FISH AND WILDLIFE STRANDED WITHIN THE WORK AREA SHALL BE CAPTURED AND RELEASED LIVE IN A SUITABLE HABITAT UPSTREAM OF THE WORK AREA UNDER THE SUPERVISION OF A QUALIFIED AQUATIC BIOLOGIST. A PERMIT FROM THE MINISTRY OF NATURAL RESOURCES IS REQUIRED.

SECTION 4: ENVIRONMENTAL COMPLIANCE

14) PLEASE NOTIFY CVC ENFORCEMENT OFFICER AND CVC PROJECT MANAGER 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.

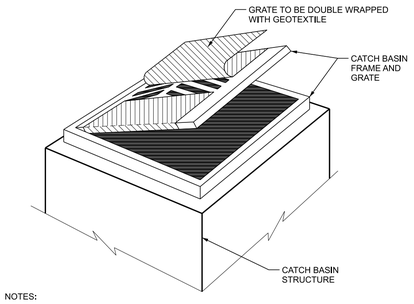
15) AN ENVIRONMENTAL MONITOR WILL BE ON SITE, AND PROVIDE ADVICE, TO ENSURE THAT ACTIVITIES THAT COULD HAVE A NEGATIVE IMPACT TO THE NATURAL ENVIRONMENT ARE EFFECTIVELY MITIGATED AS CONSTRUCTION PROCEEDS. THE ENVIRONMENTAL MONITOR SHALL NOTIFY THE CVC ENFORCEMENT OFFICER AND PROJECT MANAGER IF AN ISSUE ARISES.

PROPOSED STAGING CVC MULLET CREEK CROSSING:

1) SEDIMENTATION AND EROSION CONTROL MEASURES IN PLACE
2) EXCAVATION OF TUNNELING PITS
3) INSTALLATION OF CASING PIPES
4) INSTALLATION OF WATERMAINS WITHIN CASING PIPES
5) INSTALLATION OF ADJACENT SECTIONS OF WATERMAIN INCLUDING VALVE CHAMBERS AND DRAIN CHAMBERS
6) BACKFILLING OF WATERMAIN TRENCH
7) SITE STABILIZATION WILL OCCUR IMMEDIATELY FOLLOWING CONSTRUCTION TO AVOID EROSION. STRIPPED AREAS WILL BE STABILIZED USING A MINIMUM 150mm NATIVE TOPSOIL AND SOD. EROSION CONTROL BLANKET TO BE PLACED INSTEAD OF SOD IF WORK IS COMPLETED OUTSIDE OF THE GROWING SEASON.

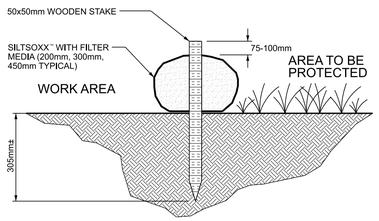
CONTRACTOR STAGING AND STORAGE AREAS:

1) THE CONTRACTOR'S STAGING AND STORAGE AREAS ARE TO BE MAINTAINED OUTSIDE THE CVC REGULATORY FLOODLINE LIMIT
2) CONSTRUCTION ACCESS ROUTE TO BE ON HERITAGE ROAD

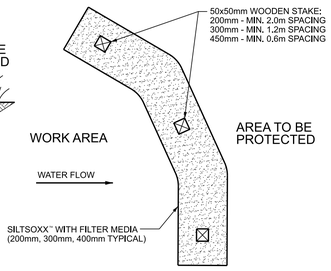


NOTES:
1. TO BE USED UNDER APPROPRIATE DRAINAGE CIRCUMSTANCES, BETWEEN APRIL AND DECEMBER.
2. WOVEN GEOTEXTILE TO HAVE A MINIMUM EQUIVALENT OPENING SIZE OF 0.15mm AND A MAXIMUM EQUIVALENT OPENING SIZE OF 0.25mm OR A NON WOVEN GEOTEXTILE TO BE CONSIDERED BASED ON SOIL PARAMETERS AND SITE CONDITIONS.
3. GEOTEXTILE TO BE REPLACED PERIODICALLY WHEN ACCUMULATED SEDIMENTS INTERFERES WITH DRAINAGE, OR AS DIRECTED BY THE REGION OR PROJECT ENGINEER.

TYPICAL CATCHBASIN PROTECTION DETAIL
N.T.S.



SECTION



PLAN

NOTES:
1. ALL MATERIAL TO MEET TERRAFIX SPECIFICATIONS.
2. SEDIMENT SOCK DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE LARGER SOCKS AS DETERMINED BY ENGINEER.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

SEDIMENT SOCK WITH FILTER MEDIA
N.T.S.

WATERMAIN NOTES:

1. ALL COPPER (LESS THAN 25mm), GALVANIZED & LEAD WATER SERVICES ARE TO BE REPLACED WITH 25mm TYPE 'K' COPPER FROM THE NEW WATERMAIN TO THE STREET LINE COMPLETE WITH A NEW SERVICE BOX AT STREET LINE. ALL W/S'S MUST HAVE A MIN. OF 1.7m COVER ON CURB AND GUTTER ROADS AND A MINIMUM OF 2.1m COVER ON UNIMPROVED ROADS, AS INDICATED ON THE DRAWINGS. IF W/S CONFLICTS WITH SEWERS AND/OR EXISTING WATERMAIN W/S HAS TO BE INSTALLED UNDER SEWER AND/OR WATERMAIN WITH A MINIMUM OF 300mm CLEARANCE. REMOVE & DISPOSE OF EXISTING WATER SERVICE BOXES.
2. PLUG THE ENDS OF THE ABANDONED WATERMAIN WITH CONCRETE OR MECHANICAL PLUG.
3. 50mm TEMP. BLOW-OFF AND/OR RISER PIPE FOR SWABBING OF THE WATERMAIN IS/ARE TO BE LOCATED IN THE BOULEVARD.
4. INSTALL TEMP. PLUG & B.O. AT END OF EACH PIPE FOR TESTING.
5. THRUST RESTRAINTS AT VERTICAL AND HORIZONTAL BENDS AND HORIZONTAL BLOCKING FOR PLUGS, CAPS AND TEES ON CONNECTIONS TO EXISTING WATERMAIN SYSTEM AS PER STD. DWGS 1-5-4, 1-5-5, 1-5-6 AND 1-5-7. BLOCKING IS NOT PERMITTED ON NEW INSTALLATIONS.
6. RESTRAINED JOINT LOCATIONS FOR NEW WATERMAIN INSTALLATION SHALL CONFORM TO CONTRACT DRAWINGS AND STD. DWG.1-5-9.
7. MAINTAIN ALL SEWER & WATERMAIN CROSSING AT MINIMUM 500mm BELOW PIPE INVERT AND/OR MINIMUM 300mm ABOVE PIPE OBVERT.
8. HYDRANTS SHALL CONFORM TO STD. DWG 1-6-1.
9. NEW HYDRANT OFFSET TO BE DETERMINED IN THE FIELD, MIN. 1.5 m OFFSET TO BELL AND HYDRO, MIN. 1.2m OFFSET FROM SIDEWALKS.
10. WATER SERVICES SHALL CONFORM TO STD DWG 1-7-1.
11. WATERMAIN UP TO AND INCLUDING 300mm DIAMETER SHALL BE PVC DR18/CLASS 150/AWWA C900, OR PVC DR18/CLASS 150/AWWA C909, AS INDICATED. 600 DIAMETER WATERMAIN SHALL BE CONCRETE PRESSURE PIPE (CPP) AWWA C301.
12. VALVE CHAMBERS SHALL CONFORM TO STD. DWGS 1-1-0, 1-1-6, 1-3-21, 1-3-22.
13. INSTALL W/S BY BORING UNDER PAVEMENT, TREES AND SHRUBS, UNLESS OTHERWISE NOTED.
14. TESTING AND COMMISSIONING SHALL BE UNDERTAKEN PER THE REGION'S STANDARD SPECIFICATIONS FOR WATERMAIN VOL. 2-2.
15. 12 GAUGE TWU STRANDED COPPER, LIGHT COLOURED PLASTIC COATED TRACER WIRE MUST BE INSTALLED WITH AND ALONG THE PIPE AND BROUGHT TO THE SURFACE AT EACH VALVE BOX/CHAMBER AND HYDRANT (AROUND PORT), TRACER WIRE IS TO BE ATTACHED TO THE PIPE BY MEANS OF TAPE.
16. THE WATERMAIN ALIGNMENT MAY BE ALTERED IN THE FIELD TO ENSURE MINIMUM 500mm SEPARATION FROM SEWERS.
17. LOCATIONS OF UTILITIES SHOWN ON THE PLAN AND PROFILE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATIONS OF UTILITIES IN THE FIELD.
18. CATCH BASINS TO BE MAINTAINED DURING CONSTRUCTION UNLESS OTHERWISE SPECIFIED.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PROTECTION AND TEMPORARY RELOCATION OF UNDERGROUND AND ABOVEGROUND UTILITIES PRIOR TO AND DURING CONSTRUCTION.
20. CONTRACTOR SHALL NOT REMOVE OR DAMAGE ANY TREE UNLESS THEY ARE INDICATED AS REMOVAL ITEMS ON THE DRAWINGS.
21. CONTRACTOR SHALL MAINTAIN FLOW IN ALL EXISTING WATER SERVICES DURING CONSTRUCTION.
22. ALL BACKFILL ON TRAVELLED PORTION OF THE RIGHT OF WAY TO BE GRAN. "B" BACKFILL AND BE COMPACTED TO MIN. 100% STD. PROCTOR DENSITY.
23. ALL AREAS DAMAGED OR DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THE RESTORATION REQUIREMENTS AS SPECIFIED OR OTHERWISE TO THE ORIGINAL CONDITIONS.
24. CONTRACTOR TO VERIFY DEGREE OF BEND REQUIRED FOR WATERMAIN DURING CONSTRUCTION LAYOUT AND TO SHOW REVISIONS ON SHOP DRAWINGS.
25. NEW WATERMAINS TO BE CHLORINATED, PRESSURE TESTED AND BACTERIOLOGICALLY TESTED PRIOR TO CONNECTING TO THE EXISTING SYSTEM. CONTRACTOR IS TO PROVIDE ALL THE NECESSARY VALVES, FITTINGS, BLOW-OFF, PLUGS, ETC. EITHER TEMPORARY OR PERMANENTLY, REQUIRED TO UNDERTAKE THIS WORK. FLUSHING CHLORINATING AND SAMPLING OF THE WATERMAIN WILL BE PERFORMED BY THE REGION. ALL OTHER TESTING SHALL BE CARRIED OUT BY A COMPANY SPECIALIZED IN THE FIELD AND APPROVED BY THE REGION.
26. BOREHOLE LOG INFORMATION AS SHOWN ON DRAWINGS IS FOR INFORMATION PURPOSES ONLY. REFER TO THE GEOTECHNICAL INVESTIGATION REPORT FOR DETAILED GEOTECHNICAL INFORMATION.
27. ANY JOINT DEFLECTION SHALL BE 50 PERCENT OF THE PIPE MANUFACTURER'S SPECIFICATIONS. PIPE BARREL DEFLECTION IS PROHIBITED WHEN USING PVC PIPE.
28. MAINTAIN 600mm HORIZONTAL SEPARATION FROM ANY BELL PLANT. HAND DIG WHEN WORKING WITHIN 1.0m OF AND WHEN CROSSING ANY BELL PLANT
29. MAINTAIN 600mm HORIZONTAL AND VERTICAL SEPARATION FROM ANY GAS MAIN FOR OPEN CUT.
30. MAINTAIN 1.0m HORIZONTAL SEPARATION FROM ANY GAS MAIN FOR BORING.
31. MAINTAIN 600mm VERTICAL CLEARANCE FROM ANY HYDRO PLANT.
32. SUPPORT, PROTECT AND MAINTAIN EXISTING FENCE DURING WATER SERVICES INSTALLATIONS USING VACTOR EXCAVATIONS AS REQUIRED.
33. PROTECT AND SUPPORT EXISTING LIGHT STANDARDS, TS POLES USING CITY APPROVED VENDOR AS REQUIRED FOR WATERMAIN AND WATER SERVICES INSTALLATIONS.
34. REFER TO http://www.peelregion.ca/pw/other/standards/linear/mat-specs/pdfs/watermain.pdf FOR ACCEPTABLE WATER INFRASTRUCTURE PRODUCTS.

REVISIONS

DATE	DETAILS	INIT.

LEGEND:

- EX. 25mmØ & LARGER COPPER W/S TO BE CUT AND TRANSFERRED OR EXTENDED TO THE NEW WM.
- REPLACE EX. W/S WITH 25mmØ COPPER
- EX. HYD. V. & B. TO BE REMOVED AND HYD. TO BE RETURNED TO REGION YARD IN BRAMPTON, 2 COPPER RD. VALVES TO BE DISPOSED OF OFF SITE.

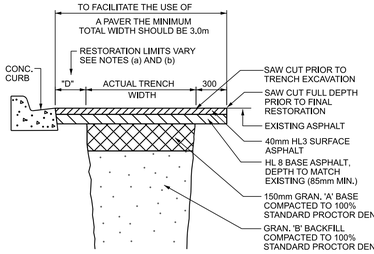
NOTES FOR WORKING CLOSE TO TREES:

1. NO OPEN TRENCHING WITHIN DRIP LINE OF BLVD.
2. BORE/AUGER UNDER TREE ROOTS
3. REINSTATE AROUND EXPOSED TREE ROOTS WITH SAND AND TOP SOIL
4. KEEP COMPACTION TO A MINIMUM IN THE IMMEDIATE TREE ROOT AREA
5. REINSTATE TREE PITS WITH GOOD QUALITY TOP SOIL
6. IF EXPOSURE IS LIKELY TO BE FOR MORE THAN ONE HOUR COVER ROOTS WITH WET SACKING

TRAFFIC MANAGEMENT NOTES:

1. CONTRACTOR TO REFER TO OTM BOOK 7 FOR ALL SIGNAGE REQUIREMENTS AND ALL OTHER TRAFFIC MANAGEMENT REFERENCES.
2. CONTRACTOR TO ENSURE ALL ROAD OCCUPANCY PERMITS ARE OBTAINED PRIOR TO CONSTRUCTION.
3. CONTRACTOR TO PREPARE A DETAILED TRAFFIC MANAGEMENT PLAN AND SUBMIT TO THE REGION AND CITY OF BRAMPTON PRIOR TO CONSTRUCTION.

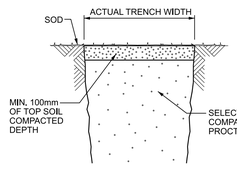
THIS DRAWING TO BE USED FOR WATERMAIN CONSTRUCTION ONLY



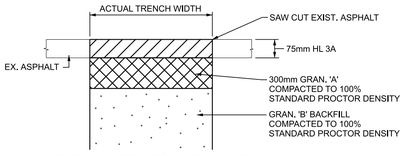
NOTES: (a) WHERE DISTANCE "D" FROM EDGE OF TRENCH TO CURB EXCEEDS 1.3m THEN SAW CUT FULL DEPTH 300mm BEYOND TRENCH WIDTH PRIOR TO FINAL RESTORATION

(b) WHERE DISTANCE "D" IS LESS THEN 1.3m THEN REMOVE ASPHALT FULL DEPTH BETWEEN CONCRETE CURB AND EDGE OF TRENCH PRIOR TO FINAL RESTORATION

REINSTATEMENT DETAIL AS PER SPECIFICATION FOR THE FOLLOWING STREETS:
HERITAGE ROAD, MEADOWVALE ROAD, STEELES AVENUE WEST, EDGEWARE ROAD
N.T.S.



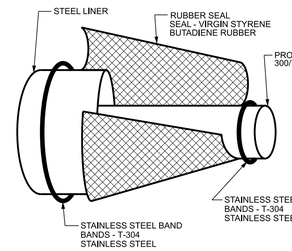
REINSTATEMENT DETAIL AS PER SPECIFICATION FOR THE FOLLOWING STREETS:
HERITAGE ROAD, MEADOWVALE ROAD
N.T.S.



TYPICAL RESTORATION OF ASPHALT DRIVEWAYS
N.T.S.

NOTES FOR THE TUNNELLING PITS:

1. THE TUNNELLING PITS MUST BE CONSTRUCTED USING CLOSED SHEATHING OR APPROVED EQUIVALENT, (SIZE AND LOCATION OF PITS SHOWN ON DRAWINGS IS APPROXIMATE ONLY, TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR).
2. CONTRACTOR IS NOT ALLOWED TO WORK IN THE PITS IF THEY DO NOT HAVE SUFFICIENT DEWATERING EQUIPMENT ON SITE TO MAINTAIN THE PITS IN A DRY WORKING CONDITION.
3. WATER PUMPED FROM TUNNELLING PITS TO BE DISCHARGED INTO A FILTER BAG, TO REMOVE SUSPENDED PARTICULATE, PRIOR TO THE WATER RE-ENTERING EX. STORM SEWER, TO THE SATISFACTION OF THE REGION OF PEEL.
4. ALL DISTURBED BOULEVARD AREAS NEAR EX. STORM SEWER ARE TO BE REINSTATED WITH 100mm NURSERY GRADE TOPSOIL AND SEEDED/SODDED WITHIN TWO WEEKS AFTER CONSTRUCTION UNLESS A DELAY HAS BEEN APPROVED DUE TO WINTER CONDITIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT SILT ON THE ROADWAY DOES NOT ENTER STORM SEWER OR WATERCOURSE.

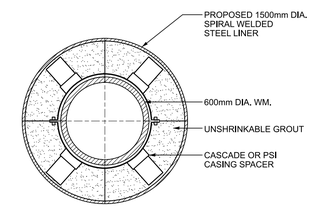


CASING END SEAL
N.T.S.

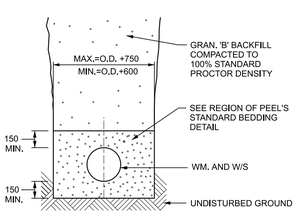
HERITAGE ROAD (BRAMPTON) LOCATED AT MULLET CREEK (600mm CARRIER, 139.3m LONG ENCASING PIPE)

ITEM	PROP. CARRIER PIPE	ENCASING PIPE
CONTENTS TO BE HANDLED	WATER	——
DIAMETER OF PIPE (NOM.)	600mm	1500mm
MIN. WALL THICKNESS	DEPENDANT UPON PIPE MATERIAL	11.9mm
PIPE MATERIAL	CONCRETE PRESSURE PIPE	STEEL
SPECIFICATION & GRADE	A.W.W.A. C303	——
TYPE OF JOINT	BELL & SPIGOT	BUTT, WELDED
DESIGN PRESSURE	690 KPa (100 P.S.I.)	——
WORKING PRESSURE	690 KPa (100 P.S.I.)	——
SURGE PRESSURE	970 KPa (140 P.S.I.)	——
TEST PRESSURE	1100 KPa (150 P.S.I.)	——
YIELD STRENGTH	——	242 MPa(35000P.S.I.)
DIRECTION OF FLOW	NORTH - SOUTH	——

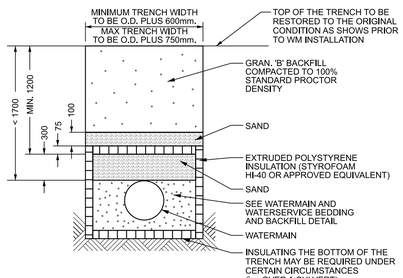
NOTES:
1. INSTALLATION, CONSTRUCTION AND MAINTENANCE TO BE IN ACCORDANCE WITH CANADIAN TRANSPORT COMMISSION'S GENERAL ORDER E-10
2. ENCASEMENT PIPE TO BE INSTALLED BY MICROTUNNELLING
3. MAXIMUM PRESSURE 1100 KPa TEST
4. AS PER OPS 1802 & 416



CASING SECTION
N.T.S.



WATERMAIN, HYDRANT AND WATER SERVICE BEDDING AND BACKFILL
N.T.S.



WATERMAIN INSULATION DETAIL
N.T.S.

Ainley CONSULTING ENGINEERS PLANNERS

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NOTICE TO CONTRACTOR
48 HOURS PRIOR TO COMMENCING WORK NOTIFY THE FOLLOWING

THE REGIONAL MUNICIPALITY OF PEEL
CITY OF MISSISSAUGA WORKS DEPT.
CITY OF BRAMPTON WORKS DEPT.
TOWN OF CALEDON WORKS DEPT.
BELL CANADA
ENBRIDGE INCORPORATED-GAS DISTRIBUTION
ONTARIO MINISTRY OF TRANSPORTATION
ONTARIO CLEAN WATER AGENCY
HYDRO ONE NETWORKS
ENERSOURCE, HYDRO MISSISSAUGA
HYDRO ONE BRAMPTON

CABLE TELEVISION/FIBREOPTIC PROVIDERS:
BELL CANADA
ENERSOURCE TELECOM
HYDRO ONE TELECOM
ROGERS CABLE
ALLSTREAM
PSN (PUBLIC SECTOR NETWORK)
FUTUREWAY (FCI BROADBAND)

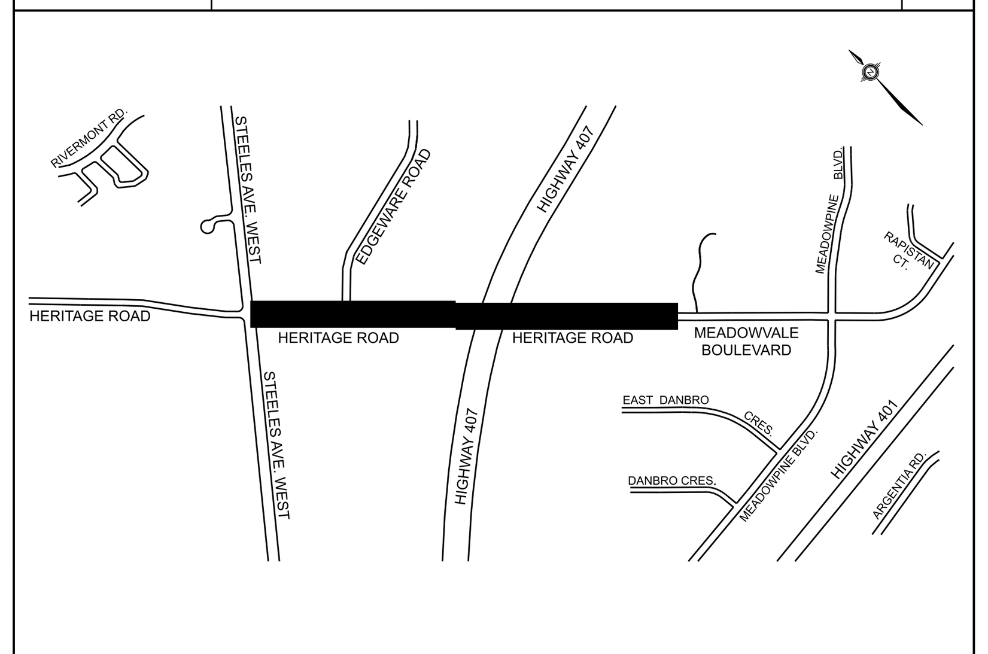
NOT TO SCALE

Region of Peel working with you

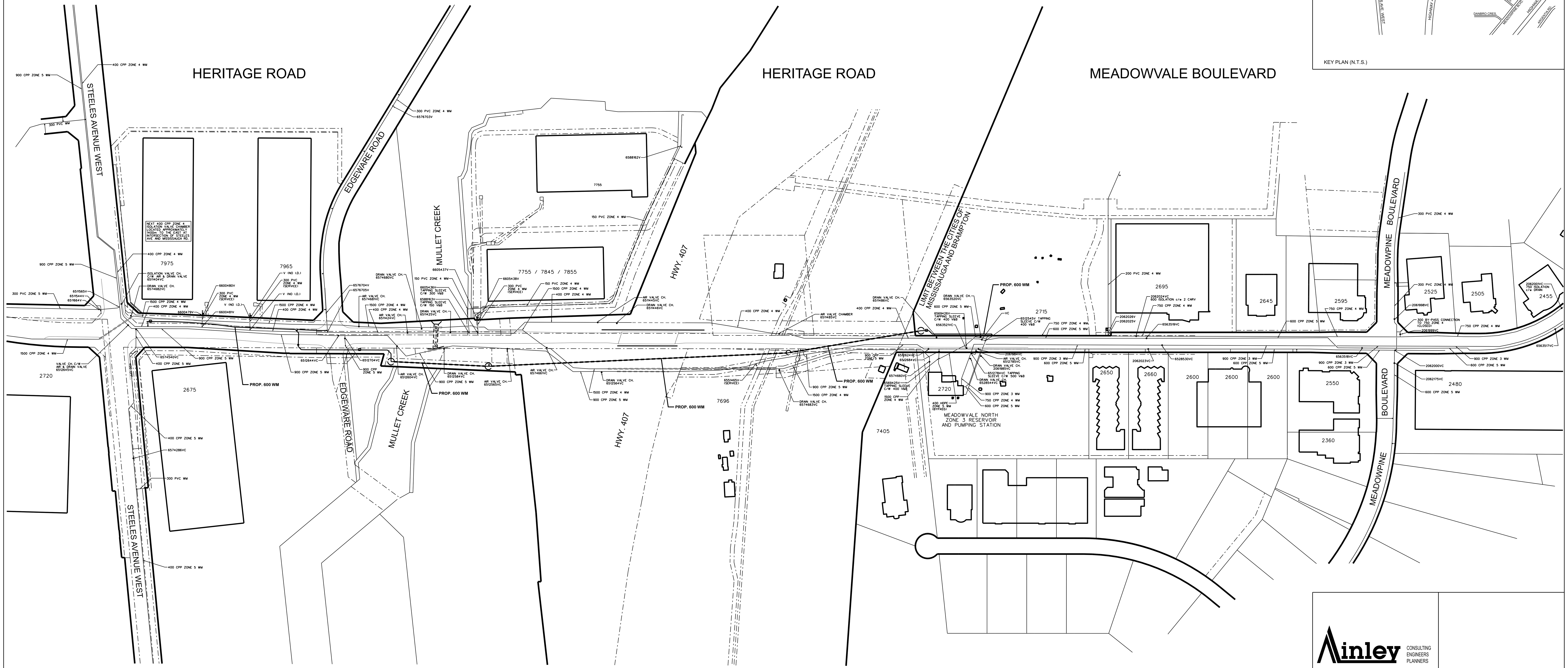
GENERAL NOTES, LEGEND AND CONSTRUCTION DETAILS

CAD Area		Area	B-8
Checked by	D.B.E.	Drawn by	D.E.
Date	AUGUST 2019	Sheet	11 of 15
		Project No.	15-1138
		Plan No.	**WM11-D**

REVISIONS		
DATE	DETAILS	INIT.



KEY PLAN (N.T.S.)



THIS DRAWING TO BE USED FOR WATERMAIN CONSTRUCTION ONLY

CONTRACT DRAWINGS
Contractor must verify all dimensions and be responsible for same. Any discrepancies must be reported to the Engineer before commencing work. Drawings are not to be scaled. Drawings may not be used for any purpose other than that stipulated in the contract agreement between the owner/client and the Engineer without the express written consent of Ainley & Associates Limited. Use of these drawings by any party for any other purpose is subject to the following caution.
CAUTION:
The information contained in this drawing is solely for the intended recipient. Any copying, distribution or use by others without the express written consent of Ainley & Associates Limited is prohibited. The recipient is responsible for confirming the accuracy and completeness of the information with the originator. The recipient assumes all risks and liabilities associated with the use of the drawings. The recipient will save and hold harmless Ainley & Associates Limited from any claims whatsoever associated with or related to the use of the drawings. The recipient will not reuse any portion of the drawings for any future project without the express written permission of Ainley & Associates Limited.

Ainley CONSULTING ENGINEERS PLANNERS

Approved by

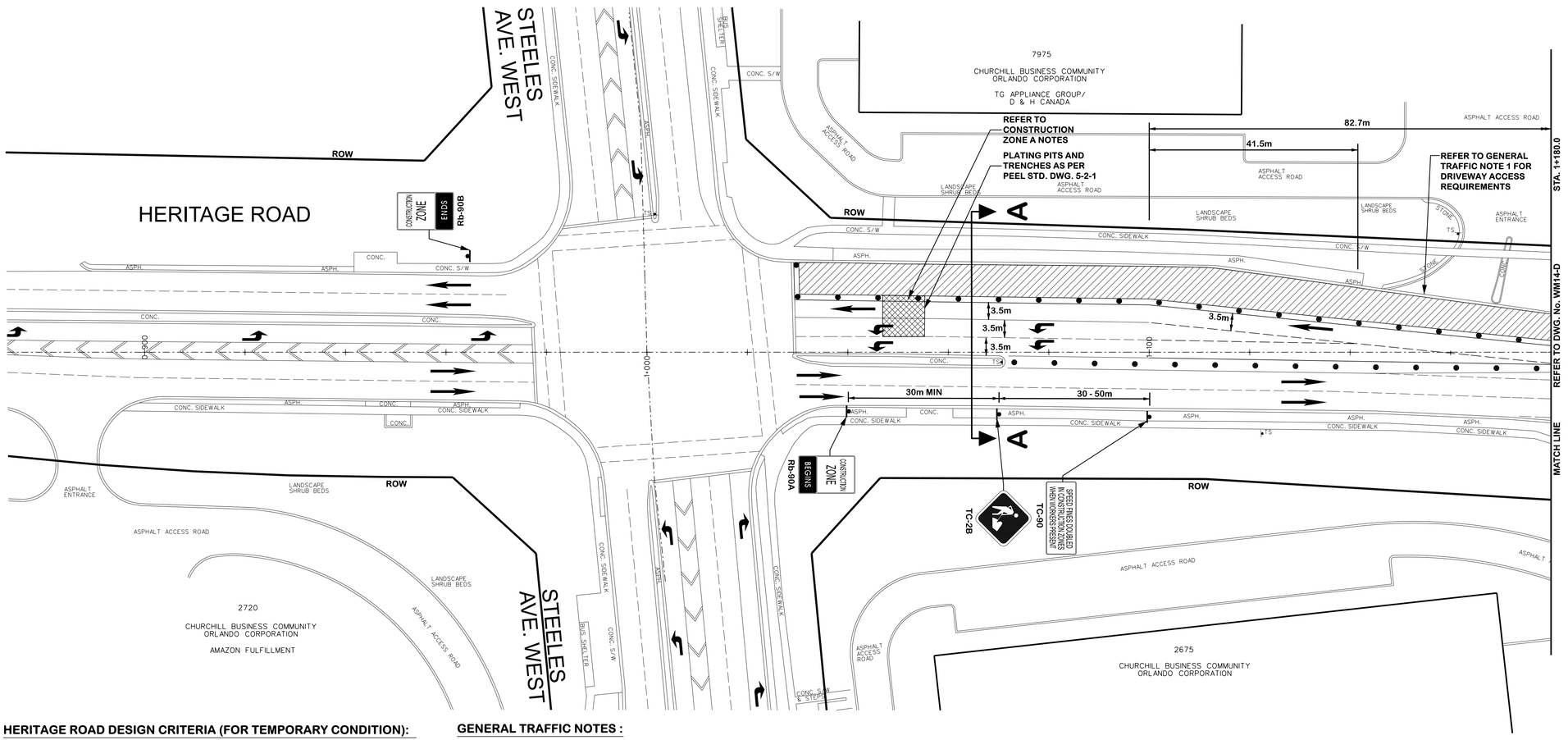
30m 0 30 60 120 180m HORIZONTAL SCALE SCALE 1:3000

Region of Peel working with you

HERITAGE ROAD

EXISTING VALVE PLAN

CAD Area		Area	B-8	Project No.	15-1138
Checked by	D.B.E.	Drawn by	D.E.		
Date	FEBRUARY 2021	Sheet	12 of 15	Plan No.	WM12-D



HERITAGE ROAD DESIGN CRITERIA (FOR TEMPORARY CONDITION):

1. POSTED SPEED: 60km/hr
2. TEMPORARY POSTED SPEED: 50km/hr
3. MINIMUM LANE WIDTH: 3.5m
4. MINIMUM TAPER: 15m. FOR OTHER STANDARDS, REFER TO ONTARIO TRAFFIC MANUAL BOOK 7 FOR TEMPORARY CONDITION.

TYPICAL WORK SEQUENCE :

1. THIS WORK SEQUENCE HAS BEEN DEVELOPED TO PROVIDE AN UNDERSTANDING OF HOW THE WORK COULD BE COMPLETED. PRIOR TO THE COMMENCEMENT OF THE WORK, THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN IDENTIFYING THE REQUIREMENTS FOR EACH STAGE OF CONSTRUCTION AND IN ACCORDANCE WITH THE CONTRACT. THE TRAFFIC CONTROL PLAN SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST VERSION OF THE ONTARIO TRAFFIC MANUAL BOOK 7.
2. THE CONTRACTOR SHALL PROVIDE FOR THE PLACEMENT AND REMOVAL OF TEMPORARY LANE MARKINGS. ANY TEMPORARY LANE MARKINGS REQUIRED TO ACCOMMODATE TRAFFIC STAGING ARE TO BE REMOVED BY GRINDING. THE USE OF BLACK-OUT PAINT WILL NOT BE PERMITTED.
3. PAVEMENT RESTORATION WITHIN THE EXISTING ROADWAY IS TO BE COMPLETED IN MAXIMUM 50mm LIFTS TO MEET EXISTING OVERALL PAVEMENT THICKNESS AND SHALL BE PAVED FLUSH WITH EXISTING PAVEMENT BEFORE OPENING TO TRAFFIC.
4. TRAFFIC MANAGEMENT DRAWINGS ARE A GUIDE FOR THE CONTRACTOR. SHOULD ANY DIRECTION CHANGE PERTAINING TO ROAD CLOSURES/SIGNAGE CHANGE, THE OWNER IS NOT RESPONSIBLE.

GENERAL TRAFFIC NOTES :

1. CONTRACTOR TO MAINTAIN IN AND OUT ACCESS TO EXISTING ENTRANCES AT ALL TIMES. CONTRACTOR IS TO NOTIFY AND COORDINATE WITH OWNER AT LEAST 48 HOURS IN ADVANCE SHORT TERM CLOSURES REQUIRED.
2. CONTRACTOR TO PROVIDE SAFE ACCESS TO BRAMPTON TRANSIT STOP AND CROSSWALK AT ALL TIMES.
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7. EXCEPT FOR SPECIFIED SHORT TERM CLOSURES. ACCESS TO BE MAINTAINED TO EXISTING ENTRANCES. PROPERTIES WITH MORE THAN ONE ENTRANCE SHALL HAVE ONLY ONE ENTRANCE DISRUPTED AT ANY ONE TIME.
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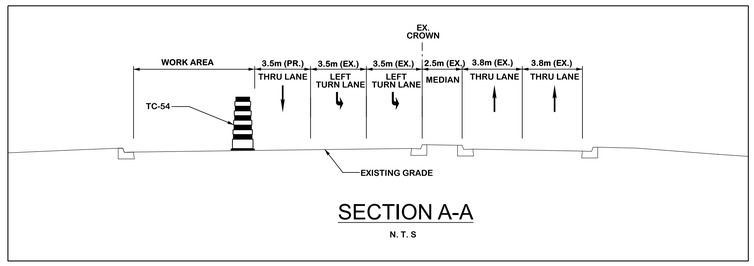
12. THE CONTRACTOR SHALL RESTORE ALL TRAFFIC LOOPS AS PART OF ROAD RESTORATION.



SECTION A-A

N. T. S

CONSTRUCTION ZONE A NOTES:

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SERVICE DATA

SERVICE	DATE	INIT.	SERVICE	DATE	INIT.
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STORM SEWERS	AUG. 8,19	D.E.	BELL U/G CABLE	AUG. 28,19	T.H.
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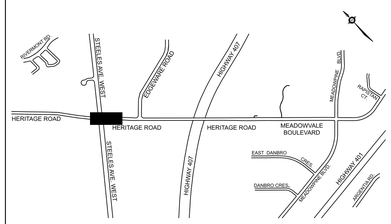
ONT. CLEAN WATER	AUG. 14,19	N/A	COMMUNIC. CABLES	AUG. 14,19	M.T.

REVISIONS

DATE	DETAILS	INIT.



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LEGEND:

- WORK AREA
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- TC-54 (8-10m SPACING, MIN 7 MARKERS FOR TAPERS)
- CONSTRUCTION STAGE TRAFFIC DIRECTION

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WS25 Proposed Water Service, Size In mm

B.M. No. 042010227 Elev. 200.069
Description: Brass cap in concrete
Location: 0.6km North od Steeles Ave., 7.4m East of centreline of Heritage Road and 2.2m West of fence

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Ainley CONSULTING ENGINEERS PLANNERS

Approved by

NOTICE TO CONTRACTOR

48 HOURS PRIOR TO COMMENCING WORK NOTIFY THE FOLLOWING

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CITY OF BRAMPTON WORKS DEPT.
TOWN OF CALEDON WORKS DEPT.
BELL CANADA
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HYDRO ONE NETWORKS
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10m 0 10 20 30m — HORIZONTAL SCALE
2m 0 2 4 6m — VERTICAL SCALE

Region of Peel working with you

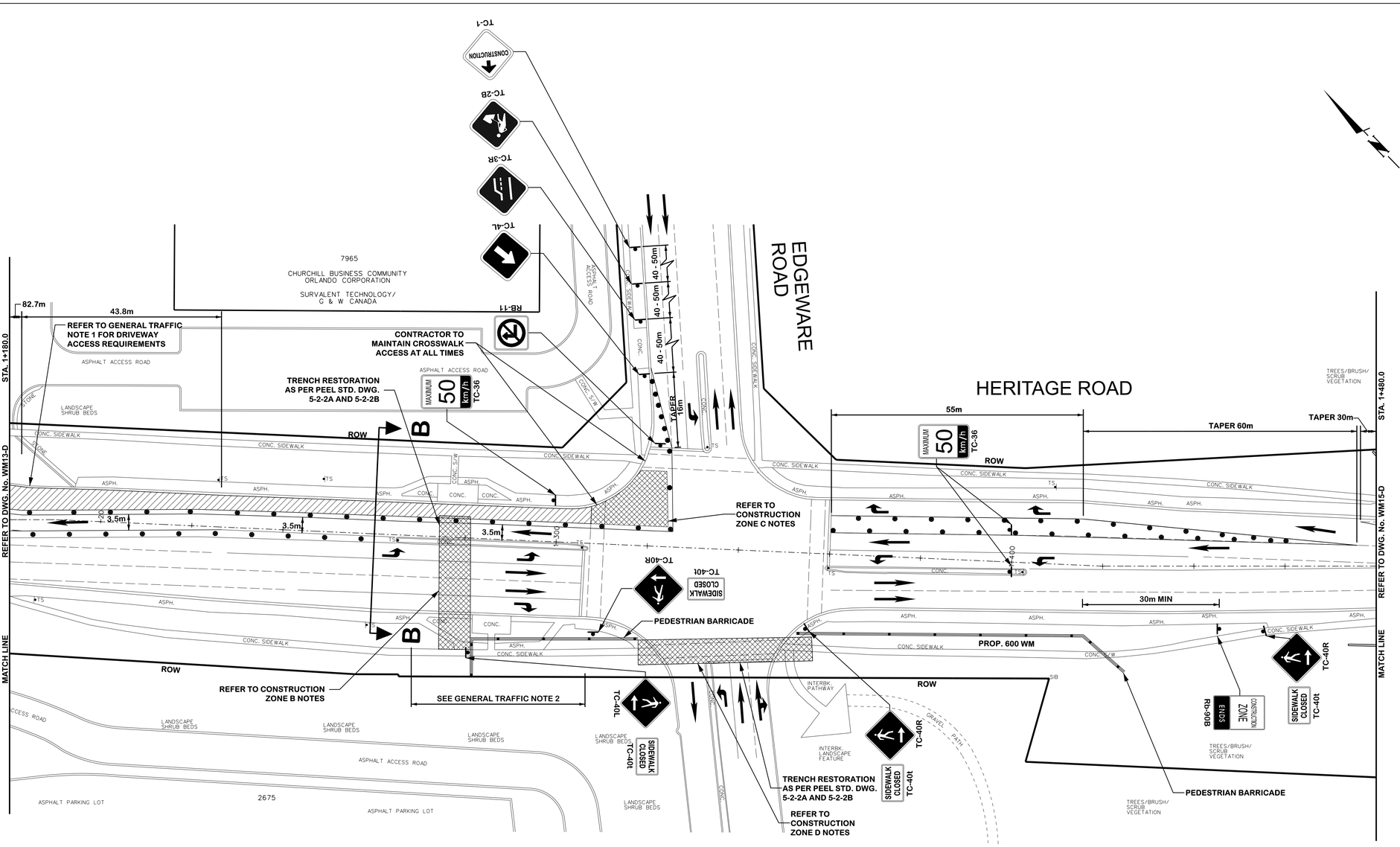
HERITAGE ROAD

(FROM STEELES AVENUE WEST TO MEADOWVALE NORTH PUMPING STATION)

TRAFFIC MANAGEMENT
STEELES AVENUE WEST INTERSECTION

STA. 0+880.0 TO STA. 1+180.0

CAD Area		Area	B-8
Checked by	N.N.	Drawn by	F.M.
Date	MARCH 2021	Sheet	13 of 15
Project No.	15-1138		
Plan No.	WM13-D		



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REVISIONS

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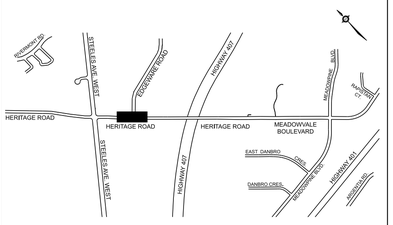

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2. TEMPORARY POSTED SPEED: 50km/hr
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TYPICAL WORK SEQUENCE :

1. THIS WORK SEQUENCE HAS BEEN DEVELOPED TO PROVIDE AN UNDERSTANDING OF HOW THE WORK COULD BE COMPLETED. PRIOR TO THE COMMENCEMENT OF THE WORK, THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN IDENTIFYING THE REQUIREMENTS FOR EACH STAGE OF CONSTRUCTION AND IN ACCORDANCE WITH THE CONTRACT. THE TRAFFIC CONTROL PLAN SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST VERSION OF THE ONTARIO TRAFFIC MANUAL BOOK 7.
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3. PAVEMENT RESTORATION WITHIN THE EXISTING ROADWAY IS TO BE COMPLETED IN MAXIMUM 50mm LIFTS TO MEET EXISTING OVERALL PAVEMENT THICKNESS AND SHALL BE PAVED FLUSH WITH EXISTING PAVEMENT BEFORE OPENING TO TRAFFIC.
4. TRAFFIC MANAGEMENT DRAWINGS ARE A GUIDE FOR THE CONTRACTOR. SHOULD ANY DIRECTION CHANGE PERTAINING TO ROAD CLOSURES/SIGNAGE CHANGE, THE OWNER IS NOT RESPONSIBLE.

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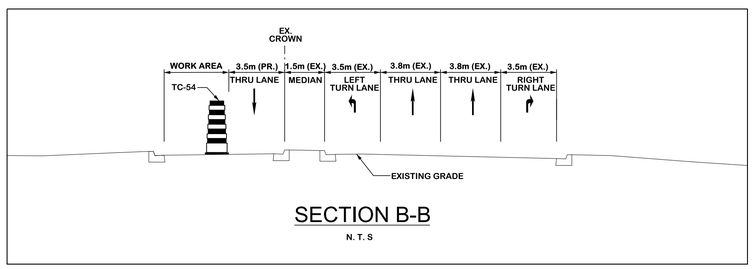

SECTION B-B
N. T. S

CONSTRUCTION ZONE B NOTES:

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3. CONTRACTOR TO USE STEEL PLATING AS PER PEEL STD. DWG. 5-2-1 UNTIL PAVEMENT CAN BE FULLY RESTORED TO FINAL GRADE.

CONSTRUCTION ZONE C NOTES:

1. CONTRACTOR SHALL NOT CONSTRUCT WITHIN THE INTERSECTION OF HERITAGE ROAD AND EDGEWARE ROAD (ZONE C) AT SAME TIME AS CONSTRUCTION ZONE A, B AND D.
2. CONTRACTOR TO USE STEEL PLATING AS PER PEEL STD. DWG. 5-2-1 UNTIL PAVEMENT CAN BE FULLY RESTORED TO FINAL GRADE.

CONSTRUCTION ZONE D NOTES:

1. CONSTRUCTION ON EDGEWARE ROAD SHALL NOT OCCUR AT THE SAME TIME AS CONSTRUCTION ON HERITAGE ROAD (ZONE A, B AND C).
2. CONTRACTOR TO USE STEEL PLATING AS PER PEEL STD. DWG. 5-2-1 UNTIL PAVEMENT CAN BE FULLY RESTORED TO FINAL GRADE.

Ainley CONSULTING ENGINEERS PLANNERS

Approved by

NOTICE TO CONTRACTOR

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FUTUREWAY (FCI BROADBAND)

10m 0 10 20 30m HORIZONTAL SCALE
2m 0 2 4 6m VERTICAL SCALE

Region of Peel
working with you

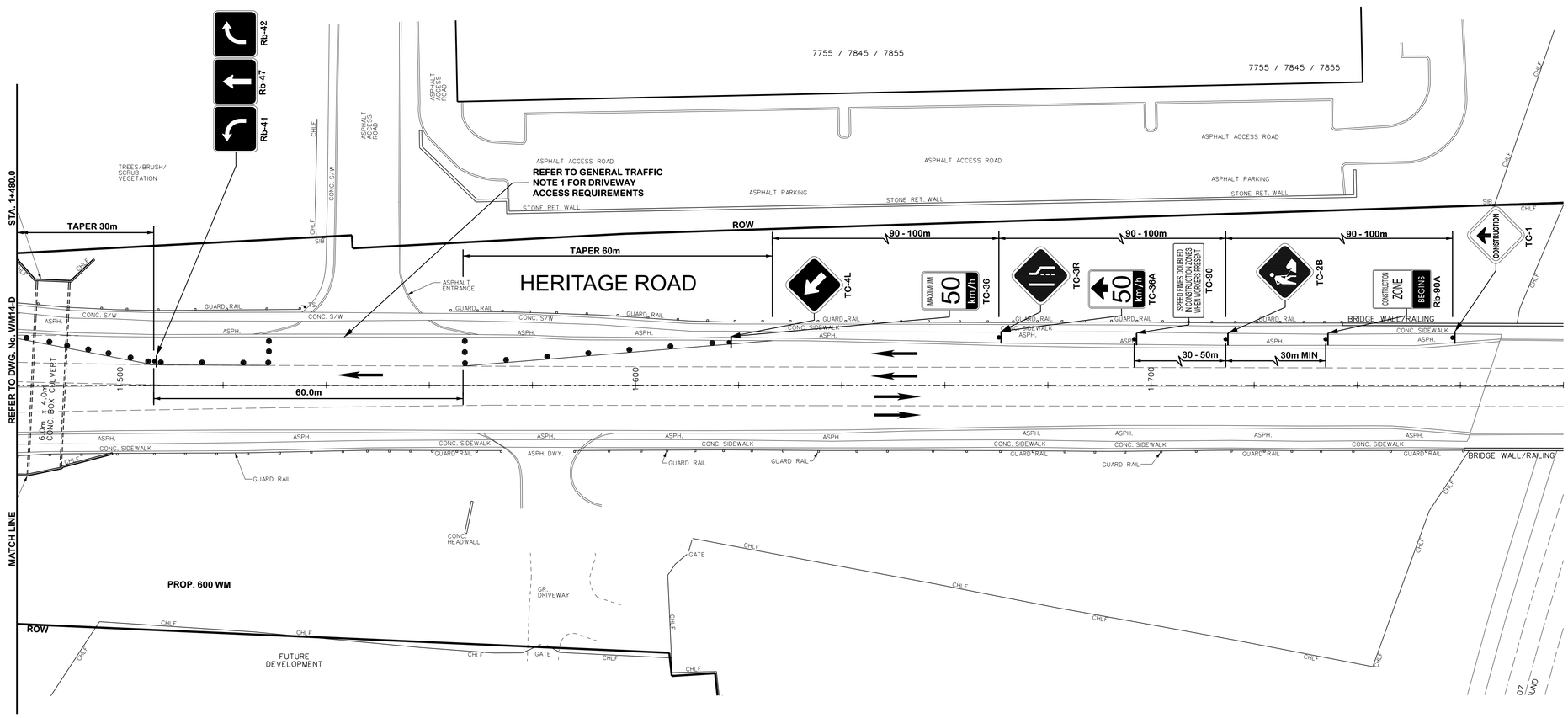
HERITAGE ROAD

(FROM STEELES AVENUE WEST TO MEADOWVALE NORTH PUMPING STATION)

TRAFFIC MANAGEMENT EDGEWARE ROAD INTERSECTION

STA. 1+180.0 TO STA. 1+480.0

CAD Area		Area	B-8
Checked by	N.N.	Drawn by	F.M.
Date	MARCH 2021	Sheet	14 of 15
		Project No.	15-1138
		Plan No.	WM14-D



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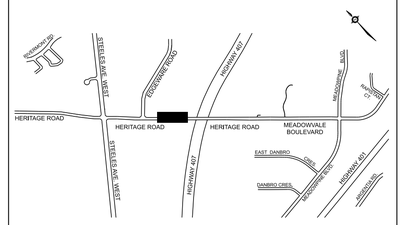

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Approved by

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CAD Area		Area B-8	Project No. 15-1138
Checked by N.N.		Drawn by F.M.	
Date MARCH 2021		Sheet 15 of 15	Plan No. **WM15-D**

Appendix D

Stage 1 Archaeological Assessment

STAGE 1 ARCHAEOLOGICAL ASSESSMENT
HERITAGE ROAD WATERMAIN
PART OF LOT 1, CONCESSIONS 5-6 WCR
(FORMER TOWNSHIP OF CHINGUACOUSY)
PART OF LOTS 13-15, CONCESSIONS 5-6 WHS
(FORMER TOWNSHIP OF TORONTO)
CITIES OF BRAMPTON AND MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL, ONTARIO

ORIGINAL REPORT

Prepared for:

Ainley Group
280 Pretty River Parkway
Collingwood, ON L9Y 4J5

Archaeological Licence #P1066 (Lytle)
Ministry of Heritage, Sport, Tourism and Culture Industries PIF# P1066-0126-2020
ASI File: 19EA-103

15 May 2020

ASI Providing Archaeological & Cultural Heritage Services
528 Bathurst Street Toronto, ONTARIO M5S 2P9
416-966-1069 F 416-966-9723 asiheritage.ca

Stage 1 Archaeological Assessment
Heritage Road Watermain
Part of Lot 1, Concessions 5-6 WCR
(Former Township of Chinguacousy)
Part of Lots 13-15, Concessions 5-6 WCR
(Former Township of Toronto)
Cities of Brampton and Mississauga
Regional Municipality of Peel, Ontario

EXECUTIVE SUMMARY

ASI was contracted by Ainley Group to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Heritage Road Watermain in the City of Brampton and City of Mississauga. This project involves the construction of approximately 1,300 metres of watermain on Heritage Road, from the Meadowvale North Pumping Station to the intersection of Heritage Road and Steeles Avenue.

The Stage 1 background study determined that 39 previously registered archaeological sites are located within one kilometre of the Study Area. The property inspection determined that parts of the Study Area exhibits archaeological potential and will require Stage 2 assessment.

In light of these results, the following recommendations are made:

1. The Study Area does not retain archaeological potential on account of deep and extensive land disturbance or having been previously assessed. These lands do not require further archaeological assessment; and,

2. Should the proposed work extend beyond the current Study Area, further Stage 1 archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

ASI

PROJECT PERSONNEL

Senior Project Manager:	Lisa Merritt, MSc. (P094) *Partner / Director* *Environmental Assessment Division*
Project Coordinator:	Katrina Thach, Hon. BA (R1225) *Archaeologist / Project Coordinator* *Environmental Assessment Division*
Project Director (Licensee):	Jessica Lytle, MSc (P1066) *Associate Archaeologist / Project Manager* *Environmental Assessment Division*
Project Manager:	Eliza Brandy, MA (R1109) *Associate Archaeologist / Project Manager* *Environmental Assessment Division*
Field Director:	Jessica Lytle
Report Preparation:	Eliza Brandy Danielle Bella, BA (Hon) *Archaeologist / Analyst* *Laboratory and Fieldwork Services, Operations Division*
Graphics:	Jonas Fernandez, MSc (R281) *Lead Archaeologist / Manager - Fleet & Geomatics Specialist* *Operations Division* Eric Bongelli, MA *Archaeologist / Geomatics Specialist* *Operations Division*
Report Reviewer:	Lisa Merritt

TABLE OF CONTENTS

EXECUTIVE SUMMARY i
PROJECT PERSONNEL ii
TABLE OF CONTENTS iii
1.0 PROJECT CONTEXT 1
1.1 Development Context 1
1.2 Historical Context 1
1.2.1 Indigenous Land Use and Settlement 1
1.2.2 Euro-Canadian Land Use: Township Survey and Settlement 5
1.2.3 Historical Map Review 7
1.2.4 Twentieth-Century Mapping Review 7
1.3 Archaeological Context 8
1.3.1 Current Land Use and Field Conditions 8
1.3.2 Geography 8
1.3.3 Previous Archaeological Research 10
2.0 FIELD METHODS: PROPERTY INSPECTION 14
3.0 ANALYSIS AND CONCLUSIONS 14
3.1 Analysis of Archaeological Potential 15
3.2 Analysis of Property Inspection Results 15
3.3 Conclusions 15
4.0 RECOMMENDATIONS 16
5.0 ADVICE ON COMPLIANCE WITH LEGISLATION 17
6.0 REFERENCES CITED 18
7.0 MAPS 26
8.0 IMAGES 33

LIST OF TABLES

Table 1: Nineteenth-century property owner(s) and historical features(s) within or adjacent to the Study Area . 7
Table 2: List of previously registered sites within one kilometre of the Study Area 10

LIST OF FIGURES

Figure 1: Heritage Road Watermain Study Area 27
Figure 2: Study Area (Approximate Location) Overlaid on the 1859 Tremaine's Map of Chinguacousy and Toronto Townships 28
Figure 3: Study Area (Approximate Location) Overlaid on the 1877 Illustrated Historical Atlas of Chinguacousy and Toronto Townships 28
Figure 4: Study Area (Approximate Location) Overlaid on the 1909 NTS Brampton Sheet 29
Figure 5: Study Area (Approximate Location) Overlaid on the 1954 Aerial Photography 29
Figure 6: Study Area (Approximate Location) Overlaid on the 1994 NTS Brampton Sheet 30
Figure 7: Study Area - Surficial Geology 31
Figure 8: Study Area - Soil Drainage 31
Figure 9: Heritage Road Watermain - Results of Stage 1 32

LIST OF PLATES

Plate 1: West view from Heritage Road sidewalk; Area is disturbed, no potential 33
Plate 2: Northwest view of the pumping station and grassed lawn; Area is disturbed, no potential 33

1.0 PROJECT CONTEXT

Archaeological Services Inc. (ASI) was contracted by Ainley Group to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Heritage Road Watermain in the City of Brampton and City of Mississauga (Figure 1). This project involves the construction of approximately 1,300 metres of watermain on Heritage Road, from the Meadowvale North Pumping Station to the intersection of Heritage Road and Steeles Avenue.

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (1990, as amended in 2018) and the 2011 *Standards and Guidelines for Consultant Archaeologists* (S & G), administered by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI 2011), formerly the Ministry of Tourism, Culture and Sport.

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act,* RSO (Ministry of the Environment 1990 as amended 2010) and regulations made under the Act, and are therefore subject to all associated legislation. This project is being conducted in accordance with the Municipal Engineers' Association document *Municipal Class Environmental Assessment* (2000 as amended in 2007, 2011 and 2015).

Authorization to carry out the activities necessary for the completion of the Stage 1 archaeological assessment was granted by Ainley Group on February 28, 2020.

1.2 Historical Context

The purpose of this section, according to the S & G*,* Section 7.5.7, Standard 1, is to describe the past and present land use and the settlement history and any other relevant historical information pertaining to the Study Area. A summary is first presented of the current understanding of the Indigenous land use of the Study Area. This is then followed by a review of the historical Euro-Canadian settlement history.

1.2.1 Indigenous Land Use and Settlement

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier approximately 13,000 years before present (BP) (Ferris 2013). Populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 BP, the environment had progressively warmed (Edwards and Fritz 1988) and populations now occupied less extensive territories (Ellis and Deller 1990).

Between approximately 10,000-5,500 BP, the Great Lakes basins experienced low-water levels, and many sites which would have been located on those former shorelines are now submerged. This period produces the earliest evidence of heavy wood working tools, an indication of greater investment of labour in felling trees for fuel, to build shelter, and watercraft production. These activities suggest prolonged seasonal residency at occupation sites. Polished stone and native copper implements were being produced by approximately 8,000 BP; the latter was acquired from the north shore of Lake Superior, evidence of extensive exchange networks throughout the Great Lakes region. The earliest evidence for cemeteries

dates to approximately 4,500-3,000 BP and is indicative of increased social organization, investment of labour into social infrastructure, and the establishment of socially prescribed territories (Ellis et al. 1990; Ellis et al. 2009; Brown 1995:13).

Between 3,000-2,500 BP, populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. The Woodland period begins around 2,500 BP and exchange and interaction networks broaden at this time (Spence et al. 1990:136, 138) and by approximately 2,000 BP, evidence exists for macro-band camps, focusing on the seasonal harvesting of resources (Spence et al. 1990:155, 164). By 1,500 BP there is macro botanical evidence for maize in southern Ontario, and it is thought that maize only supplemented people's diet. There is earlier phytolithic evidence for maize in central New York State by 2,300 BP - it is likely that once similar analyses are conducted on Ontario ceramic vessels of the same period, the same evidence will be found (Birch and Williamson 2013:13–15). Bands likely retreated to interior camps during the winter. It is generally understood that these populations were Algonquian-speakers during these millennia of settlement and land use.

From the beginning of the Late Woodland period at approximately 1,000 BP, lifeways became more similar to that described in early historical documents. Between approximately 1000-1300 Common Era (CE), the communal site is replaced by the village focused on horticulture. Seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson 1990:317). By 1300-1450 CE, this episodic community disintegration was no longer practised and populations now communally occupied sites throughout the year (Dodd et al. 1990:343). From 1450-1649 CE this process continued with the coalescence of these small villages into larger communities (Birch and Williamson 2013). Through this process, the socio-political organization of the First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed. By 1600 CE, the communities within Simcoe County had formed the Confederation of Nations encountered by the first European explorers and missionaries. In the 1640s, the traditional enmity between the Haudenosaunee[1] and the Huron-Wendat (and their Algonquian allies such as the Nippissing and Odawa) led to the dispersal of the Huron-Wendat.

Shortly after dispersal of the Huron-Wendat, Ojibwa began to expand into southern Ontario (Rogers 1978:760–762). This history was constructed by Rogers using both Anishinaabek oral tradition and the European documentary record, and notes that it included Chippewa, Ojibwa, Mississauga, and Saulteaux or "Southeastern Ojibwa" groups. Ojibwa, likely Odawa, were first encountered by Samuel de Champlain in 1615 along the eastern shores of Georgian Bay. Etienne Brule later encountered other groups and by 1641, Jesuits had journeyed to Sault Sainte Marie (Thwaites 1896:11:279) and opened the Mission of Saint Peter in 1648 for the occupants of Manitoulin Island and the northeast shore of Lake Huron. The Jesuits reported that these Algonquian peoples lived "solely by hunting and fishing and roam as far as the "Northern sea" to trade for " Furs and Beavers, which are found there in abundance" (Thwaites 1896-1901, 33:67), and "all of these Tribes are nomads, and have no fixed residence, except at certain seasons of the year, when fish are plentiful, and this compels them to remain on the spot" (Thwaites 1896-1901, 33:153). Algonquian-speaking groups were historically documented wintering with the Huron-Wendat, some who abandoned their country on the shores of the St. Lawrence because of attacks from the Haudenosaunee (Thwaites 1896-1901, 27:37).

[1] The Haudenosaunee are also known as the New York Iroquois or Five Nations Iroquois and after 1722 Six Nations Iroquois. They were a confederation of five distinct but related Iroquoian–speaking groups – the Seneca, Onondaga, Cayuga, Oneida, and Mohawk. Each lived in individual territories in what is now known as the Finger Lakes district of Upper New York. In 1722 the Tuscarora joined the confederacy.

Other Algonquian groups were recorded along the northern and eastern shores and islands of Lake Huron and Georgian Bay - the "Ouasouarini" [Chippewa], the "Outchougai" [Outchougai], the "Atchiligouan" [Achiligouan] near the mouth of the French River and north of Manitoulin Island the "Amikouai, or the nation of the Beaver" [Amikwa; Algonquian] and the "Oumisagai" [Missisauga; Chippewa] (Thwaites 1896-1901, 18:229, 231). At the end of the summer 1670, Father Louys André began his mission work among the Mississagué, who were located on the banks of a river that empties into Lake Huron approximately 30 leagues from the Sault (Thwaites 1896-1901, 55:133-155).

After the Huron-Wendat had been dispersed, the Haudenosaunee began to exert pressure on the Ojibwa. While their numbers had been reduced through warfare, starvation, and European diseases, the coalescence of various Anishinaabek groups led to enhanced social and political strength (Thwaites 1896-1901, 52:133) and Sault Sainte Marie was a focal point for people who inhabited adjacent areas both to the east and to the northwest as well as for the Saulteaux, who considered it their home (Thwaites 1896-1901, 54:129-131). The Haudenosaunee established a series of settlements at strategic locations along the trade routes inland from the north shore of Lake Ontario. From east to west, these villages consisted of Ganneious, on Napanee Bay, an arm of the Bay of Quinte; Quinte, near the isthmus of the Quinte Peninsula; Ganaraske, at the mouth of the Ganaraska River; Quintio, at the mouth of the Trent River on the north shore of Rice Lake; Ganatsekwyagon (or Ganestiquiagon), near the mouth of the Rouge River; Teyaiagon, near the mouth of the Humber River; and Quinaouatoua, on the portage between the western end of Lake Ontario and the Grand River (Konrad 1981:135). Their locations near the mouths of the Humber and Rouge Rivers, two branches of the Toronto Carrying Place, strategically linked these settlements with the upper Great Lakes through Lake Simcoe. The inhabitants of these villages were agriculturalists, growing maize, pumpkins and squash, but their central roles were that of portage starting points and trading centres for Iroquois travel to the upper Great Lakes for the annual beaver hunt (Konrad 1974; Williamson et al. 2008:50–52). Ganatsekwyagon, Teyaiagon, and Quinaouatoua were primarily Seneca; Ganaraske, Quinte and Quintio were likely Cayuga, and Ganneious was Oneida, but judging from accounts of Teyaiagon, all of the villages might have contained peoples from a number of the Iroquois constituencies (ASI 2013).

During the 1690s, some Ojibwa began moving south into southern Ontario and soon replaced, the Haudenosaunee by force. By the first decade of the eighteenth century, the Michi Saagiig Nishnaabeg (Mississauga Nishnaabeg) had settled at the mouth of the Humber, near Fort Frontenac at the east end of Lake Ontario and the Niagara region and within decades were well established throughout southern Ontario. In 1736, the French estimated there were 60 men at Lake Saint Clair and 150 among small settlements at Quinte, the head of Lake Ontario, the Humber River, and Matchedash (Rogers 1978:761). This history is based almost entirely on oral tradition provided by Anishinaabek elders such as George Copway (Kahgegagahbowh), a Mississauga born in 1818 near Rice Lake who followed a traditional lifestyle until his family converted to Christianity (MacLeod 1992:197; Smith 2000). According to Copway, the objectives of campaigns against the Haudenosaunee were to create a safe trade route between the French and the Ojibwa, to regain the land abandoned by the Huron-Wendat. While various editions of Copway's book have these battles occurring in the mid-seventeenth century, common to all is a statement that the battles occurred around 40 years after the dispersal of the Huron-Wendat (Copway 1850:88; Copway 1851:91; Copway 1858:91). Various scholars agree with this timeline ranging from 1687, in conjunction with Denonville's attack on Seneca villages (Johnson 1986:48; Schmalz 1991:21–22) to around the mid- to late-1690s leading up to the Great Peace of 1701 (Schmalz 1977:7; Bowman 1975:20; Smith 1975:215; Tanner 1987:33; Von Gernet 2002:7–8).

Robert Paudash's 1904 account of Mississauga origins also relies on oral history, in this case from his father, who died at the age of 75 in 1893 and was the last hereditary chief of the Mississauga at Rice

Lake. His account in turn came from his father Cheneebeesh, who died in 1869 at the age of 104 and was the last sachem or Head Chief of all the Mississaugas. He also relates a story of origin on the north shore of Lake Huron (Paudash 1905:7–8) and later, after the dispersal of the Huron-Wendat, carrying out coordinated attacks against the Haudenosaunee. Francis Assikinack, an Ojibwa of Manitoulin Island born in 1824, provides similar details on battles with the Haudenosaunee (Assikinack 1858:308–309).

Peace was achieved between the Haudenosaunee and the Anishinaabek Nations in August of 1701 when representatives of more than twenty Anishinaabek Nations assembled in Montreal to participate in peace negotiations (Johnston 2004:10). During these negotiations captives were exchanged and the Iroquois and Anishinaabek agreed to live together in peace. Peace between these nations was confirmed again at council held at Lake Superior when the Iroquois delivered a wampum belt to the Anishinaabek Nations.

From the beginning of the eighteenth century to the assertion of British sovereignty in 1763, there is no interruption to Anishinaabek control and use of southern Ontario. While hunting in the territory was shared, and subject to the permission of the various nations for access to their lands, its occupation was by Anishinaabek until the assertion of British sovereignty, the British thereafter negotiating treaties with them. Eventually, with British sovereignty, tribal designations changed (Smith 1975:221–222; Surtees 1985:20–21). According to Rogers (1978), by the twentieth century, the Department of Indian Affairs had divided the "Anishinaubag" into three different tribes, despite the fact that by the early eighteenth century, this large Algonquian-speaking group, who shared the same cultural background, "stretched over a thousand miles from the St. Lawrence River to the Lake of the Woods." With British land purchases and treaties, the bands at Beausoleil Island, Cape Croker, Christian Island, Georgina and Snake Islands, Rama, Sarnia, Saugeen, the Thames, and Walpole, became known as "Chippewa" while the bands at Alderville, New Credit, Mud Lake, Rice Lake, and Scugog, became known as "Mississauga." The northern groups on Lakes Huron and Superior, who signed the Robinson Treaty in 1850, appeared and remained as "Ojibbewas" in historical documents.

In 1763, following the fall of Quebec, New France was transferred to British control at the Treaty of Paris. The British government began to pursue major land purchases throughout Ontario in the early nineteenth century, and entered into negotiations with various Nations for additional tracts of land as the need arose to facilitate European settlement.

In 1805, the Mississaugas were granted one mile (approximately 1.6 km) on either side of the Credit River, Twelve Mile Creek and Sixteen Mile Creek. In 1818, the majority of the Mississauga Tract was acquired by the Crown excluding the lands tracts flanking the Credit River, Twelve Mile Creek and Sixteen Mile Creek. In 1820, the remainder of Mississauga land was surrendered except approximately 81 hectares (ha) along the Credit River (Heritage Mississauga 2012:18). In 1825-26 the Credit Indian Village was established as an agricultural community and Methodist mission near present day Port Credit (Heritage Mississauga 2019a; Mississaugas of the Credit First Nation 2014). By 1840 the village was under significant pressure from Euro-Canadian settlement that plans begun to relocate the settlement. In 1847 the Credit Mississaugas were made a land offer by the Six Nations Council to relocate at the Grand River. In 1847, 266 Mississaugas settled at New Credit, approximately 23 km southwest of Brantford. In 1848 a mission of the Methodist Church was established there by Rev. William Ryerson (Woodland Indian Cultural Education Centre 1985). Although the majority of the former Mississague Tract had been surrendered from the Mississauga by 1856 (Gould 1981), this does not exclude the likelihood that the Mississauga continued to utilise the landscape at large during travel (Ambrose 1982) and for resource extraction.

The Study Area is within Treaty 13a. Treaty 13a was signed on August 2, 1805 by the Mississaugas and the British Crown in Port Credit at the Government Inn. A provisional agreement was reached with the Crown on August 2, 1805, in which the Mississaugas ceded 70,784 acres of land bounded by the Toronto Purchase of 1787 in the east, the Brant Tract in the west, and a northern boundary that ran six miles back from the shoreline of Lake Ontario. The Mississaugas also reserved the sole right of fishing at the Credit River and were to retain a one-mile strip of land on each of its banks, which became the Credit Indian Reserve. On September 5, 1806, the signing of Treaty 14 confirmed the Head of the Lake Purchase between the Mississaugas of the Credit and the Crown (Mississaugas of the Credit First Nation 2017; Mississauga of the New Credit First Nation 2001).

1.2.2 Euro-Canadian Land Use: Township Survey and Settlement

Historically, the Study Area is located in the County of Peel, in the Former Township of Chinguacousy Lot 1, Concessions 5-6 and the Former Township of Toronto Lots 13-15, Concessions 5-6.

The S & G stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches, and early cemeteries are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the *Ontario Heritage Act* or a federal, provincial, or municipal historic landmark or site are also considered to have archaeological potential.

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those that are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be located in proximity to water. The development of the network of concession roads and railroads through the course of the nineteenth century frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 m of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed Indigenous pathways and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Indigenous trails, both along the lakeshore and adjacent to various creeks and rivers (ASI 2006).

Chinguacousy Township

The township is said to have been named by Sir Peregrine Maitland after the Mississauga word for the Credit River meaning “young pine.” Other scholars assert that it was named in honour of the Chippewa Chief Shinguacose, which was corrupted to the present spelling of ‘Chinguacousy,’ “under whose leadership Fort Michilimacinac was captured from the Americans in the War of 1812” (Mika and Mika 1977:416; Rayburn 1997:68). The township was formally surveyed in 1818, and the first settlers took up their lands later in that same year. The extant Survey Diaries indicate that the original timber stands within the township included oak, ash, maple, beech, elm, basswood, hemlock, and pine. It was recorded that the first landowners in Chinguacousy included settlers from New Brunswick, the United States, and also United Empire Loyalists and their children (Walker and Miles 1877:65; Mika and Mika 1977:417; Armstrong 1985:142).

Due to the small population of the newly acquired tract, Chinguacousy was initially amalgamated with the Gore of Toronto Township for political and administrative purposes. In 1821, the population of the united townships numbered just 412. By 1837, the population of the township had reached an estimated 1,921. The numbers grew from 3,721 in 1842 to 7,469 in 1851. Thereafter the figures declined to 6,897 in 1861, and to 6,129 by 1871 (Walton 1837:71; Walker and Miles 1877:59). Township was the largest in Peel County and was described as one of the best settled townships in the Home District. It contained excellent, rolling land which was timbered mainly in hardwood with some pine intermixed. The township contained one grist mill and seven saw mills. By 1851, this number had increased to two grist mills and eight sawmills (Smith 1846:32; Smith 1851:279). The principal crops grown in Chinguacousy included wheat, oats, peas, potatoes, and turnips. It was estimated that the only township in the province which rivaled Chinguacousy in wheat production at that time was Whitby. Other farm products included maple sugar, wool, cheese, and butter (Smith 1851:279).

In 1974, part of the township was amalgamated with the City of Brampton, and the remainder was annexed to the Town of Caledon (Walker and Miles 1877:59; Mika and Mika 1977:417-418; Armstrong 1985:152; Rayburn 1997:68).

Toronto Township

The Township of Toronto was originally surveyed in 1806 by Mr. Wilmot, Deputy Surveyor. The first settler in this Township, and also the County of Peel, was Colonel Thomas Ingersoll. The whole population of the Township in 1808 consisted of seven families, scattered along Dundas Street. The number of inhabitants gradually increased until the war broke out in 1812, which gave considerable check to its progress. When the war was over, the Township's growth revived and the rear part of the Township was surveyed and called the "New Survey". The greater part of the New Survey was granted to a colony of Irish settlers from New York City, who suffered persecution during the war.

The Credit River runs through the western portion of the Township, and proved to be a great source of wealth to its inhabitants, as it was not only a good watering stream, but there were endless mill privileges along the entire length of the river.

Several villages of varying sizes had developed by the end of the nineteenth century, including Streetsville, Meadowvale, Churchville, and Malton. A number of crossroad communities also began to grow by the end of the nineteenth century. These included Britannia, Derry, Frasers Corners, Palestine, Mt Charles, and Grahamsville.

Whaley's Corners

Whaley's Corners developed in the 1820s at the intersection of what is now Winston Churchill Boulevard and Steeles Avenue West. William C. Whaley moved from Delaware and settled at this location in 1819. A schoolhouse was built in 1932, and William Whaley opened the Whaley's Inn in 1844 (Moreau 2019; Independent Free Press 2017). Named after the Whaley family, the community also had a general store, toll gate, blacksmith and a Methodist Church (Heritage Mississauga 2019b).

1.2.3 Historical Map Review

The 1859 Tremaines Map and the 1877 Illustrated Historical Atlas of Chinguacousy and Toronto Townships (Tremaine 1859; Walker and Miles 1877) were examined to determine the presence of historic features within the Study Area during the nineteenth century (Table 1; Figures 2-3).

It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases.

In addition, the use of historical map sources to reconstruct/predict the location of former features within the modern landscape generally proceeds by using common reference points between the various sources. These sources are then geo-referenced in order to provide the most accurate determination of the location of any property on historic mapping sources. The results of such exercises are often imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance of such margins of error is dependent on the size of the feature one is attempting to plot, the constancy of reference points, the distances between them, and the consistency with which both they and the target feature are depicted on the period mapping.

Table 1: Nineteenth-century property owner(s) and historical features(s) within or adjacent to the Study Area

		1859		*1877*	
Con #	**Lot #**	**Property Owner(s)**	**Historical Feature(s)**	**Property Owner(s)**	**Historical Feature(s)**
Chinguacousy					
5 WCR	1	Henry Arnett Sr.	None	Wm J Arnott	None
6 WCR	1	Saml McClure	None	Saml McClure	Orchard
Toronto					
5 WHS	13	Wm Whaley	None	David Whaley	None
5 WHS	14	Jas Hillis	None	James Hillis	None
5 WHS	15	Wm Sibbald	None	Hugh Hainen	Orchard
6 WHS	13	Geo Sutton	None	Wm Hillis	None
6 WHS	14	John M. Forster	None	Jno McClure	None
6 WHS	15	John Atchinson	None	Thos Brownridge	None

The 1859 and 1877 maps show that Heritage Road and Steeles Avenue West were historic roads. A tributary of the Credit River can be seen passing through the Study Area on Lot 15, Concessions 5-6 West of Hurontario Street (WHS). By 1877, several roads can be seen leading to orchards and houses outside of the Study Area. The orchard of Hugh Hainen is located adjacent the Study Area.

1.2.4 Twentieth-Century Mapping Review

The 1909 and 1994 national topographic series (NTS) Brampton Sheet (Department of Militia and Defence 1909:199; Department of Energy, Mines and Resources 1994) and the 1954 aerial photography

(Hunting Survey Corporation Limited 1954) were examined to determine the extent and nature of development and land uses within the Study Area (Figures 4-6).

The 1909 map shows a bridge where the Credit River tributary crosses Heritage Road. The 1954 aerial photography shows open fields adjacent the road. By 1994, a hydro corridor runs through the Study Area near the south end.

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Study Area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological research: the site record forms for registered sites available online from the MHSTCI through "Ontario's Past Portal"; published and unpublished documentary sources; and the files of ASI.

1.3.1 Current Land Use and Field Conditions

A review of available Google satellite imagery since 2004 shows numerous impacts to the Study Area. In 2009, road widening impacts along Heritage Road from Steeles Avenue West to the south end of the Study Area can be seen. Edgeware Road was also constructed. Construction occurs at 7965 and 7975 Heritage Road, and 2675 Steeles Avenue West in 2013.

A Stage 1 property inspection was conducted on Tuesday April 14, 2020 that noted the Study Area is Heritage Road, from Steeles Avenue West to south of Highway 407. The area includes drainage ditches, sidewalks, entrances to commercial buildings and parking lots, access roads, a hydro corridor, a gravel parking lot, the Meadowvale pumping station, and the Totoredaca dog park.

1.3.2 Geography

In addition to the known archaeological sites, the state of the natural environment is a helpful indicator of archaeological potential. Accordingly, a description of the physiography and soils are briefly discussed for the Study Area.

The S & G stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential.

Water has been identified as the major determinant of site selection and the presence of potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in Ontario since 5,000 BP (Karrow and Warner 1990:Figure 2.16), proximity to water can be regarded as a useful index for the evaluation of archaeological site

potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location.

Other geographic characteristics that can indicate archaeological potential include: elevated topography (eskers, drumlins, large knolls, and plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings. Resource areas, including; food or medicinal plants (migratory routes, spawning areas) are also considered characteristics that indicate archaeological potential (S & G, Section 1.3.1).

The Study Area is located within the bevelled till plains of the Peel Plain physiographic region of southern Ontario (Chapman and Putnam 1984).

The Peel Plain is a level-to-undulating area of clay soil which covers an area of approximately 77,700 hectares across the central portions of the Regional Municipalities of York, Peel, and Halton. The Peel Plain has a general elevation of between 500 and 750 feet above sea level with a gradual uniform slope towards Lake Ontario. The Peel Plain is sectioned by the Credit, Humber, Don, and Rouge Rivers with deep valleys as well as a number of other streams such as the Bronte, Oakville, and Etobicoke Creeks. These valleys are in places bordered by trains of sandy alluvium. The region is devoid of large undrained depressions, swamps, and bogs though nevertheless the dominant soil possesses imperfect drainage.

The Peel Plain overlies shale and limestone till which in many places is veneered by occasionally varved clay. This clay is heavy in texture and more calcareous than the underlying till and was presumably deposited by meltwater from limestone regions and deposited in a temporary lake impounded by higher ground and the ice lobe of the Lake Ontario basin. The Peel Plain straddles across the contact of the grey and red shales of the Georgian Bay and Queenston Formations, respectively, which consequently gives the clay southwest of the Credit River a more reddish hue and lower lime content than the clay in the eastern part of the plain. Additionally, the region exhibits exceptional isolated tracts of sandy soil specifically in Trafalgar Township, near Unionville, and north of Brampton where in the latter location there is a partly buried esker. The region does not possess any good aquifers and the high level of evaporation from the clay's now deforested surface is a disabling factor in ground-water recharge. Further, deep groundwater accessed by boring is often found to be saline (Chapman and Putnam 1984:174-175).

Figure 7 depicts surficial geology for the Study Area. The surficial geology mapping demonstrates that the Study Area is underlain by clay to silt-textured till derived from glaciolacustrine deposits or shale and modern alluvial deposits of clay, silt, sand, gravel and organic remains (Ontario Geological Survey 2010). Soils in the Study Area consist of (Figure 8):

- Oneida clay loam, a grey-brown podzolic with good drainage
- Chinguacousy clay loam, a grey-brown podzolic with imperfect drainage
- Jeddo clay loam, a dark grey gleisolic with poor drainage
- Bottomland, an alluvial with variable drainage

The Study Area is within the Credit River Watershed, which drains an area of approximately 860 square kilometres from its headwaters in Orangeville, Erin, and Mono, passing through part of the Niagara Escarpment and the Oak Ridges Moraine, and draining into Lake Ontario at the town of Port Credit (Credit Valley Conservation 2009). The river was named "Mis.sin.ni.he" or "Mazinigae-zeebi" by the Mississaugas, and surveyor Augustus Jones believed this signified "the trusting creek", or could also be

translated as "to write or give and make credit", while the French name used when the river was first mapped in 1757 was "Riviere au Credit". These names refer to the fur trading period, when the French, British, and Indigenous traders would meet along this river (Jameson 1838:73–74; Smith 1987:255–257; Rayburn 1997:84; Scott 1997:182; Gibson 2002:177; Robb et al. 2003:6). The Credit River was historically considered to be one of the best potential power sources for milling in all of southern Ontario, which led to the development of early of saw and grist mill industries, and later textile mills, distilleries, bottling plants, and hydro-electric plants spawned communities throughout the river valley, typically close to the Niagara Escarpment (Town of Caledon 2009:7.1).

1.3.3 Previous Archaeological Research

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MHSTCI. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 km east to west, and approximately 18.5 km north to south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The Study Area under review is located in Borden block *AjGw.*

According to the OASD, 39 previously registered archaeological sites are located within one kilometre of the Study Area (MHSTCI 2019). A summary of the sites is provided below.

Table 2: List of previously registered sites within one kilometre of the Study Area

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AjGw-14	Laidlaw	Euro-Canadian	Homestead	Konrad 1972
AjGw-17	Garnett Laidlaw	Archaic	Campsite	Unknown 1976
AjGw-63	Junction	Pre-Contact Indigenous	Findspot	Junction
AjGw-64	John Beatty	Euro-Canadian	Midden	MPP 1985
AjGw-65	Levi's	Archaic, Late	Camp	MPP 1985
AjGw-71	Mullet Ponds	Woodland, Early; Woodland, Middle	Village	Lennox 1987
AjGw-100	n/a	Euro-Canadian	Homestead	MPP 1988
AjGw-205	New Parcel	Iroquoian	Campsite	MTO 1990
AjGw-247	GWG	Paleo-Indian, Late	Camp	Stewart 1995
AjGw-248	Mullet Creek	Pre-Contact Indigenous	Campsite	Stewart 1996
AjGw-249	*Brackenreed Homestead*	*Euro-Canadian*	*Homestead*	*MCHI 1996,*
AjGw-315	House	Euro-Canadian	Homestead	Currie 1999
AjGw-316	Oliver	Euro-Canadian	Homestead	Currie 1999
AjGw-333	Location 25	Pre-Contact Indigenous	Scatter	MHCI 2002
AjGw-335	Location 43	Pre-Contact Indigenous	Scatter	MHCI 2002
AjGw-336	Whaley	Euro-Canadian	Homestead	MHCI 2002; AAL 2005

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AjGw-337	McClure	Euro-Canadian	Homestead	MHCI 2002; AAL 2005
AjGw-340	Location 24	Pre-Contact Indigenous	Findspot	MHCI 2002
AjGw-341	Location 27	Pre-Contact Indigenous	Findspot	MHCI 2002
AjGw-342	*Location 36*	*Pre-Contact Indigenous*	*Findspot*	*MHCI 2002*
AjGw-343	*Location 38*	*Pre-Contact Indigenous*	*Findspot*	*MHCI 2002*
AjGw-344	Location 46	Pre-Contact Indigenous	Findspot	MHCI 2002
AjGw-345	*Location 48*	*Pre-Contact Indigenous*	*Findspot*	*MHCI 2002*
AjGw-346	Location 49	Pre-Contact Indigenous	Findspot	MHCI 2002
AjGw-347	Location 60	Pre-Contact Indigenous	Findspot	MHCI 2002
AjGw-348	Location 31	Pre-Contact Indigenous	Findspot	MHCI 2002
AjGw-350	Location 30	Euro-Canadian	Scatter	MHCI 2002
AjGw-415	AjGw-415 - P2	Archaic, Early	Findspot	ASI 2006
AjGw- 416	n/a	Archaic, Late	Findspot	ASI 2006
AjGw-492	Ornstock P1	Pre-Contact Indigenous	Findspot	Archeoworks 2007
AjGw-505	Kingshott Site	Woodland, Early	Single-activity or short-term occupation	ARA 2009
AjGw-514	Heritage Knolls	Archaic, Middle	Campsite	AAL 2012
AjGw-515	Heritage Knolls II	Pre-Contact Indigenous	Campsite	AAL 2012
AjGw-516	Heritage Knolls III	Pre-Contact Indigenous	Campsite	AAL 2012
AjGw-519	Heritage Knolls IV	Pre-Contact Indigenous	Campsite	AAL 2012
AjGw-524	*McClure*	*Euro-Canadian*	*Homestead*	*AAL 2012*
AjGw-556	Beatty	Euro-Canadian	Homestead	ASI 2015; TAI 2016
AjGw-563	Arnott	Archaic, Middle; Euro-Canadian	Short-term occupation; Homestead	ASI 2016, 2018, 2019
AjGw-581	n/a	Euro-Canadian	Church, cemetery	ARA 2017

Sites in **bold** are within the Study Area
Sites in *italic* are within 50m

AAL – Archaeological Assessments Ltd.
ARA – Archaeological Research Associates Ltd.

The Brackenreed Homestead (AjGw-249), the McClure Site (AjGw-524), Location 36 (AjGw-342), Location 38 (AjGw-343) and Location 48 (AjGw-345) are located within 50 metres of the Study Area, and do not exhibit further cultural heritage value and interest (CHVI).

According to the background research, 16 previous reports detail fieldwork within 50 m of the Study Area.

- (Archaeological Assessments Ltd. 2012) conducted a Stage 1 AA of the Orlando Corporation Lands, located at the northwest corner of Steeles Avenue West and Heritage Road. The field review determined that the property retained archaeological potential, and recommended Stage 2 archaeological assessment. P013-670-2012

- (Archaeological Assessments Ltd. 2013a) conducted a Stage 2-3 AA of the Orlando Corporation Lands. A pedestrian survey was conducted at five-metre intervals, which located the McClure Site (AjGw-524). It should be noted that within the Stage 2-3 and Stage 4 reports the site was incorrectly identified as AjGw-517. Stage 3 controlled surface collection was conducted at one-metre intervals. The Stage 2-3 investigations produced a combined assemblage of 270 artifacts which suggested a homestead occupied from the 1830s to the 1850s. It was determined that the McClure Site (AjGw-524) had CHVI, requiring a Stage 4 mitigative excavation. P361-013-2012 and P361-041-2013

- (Archaeological Assessments Ltd. 2013b) conducted a Stage 4 Mitigative Excavation of the McClure Site (AjGw-524). A gradall was used to strip topsoil from the site, which was then shovel shined. No cultural features or artifacts were found. The site was fully excavated and documented to have no further CHVI and no further archaeological assessment was required. P361-044-2013

- (Archeoworks Inc. 2003) conducted a Stage 1 AA for the widening of Heritage Road from Steeles Avenue to the south city limit of Brampton. The field review determined a Stage 2 archaeological assessment would be required in part of the project area. P029-039

- (ASI 2002) conducted a Stage 1 AA for Steeles Avenue, from Hurontario Street to Chinguacousy Road and Winston Churchill Boulevard to Mississauga Road. Field review determined Stage 2 archaeological assessment would be required to confirm the extent of disturbance in part of the project area. P2001-020-299

- (ASI 2005) conducted a Stage 2 AA for the Heritage Road Feedermain, from north of Embleton Road to the Meadowvale North Pumping Station located south of Highway 407. It was determined that a large portion of the project area between the pumping station to north of Steeles Avenue was disturbed by grading, landscaping, and buried utilities. North of Highway 407, the adjacent ploughed field was pedestrian surveyed, which did not identify cultural resources. No further archaeological assessment was recommended. P057-167-2005

- (ASI 2007) conducted a Stage 1 AA for the proposed 600 mm feedermain from the Meadowvale Pumping Station to 400 mm watermain on Millcreek Drive. Meadowvale Boulevard was determined to be disturbed in field review. No further archaeological assessment was recommended within the Proposed Alignment or Alternative Routes. P057-341-2006

- (ASI 2014) conducted a Stage 1 AA for the Heritage Road Improvements from Steeles Avenue West to north of Embleton Road. Field review determined part of the project area retained archaeological potential. Stage 2 archaeological assessment was recommended. P392-010-2013

- (ASI 2020) conducted a Stage 1 AA for the 407 Transitway, which overlaps the current Study Area at Heritage Road south of Highway 407. The area was determined to be previously accessed

and subject to deep and extensive land disturbance. No further archaeological assessment was recommended.

- (Dillon Consulting Ltd. 1997) conducted a Stage 2 and Stage 3 along the proposed Highway 407 ROW reporting on their 1995 and 1996 field seasons which identified the Brackenreed Homestead Site (AjGw-249). The Stage 2 archaeological assessment found a total of 356 Euro-Canadian artifacts during pedestrian survey across an area of 50 by 70 metres adjacent to the current Study Area. The site was recommended for further archaeological assessment.

- (D.R. Poulton & Associates Inc. 2012) conducted a Stage 1 AA for the proposed GTA pipeline. It was determined that the field west and east of Heritage Road, north of the hydro corridor, would require Stage 2 archaeological assessment. P242-010-2012

- (Earthworks Archaeological Services Inc. 2018) conducted a Stage 1 AA adjacent Heritage Road on the east side and north of Highway 407. The field review determined the area was previously disturbed and recommended no further archaeological assessment. P310-0195-2018

- (Earthworks Archaeological Services Inc. 2019) conducted a Stage 1 AA adjacent Heritage Road on the west side and north of Highway 407. The field review determined the area was previously disturbed and recommended no further archaeological assessment. P310-0015-2019

- (Mayer Heritage Consultants Inc. 1996) conducted a Stage 3 and Stage 4 AA of the Brackenreed Homestead Site (AjGw-249). The Stage 3 AA commenced with a pedestrian survey, conducted at half metre intervals over the ploughed area. Ten test units were placed in strategic locations and excavated in arbitrary ten centimetre lots. A gradall was used to remove topsoil from a 35 by 60 metres area at the beginning of the Stage 4. Seven surface features and 12 post moulds were determined to be cultural. The artifacts assemblage for the Stage 2, 3 and 4 archaeological investigations dates between the 1820s to 1840s. It was determined that the Brackenreed Homestead site (AjGw-249) was fully documented and excavated to provincial guidelines and protocols of the time. No further assessment was recommended.

- (Mayer Heritage Consultants Inc. 2002) conducted a Stage 2 and 3 AA south of Steeles Avenue, bounded by Winston Churchill Boulevard to the west and Mississauga Road to the east. Pedestrian survey was conducted. Test pit survey was conducted at five metre intervals, with additional testing around test pits with positive results. A total of 60 findspots and sites were located during the Stage 2 Assessment. Nine of the 60 sites were recommended for Stage 3 archaeological investigation. Four of the 60 sites were subject to Stage 3 archaeological investigation and further recommended Stage 4 mitigation. Location 34 and sites AjGw-342, AjGw-343 and AjGw-345 were located within 50 metres of the current Study Area. Location 34 represented a findspot of one utilized Onondoga flake, and sites AjGw-342, AjGw-343 and AjGw-345 were findspots consisting of isolated projectile points. These sites were not recommended for further archaeological investigation.

- (Parker Archaeological Consulting 2007) conducted a Stage 2 AA of Heritage Road from Steeles Avenue to the southern city limits of Brampton. Pedestrian and test pit surveys were conducted where appropriate at five-metre intervals. It was determined the majority of the study area had been previously disturbed by infrastructure. No cultural material was encountered during the

assessment and therefore future road improvement may occur within the study area. P043-047-2007

- (Stantec Consulting Ltd. 2015) conducted a Stage 2 AA of temporary workspaces TWS-A18 and TWS-A19 as part of the proposed GTA pipeline. TWS-A18 and TWS-A19 were 30 by 50 metre areas located north of the hydro corridor at Heritage Road. A test pit survey was conducted at 2.5m intervals at TWS-A18, and five-metre intervals for TWS-A19. No cultural material was identified at either location. No further archaeological assessment was recommended. P256-0352-2015

2.0 FIELD METHODS: PROPERTY INSPECTION

A Stage 1 property inspection must adhere to the S & G, Section 1.2, Standards 1-6, which are discussed below. The entire property and its periphery must be inspected. The inspection may be either systematic or random. Coverage must be sufficient to identify the presence or absence of any features of archaeological potential. The inspection must be conducted when weather conditions permit good visibility of land features. Natural landforms and watercourses are to be confirmed if previously identified. Additional features such as elevated topography, relic water channels, glacial shorelines, well-drained soils within heavy soils and slightly elevated areas within low and wet areas should be identified and documented, if present. Features affecting assessment strategies should be identified and documented such as woodlots, bogs or other permanently wet areas, areas of steeper grade than indicated on topographic mapping, areas of overgrown vegetation, areas of heavy soil, and recent land disturbance such as grading, fill deposits and vegetation clearing. The inspection should also identify and document structures and built features that will affect assessment strategies, such as heritage structures or landscapes, cairns, monuments or plaques, and cemeteries.

The Stage 1 archaeological assessment property inspection was conducted under the field direction of Jessica Lytle (1066) of ASI, on April 14, 2020, in order to gain first-hand knowledge of the geography, topography, and current conditions and to evaluate and map archaeological potential of the Study Area. It was a visual inspection only and did not include excavation or collection of archaeological resources.

Fieldwork was only conducted when weather conditions were deemed suitable and seasonally appropriate, per S & G Section 1.2., Standard 2. Previously identified features of archaeological potential were examined; additional features of archaeological potential not visible on mapping were identified and documented as well as any features that will affect assessment strategies. Field observations are compiled onto the existing conditions of the Study Area in Section 7.0 (Figure 9) and associated photographic plates are presented in Section 8.0 (Plates 1-2).

3.0 ANALYSIS AND CONCLUSIONS

The historical and archaeological contexts have been analyzed to help determine the archaeological potential of the Study Area. These data are presented below in Section 3.1. Results of the analysis of the Study Area property inspection are presented in Section 3.2.

3.1 Analysis of Archaeological Potential

The S & G, Section 1.3.1, lists criteria that are indicative of archaeological potential. The Study Area meets the following criteria indicative of archaeological potential:

- Previously identified archaeological sites (See Table 2);
- Water sources: primary, secondary, or past water source (tributary of the Credit River);
- Early historic transportation routes (Heritage Road, Steeles Avenue West);
- Proximity to early settlements (Whaley's Corners); and
- Well-drained soils (Oneida clay loam)

According to the S & G, Section 1.4 Standard 1e, no areas within a property containing locations listed or designated by a municipality can be recommended for exemption from further assessment unless the area can be documented as disturbed. The Municipal Heritage Register was consulted and no properties within the Study Area are Listed or Designated under the Ontario Heritage Act.

These criteria are indicative of potential for the identification of Indigenous and Euro-Canadian archaeological resources, depending on soil conditions and the degree to which soils have been subject to deep disturbance.

3.2 Analysis of Property Inspection Results

Part of the Study Area has been previously assessed and does not require further archaeological assessment (Figure 9: areas highlighted in red).

The remainder of the Study Area has been subjected to deep soil disturbance events and according to the S & G Section 1.3.2 do not retain archaeological potential (Plates 1-2; Figure 8: areas highlighted in yellow). These areas do not require further survey.

3.3 Conclusions

The Stage 1 background study determined that 27 previously registered archaeological sites are located within one kilometre of the Study Area. The property inspection determined that the Study Area does not exhibit archaeological potential and will not require Stage 2 assessment.

4.0 RECOMMENDATIONS

In light of these results, the following recommendations are made:

1. The Study Area does not retain archaeological potential on account of deep and extensive land disturbance or having been previously assessed. These lands do not require further archaeological assessment; and,

2. Should the proposed work extend beyond the current Study Area, further Stage 1 archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

NOTWITHSTANDING the results and recommendations presented in this study, ASI notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the MHSTCI should be immediately notified.

5.0 ADVICE ON COMPLIANCE WITH LEGISLATION

ASI also advises compliance with the following legislation:

- This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, RSO 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations ensure the conservation, preservation and protection of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological field work on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act.*

- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the *Ontario Heritage Act*.

- The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

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7.0 MAPS

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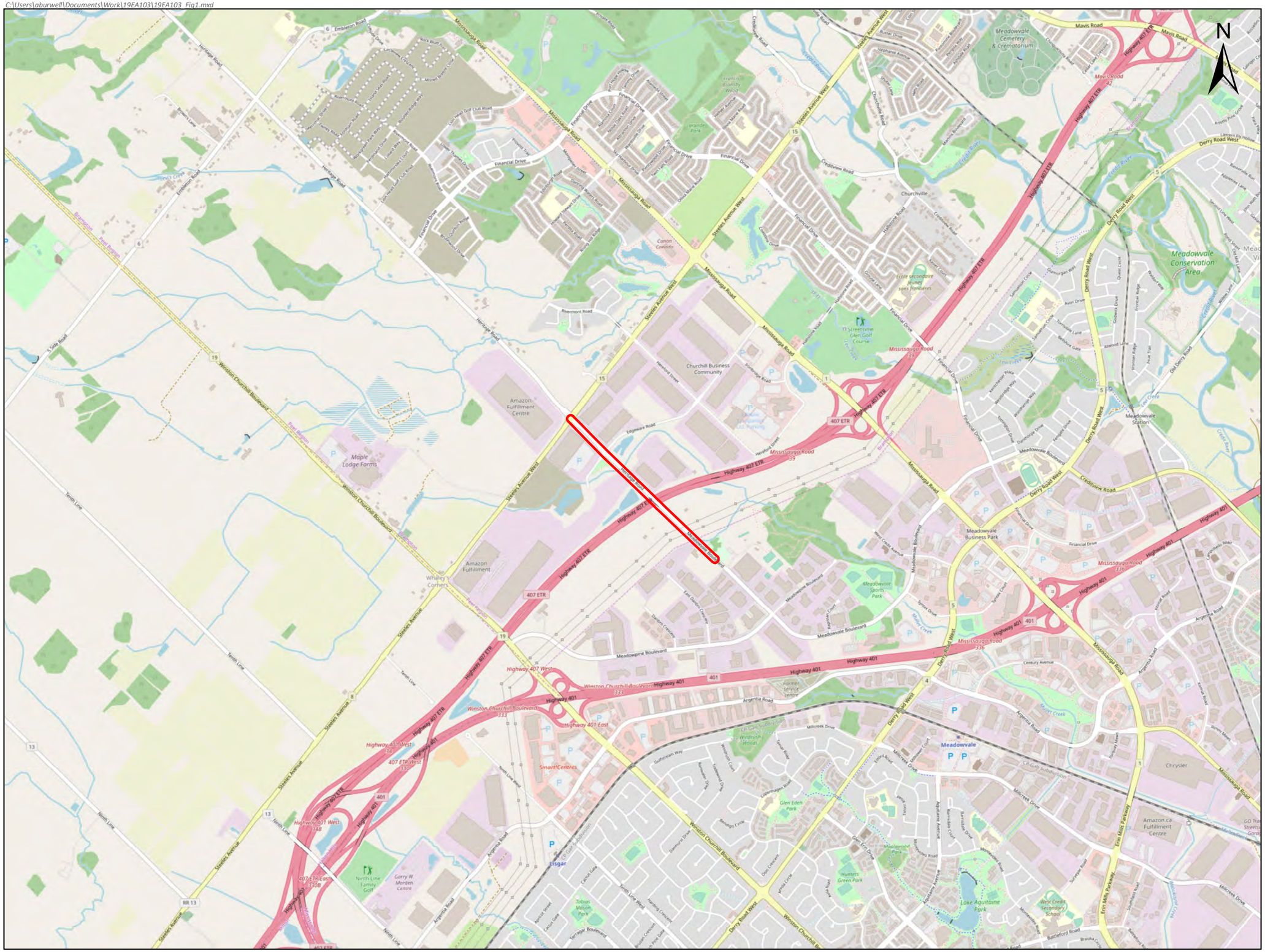

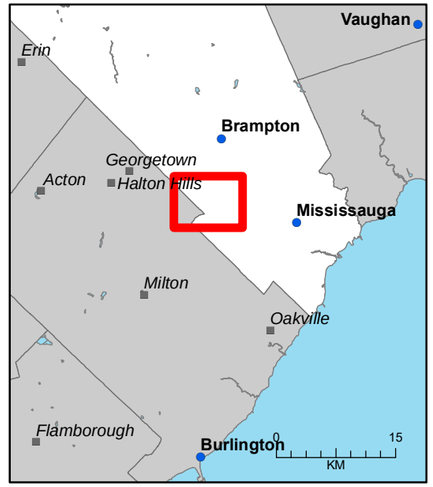

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Providing Archaeological & Cultural Heritage Services
528 Bathurst Street Toronto, ONTARIO M5S 2P9
T 416-966-1069 F 416-966-9723 asiheritage.ca

Figure 1: Heritage Road Watermain Study Area

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Figure 2: Study Area (Approximate Location) Overlaid on the 1859 Tremaine's Map of Chinguacousy and Toronto Townships

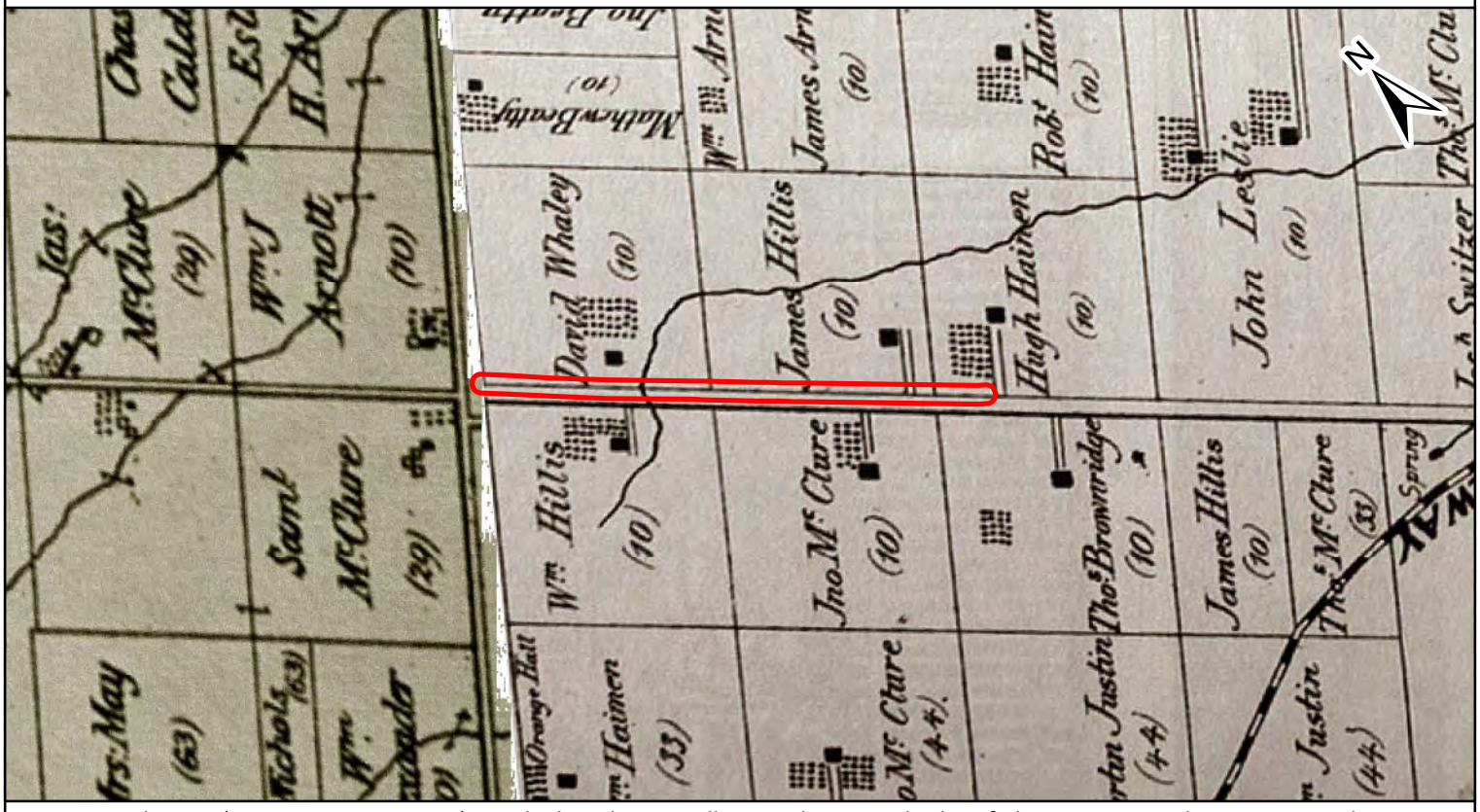

Figure 3: Study Area (Approximate Location) Overlaid on the 1877 Illustrated Historical Atlas of Chinguacousy and Toronto Townships

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Fig. 2: Tremaine's Map of the County of Peel. 1858; Fig. 3: Illustrated Historical Atlas of the County of Peel. 1877.

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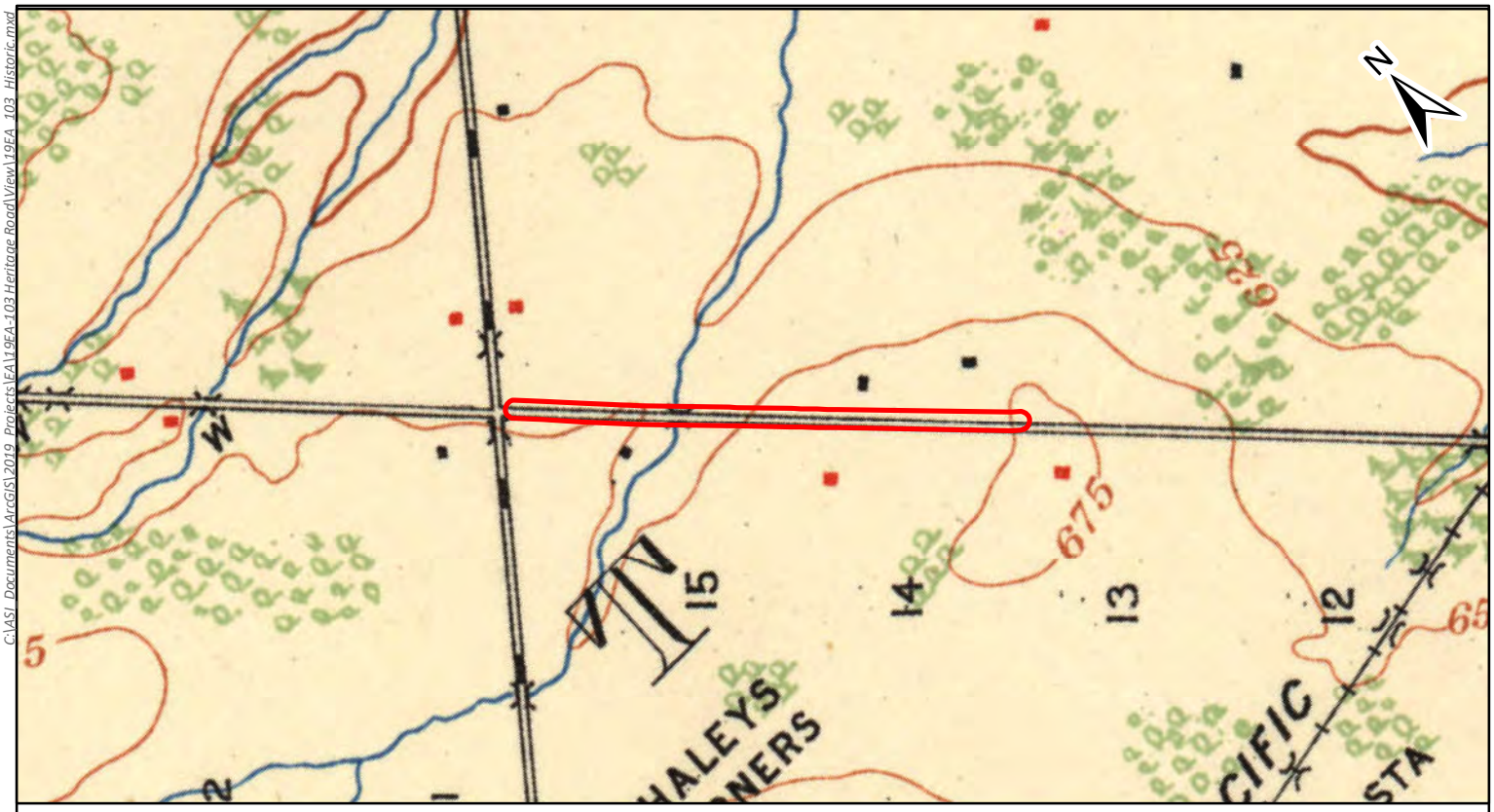

Figure 4: Study Area (Approximate Location) Overlaid on the 1909 NTS Brampton Sheet

Figure 5: Study Area (Approximate Location) Overlaid on the 1954 Aerial Photography

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STUDY AREA

Fig. 4: National Topographic System, Brampton Sheet. 1909; Fig. 5: University of Toronto, Map and Data Library.

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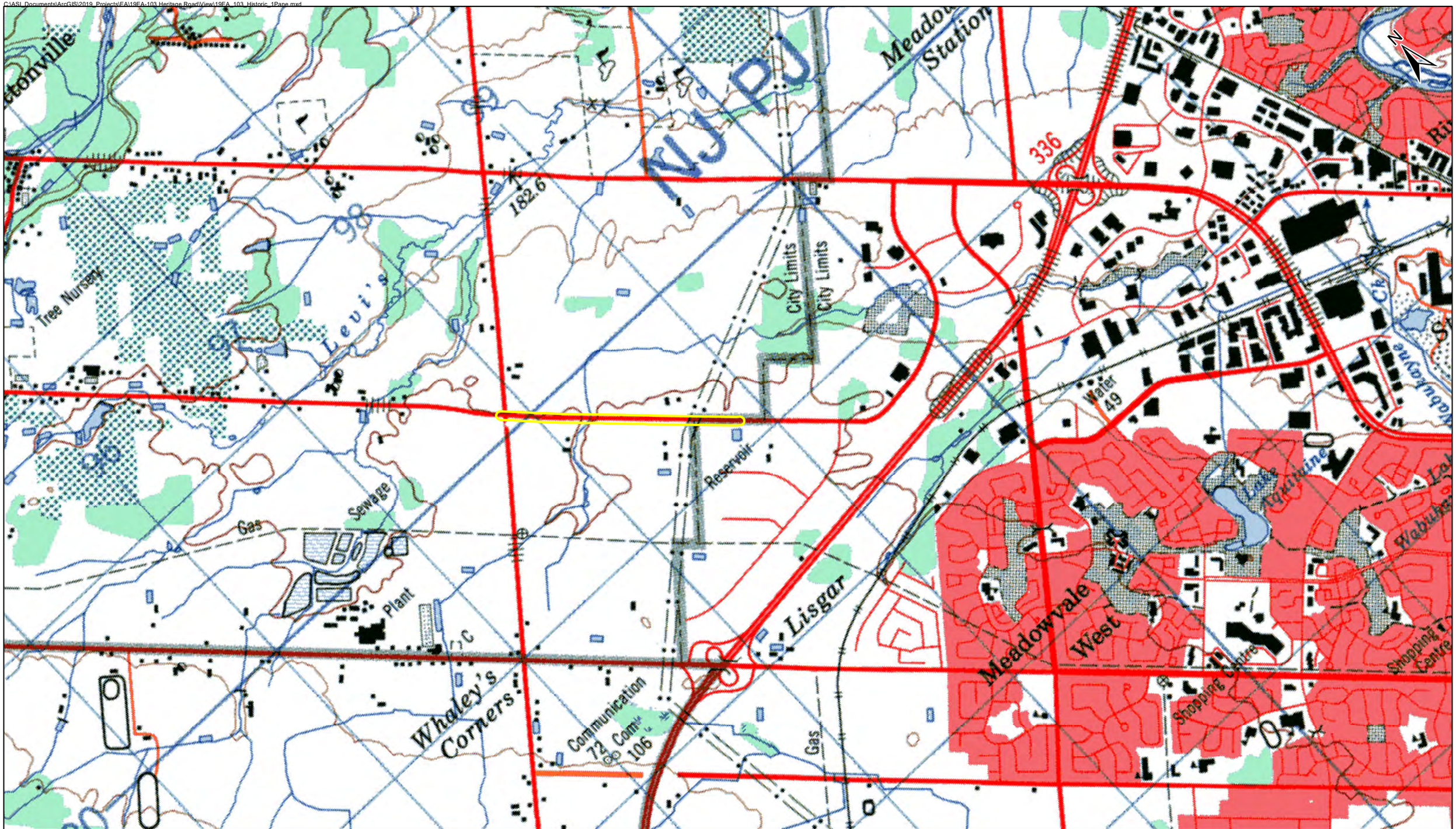

Figure 6: Study Area (Approximate Location) Overlaid on the 1994 NTS Brampton Sheet

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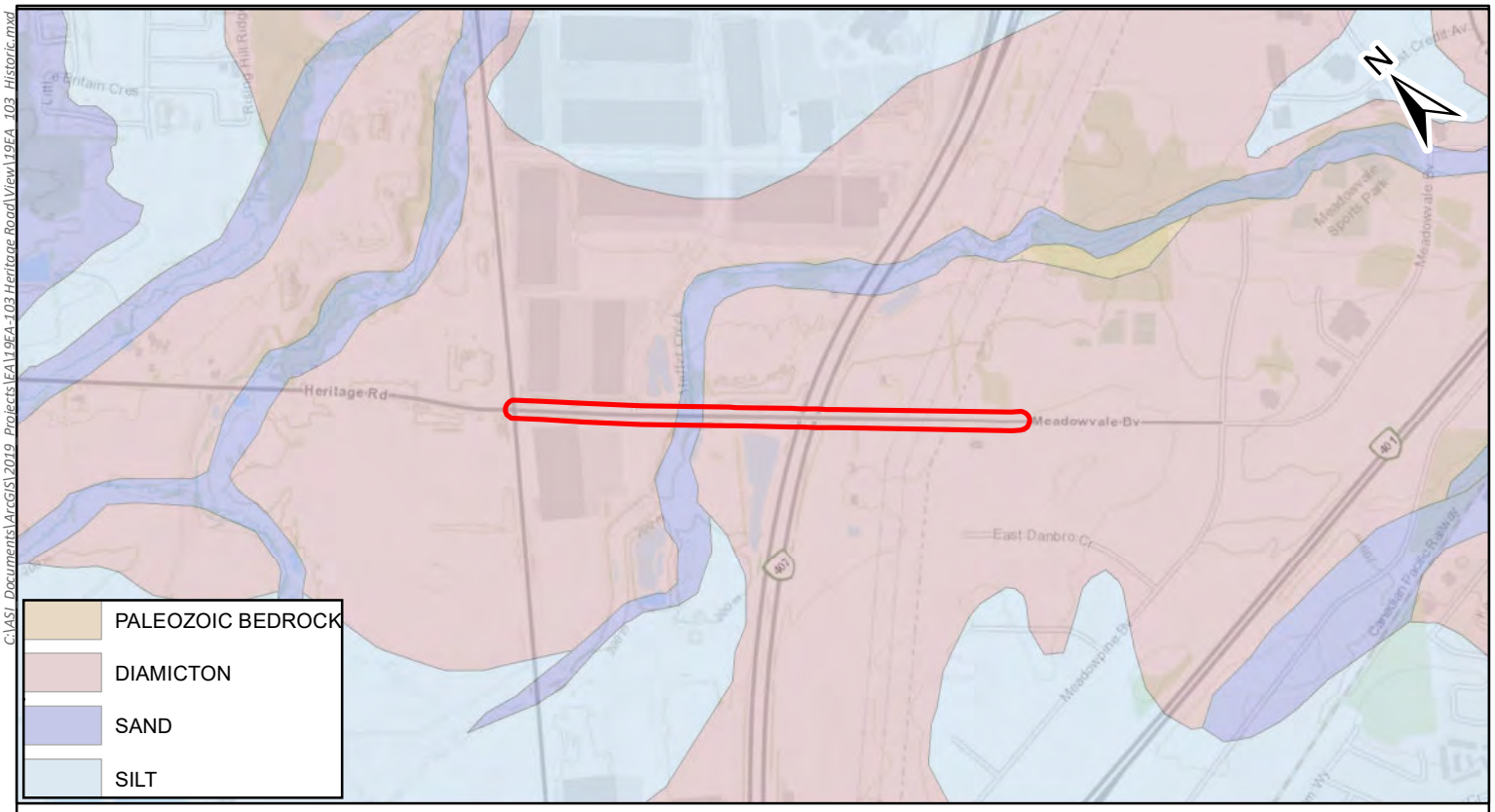

Figure 7: Study Area - Surficial Geology

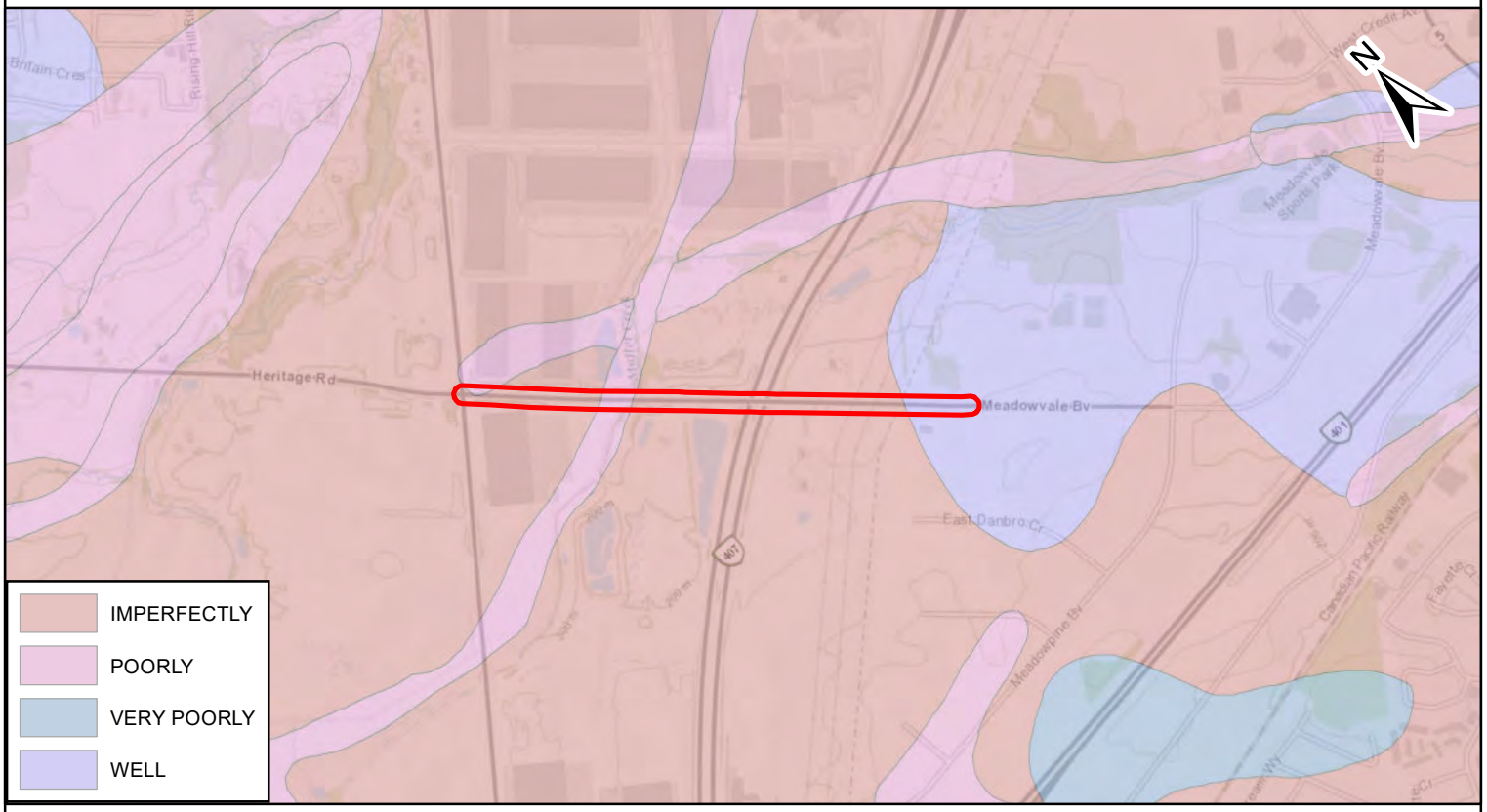

Figure 8: Study Area - Soil Drainage

STUDY AREA

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong

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Figure 9: Heritage Road Watermain - Results of Stage 1

8.0 IMAGES

Plate 1: West view from Heritage Road sidewalk; Area is disturbed, no potential

Plate 2: Northwest view of the pumping station and grassed lawn; Area is disturbed, no potential

Appendix E
Baseline Natural Features Assessment

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Technical Memorandum

Date: September 14, 2020

Project #: 1705610

To: Rebecca Weatherall, Ainley Group

From: Ryan Morin, Dirk Janas, Palmer

Re: **Heritage Road Watermain Natural Environmental Conditions Memorandum**

Palmer was retained by Ainley Group (Ainley) to assess the natural heritage environmental conditions as part of the construction of a watermain connecting the Meadowvale North Pumping Station in the City of Mississauga, to the intersection of Steeles Avenue and Heritage Road in the City of Brampton. Construction of this watermain is expected to occur along the side of the existing Heritage Road roadway, likely entirely within existing disturbed areas along the roadway (the study area – **Figure 1**). The study area along Heritage road primarily consists of mowed landscapes or cultural meadows regenerating from historic clearing or anthropogenic maintenance. The primary natural heritage feature involves the crossing of Mullet Creek watercourse and its associated riparian vegetation communities.

This Technical Memo is prepared as part of the road reconstruction and urbanization design prepared by Ainley and is submitted to support both the Class Environmental Assessment (EA) process and the Credit Valley Conservation Authority (CVC) approval and permitting process. This Technical Memo describes the background review, agency consultation and field investigations undertaken to support the characterization of existing natural environmental conditions through the project, identify potential impacts and provide recommendations for protection and mitigation measure for the detailed design.

The objectives of this study are to inventory and evaluate the existing natural heritage features and ecological functions within the project area, including Ecological Land Classification (ELC) mapping, Breeding Bird Surveys, Species at Risk (SAR) habitat screening and assessment, evaluation of sensitive natural features, and assessment of significant wildlife habitat. Representative photographs taken during the 2020 field investigations are attached as an Appendix to this report.

As part of this Technical Memo the following supporting Figures and Appendices have been provided:

- **Figure 1.** Site Location
- **Figure 2A & 2B.** Existing Environmental Conditions
- **Appendix A.** Flora List
- **Appendix B.** Breeding Bird List
- **Appendix C.** Photo Log
- **Appendix D.** CVC Pre-consultation Comments

1. Environmental Policy

1.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) provides direction to regional and local municipalities regarding planning policies for the protection and management of natural heritage features and resources (OMMAH, 2014). Section 2.1 of the PPS defines eight natural heritage feature (NHF) types and adjacent lands and provides planning policies for each. While the project is not subject to the Planning Act, the identification and NHF through the PPS is used as part of the identification of environment features and potential constraints as part of the Municipal Class Environmental Assessment (EA) process.

Of these NHF, development is not permitted in:

- Significant Coastal Wetlands;
- Significant Wetlands in Ecoregions 5E, 6E and 7E;
- Fish Habitat, except in accordance with provincial and federal requirements; or
- Habitat of species designated as Endangered and Threatened, except in accordance with provincial and federal requirements.

Additionally, unless it can be demonstrated through an EIS that there will be no negative impacts on the natural features or their ecological functions, development and site alteration are also not permitted in:

- Significant Wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E;
- Significant Woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Mary's River);
- Significant Valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Mary's River);
- Significant Wildlife Habitat;
- Significant Areas of Natural and Scientific Interest;
- Other Coastal Wetlands in Ecoregions 5E, 6E and 7E; and
- Lands defined as *Adjacent Lands* to all the above natural heritage features.

Each of these natural heritage features is afforded varying levels of protection subject to guidelines, and in some cases, regulations. The project area is located in Ecoregion 6E (Crins, Gray, Uhlig, & Wester, 2009). The NHF definitions are used in this report to guide the identification and protection of ecological elements in the project area.

1.2 Credit Valley Conservation Authority (CVC) Regulations and Policies

The study area falls within the jurisdiction of CVC. Relevant CVC regulations and policies include the following:

- Ontario Regulation 160/06 - Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses. This policy was designed to "safeguard watershed health by preventing pollution and destruction of ecologically sensitive areas such as significant natural features and areas, wetlands, shorelines, valleylands and watercourses. Ontario Regulation 160/06

establishes Regulated Areas where development could be subject to flooding, erosion or dynamic beaches, or where interference with wetlands or alterations to watercourses might have an adverse effect".

The project area falls within regulated lands (orange zones on **Map A**). The associated CVC policies, regulations and permitting will therefore apply and approvals will be required from the agency.

Map A. CVC Regulation Limits (Orange) within the Study Area (Red)

1.3 Endangered Species Act (2007)

Species designated as Threatened or Endangered by the Committee on the Status of Species at Risk in Ontario (COSSARO), otherwise known as Species at Risk in Ontario (SARO), and their habitats (e.g. areas essential for breeding, rearing, feeding, hibernation and migration) are afforded legal protection under the *Endangered Species Act* (ESA) (Government of Ontario 2007).

The protection provisions for species and their habitat within the ESA apply only to those species listed as endangered or threated on the SARO list. Special Concern species may be afforded protection through

policy instruments respecting significant wildlife habitat as defined by the Province or other relevant authority, or other protections contained in Official Plan (OP) policies.

1.4 Fisheries Act

The *Fisheries Act* is administered by Fisheries and Oceans Canada (DFO) and requires that project activities avoid causing harm to fish or fish habitat (HADD). This applies to work being conducted in or near water that support fish that are part of, or support, commercial, recreational, or Aboriginal fisheries. Self-assessment has been used to determine the potential for a project to cause HADD in recent years, including during the scoping of the requirements for this project, however the submission of a Request for Review (RFR) is the current requirement. This offers DFO a chance to determine if the project requires an Authorization (i.e., HADD cannot be avoided). An RFR will be submitted to DFO pertaining to this project.

1.5 Migratory Birds Convention Act (1994)

The *Migratory Birds Convention Act* (MBCA) and Migratory Birds Regulations (MBR) (2014) protect most species of migratory birds and their nests and eggs anywhere they are found in Canada. General prohibitions under the MBCA and MBR protect migratory birds, their nests and eggs and prohibit the deposition of harmful substances in waters / areas frequented by them. The MBR includes an additional prohibition against incidental take, which is the inadvertent harming or destruction of birds, nests or eggs.

Compliance with the MBCA and MBR is best achieved through due diligence, which identifies potential risk based on a site-specific analysis in consideration of the Avoidance Guidelines and Best Management Practices information on the Environment Canada website.

2. Study Approach

2.1 Background Review and Agency Consultation

Ainley initiated contact with CVC to inform the agency of the project and receive pre-consultation comments. Palmer has relevant background material, including site-specific natural heritage data provided by CVC, to provide a focus to field investigations and ensure compliance with regulations and policy. Background review included the following:

- Review of initial CVC comments provided at project scoping (**Appendix D**);
- Collection and review of relevant mapping and reports, including Natural Heritage Information Centre (NHIC) make-a-map application for species occurrences and designated area mapping;
- Ministry of Natural Resources and Forestry (MNRF) online Natural Heritage Information Centre square data;
- DFO's online Aquatic Species at Risk mapping tool; and,
- Site-specific data provided under a sharing agreement from CVC.

2.2 Ecological Surveys

To provide site characterization Palmer ecologists undertook field investigations on the natural heritage along the road alignment including vegetation communities and flora, characterize aquatic habitat, conduct

breeding bird survey, assess physical terrain characteristics, and to provide an assessment of the ecological features and functions within the study area. Survey methods are described below.

2.2.1 Vegetation and Flora

Vegetation communities were mapped and described following the Ecological Land Classification (ELC) System for Southern Ontario (Lee *et al*. 1998). Vegetation community boundaries were delineated on field maps through the interpretation of recent aerial photographs and CVC data, and refined in the field. Information collected during ELC surveys includes dominant species cover, community structure, as well as level of disturbance, presence of indicator species, and other notable features.

Botanical and ELC surveys were completed on March 30 and June 1, 2020 by traversing the study area, recording species observed and delineating ELC communities. Identified vascular plants were checked for their status at local, regional (Varga *et al,* 2000), and provincial levels (NHIC, 2000; Oldham and Brinker, 2009). Provincial plant status is based on the Species at Risk in Ontario (SARO) (Ontario Ministry of Natural Resources and Forestry, 2018) and the NHIC.

Searches for Butternut (*Juglans cinerea*), an Endangered Species at Risk (SAR) tree, were completed during the botanical surveys and tree inventory, as well as any other SAR vascular plant species.

2.2.2 Breeding Bird Surveys

Two breeding bird surveys were conducted in general accordance with Ontario Breeding Bird Atlas protocols (Bird Studies Canada, 2001) at the site within the peak breeding season for most bird species. The first survey was conducted on June 14, 2020 and the second survey was conducted one week later on June 21, 2020. The surveys were carried out between 05:00 and 10:00 h to coincide with the dawn chorus. The study area alignment was walked, and the surveyor recorded all bird species seen and heard within and flying over the survey area on each site visit. The number, breeding evidence, and approximate location of each bird or bird group was recorded on the site map.

2.2.3 Aquatic Habitat

An assessment of the existing aquatic habitat and riparian conditions were conducted on June 1, 2020. The weather conditions were 18ºC, 50% cloud cover, 10 km/h wind speed with no precipitation. The assessment was carried out by assessing the existing conditions of Mullet Creek within the study area, including approximately 100 metres upstream and downstream.

- Identification of in-stream barriers to fish passage;
- Channel morphology measurements (water depth, pool depth, stream width, bankfull width, stream order, habitat structure, pools and riffles);
- Bank undercuts and instream cover;
- Point source impacts (e.g., outfalls, sources of pollution) and surrounding land uses;
- Baseflow, flow regime characteristics (e.g., flashy urban system);
- Water quality;
- Substrate type;
- Critical habitats (spawning, nursery or rearing grounds);

- Riparian cover and shading;
- Groundwater discharge and upwellings; and
- Other measurements that indicate the quality of the habitat such as entrenchment, erosion, degradation.

2.2.4 Species at Risk

For the purposes of this report, Species at Risk include species listed as Endangered, Threatened or Special Concern under Ontario's *ESA.* The protection provisions for species and their habitat within the *ESA* apply only to those species listed as Endangered or Threated on the Species at Risk in Ontario. Special Concern species may be afforded protection through policy instruments respecting significant wildlife habitat as defined by the Province or other relevant authority, or other protections contained in Official Plan policies.

Prior to field work, existing SAR records were queried through the Natural Heritage Information Centre (NHIC) online database and based on Palmer's professional experience based on habitat representation and opportunities.

Habitats within the project area were characterized and screened for evidence of or potential use by these species. A brief discussion of the status, habitat requirements, and assessment of likely presence of SAR species on the subject property is provided in **Section 3.3**.

DFO provides the most up-to-date information regarding the confirmed habitat and range of Species at Risk fish and the potential for species to occur in the project area was queried using their online database (Aquatic Species at Risk Map, 2019). This query indicated that there currently are no known records for Species at Risk fish within the Mullet Creek drainage system.

3. Existing Conditions

The study area is characterized primarily by roadside lawn and meadow beyond the existing shoulder of Heritage Road, with natural vegetated communities being limited to the area surrounding Mullet Creek and its tributary south of Highway 407 (**Figure 2**).

3.1 Terrestrial Habitat

3.1.1 Vegetation Communities

Field investigations and background data review identified five (5) different vegetation communities in addition to mowed landscapes within the study area (**Figures 2A & 2B**). The ELC descriptions of these vegetation communities are provided in **Table 1** below.

Table 1. Vegetation Communities Descriptions for the Study Area

Vegetation ELC Community	Vegetation Community Description
Lawn	Those areas identified as Lawn on **Figure 2** are manicured monoculture lawns, with most of these areas maintained for keeping the roadside clear.

CUM1: Mineral Cultural Upland Meadow	Mineral Cultural Meadows represent a community naturalizing after anthropogenic disturbances or clearing, dominated by grasses or forbs (**Photograph 15 & 16**). They contain a diversity of native and non-native vascular plant species: Queen Anne's Lace *(Daucus carota)*, Coltsfoot *(Tussilago farfara)*, Bird's Foot Trefoil *(Lotus corniculatus),* Common Plantain *(Plantago major),* English Plantain *(Plantago lanceolata)*, Red Clover *(Trifolium pratense),* Dame's Rocket *(Hesperis matronalis)* Thicket Creeper *(Parthenocissus vitacea)*, Kentucky Bluegrass *(Poa pratensis)* and Smooth Brome *(Bromus inermis)*.
CUT1: Mineral Cultural Upland Thicket	Mineral Cultural thickets also represent a community naturalizing after anthropogenic disturbance and are dominated by native and non-native shrub species with European Buckthorn *(Rhamnus cathartica)*, Tartarian Honeysuckle *(Lonicera tartarica)* and Hawthorn species *(Crataegus* spp.*)* primarily densely occupying this community. Also present is Staghorn Sumac *(Rhus typhina)*, with Nannyberry *(Viburnum lentago)* and Sandbar Willow *(Salix interior)* in the riparian areas around Mullet Creek (**Photograph 17**).
CUW1: Mineral Cultural Upland Woodland	Mineral Cultural thickets also represent a community naturalizing after anthropogenic disturbance but are represented by tree or tall shrub canopy cover between 35% and 60% (**Photograph 18 & 19**). These communities contain some White Ash *(Fraxinus americana)* and Manitoba Maple *(Acer negundo)* but are primarily represented by tall, mature shrub species such as European Buckthorn and Hawthorn species. The understory within the Cultural Woodlands is sparse with low species diversity due to dense vegetation patterns, lack of species diversity in the area for recruitment, and generally limited to saplings of the dominant shrub and tree species.
FOD7-2: Fresh – Moist Ash Lowland Deciduous Forest	This Ash Lowland Forest represents the only forest community found within the subject property (**Photograph 20**). It is dominated primarily by Green Ash *(Fraxinus pennsylvanica)*, with Manitoba Maple, Bur Oak *(Quercus macrocarpa)* and American Elm *(Ulmus americana)*. Many of the Green Ash are dying back likely due to the presence of the Emerald Ash Borer *(Agrilus planipennis)*. Due to the invasion of non-native understory shrubs such as Buckthorn and Tartarian Honeysuckle, understory diversity is limited to Wild Red Raspberry *(Rubus idaeus)*, Common Dandelion, Garlic Mustard *(Alliaria petiolata),* Robin's Fleabane *(Erigeron pulchellus),* Common Strawberry *(Fragaria virginiana)* and Urban Avens *(Geum urbanum)*.
MAM 2-2 Reed Canary Grass Mineral Meadow Marsh	This small wetland community type occurs within the bankfull width of Mullet Creek and is associated with areas where the watercourse is less defined (**Photograph 1, 2 & 10**). It is dominated entirely by the non-native variety of Reed Canary Grass *(Phalaris arundinacea)* and Hybrid Cattail *(Typha x glauca)*.

3.1.2 Flora

A total of 38 species of vascular plants was recorded within the project area, 45% of which are known to be non-native to Ontario (**Appendix A**). Considering the size of the study area, this represents a low vascular plant diversity with high non-native species incidence, owing primarily to a highly urbanized/altered landscape and the cover by manicured lawn and dense stands or trees and shrubs in cultural communities, limiting understory development. All species but two are considered S5 (common, secure) and SNA (non-native) in Ontario, with White Ash and Green (Red) Ash considered S4 (uncommon, apparently secure) in Ontario. This ranking is due to significant die-back of ash species in Southern Ontario. On the property, these ashes occur within the FOD7-2 woodland and the majority of specimens show some sign of the pest Emerald Ash Borer.

The recorded presence of non-native species is indicative of a level of disturbance that can be expected along roadways. Additionally, several highly invasive species were observed in the project area, including Tartarian Honeysuckle, European Buckthorn, and Garlic Mustard.

One species was recorded as rare (Robin's Plantain) and one as uncommon (Sago Pondweed) in Peel Region (CVC, 2002). Robin's plantain was found within the FOD7-2 forest and Sago Pondweed found within Mullet Creek.

3.1.3 Breeding Bird Surveys

The survey documented the birds based on the following habitats and locations: (i) Lawn, (ii) Mineral Cultural Meadow, (iii) Mineral Cultural Thicket, (iv) Mineral Cultural Woodland, (v) Fresh - Moist Lowland Ash Deciduous Forest, (vi) flyovers and adjacent areas. A total of 29 bird species were documented on the property, as summarized in **Appendix B**. Most of the birds recorded on the subject property are considered common, widespread and abundant in the province of Ontario. The most frequently observed species found on the property included birds characteristic of urban and suburban areas, such as European Starling (*Sturnus vulgaris*), Red-winged Blackbird (*Agelaius phoeniceus*), and American Goldfinch (*Cardeulis tristis*).

One Species at Risk was recorded from the study area: Barn Swallow (*Hirundo rustica*). Two Barn Swallows were observed on both site visits over the pond adjacent to Meadowvale Boulevard at the Meadowvale North Reservoir and Pumping Station. Two other individuals were observed on the first site visit over the ponds northwest of the Heritage Road and Highway 407 outside of the survey boundaries. The species is listed as threatened both nationally and provincially. The observations at least a week apart at the same location provide a probable breeding status of Territorial at the site. Nesting was not confirmed at the site and no suitable nesting sites were identified within the survey boundaries.

Two area-sensitive species were recorded at the site: Hairy Woodpecker (*Picoides villosus*) and Savannah Sparrow (*Passerculus sandwichensis*). Area-sensitive species require large areas of continuous habitat for breeding and foraging. The specific habitat requirements vary by species. Hairy Woodpeckers have territories that cover 4-8 ha and require a number of tall trees and snags >25 cm dbh. A Hairy Woodpecker was observed on the first site visit in suitable nesting habitat in the Fresh - Moist Lowland Ash Deciduous Forest part of the survey area adjacent to Heritage Road. Savannah Sparrows require tracts of grassland >50 ha. A Savannah Sparrow was observed on the second site visit singing in suitable nesting habitat adjacent to and outside the project survey boundaries.

3.2 Aquatic Habitat

3.2.1 Mullet Creek

The project area includes a crossing of Mullet Creek along Heritage Road where the watercourse flows west to east (**Figure 2**), from a series of wetlands and drainage features west and north of the property. Downstream of the study area, Mullet Creek traverses south through suburban development for several kilometres before its confluence with the Credit River, just south of Burnhamthorpe road. Mullet Creek is identified as a fish-bearing watercourse in Land Information Ontario's Aquatic Resource Area (ARA) database with species listed in **Table 2**. Mullet Creek, in the vicinity of the Heritage Road crossing, is

represented by both a natural meandering riffle-run-pool morphology, with the east side represented by a large pool followed by channelized riffle-runs. Within the study area, south of Highway 407, a small tributary of Mullet creek occurs on the east side of Heritage Road (**Photograph 7**) (**Figure 2**).

The main branch of Mullet creek crossing on the west side of Heritage Road is a sinuous stream and features a natural meander with significant vegetation occurring within the bank full limit, primarily represented by Reed Canary Grass, Hybrid Cattail and wetland grasses (**Photograph 1, 2, 3, 4 & 10**), with aquatic plant representation including submerged Sago Pondweed *(Stuckenia pectinata)*. Within the vegetation, the watercourse meanders and features a riffle-run-pool stream morphology for over 150 metres upstream (west of study area at Mullet creek crossing). Wetted width averaged 1.2 metres on March 30th during the spring freshet, and 0.6 metres on June 1st. Water depth averaged 0.5 metres on March 30th and 0.25 metres on June 1st.

East of Heritage Road, downstream Mullet Creek, a large pool within the watercourse occurs adjacent to the roadway (**Photograph 5 & 13**). Downstream of this feature, the watercourse is channelized and features rapid riffle-run morphology within forested riparian habitat and limited in-water vegetation (**Photograph 6 & 14**). The maximum depth of the pool was 1.5 metres on March 30th in the spring freshet, and 0.9 metres on June 1st. The bankfull width of the downstream watercourse was approximately the same between the two survey events, due to the channelized nature of this reach.

3.2.2 Drainage Feature

The drainage feature and tributary of Mullet Creek occurring south of Highway 407 contained water on March 30th (**Photograph 8 & 9**), and was almost completely dry on June 1st. West of Heritage road, no upstream connection or water could be detected despite the presence of a culvert under the road in this location. This suggests the ephemeral nature of this drainage feature. During the spring freshet, water within this feature was isolated with dry stretches in between limiting any spring access for fish. During the summer, this feature would not provide any potential fish habitat, and would only function to drain water from the tablelands into Mullet Creek and provide contributing flows to downstream habitat. In the spring freshet, it is possible that higher water levels provide some access to fish within this drainage feature, however higher reaches toward Heritage road and the study area are isolated by dry stretches from the primary branch of Mullet Creek. Despite the presence of a culvert across Heritage Road associated with this drainage feature, no upstream water or drainage was detected on the west side of Heritage Road.

3.2.3 Fish Community

The project area occurs along Heritage Road and crosses a section of Mullet Creek, just south of the intersection with Edgeware Road. CVC data indicates sampling occurred on Mullet Creek, upstream from Meadowvale Boulevard (downstream from project site) in June in 2011, 2014, 2016 and 2018. Species collected during these investigations are included and identified in **Table 2**.

The MNRF's LIO database Aquatic Resource Area Polyline shapefile indicates Mullet Creek as being a Warmwater fishery containing a variety of species (shown in **Table 2**). This list is not site-specific to the stretch of Mullet creek within the vicinity of the Study Area, and likely includes some species that would only be found further down the watershed.

Table 2. Fish Species Known to Occur in Mullet Creek

Scientific Name	Common Name	Captured by CVC Sampling?	Spawning Habitat (Scott & Crossman, 1998)
Rhinichthys atratulus	Blacknose Dace	Yes	Riffles within shallow water of clear, cool streams.
Lepomis macrochirus	Bluegill	Yes	Shallow areas of gravel, sand or mud with a firm bottom. Spawning locations can be highly variable.
Pimephales notatus	Bluntnose Minnow	No	In shallow water, under in-stream cover and debris, such as rocks or logs. Males hollow out a nest below these structures.
Culaea inconstans	Brook Stickleback	No	Cool, clear waters with nest selection often chosen on in-water grasses rushes and reeds.
Oncorhynchus tshawytscha	Chinook Salmon	No	Migrate from Lake Ontario (anadromous) to spawn, generally over gravel in riffles. Migrate from lake to river (anadromous) to spawn, generally over gravel in riffles.
Oncorhynchus kisutch	Coho Salmon	No	Migrate from Lake Ontario (anadromous) to spawn, generally over gravel in riffles. Migrate from lake to river (anadromous) to spawn, generally over gravel in riffles.
Luxilus cornutus	Common Shiner	No	Over gravel beds in flowing water, or the head of a gravelly riffle. Lake populations will move upstream during spawning, and they are only known to spawn within creeks.
Semotilus atromaculatus	Creek Chub	Yes	Small, gravelly streams, generally just below a riffle.
Etheostoma flabellare	Fantail Darter	No	Spawning occurs in slower moving waters than their general habit, with the nest often excavated under debris or rocks.
Pimephales promelas	Fathead Minnow	No	Slow-moving water, sites are often selected under in-water debris.
Rhinichthys cataractae	Longnose Dace	No	Riffles over a gravelly bottom in streams.
Lepomis gibbosus	Pumpkinseed	No	Shallow water of slow-moving streams, ponds or lakes, usually near shore in depths for 6 – 12 inches.
Oncorhynchus mykiss	Rainbow Trout	No	Smaller tributaries of rivers, over fine gravel in riffles.

While no fisheries sampling was conducted during field investigations in the study area as this is not within the scope of work and due to available background information, unidentified *Cyprinidae* species were observed swimming in the main branch of Mullet Creek, primarily to the west of Heritage Road.

3.3 Species at Risk

The MNRF's NHIC information centre was consulted for information on SAR occurrences or potential presence in and surrounding the project area. As the information provided by the MNRF is not specific to the study area, some species have been added to **Table 3** based on Palmer's experience in the area and knowledge of potential SAR in the region.

Based on NHIC review, the results of field surveys and habitat screening, and our professional experience working in the Region, the following 15 SAR have been assessed as potentially occurring within the project area (**Table 4**).

The NHIC database shows nearby 1km assessment squares that identify Eastern Meadowlark *(Sturnella magna)*, Barn Swallow *(Hirundo rustica)*, Eastern Wood-pewee *(Contpous virens)*, Henslow's Sparrow *(Ammodramus henslowii)* and Butternut *(Juglans cinerea)* as occurring in the general area.

Table 3. SAR Habitat Screening for MNRF SAR Records

Species	Habitat Requirement Overview	Habitat Suitability	SARO Status
Butternut (*Juglans cinerea*)	Butternut grows best on rich, moist, well-drained loams often found on stream bank sites but may be found on well-drained gravelly sites, especially those of limestone origin.	Potential – stream banks, forest edge, however, none observed.	Endangered
Redside Dace (*Clinostomus elongatus*)	Redside dace are typically found in stream segments that flow through open meadows, pasture or shrub overstory as opposed to closed canopy forest in Ontario.	No, Mullet Creek not identified as RSD habitat on DFO Aquatic SAR database. RSD also not identified on downstream watercourse (Credit River), indicating the creek is not potential "contributing" habitat.	Endangered
Little Brown Myotis (*Myotis lucifugus*)	In the summer, roosts in trees, barns, attics and abandoned buildings to raise their young. In the winter, they hibernate in abandoned mines or caves.	Potential – forested areas	Endangered
Northern Myotis (*Myotis septentrionalis*)	Roosts under loose bark and cavities in trees in boreal forests. In the winter, the hibernate in abandoned caves or mines (MNRF, 2018h).	Potential – forested area	Endangered
Tricolored Bat (*Perimyotis subflavus*)	In the summer, forms day roosts in a range of habitats including older forest and sometimes barns. These bats overwinter in caves.	Unlikely – typically associated with more mature forests with oak representation	Endangered
Eastern Small-footed Myotis (*Myotis leibii)*	Roosts in a variety of habitats including caves, hollow trees, buildings, and bridges in the summer. In the winter, they hibernate in abandoned caves or mines.	Potential – forested area	Endangered
Barn Swallow (*Hirundo rustica*)	Prefers farmland; lake/river shorelines; wooded clearings; urban populated areas; rocky cliffs; and wetlands. They nest inside or outside buildings; under bridges and in road culverts; on rock faces and in caves etc.	Probable – identified in Breeding Bird surveys at Meadowvale pumping station.	Threatened
Bobolink (*Dolichonyx oryzivorus*)	Generally, prefers open grasslands and hay fields. In migration and in winter uses freshwater marshes and grasslands.	Potential – Open meadows	Threatened
Chimney Swift (*Chaetura pelagica*)	Chimney Swifts are most often found in urban areas and choose unused chimneys to build their nests and roost. They are usually located near water due to the abundance of insects, which are their main food source.	Unlikely – buildings within study area are newer industrial buildings likely without chimneys of suitable size and structure (i.e., masonry) needed for habitat.	Threatened

Eastern Meadowlark (*Sturnella magna*)	Generally, prefers grassy pastures, meadows and hay fields. Nests are always on the ground and usually hidden in or under grass clumps.	Potential – open meadows	Threatened
Common Nighthawk (*Chordeiles minor*)	Habitat is very variable including open habitats, disturbed areas, rock barrens, lakeshores, riverbanks, mines and forests. The species also nests in orchards, cultivated fields, gravel roads and mine tails. They prefer to occupy natural sites.	Potential –forested banks and agricultural crop fields	Special Concern
Eastern Wood Pewee (*Contopus virens*)	The Eastern Wood-pewee is mostly associated with the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in forest stands of intermediate age and in mature stands with little understory vegetation.	Unlikely – forested area (FOD7-2) lacks forest interior and characterized by edge habitat	Special Concern
Grasshopper Sparrow (*Ammodramus savannarum*)	Lives in open grassland areas with sandy, well-drained soil. Also nests in pasture, hayfields, prairies, alvars and grain crops.	Potential – open meadow	Special Concern
Red-headed Woodpecker (*Melanerpes erythrocephalus*)	The Red-headed Woodpecker is found in a wide variety of habitats, including open oak and beech forests, grasslands, forest edges, orchards, pastures, riparian forests, roadsides, urban parks, golf courses, cemeteries, as well as along beaver ponds and brooks.	Potential – forested area	Special Concern
Wood Thrush (*Hylocichla mustelina*)	The Wood Thrush is found in moist, deciduous hardwood or mixed stands, often previously disturbed (e.g., small-scale logging and ice storm damage), with a dense deciduous undergrowth and with tall trees for singing perches.	Unlikely – forested area (FOD7-2) lacks forest interior and characterized by edge habitat	Special Concern

3.4 Incidental Wildlife

The study area is bounded by a high-traffic roadway, the watercourse corridors which would limit utility of movement opportunities for species such as White-tailed Deer (*Odocoileus virginianus*) and Coyote (*Canis latrans*) if present in the area. The large culvert may allow some landscape connectivity if animals are willing to use it. At the immediate site level, potential wildlife habitats consist of the aquatic environment of Mullet Creek and its surrounding riparian areas. Standing dead White and Green Ash trees were observed within the FOD7-2 forest may be used as wildlife trees or provide habitat to maternity roosting bats.

Incidental species recorded include American Goldfinch (*Cardeulis tristis*), American Crow (*Corvus brachyrhynchos*), Blue Jay (*Cyanocitta cristata)* and Black-capped Chickadee (*Poecile atricapillus*). The extent of mowed lawn within the study area and limited natural features limits the wildlife utility across the study area, with most wildlife potential occurring within the natural area surrounding Mullet Creek.

4. Environmental Management Plan

4.1 Construction Timing Window

The recommended construction timing window for tree and vegetation removal is from October 15 to March 30. This timing window specifically applied to vegetation removal as it encompasses for the protection of Endangered bats maternity roost habitat as well as the potential presence of breeding birds. Should tree removal be necessary outside of this window (i.e., between April 1 to October 15), a qualified ecologist must survey and screen the trees proposed to be removed. Based on a review of the design alternatives and existing site conditions, minimal vegetation removal will be required.

4.2 Erosion and Sediment Control

To minimize the potential for erosion and off-site transportation of sediment into Mullet Creek and the natural environment, the project will implement best practices related to Erosion and Sediment Control (ESC) measures. In general, ESC measures should be installed prior to works commencing and be maintained in good condition for the duration of the works. ESC measures must meet guidelines outlined in the Erosion Sediment Control Guideline for Urban Construction, December 2006, prepared by the Greater Golden Horseshoe Area Conservation Authorities (GGHA CAs). With Respect to ESC measures, the contractor must:

- Retain existing vegetation and stabilize ground with native vegetation where possible;
- Limit the duration of soil exposure and/or phase construction;
- Delimit the perimeter of and excavation or drilling area with light duty silt fencing;
- Maintain overland sheet flow and avoid concentrating flow;
- Store and stockpile soil away from watercourse and drainage structure; and
- Assess ESC measures before and after significant rainfall and snowmelt events.

All repairs required to ESC measures will be completed within 48 hours of notice, unless otherwise agreed by the Region, the Contractor, the regulatory authority and the environmental inspector(s). Stockpiles are to be protected immediately and, if place for longer than 45 days, temporarily stabilized.

4.3 Site Inspections

Record keeping is required throughout the project activities, with the majority of the record keeping expected to be associated with construction dewatering and instream channel works. Environmental monitoring and inspections of works will meet regulatory agency direction and permit requirements and will be undertaken regularly by qualified and experienced inspectors. The minimum frequency of site inspections and reporting will be as follows:

- Daily during active dewatering and daily visual inspection of discharge;
- Environmental inspections before and after significant storm and snow melt events; and
- Daily during extended rain and snowmelt periods.

All records should be maintained on a regular basis. The records should be available for inspection and review by agencies upon request. The Environmental Inspector will prepare a Final Monitoring Report

summarizing the environmental inspection program. This will be submitted to Halton Region, and regulatory agencies. The Monitoring Report will include:

- An overview of construction activities during the proposed works;
- A comprehensive list of environmental sensitivities associated with those works and environmental protection measures; and
- Significant deviations from approved environmental protection measures.

4.4 Response Plan

The development of a response plan is required to avoid spills of deleterious substances from entering the watercourse. At a minimum, the response plan should ensure that machinery is kept clean, washing and refuelling areas are set-back from the watercourse, and spills are cleaned up promptly. Responses to avoid spills or contamination include:

- Stop work, contain sediment-laden water and other deleterious substances and prevent their further migration in the watercourse;
- Maintain all machinery on site in a clean condition and free of fluid leaks; and
- Wash, refuel and service machinery and store fuel and other materials for the machinery in such a way as to prevent any deleterious substances from entering the water.

5. Conclusion

Considering relevant environmental policy and the results of ecological investigations, the following considerations and conclusions with respect to the proposed project are presented:

- The study area contains regulated lands for Credit Valley Conservation, and it is anticipated that a permit will be required.
- Mullet Creek is a fish-bearing watercourse that traverses the property. Currently, no in-water work has been identified in the proposed project plans and no HADD (section 3.1 of this report) is anticipated to occur to the fish habitat in Mullet Creek. All alternatives show a crossing of Mullet Creek using trenchless methods, negating the requirement for in-water work and disturbance within the high-water mark,
- A wetland community was identified in the study area during field investigations associated with the riparian area of Mullet Creek, west of Heritage road. No wetlands were identified on MNRF's LIO mapping;
- Any vegetation clearing should occur outside of the Breeding Bird Season to avoid contravention of the *Migratory Birds Convention Act,* and outside of the Roosting Maternity Bat season to avoid contravention of the *Endangered Species Act*. Clearing should occur between October 1st and April 1st of the calendar year;
- No Butternut or other SAR vascular plants were found to occur in the study area;
- No Aquatic Species at Risk are identified in Mullet Creek according to DFO online database;
- Barn Swallow, a Threatened species, was detected as probable breeding around the Meadowvale pumping station. As no work is proposed to this building, it is not expected any permitting would be required with respect to this species;

- Vegetation communities, identified on **Figure 2,** surrounding Mullet Creek fall within regulated area of CVC. In communication between CVC and the project team at the outset, CVC indicated these areas being of prime concern. Limiting vegetation removal and disturbance of these areas should be considered in project design.

The findings of this Existing Environmental Conditions study are the result of a background review, ecological field surveys and an analysis of data using current scientific understanding of the ecology of the area and natural heritage policy requirements. This information provides the foundation with which the detailed design can be completed in the context of existing conditions of the natural environment.

Prepared By:

Ryan Morin, B.Sc.
Ecologist

Approved By:

Dirk Janas, B.Sc.
Principal, Senior Ecologist

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LEGEND:

- Watercourse (MNRF)
- Study Area

KEY MAP

METRE SCALE: 0 10 20 40 60 80 m		NORTH:	
PRINT SCALE: 1:4000	PRINT SIZE: 11 x 17 "		
DATUM: NAD 1983	PROJECTION: UTM Zone 17		
DATE: Sep 09, 2020	DRAWN: CV	CHECKED: RM	
PREPARED BY: [redacted]			

CLIENT: Ainley Group

PROJECT: Heritage Road Watermain

TITLE: **Site Location**

Figure 1 | REVISION: 1-1 | PROJECT NO. 1705610

Document Path: G:\Shared drives\Projects 2017\17056 - Ainley Group\1705610 - Heritage Road Watermain\Mapping\Figures\5_ArcGIS\1705610_1-1_Site Location.mxd

LEGEND:

Bird Location:

- Barn Swallow
- Hairy Woodpecker
- Savannah Sparrow

- Watercourse (MNRF)
- Ecological Land Classification
- Study Area

ELC Description:

CUM1: Mineral Cultural Upland Meadow
CUT1: Mineral Cultural Upland Thicket
CUW1: Mineral Cultural Upland Woodland
FOD7-2: Fresh – Moist Ash Lowland Deciduous Forest
MAM2-2: Reed Canary Grass Meadow Marsh

METRE SCALE: 0 10 20 40 m

NORTH:

PRINT SCALE:	1:2000	PRINT SIZE:	11 x 17 "
DATUM:	NAD 1983	PROJECTION:	UTM Zone 17
DATE:	Sep 21, 2020	DRAWN: CV	CHECKED: RM

PREPARED BY: [redacted]

CLIENT: Ainley Group

PROJECT: Heritage Road Watermain

TITLE: **Existing Environmental Conditions**

Figure 2A | REVISION: 1-1 | PROJECT NO. 1705610

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LEGEND:

Bird Location:

- Barn Swallow
- Hairy Woodpecker
- Savannah Sparrow

- Watercourse (MNRF)
- Ecological Land Classification
- Study Area

ELC Description:

CUM1: Mineral Cultural Upland Meadow
CUT1: Mineral Cultural Upland Thicket
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FOD7-2: Fresh – Moist Ash Lowland Deciduous Forest
MAM2-2: Reed Canary Grass Meadow Marsh

METRE SCALE: 0 10 20 40 m

NORTH:

PRINT SCALE:	1:2000	PRINT SIZE:	11 x 17 "
DATUM:	NAD 1983	PROJECTION:	UTM Zone 17
DATE:	Sep 21, 2020	DRAWN: CV	CHECKED: RM

PREPARED BY: [redacted]

CLIENT: Ainley Group

PROJECT: Heritage Road Watermain

TITLE: **Existing Environmental Conditions**

Figure 2B | REVISION: 1-1 | PROJECT NO. 1705610

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Appendix A

Flora List

Scientific Name	Common Name	S Rank	COSEWIC Status	SARO Status	Coefficient of Conservatism	Peel Region (CVC 2002)
Aegopodium podagraria	Goutweed	SNA				
Cornus sericea	Red-osier Dogwood	S5			2	
Equisetum arvense	Field Horsetail	S5			0	
Fraxinus americana	White Ash	S4			4	
Juncus articulatus	Jointed Rush	S5			5	
Juncus effusus	Soft Rush	S5			4	
Populus tremuloides	Trembling Aspen	S5			2	
Ulmus americana	White Elm	S5			3	
Acer negundo	Manitoba Maple	S5			0	
Achillea millefolium	Common Yarrow	SNA				
Alliaria petiolata	Garlic Mustard	SNA				
Asclepias syriaca	Common Milkweed	S5			0	
Bromus inermis	Smooth Brome	SNA				
Centaurea stoebe	Spotted Knapweed	SNA				
Crataegus sp.	Hawthorn Species					
Erigeron pulchellus	Robin's-plantain Fleabane	S5			7	R2
Fraxinus pennsylvanica	Red Ash	S4			3	
Geum urbanum	Wood Avens	SNA				
Hesperis matronalis	Dame's Rocket	SNA				
Lonicera tatarica	Tatarian Honeysuckle	SNA				
Lotus corniculatus	Garden Bird's-foot Trefoil	SNA				
Parthenocissus vitacea	Thicket Creeper	S5			4	
Plantago lanceolata	English Plantain	SNA				
Plantago major	Common Plantain	SNA				
Poa pratensis	Kentucky Bluegrass	S5			0	
Quercus macrocarpa	Bur Oak	S5			5	
Rhamnus cathartica	European Buckthorn	SNA				
Rhus typhina	Staghorn Sumac	S5			1	
Rubus idaeus	Red Raspberry	S5			2	
Salix interior	Sandbar Willow	S5			1	
Stuckenia pectinata	Sago Pondweed	S5			4	U
Tanacetum vulgare	Common Tansy	SNA				
Taraxacum officinale	Common Dandelion	SNA				
Thuja occidentalis	Eastern White Cedar	S5			4	
Trifolium pratense	Red Clover	SNA				
Tussilago farfara	Coltsfoot	SNA				
Typha x glauca	(Typha angustifolia X Typha latifolia)	SNA				
Viburnum lentago	Nannyberry	S5			4	

Appendix B

Breeding Bird List

Breeding Birds of Heritage Road Watermain

Common Name	Scientific Name	Status								Locations						Observed on site visit	
		National Species at Risk COSEWICa	Species at Risk in Ontario Listing a	Provincial breeding season SRANK [b]	TRCA Status	CVC status	Regional Status	Area-sensitive (OMNR)c	Breeding Code	1	2	3	4	5	6	14-Jun-20	21-Jun-20
Great Blue Heron	*Ardea herodias*			S4	L3	yes			X						✓	1	1
Mallard	*Anas platyrhynchos*			S5	L5	yes			H	✓					✓	13	16
Killdeer	*Charadrius vociferus*			S5	L4	yes			T	✓					✓	5	8
Ring-billed Gull	*Larus delawarensis*			S5	L4	yes			X						✓	1	3
Rock Pigeon	*Columba livia*			SE	L+	yes			AE	✓						4	4
Mourning Dove	*Zenaida macroura*			S5	L5	yes			T	✓						2	4
Hairy Woodpecker	*Picoides villosus*			S5	L4	yes		A	H					✓		1	
Willow Flycatcher	*Empidonax traillii*			S5	L4	yes			T	✓				✓	✓	4	5
Tree Swallow	*Tachycineta bicolor*			S4	L4	yes			NY	✓					✓	1	2
N. Rough-winged Swallow	*Stelgidopteryx serripennis*			S4	L4	yes			H	✓						1	
Cliff Swallow	*Petrochelidon pyrrhonota*			S4	L5	yes			H	✓					✓	4	4
Barn Swallow	*Hirundo rustica*	THR	THR	S4	L4	yes			T	✓					✓	4	2
American Crow	*Corvus brachyrhynchos*			S5	L5	yes			FY	✓						3	
American Robin	*Turdus migratorius*			S5	L5	yes			NY	✓	✓		✓			16	17
Gray Catbird	*Dumetella carolinensis*			S4	L4	yes			T	✓				✓		2	2
Cedar Waxwing	*Bombycilla cedrorum*			S5	L5	yes			T	✓			✓			3	5
European Starling	*Sturnus vulgaris*			SE	L+	yes			NY	✓	✓					54	25
Warbling Vireo	*Vireo gilvus*			S5	L5	yes			T					✓		1	1
Red-eyed Vireo	*Vireo olivaceus*			S5	L4	yes			T					✓		1	1
Yellow Warbler	*Setophaga petechia*			S5	L5	yes			T				✓	✓	✓	4	4
Chipping Sparrow	*Spizella passerina*			S5	L5	yes			CF	✓						2	2
Savannah Sparrow	*Passerculus sandwichensis*			S4	L4	yes		A	X						✓		1
Song Sparrow	*Melospiza melodia*			S5	L5	yes			CF	✓			✓	✓		8	6
Red-winged Blackbird	*Agelaius phoeniceus*			S4	L5	yes			A	✓			✓		✓	15	25
Common Grackle	*Quiscalus quiscula*			S5	L5	yes			H	✓			✓	✓	✓	3	8
Brown-headed Cowbird	*Molothrus ater*			S5	L5	yes			D	✓	✓				✓	8	9
House Finch	*Carpodacus mexicanus*			SE	L+	yes			P	✓					✓		7
American Goldfinch	*Cardeulis tristis*			S5	L5	yes			A	✓	✓				✓	19	20
House Sparrow	*Passer domesticus*			SE	L+	yes			H	✓					✓		4

Field Work Conducted On:	***Date***	**Temp (C)**	**Wind speed (km/h)**	**Cloud cover (%)**		**Start time**	**End time**	**Level of effort (h:min)**	**Number of species observed**
Site visit 1	*14-Jun-20*	11	13	10		7:30	9:40	2h 10m	26
Site visit 2	*21-Jun-20*	21	6	10		5:50	7:50	2h	26

USE/DELETE SECTIONS/CITATIONS BELOW AS DESIRED/NEEDED

Location 1 -	*Lawn*
Location 2 -	*CUM1 - Mineral Cultural Meadow*
Location 3 -	*CUT1 - Mineral Cultural Thicket*
Location 4 -	*CUW1- Mineral Cultural Woodland*
Location 5 -	*FOD7-2 Fresh - Moist Lowland Ash Deciduous Forest*
Location 6 -	*Flyovers and adjacent areas*

Number of Species:	29
Number of (provincial and national) Species at Risk:	1
Number of S1 to S3 (provincially rare) Species:	0
Number of Regionally Rare Species:	1
Number of Area-sensitive Species:	2

Location 1	Lawn
Number of Species:	22
Number of (provincial and national) Species at Risk:	1
Number of S1 to S3 (provincially rare) Species:	0
Number of Regionally Rare Species:	0
Number of Area-sensitive Species:	0

Location 2 -	CUM1 - Mineral Cultural Meadow
Number of Species:	4
Number of (provincial and national) Species at Risk:	0
Number of S1 to S3 (provincially rare) Species:	0
Number of Regionally Rare Species:	0
Number of Area-sensitive Species:	0

Location 3 -	CUT1 - Mineral Cultural Thicket
Number of Species:	0
Number of (provincial and national) Species at Risk:	0
Number of S1 to S3 (provincially rare) Species:	0
Number of Regionally Rare Species:	0
Number of Area-sensitive Species:	0

Location 4 -	CUW1- Mineral Cultural Woodland
Number of Species:	6
Number of (provincial and national) Species at Risk:	0
Number of S1 to S3 (provincially rare) Species:	0
Number of Regionally Rare Species:	0
Number of Area-sensitive Species:	0

Location 5 -	FOD7-2 Fresh - Moist Lowland Ash Deciduous Forest
Number of Species:	8
Number of (provincial and national) Species at Risk:	0
Number of S1 to S3 (provincially rare) Species:	0
Number of Regionally Rare Species:	0
Number of Area-sensitive Species:	1

Location 6 -	Flyovers and adjacent areas
Number of Species:	16
Number of (provincial and national) Species at Risk:	1
Number of S1 to S3 (provincially rare) Species:	0
Number of Regionally Rare Species:	1
Number of Area-sensitive Species:	1

KEY

a COSEWIC = Committee on the Status of Endangered Wildlife in Canada

a Species at Risk in Ontario List (as applies to ESA) as designated by COSSARO (Committee on the Status of Species at Risk in Ontario)
END = Endangered, THR = Threatened, SC = Special Concern

b SRANK (from Natural Heritage Information Centre) for breeding status if:
S1 (Critically Imperiled), S2 (Imperiled),S3 (Vulnerable), S4 (Apparently Secure), S5 (Secure)
SZB (breeding migrants or vagrants) and SR (reported as breeding, but no persuasive documentation) .
SE (exotic, i.e. non-native)

c Ontario Ministry of Natural Resources (OMNR). 2000. Significant Wildlife Habitat Technical Guide (Appendix G). 151 p plus appendices.

d Toronto and Region Conservation Authority L rank:
L1 to L3 Regional species of concern from highest to lowest; L4 Urban concern; L5 Secure through region

Appendix C

Photo Log

Photograph Log

Aquatic Existing Conditions

Photograph 1. Looking Downstream, Heritage Road Crossing Primary Reach of Mullet Creek looking East (March 30, 2020)

Photograph 2. Upstream view of Mullet Creek from Heritage Road Crossing looking West (March 30, 2020)

Photograph 3. Mullet Creek Upstream, 50m Upstream of Heritage Road Crossing looking West (March 30, 2020)

Photograph 4. In-stream Vegetation and Riparian Bank of Mullet Creek Looking North (March 30, 2020)

Photograph 5. Pool on Mullet Creek, Downstream of Heritage Road Crossing (March 30, 2020)

Photograph 6. Riffle-Run Habitat on Mullet Creek 50m Downstream of Heritage Road Looking East (March 30, 2020)

Photograph 7. Ephemeral Catchment of Tributary (south) of Mullet Creek Looking West (March 30, 2020)

Photograph 8. Average Water Depths in Tributary Catchment Average 6 – 8 cm. (March 30, 2020)

Photograph 9. Pooling Water in Thickets occur 100m downstream of Tributary Looking West (March 30, 2020)

Photograph 10. Summer Conditions of Mullet Creek Upstream from Culvert Looking East (June 1, 2020)

Photograph 11. In-stream Late-spring Conditions of Mullet Creek Upstream from Culvert (June 1, 2020)

Photograph 12. In-stream Late-spring Conditions of Mullet Creek Within Culvert (June 1, 2020)

Photograph 13. Late-spring Conditions of Mullet Creek Pool Downstream of Culvert (June 1, 2020)

Photograph 14. Late-spring Conditions of Mullet Creek Pool 10m Downstream of Culvert, Beyond Pool Looking East (June 1, 2020)

Terrestrial Existing Conditions

Photograph 15. Mineral Upland Cultural Meadow (CUM1) along Heritage Road (June 1, 2020)

Photograph 16. CUM1 community along Heritage Road south of Highway 407, under Power Lines (June 1, 2020)

Photograph 17. Mineral Cultural Upland Thicket (CUT1) and CUM1 surrounding the Mullet Creek Culvert, West side (June 1, 2020)

Photograph 18. Mineral Cultural Upland Woodland (CUW1) surrounding Mullet Creek, observed from Heritage Road (June 1, 2020)

Photograph 19. Interior view of CUW1 from Mullet Creek (June 1, 2020)

Photograph 20. Interior of Fresh – Moist Ash Lowland Deciduous Forest (FOM7-2) (June 1, 2020)

Appendix D

CVC Pre-consultation Comments

It is the understanding of CVC staff that the Region of Peel has initiated a Municipal Class Environmental Assessment (EA) to consider extending a watermain outside of the existing road right-of-way on Heritage Road. This watermain will extend from the Meadowvale North Pumping Station in Mississauga to Steeles Avenue West in Brampton.

We have had an opportunity to review the Notice of Commencement and associated study area and offer the following preliminary comments for your consideration:

1. The study area is located within the Mullet Creek watershed. There is one regulated watercourse crossing of Mullet Creek which will require a permit in the future.
2. During the EA Study reference should be made to CVC's Fluvial Geomorphic Guidelines. The Guidelines and associated factsheets have been developed to standardize scour assessments in relationship to proposed infrastructure crossing a watercourse.
3. The EA Study should provide a clear representation of the location of any proposed infrastructure as compared to the erosion hazard corridor and meanderbelt width delineations (associated with the regulated watercourse). Indicate the 50-year, 75-year and 100-year erosion hazard limit in the vicinity of the proposed infrastructure. Consider the lifespan of the infrastructure and comment on the risk of being exposed in relation to the planning horizon. A geomorphologist may be required to provide input towards erosion counter measures, if required. Reference should be made to CVC's Fluvial Geomorphology Guidelines as well as the Slope Stability guidelines as necessary.
4. Any work being completed within the floodplain associated with the regulated watercourse must not create any offsite flooding impacts. During the study confirm that the proposed or that altered grades will be returned to existing conditions and therefore not have any offsite flooding impacts. CVC recommends any proposed exposed (at surface) infrastructure to be located outside of the regulatory floodplain associated with the regulated watercourse.
5. An increase in impervious area due to the proposed works being completed will require a stormwater management (SWM) investigation that adheres to all of CVC's criteria and applicable Provincial criteria. Therefore, please apply CVC's Stormwater Management Criteria for the proposed works, as applicable. Ensure this is identified and addressed within the Stormwater Management Report.
    a. The purpose of quantity control criteria is to protect downstream properties from flood increases due to upstream development. CVC expects that there be no increase in peak flows for all storm events (2-year to 100-year and Regional) in the receiving regulated watercourses in accordance with Table 3.1 of CVC's SWM Criteria document.
    b. All watercourses and waterbodies within CVC's jurisdiction are classified as requiring an Enhanced Level of Protection (80% TSS Removal). This criterion applies to the increase in impervious area along the study area.
    c. The minimum erosion control requirement for all watercourses within CVC's jurisdiction is the retention of the first 5mm of every rainfall event.
6. Based on preliminary review there are natural heritage features of concern within the project area including Mullet Creek, and associated vegetated valley and floodplain that crosses Heritage Road just south of Edgeware Rd. This watercourse contains direct fish habitat; any proposed in- or near water works will need to be assessed. There is a confirmed wetland within the Mullet Creek valley west of Heritage Road and south of Edgeware Rd. with potential for additional wetlands along the Mullet Creek Valley corridor. The Mullet Creek valley corridor in the vicinity of Heritage Road consists of woodland vegetation that is part of the Credit Valley Watershed Natural Heritage System. Impacts to natural heritage features should be avoided. Preliminary alternative

options 1 and 2 appear to result in infrastructure within regulated areas; works within regulated areas should be located outside of natural areas, where feasible. Please provide a detailed description of the works, a description of the locations of the proposed works (including access and staging areas), a description of impacts including impacts associated with staging and access, and details regarding site restoration and tree protection during the study.

Preliminary considerations for future detailed design

7. Pending the methodology of construction, a Frac-out Contingency Plan may be required specifically in relation to the crossing of Mullet Creek.
8. The proponent is responsible for the submission and ultimate implementation of a comprehensive ESC plan for each stage of construction. If the construction duration is relatively long and/or the watercourse is sensitive, multi stage construction ESC plans will be required to ensure adequate control for the entire period of work.
    a. If necessary, a flow diversion or by-pass plan may also be required.
    b. In the instances where groundwater is high and dewatering is required during construction activities, a dewatering plan will be required by a qualified person.
9. Any staging or stockpiling associated with proposed works will need to be off-site OR a minimum of 30m from Mullet Creek.
10. Please see the CVC Plant Selection Guideline for details on approved species, seed mixes and cover crops to be used in future restoration.
11. Based on the provided information there are works proposed in or near water. To protect sensitive aquatic receivers the project works must occur between July 1 – March 31 of any given year. This timing window restriction is to appear on all appropriate contract reports and drawings.
12. To avoid impacts to federally protected migratory birds, vegetation removals and/or any proposed activities within migratory bird habitat should be avoided during the primary breeding bird season (April 1 – August 31). A breeding bird timing window (April 1 – August 31) should appear on all construction drawings and reports to ensure compliance with the Migratory Birds Convention Act (MBCA 1994). Note that adherence to this timing window does not constitute clearance under and relevant legislation but is considered best practice for avoiding impacts.

Given CVC's interest staff would like to be kept informed of future meetings and proceedings through the EA process. Please forward any information or reports when available to ensure that this Authority's policy and program interests are reflected in the planning and design components for this project.