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January 17, 2022

**Delivered by Email & RESS**

Ms. Marconi, Acting Registrar  
Ontario Energy Board  
P.O. Box 2319, 27<sup>th</sup> Floor  
2300 Yonge Street  
Toronto, ON M4P 1E4

Dear Ms. Marconi:

**Re: Sun-Canadian Pipe Line Company Limited's Sections 90 and 97 Application  
for Leave to Construct  
Ontario Energy Board File No.: EB-2022-0012  
Application and Evidence**

Application

Please find attached Sun-Canadian Pipe Line Company Limited's ("**SCPL**") application and evidence in support of an application pursuant to Sections 90 and 97 of the *Ontario Energy Board Act, 1998*, an order granting leave to construct a hydrocarbon refined product pipeline to replace approximately 480 meters of existing pipeline that has been exposed at East Sixteen Mile Creek in the Town of Milton (the "**Application**").

SCPL's contacts for service of documents associated with this Application are listed at paragraph 15 of the Application.

Confidentiality Request - Personal Information

Exhibit E.1.5 – Line List contains personal information of landowners and has therefore been redacted pursuant to Rule 9A.01 of the Ontario Energy Board's ("**OEB**") Rules of Practice and Procedure<sup>1</sup> and in accordance with Section 10 of the OEB's *Practice Direction on Confidential Filings* ("**Practice Direction**").<sup>2</sup>

In keeping with the requirements of the Practice Direction, a confidential un-redacted version of Exhibit E.1.5 is filed with the Registrar only. The confidential version of the document is marked "Confidential-Personal Information" with highlighting to identify the personal information. In accordance with Section 10.1.1(b) of the Practice Direction, SCPL is providing Table 1 below

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<sup>1</sup> Ontario Energy Board – Rules of Practice and Procedure, Revised December 17, 2021, page 7.

<sup>2</sup> Ontario Energy Board - Practice Direction on Confidential Filings, Revised December 17, 2021, page 14.

which sets out for each piece of redacted personal information: (i) the specific page(s) that contain the personal information; and (ii) the basis for the personal information claim with specific reference to how the redacted information fits within the definition of personal information set out in section 2 of *Freedom of Information and Protection of Privacy Act, 1990* (“**FIPPA**”).

**Table 1 - Redacted Personal Information**

	<b>(i) Page number</b>	<b>(ii) Basis for personal information claim</b>
1.	Exhibit E.1.5, pages 1 and 2.	Redacted information contains name and mailing address of landowner. Pursuant to section 2(1)(d) of FIPPA, “personal information” means recorded information about an identifiable individual, including, the address, telephone number, fingerprints or blood type of the individual.
2.	Appendix 2, page 2.	Redacted information contains name of landowner. Pursuant to section 2(1)(d) of FIPPA, “personal information” means recorded information about an identifiable individual, including, the address, telephone number, fingerprints or blood type of the individual.

SCPL requests that the redacted information be kept confidential.

Should you have any questions about the Application, please do not hesitate to contact me.

Yours very truly,

**BORDEN LADNER GERVAIS LLP**

Per:

John Vellone

cc: Peter Martens, Sun-Canadian Pipe Line Limited



# NPS 12 East Sixteen Mile Creek Pipeline Replacement

Application for Leave to Construct  
EB-2022-0012

## **EXHIBIT A - GENERAL**

### A.1.1 ACRONYMS AND ABBREVIATIONS

Terminology used in this document is defined where it is first used. The following list will assist readers who may choose to review only portions of the document.

ac	acres
CH	Conservation Halton
CHER	Cultural heritage evaluation report
CHVI	Cultural heritage value or interest
CHL	Cultural heritage landscapes
CSA	Canadian Standards Association
ER	Environmental Report
ha	hectares
HCCC	Six Nations Haudenosaunee Confederacy Chiefs Council
HDI	Haudenosaunee Development Institute
HDD	Horizontal directional drilling
HWN	Huron-Wendat Nation
kPa	kilopascal
LTC	Leave to Construct
m	metre
MOE	Ministry of Energy
MMA	Ministry of Municipal Affairs
MECP	Ministry of Environment, Conservation and Parks
ENDM	The Ministry that was formerly the Ministry of Energy, Northern Development and Mines, which is now the MOE and MNMNRF.
MCFN	Mississaugas of the Credit First Nation
MNMNRF	Ministry of Northern Development, Mines, Natural Resources and Forestry
MNRF	The Ministry that was formerly the Ministry of Natural Resources and Forestry, which is now the MNMNRF
MOE	Ministry of Energy
MOP	Maximum operating pressure
MPa	megapascal
MHSTCI	Ministry of Heritage, Sport, Tourism, Culture Industries
NPS	Nominal Pipe Size

OEB	Ontario Energy Board
OPCC	Ontario Pipeline Coordinating Committee
psi	Pound force per square inch
ROW	Right(s)-of-way
SAR	Species at risk
SARA	<i>Species at Risk Act</i>
SCPL	Sun-Canadian Pipe Line Company Limited
SMYS	Specified minimum yield strength
SNGR	Six Nations of the Grand River
TMHC	Timmins Martelle Heritage Consultants
TSSA	Technical Standards and Safety Authority
TWS	Temporary workspace
WPS	Welding procedure specifications

## A.1.2 EXHIBIT LIST

### *Exhibit A: General*

Exhibit	Tab	Schedule	Description
A	1	1	Acronyms and abbreviations
	1	2	Exhibit list
	1	3	Application and approval requested
	1	4	Map of project
	1	5	OPCC distribution list
	1	6	List of interested parties

### *Exhibit B: Purpose, Need, Proposed Project and Timing*

Exhibit	Tab	Schedule	Description
B	1	1	Purpose, need, proposed project and timing
	1	2	Map of preferred routing

### *Exhibit C: Routing and Environmental*

Exhibit	Tab	Schedule	Description
C	1	1	Route selection
	1	2	Environmental Report Summary
	1	3	Environmental Protection Plan
	1	4	Archaeology Assessment
	1	5	Correspondence related to archaeological resources

### *Exhibit D: Project*

Exhibit	Tab	Schedule	Description
D	1	1	Introduction
	1	2	Project construction methods
	1	3	Design specifications
	1	4	Pressure testing
	1	5	Project costs (section not applicable)
	1	6	Schedule

*Exhibit E: Land Matters*

<b>Exhibit</b>	<b>Tab</b>	<b>Schedule</b>	<b>Description</b>
E	1	1	Summary of land matters
	1	2	Negotiations to date
	1	3	Land-related permits and agreements required
	1	4	Attachment 1 – Grant of Easement Pipeline (Ontario) Agreement
	1	5	Line list

*Exhibit F: Indigenous Relations*

<b>Exhibit</b>	<b>Tab</b>	<b>Schedule</b>	<b>Description</b>
F	1	1	Indigenous Consultation Summary
	1	2	Indigenous correspondence summary table

*Exhibit G: Record of Consultation - Supporting Documents*

<b>Exhibit</b>	<b>Tab</b>	<b>Schedule</b>	<b>Description</b>
G	1	1	Consultation Summary
	1	2	Ontario Energy Board correspondence summary table
	1	3	Provincial Ministries and conservation authority correspondence summary table
	1	4	Municipal correspondence summary table

*Appendices*

<b>Appendix</b>	<b>Description</b>
1	Environmental Report
2	Indigenous consultation records and supporting documentation
3	Record of consultation - supporting documents

### A.1.3 APPLICATION AND APPROVALS REQUESTED

#### *Ontario Energy Board*

**IN THE MATTER OF** the *Ontario Energy Board Act, 1998, S.O. 1998, c. 15 (Sched. B)*, as amended (the “OEB Act”);

**AND IN THE MATTER OF** an application by Sun-Canadian Pipe Line Company Limited under section 90(1) of the OEB Act for an order granting leave to replace an approximately 480 metre portion of existing privately owned NPS12 pipeline that has been exposed at East Sixteen Mile Creek in the Town of Milton;

**AND IN THE MATTER OF** an application by Sun-Canadian Pipe Line Company Limited under section 97 of the OEB Act for approval of the proposed form of easement agreements included herein.

#### **LEAVE TO CONSTRUCT APPLICATION: NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT**

1. The Applicant, Sun-Canadian Pipe Line Company Limited (“Sun-Canadian”) is a corporate body duly formed pursuant to the laws of Canada having an office in the City of Hamilton. Sun-Canadian was founded in 1953 to safely transport refined petroleum products for its owners from refineries in the Sarnia area to marketing plants in London, Hamilton, and the Toronto area in an environmentally sound and efficient manner.
2. Since its construction, Sun-Canadian has safely operated the NPS12 Pipeline for 48 years. The NPS12 Pipeline is an important infrastructure that transports hydrocarbon refined product (“LVP”) from Sarnia to London, Hamilton, and Toronto. To support the continued safe, reliable, and environmentally responsible transportation of LVP, Sun-Canadian is planning to construct and operate a new segment of pipeline to replace the portion of line that has been exposed in the East Sixteen Mile Creek.
3. Sun-Canadian hereby applies (“Application”) to the Ontario Energy Board (“OEB”), pursuant to section 90(1) of the OEB Act for Leave to Construct (“LTC”) the NPS 12 East Sixteen Mile Creek Pipeline Replacement (the “Project”): specifically the Project involves the replacement of approximately 480 metres (m) of existing pipeline in the vicinity of the East Sixteen Mile Creek crossing with a new section of pipe – to be installed at a depth that will eliminate three existing areas of shallow depth of cover. Once the new segment of pipeline is installed, the existing segment will be decommissioned by cutting out / isolating

it from the new pipeline alignment, removing any remaining product within the pipeline segment, capping of the segment, and filling it with concrete.

4. The new pipeline will generally follow the alignment of the existing NPS12 pipeline, to the extent practical, and in consideration of the existing Sun-Canadian easement, adjacent land uses, and environmental and social constraints.
5. New easement will be required for a portion of the replacement pipeline segment. The new easement will be approximately 300 m in length and will affect two properties on the west side of Trafalgar Road. The owners of the two affected properties are the same owners who have the existing pipeline on their property. Sun-Canadian will secure temporary workspaces via existing easement agreements with neighbouring parties. No new landowners will be affected.
6. The existing pipeline occupies a Right-of-Way ("RoW") that is shared with other utilities owners and operators. A watermain, owned by Halton Region, an Enbridge Gas natural gas pipeline, and Milton Power lines are situated in the RoW. These utilities will continue to operate without disruption and mitigation measures will be applied to limit potential impacts during construction.
7. Pending LTC approval, receipt of permits, agreements, and other necessary approvals, construction is planned to occur during the Summer and Fall of 2022. The purpose, need, and timing of the Project is described in greater detail in Exhibit B.1.1. A map identifying the approximate location of the replacement pipeline segment is included as Exhibit B.1.2 of this Application.
8. Through the completion of an Environmental Report (ER), Sun-Canadian has planned the Project pursuant to the OEB's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016) ("Environmental Guidelines"). A copy of the ER is attached as Appendix 1 of the Application. The principal objective of the ER was to identify an environmentally preferred route and outline various environmental mitigation and protection measures for the construction and operation of the Project while meeting the intent of the OEB's Environmental Guidelines.
9. The route selection process, documented within the ER, was undertaken in accordance with the OEB Environmental Guidelines, which identifies the environmental and socio-economic features, and the routing principles, to be considered. The location of the replacement pipeline segment was determined by considering the confines of available space and the tie-in locations to the existing pipeline. Routing also considered socio-economic constraints,



environmental considerations, and constructability while utilizing the most reasonably direct route. Further discussion on route selection is included in Exhibit B.1.1 of the Application.

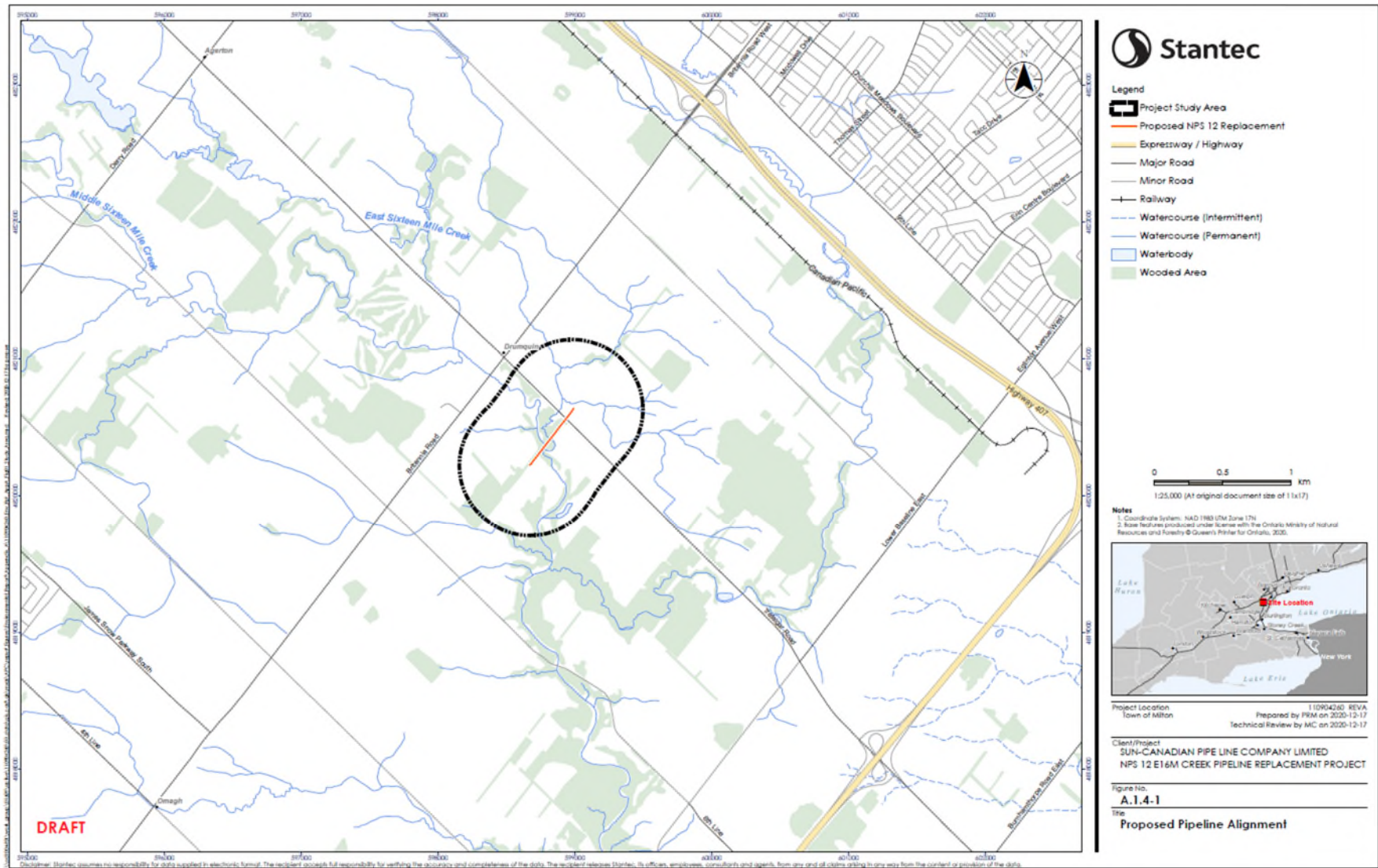
10. Sun-Canadian recognizes the importance of consultation and engagement and that it is an essential requirement of the OEB Environmental Guidelines. Sun-Canadian identified interested and potentially affected parties and informed them about the Project, solicited information about their values and local environmental and socio-economic circumstances, and received advice about key Project decisions, before those decisions were finalized. Exhibit A.1.5 lists the Ontario Pipeline Coordinating Committee (“OPCC”) members, while Exhibit A.1.6 lists interested parties. Exhibit F outlines the engagement and consultation activities and plans with Indigenous communities. Exhibit G outlines the engagement and consultation activities with the public, municipalities and agencies. Exhibit G is comprised of the Record of Consultation and supporting documents, which includes a record of the consultation log and detailed supporting documents.
11. With respect to Indigenous consultation, the Ministry of Energy, Northern Development and Mines (ENDM), now the Ministry of Energy (MOE), Indigenous Energy Policy team provided a letter on July 28, 2020, that outlined the Crown’s direction on the duty to consult. ENDM delegated the procedural aspects of the Crown’s duty to consult to Sun-Canadian. The letter included a list of Indigenous communities that should be consulted on the basis that they may be adversely affected by the Project, as follows:
  - Huron-Wendat Nation (Huron Wendat);
    - The ENDM Delegation Letter noted that interests are specific to archaeological resources.
  - Mississaugas of the Credit First Nation (“MCFN”); and
  - Six Nations of the Grand River (SNGR);
    - The ENDM Delegation Letter noted that consultation is required with both the Six Nations Elected Council and Haudenosaunee Confederacy Chiefs Council (“HCCC”), and all correspondence with the HCCC should copy the Haudenosaunee Development Institute (“HDI”).
12. Exhibit D includes details on project design specifications, construction methodologies, pressure testing procedures and key milestones.

13. Exhibit E includes a summary of land matters, negotiations to-date and a description of land related permits and agreements required and copies of draft agreements to be offered to affected landowners, where easements are required (Sun-Canadian's Grant of Easement Pipeline Agreement is attached as Exhibit E.1.4). A redacted landowner list is provided as Exhibit E.1.5, which describes the parcels, a copy of which will be filed in accordance with the OEB's rules on confidentiality.
14. Sun-Canadian is a non-rate regulated private enterprise and the Project is financed by Sun-Canadian. There are no cost impacts on ratepayers. Therefore, disclosure of Project costs and an economic feasibility assessment are not applicable. No supporting information is required relating to project costs and economic feasibility assessment.
15. This approach is supported by the OEB's recent Decision and Order dated March 12, 2020 in EB-2019-0007 which at page 5 notes:
16. "In this case, the OEB's review does not include consideration of the Project cost and economics as Imperial Oil is not a rate-regulated entity, and the costs of the Project will therefore not be passed on to ratepayers through any OEB-approved rates."
17. Sun-Canadian requests that this Application proceed by way of a written hearing in English.
18. Sun-Canadian requests that the OEB make the following orders:
  - (1) an order pursuant to section 90 of the *Ontario Energy Board Act* granting Leave to Construct the Project; and
  - (2) an order pursuant to section 97 of the *Ontario Energy Board Act* approving the proposed grant of easement pipeline agreement found in Exhibit E.1.4.
19. Sun-Canadian requests that copies of all documents filed with the Board in connection with this proceeding be provided to Sun-Canadian's regulatory lead and legal counsel as follows:
  - a. Applicant: Sun-Canadian Pipe Line Company Limited
  - b. Address: 830 Highway 6 North, Flamborough, ON L0R 2H0
  - c. Contact: Peter Martens

- d. Phone: 289-230-4350
- e. Email: pmartens@sun-canadian.com
- f. Applicant's counsel: Borden Ladner Gervais LLP
- g. Address: Bay Adelaide Centre, East Tower, 22 Adelaide Street West, Suite 3400, Toronto, ON M5H 4E3
- h. Contact: John A.D. Vellone
- i. Phone: 416-367-6730
- j. Email: jvellone@blg.com

## A.1.4 MAP OF PROJECT

Figure A.1.4-1: Proposed Pipeline Alignment



## A.1.5 OPCC DISTRIBUTION LIST

Table A.1.5-1: OPCC Distribution List

First Name	Last Name	Title	Representing	Address	Town	Province	Postal Code	Phone	Email
Zora	Crnojacki		Ontario Energy Board	PO Box 2319, 2300 Yonge Street, 26th Floor	Toronto	ON	M4P 1E4	416-440-8104	<a href="mailto:zora.crnojacki@oeb.ca">zora.crnojacki@oeb.ca</a>
Helma	Geerts	Land Use Policy & Stewardship	Ministry of Agriculture, Food and Rural Affairs	1 Stone Road West, 3rd Floor SE	Guelp h	ON	N1G 4Y2	519-546-7423	<a href="mailto:helma.geerts@ontario.ca">helma.geerts@ontario.ca</a>
Dan	Minkin	Heritage Planner	Ministry of Heritage, Sport, Tourism and Culture Industries	401 Bay Street	Toronto	ON	M7A 0A7	416-314-7147	<a href="mailto:dan.minkin@ontario.ca">dan.minkin@ontario.ca</a>
Tony	Difabio		Ministry of Transportation	301 St. Paul Street, 2nd Floor	St. Catharines	ON	L3R 7R4	905-704-2656	<a href="mailto:tony.difabio@ontario.ca">tony.difabio@ontario.ca</a>
Kouroush	Manouchehri		Technical Standards and Safety Authority	345 Carlingview Drive	Toronto	ON	M9W 6N9	416-734-3539	<a href="mailto:kmanouchehri@tssa.org">kmanouchehri@tssa.org</a>
Sally	Renwick	Team Lead, Environmental Planning, Land Use and Environmental Planning Section	Ministry of Natural Resources and Forestry	300 Water Street	Peterborough	ON	K9J 8M5	705-755-5195	<a href="mailto:sally.renwick@ontario.ca">sally.renwick@ontario.ca</a>
Scott	Oliver	Western Municipal Services Office	Ministry of Municipal Affairs and Housing	659 Exeter Rd, 2nd Floor	London	ON	N6E 1L3	519-873-4033	<a href="mailto:scott.oliver@ontario.ca">scott.oliver@ontario.ca</a>
			Ministry of Environment, Conservation and Parks, Central Region	Place Nouveau 9th Flr, 5775 Yonge St	Toronto	ON	M2M 4J1		<a href="mailto:eanotification.cregion@ontario.ca">eanotification.cregion@ontario.ca</a>
Cory	Ostrowka	Environmental Specialist, Environmental Management	Infrastructure Ontario	1 Dundas Street West, Suite 2000	Toronto	ON	M5G 2L5	416-571-8294	<a href="mailto:cory.ostrowka@infrastructureontario.ca">cory.ostrowka@infrastructureontario.ca</a>
Jason	McCullough	Senior Advisor, Indigenous Energy Policy Unit	Ministry of Energy, Northern Development and Mines	6th Floor, 77 Grenville Street	Toronto	ON	M7A 2C1	416-526-2963	<a href="mailto:jason.mccullough@ontario.ca">jason.mccullough@ontario.ca</a>
Debbie	Scanlon	Manager Approvals Section	Ministry of Environment, Conservation and Parks	40 St. Clair Av. W, 14th Floor	Toronto	ON	M4V 1M2	647-627-5917	<a href="mailto:sourceprotection@ontario.ca">sourceprotection@ontario.ca</a>

## A.1.6. LIST OF INTERESTED PARTIES

1. In addition to OPCC members, Sun-Canadian identified key municipal and provincial staff, Indigenous communities and local organizations that may have an interest in the Project. The identification of interested and potentially affected parties was undertaken using a variety of sources, including the Ministry of the Environment, Conservation and Parks (MECP)'s Environmental Assessment Government Review Team Master Distribution List. Indigenous communities were identified through consultation with ENDM (now MOE). Directly affected and adjacent landowners were also consulted. A list of directly affected and adjacent landowners can be found in Exhibit E.1.5.

**Table A.1.6-1: Additional Provincial, Municipal, Other Agency and Indigenous Community Contacts**

First Name	Last Name	Title	Representing	Phone	Email
Brad	Allen	District Manager, Aurora District	Ministry of Natural Resources and Forestry	905-713-7372	<a href="mailto:brad.allan@ontario.ca">brad.allan@ontario.ca</a>
Maria	Jawaid	District Planner, Aurora District	Ministry of Natural Resources and Forestry	907-713-7367	<a href="mailto:maria.jawaid@ontario.ca">maria.jawaid@ontario.ca</a>
James	Hamilton	Manager, Heritage Planning Unit	Ministry of Heritage, Sport, Tourism and Culture Industries	416-212-7505	<a href="mailto:james.hamilton@ontario.ca">james.hamilton@ontario.ca</a>
Ben	Davis	Regulations Officer	Conservation Halton	905-336-1158 x 2278	<a href="mailto:bdavis@hrca.on.ca">bdavis@hrca.on.ca</a>
Anneleis	Eckert	Rural Planner	Ministry of Agriculture, Food and Rural Affairs	519-827-6040	<a href="mailto:anneleis.eckert@ontario.ca">anneleis.eckert@ontario.ca</a>
Barbara	Koopmans	Commissioner, Planning & Development	Town of Milton	905-878-7252 x 2398	<a href="mailto:planning@milton.ca">planning@milton.ca</a>
Troy	McHarg	Commissioner, Corporate Services/Town Clerk	Town of Milton	905-878-7252	<a href="mailto:towncler@milton.ca">towncler@milton.ca</a>
Shawn	Clelow	Infrastructure & Right of Way Technologist	Town of Milton	905-878-7252	<a href="mailto:shawn.clelow@milton.ca">shawn.clelow@milton.ca</a>
Graham	Milne	Regional Clerk	Halton Region	905-825-6000 x 7110	<a href="mailto:graham.milne@halton.ca">graham.milne@halton.ca</a>
Robert	Clackett	Senior Planner	Halton Region	905-825-600 x 7554	<a href="mailto:robert.clackett@halton.ca">robert.clackett@halton.ca</a>
Diana	Jiona	Manager, Infrastructure	Halton Region	905-878-7252 x 2513	<a href="mailto:diana.jiona@milton.ca">diana.jiona@milton.ca</a>

		e & Right of Way			
Wayne	Hill	Monitoring Program Coordinator	Haudenosaunee Development Institute		<a href="mailto:tworowarchaeology@gmail.com">tworowarchaeology@gmail.com</a>
Janice	Williams	N/A	Haudenosaunee Development Institute		<a href="mailto:janicewilliams@hdi.land">janicewilliams@hdi.land</a>
Janice	Bomberry	N/A	Haudenosaunee Development Institute		<a href="mailto:janicehdi@gmail.com">janicehdi@gmail.com</a> ; <a href="mailto:shannonhill@hdi.land">shannonhill@hdi.land</a>
Raechelle	Williams	Environmental Supervisor	Haudenosaunee Development Institute	519-445-4222	
Lonny	Bomberry	Lands and Resources Director	Six Nations of the Grand River	519-753-0665	<a href="mailto:lonnybomberry@sixnations.ca">lonnybomberry@sixnations.ca</a>
Tanya	Hill-Montour	Archaeology Supervisor	Six Nations of the Grand River	226-388-0665	<a href="mailto:tanyahill-montour@sixnations.ca">tanyahill-montour@sixnations.ca</a>
Adam	LaForme	Archaeological Operations Supervisor	Mississaugas of the Credit First Nation		<a href="mailto:Adam.LaForme@mncfn.ca">Adam.LaForme@mncfn.ca</a>
Mark	LaForme	Director, Director of Consultation & Accommodation	Mississaugas of the Credit First Nation		<a href="mailto:Mark.Laforme@mncfn.ca">Mark.Laforme@mncfn.ca</a>
Erika	Johannsen	Field Archaeologist	Mississaugas of the Credit First Nation	905-870-5844	
Maxime	Picard	Project Coordinator	Huron Wendat Nation	418-843-3767 x2105	<a href="mailto:maxime.picard@cnhw.qc.ca">maxime.picard@cnhw.qc.ca</a>

## **EXHIBIT B - PURPOSE, NEED, PROPOSED PROJECT AND TIMING**



## **B.1.1 PURPOSE, NEED, PROPOSED PROJECT, AND TIMING**

### *Purpose and Need for Proposed Project*

1. Sun-Canadian's NPS12 Pipeline provides an important connection supplying LVP product from Sarnia to London, Hamilton and Toronto. To support continued safe and reliable transportation of product and operation of the NPS12 Pipeline, Sun-Canadian is planning to replace approximately 480m of the existing pipeline in the vicinity of the East Sixteen Mile Creek with a new section of pipe, which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Replacement of the pipeline segment will maintain the continued reliable supply of fuel to the Greater Toronto and Hamilton Area in a safe and environmentally responsible manner.
2. Exhibit B.1.2-1 shows the existing Sun-Canadian NPS network in Ontario.
3. Sun-Canadian's 2019 annual water survey identified three locations along the pipeline with low or no cover. In the spring of 2019, Sun-Canadian undertook emergency mitigation measures including in-water pipe supports and protective armouring to temporarily stabilize and protect the infrastructure. Alternatives to replacing the pipeline in its current configuration were not considered preferred due to technical feasibility, socio-economic, and environmental impacts.
4. The NPS12 Pipeline from Waterdown to Toronto has operated safely since it was constructed in 1973. Sun-Canadian attributes this to its rigorous safety and integrity program that consists of regular in-line smart tool inspections, focused in-field examination/repair activities, extensive damage prevention measures, and an effective landowner engagement process.

### *Proposed Project*

5. The proposed Project involves installation of approximately 480m of pipeline in the vicinity of the East Sixteen Mile Creek crossing.
6. To reduce impacts to adjacent landowners and the environment, the replacement pipeline segment is located parallel to the existing pipeline alignment. The replacement pipeline segment is predominantly within the existing ROW, approximately 300m of new easement is required. Sun-Canadian is working with directly affected landowners to obtain the necessary agreements.
7. A cathodic protection system consisting of rectifier will be installed to protect the replacement pipeline segment from corrosion. Additional above-ground facilities along the pipeline include post-mounted signs identifying the pipeline, aerial patrol signs for fixed wing patrols, fence stiles, foot bridges for ditch crossings (if applicable), and "test boxes" located along fence lines at roads that are used to assess the adequacy of the corrosion protection system.
8. The replacement pipeline segment will be constructed using Horizontal Directional

Drilling (HDD). HDD is a technique whereby a tunnel is drilled with electronically guided drilling pipe that is lubricated with a drilling fluid. The pipeline is then constructed on the surface and pulled through the tunnel. HDD is a less intrusive construction method than traditional open cut crossings of a watercourse.

9. After the replacement pipeline segment is installed, the existing segment of NPS12 pipeline that is no longer required will be decommissioned. This will consist of the pipe being purged of product, capped, filled with concrete, deactivated and left in-place, following all relevant safety and technical standards.
10. A map of the Project in relation to the Sun-Canadian network within Ontario is shown on Exhibit E.1.1-1.

#### *Project Timing*

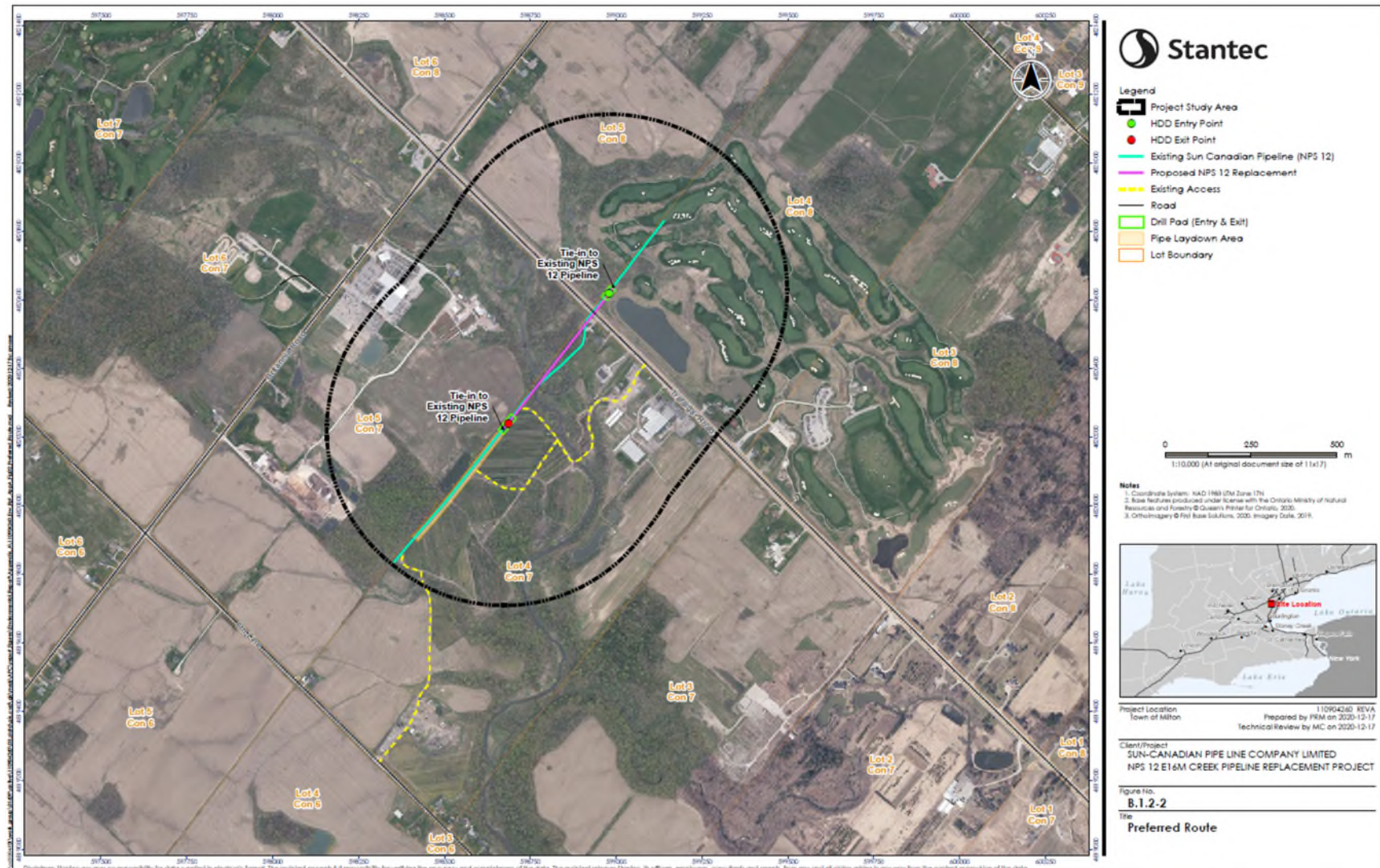
11. Subject to regulatory and permitting approvals, the construction of the Project is planned to occur in 2022. Once constructed, the pipeline is expected to continue to operate for 50 years. A Project construction schedule is provided as Exhibit D.1.6.

## B.1.2 MAP OF PREFERRED ROUTING

Figure B.1.2-1: Sun-Canadian Pipeline Network



Figure B.1.2-2: Preferred Route



## **EXHIBIT C - ROUTING AND ENVIRONMENTAL**



### C.1.1 ROUTE SELECTION

1. The selected route presents the least potential for adverse environmental and socio-economic impacts.
2. The route evaluation was supported by a review of available background information, desktop studies, environmental, and socio-economic field surveys, consultation with regulators and other stakeholders, and constructability reviews.
3. The route selection process was supported by a review of available background information, including requests to several agencies and stakeholders to assist with identifying environmental features, constraints, the potential for presences of Species at Risk (SAR) and their habitat. The results of this data collection are visually summarized within the Existing Conditions Figures within Appendix C of the ER **Error! Reference source not found.**(Appendix 1) The Preferred Route was circulated to agencies and stakeholders for review, no comments were received.
4. Alternate construction methods were considered for the East Sixteen Mile Creek crossing:
  - a. Open cut crossing was less desirable than HDD as it would require physical disturbance to the watercourse and vegetation clearing on and adjacent to the watercourse banks. Additionally, there would be potential disturbance and impacts to aquatic SAR within the watercourse. HDD avoids impacts to Trafalgar Road, a regional arterial roadway. An open cut crossing would result in additional disturbance to the property and residence immediately east of the watercourse associated with construction equipment access requirements, construction techniques and engineering requirements.
  - b. An alternative HDD entry pit location was considered between Trafalgar Road and East Sixteen Mile Creek. This alternative would impact the residence and property immediately east of East Sixteen Mile Creek due to construction equipment access requirements, construction techniques and engineering requirements.
5. HDD reduces potential environmental impacts, locating the HDD entry pit east of Trafalgar Road eliminates socio-economic impacts to the residence west of Trafalgar Road.
6. The Preferred Route may be subject to minor adjustments as the Project progresses through detail design, supplemental studies (including environmental studies) and site-specific requests from landowners and agencies. As identified in Section 3.6 of the ER (Appendix 1) the following key inputs will be considered in the detailed design:

- The applicable fish timing window guidelines for any in-water works will be followed, as required by the MNDMNRF (formerly MNRF).
- A permit under O. Reg 162/06 will be required from Conservation Halton (CH) and necessary design modifications will be incorporated.

In general, this detailed design exercise will seek to avoid sensitive natural features to the extent practicable while considering utilities and infrastructure.

### C.1.2 ENVIRONMENTAL REPORT SUMMARY

1. The ER fulfills the requirements of the OEB's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016). The ER is a component of the LTC application for the Project.

The ER describes the actions taken to identify an environmentally preferred route and to outline various environmental mitigation and protection measures for the construction and operation of the Project. The ER has three main phases:

- Phase 1 – Identification of Project Study Area and Preferred Route

This phase defined the study area, determined routing parameters and routing objectives, and identified environmental and socio-economic opportunities and constraints. This information and criteria were then used to evaluate potential alignments through a detailed review of available literature, mapping, and digital data, as well as engineering factors and constructability. The product of this phase was the determination of the Preferred Route.

- Phase 2 – Gather Information and Consultation

During this phase environmental and socio-economic background data relevant to the study area was confirmed and further supported through information requests to several agencies and stakeholders to assist with identifying environmental features, constraints, the potential for presence of Species at Risk (SAR) and their habitat. This data was used to develop mitigation and protective measures based on predicted effects and potential impacts.

Feedback on the Project was also sought through the issuance of public notices and targeted letters to agencies, municipal representatives, Indigenous communities, landowners, and other stakeholders.

- Phase 3- Environmental Report

During this phase potential environmental and socio-economic impacts and cumulative effects that would result from the Project were identified and mitigation and protection measures to reduce these impacts were determined. Mitigation and protection measures included the identification of supplemental studies, monitoring and contingency plans to be prepared and implemented.



### **C.1.3 ENVIRONMENTAL PROTECTION PLAN**

1. A Project specific Environmental Protection Plan (EPP) along with several management and contingency plans will be developed through the detailed design process, prior to construction. The EPP will outline the required environmental protection measures and commitments to avoid or reduce potential effects on the environment as a result of the Project. The EPP builds on the mitigation measures monitoring and contingency plans identified within the ER. It will provide the overarching structure upon which environmental management will be completed during construction by identifying environmental requirements, compliance procedures, roles and responsibilities, training procedures, inspection and reporting structures, and other processes and procedures for environmental management.
2. The EPP is a dynamic document that will be progressively developed as the Project moves through the design, permitting, and construction phases.
3. The EPP will include several Project specific management plans that will be topic specific to provide clear and transparent guidance regarding permit approval terms and conditions, other regulatory requirements, and commitments made as part of the ER.

#### C.1.4 ARCHAEOLOGY ASSESSMENT

1. A Stage 1 archaeological assessment (AA) was completed to evaluate the archaeological potential of the Preferred Route. The AA was completed in accordance with the MHSTCI's *Standards and Guidelines for Consultant Archaeologists*. The Stage 1 AA included a background review of current land use, historic and modern mapping, past settlement history for the area and a consideration of topographic and physiographic features, soils, and drainage. A site visit was also conducted on November 19, 2020, to document the current conditions of the area.
2. The Stage 1 AA concluded that the majority of the study area has archaeological potential and that further stages of AA's be completed (e.g. Stage 2) in accordance with MHSTCI's *Standards and Guidelines for Consultant Archaeologist* to provide for the assessment and mitigation of identified archaeological resources, if any are found.
3. The Stage 1 AA Report (prepared by Timmins Martelle under PIF# P324-0571-2020) was submitted to MHSTCI on January 7, 2021 and entered into the Ontario Public Register on January 20, 2021. The Stage 1 AA found that further archaeological work would be required. The Huron-Wendat, Six Nations, MCFN, and HDI were involved in the Stage 1 assessment and had an opportunity to review the report prior to MHSTCI submission. There were no edits of the report requested by any of the Indigenous communities. The Stage 1 AA can be found in Appendix E of the ER (Appendix 1).
4. The Stage 2 AA Report (prepared by Timmins Martelle under PIF# P324-0576-2020) was submitted to MHSTCI on July 16, 2021 and entered into the Ontario Public Register on July 16, 2021. The Stage 2 AA found that no further work is recommended. The Huron-Wendat, Six Nations, MCFN, and HDI were involved in the Stage 2 assessment and had an opportunity to review the report prior to MHSTCI submission. There were no edits of the report requested by any of the Indigenous communities. The Stage 2 AA can be found in Appendix E of the ER (Appendix 1).
5. The Huron-Wendat, Six Nations, MCFN and HDI participated in the Stage 2 AA field program.

## C.1.5 CORRESPONDENCE RELATED TO ARCHAEOLOGICAL RESOURCES

A summary of key correspondence with MHSTCI and Indigenous communities related to archaeological resources is provided in Table C.1.5-1. Additional information on consultation is included in Appendix B of the ER (Appendix 1).

**Table C.1.5-1: Archaeological Resource Correspondence**

Date	Party	Description	Comment
August 12, 2020	Haudenosaunee Confederacy Chiefs Council (HCCC)	Notice of Commencement	Sun-Canadian provided Notice of Commencement
August 12, 2020	Huron Wendat Nation (HWN)	Notice of Commencement	Sun-Canadian provided Notice of Commencement
August 12, 2020	Mississauga of the Credit First Nation (MCFN)	Notice of Commencement	Sun-Canadian provided Notice of Commencement
August 12, 2020	Six Nations of the Grand River (SNGR) Elected Council	Notice of Commencement	Sun-Canadian provided Notice of Commencement
August 21, 2020	MHSTCI	Notice of Commencement	Sun-Canadian provided Notice of Commencement
September 8, 2020	MHSTCI	Response to Notice of Commencement	MHSTCI provided a response to the Notice of Commencement outlining MHSTCI interests and processes as it relates to archaeological resources, including the completion of archaeological assessments
September 9, 2020	HWN	Virtual Meeting	Discussed inclusion of community members in archaeological assessments
September 22, 2020	SNGR	Virtual Meeting	Discussed inclusion of community members in archaeological assessments
October 5, 2020	MCFN	Virtual Meeting	Discussed inclusion of community members in archaeological assessments
November 13, 2020	HDI	Email	Timmins Martelle Heritage Consultants (TMHC) reached out to HDI concerning the project and participation in the Stage 1 archaeological assessment
November 13, 2020	HWN	Email	TMHC reached out to HWN concerning the project and participation in the Stage 1 archaeological assessment
November 13, 2020	SNGR	Email	TMHC reached out to SNGR concerning the project and participation in the Stage 1 archaeological assessment
November 13, 2020	MCFN	Email	TMHC reached out to MCFN concerning the project and participation in the Stage 1 archaeological assessment
December 8, 2020	HDI	Email	TMHC provided HDI a copy of the draft Stage 1 report for review

December 8, 2020	HWN	Email	TMHC provided HWN a copy of the draft Stage 1 report for review
December 8, 2020	SNGR	Email	TMHC provided SNGR a copy of the draft Stage 1 report for review
December 8, 2020	MCFN	Email	TMHC provided MCFN a copy of the draft Stage 1 report for review
December 15, 2020	SNGR	Email	SNGR confirmed there were no requested edits to the Stage 1 report
December 29, 2020	HWN	Email	HWN confirmed there were no requested edits to the Stage 1 report
January 6, 2021	HDI	Phone call	HDI provided TMHC verbal confirmation that there are no additional comments following their review of the Stage 1 report
January 6, 2021	MCFN	Email	MCFN confirmed there were no requested edits to the Stage 1 report
May 5, 2021	HDI	Email	TMHC reached out to HDI concerning the project and participation in the Stage 2 archaeological assessment
May 5, 2021	HWN	Email	TMHC reached out to HWN concerning the project and participation in the Stage 2 archaeological assessment
May 5, 2021	SNGR	Email	TMHC reached out to SNGR concerning the project and participation in the Stage 2 archaeological assessment
May 5, 2021	MCFN	Email	TMHC reached out to MCFN concerning the project and participation in the Stage 2 archaeological assessment
May 31, June 3 and 4, 2021	HDI	In field discussion	Discussions between TMHC field director and HDI representative about the fieldwork, findings and recommendations. No concerns were raised.
May 31, June 3 and 4, 2021	SNGR	In field discussion	Discussions between TMHC field director and SNGR representative about the fieldwork, findings and recommendations. No concerns were raised.
May 31, June 3 and 4, 2021	HWN	In field discussion	Discussions between TMHC field director and HWN representative about the fieldwork, findings and recommendations. No concerns were raised.
June 18, 2021	HDI	Email	TMHC provided HDI a copy of the draft Stage 2 report for review
June 18, 2021	HWN	Email	TMHC provided HWN a copy of the draft Stage 2 report for review
June 18, 2021	SNGR	Email	TMHC provided SNGR a copy of the draft Stage 2 report for review
June 18, 2021	MCFN	Email	TMHC provided MCFN a copy of the draft Stage 2 report for review
June 27, 2021	SNGR	Email	SNGR confirmed there were no requested edits to the Stage 2 report
June 28, 2021	MCFN	Email	MCFN confirmed there were no requested edits to the Stage 2 report

July 13, 2021	HDI	Phone call	HDI provided TMHC verbal confirmation that there are no additional comments following their review of the Stage 2 report
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## **EXHIBIT D - PROJECT**

### **D.1.1 INTRODUCTION**

1. This section describes the proposed Project construction methods, engineering design specifications, and testing methodology and procedures. The proposed Project schedule, including key milestone dates, are also included as evidence to this Application. Refer to Exhibit D.1.6 for the anticipated Project schedule and milestones.

## D.1.2 PROJECT CONSTRUCTION METHODS

The pipeline construction process includes various activities as described below:

1. **Site Preparation and Clearing:** The first activity is typically the survey and staking, which delineate the boundaries of the ROW and temporary work areas. Next, the RoW and temporary work areas are cleared of brush and trees where required. Safety fence is installed at the edge of the construction RoW where public safety considerations are required, and aspects of the traffic management plan are implemented (i.e., signs, vehicle access). Silt fence is installed at required locations.
2. **Grading and Stripping:** The RoW is graded where required to allow for access by construction equipment. At this stage, the topsoil (on agricultural lands) or the duff layer (on natural lands) is stripped by bulldozers and graders then segregated so it will not be mixed with the subsoil later removed from the HDD entry and exit pits. Existing landscaping is also removed (if required), and dewatering undertaken, where necessary.
3. **Stringing:** Stringing is the process where pipeline sections are delivered to the RoW and placed on wood skids at the pipe laydown area.
4. **Pipe Fabrication:** The pipeline is welded into a continuous length. The pipe welds are non-destructively tested (e.g. x-ray) and coated.
5. **Horizontal Directional Drilling (HDD):** The drill pad set up area is graded; Temporary Work Space is prepared for stringing of the drill pull section and entry and exit pits are excavated. The pipeline is then installed utilizing HDD.
6. **Backfilling:** During backfilling the originally excavated subsoil is placed over the pipe in the entry and exit pits. The pipe will be sand-padded to protect the coating. Topsoil is then replaced.
7. **Hydrostatic Testing:** The pipeline is pressure tested by filling the pipe with water and holding it at a high pressure for a set period of time, typically 8 hours. Water is typically drawn from nearby source if available. Municipal water may also be used for hydrostatic testing. The suitable water source is determined based on discussions with the appropriate authorities. Upon completion of the hydrostatic testing, the pipeline is drained and dried, purged of air and then put into service.
8. **Clean-Up and Restoration:** Clean-up is the restoration of the RoW and other work areas. On agricultural land this may require decompaction of the subsoil to maintain productivity. In natural areas, clean-up restores the environment including re-seeding of the ROW and returning the topography after grading. Any erosion and sediment controls installed during construction are also removed. Clean-up will also restore landscaping, laneways and driveways



### D.1.3 DESIGN SPECIFICATIONS

Table D.1.3-1 provides the existing pipe specifications at East 16 Mile Creek Crossing and Table D.1.3-2 provides the design specifications for the pipe, fittings and associated equipment used to construct the Project and are in compliance with CSA Z662-19.

**Table D.1.3-1: Existing Pipe Specifications at East 16 Mile Creek Crossing**

Name	From	To	Year Built	O.D. (mm)	W.T (mm)	Type and Grade	SMYS (mpA)	Coating	Product	MOP (kPag)
SCPL NPS 12	Waterdown	North York	1973	323.9 [NPS12]	6.351 [0.25 in.]	ERW API 5L X52	359 [52 ksi]	Extruded Polyethylene (YJ®)	LVP (Refined Product)	9,930 [1,440 psig]

**Note:**

1. As per SCPL In-line Inspection (ILI) data.

**Table D.1.3-2: Replacement Pipe Specifications**

Description	O.D. (mm)	W.T. (mm)	Grade & Type	External Coating
NPS 12 Line Pipe Replacement	323.9 [NPS12]	12.72 [0.500 in.]	CSA Z245.1 Gr. 448 Cat. II M20C ERW/SEAMLESS1	Dual Layer Abrasion Resistant Fusion Bonded Epoxy (FBE) CSA Z245.20-18 System 2B3
NPS 12 Transition Pieces	323.9 [NPS12]	12.72 [0.500 in.]	CSA Z245.1 Gr. 359 Cat. II M20C ERW/SEAMLESS1	Two Part Liquid Epoxy CSA Z245.30-18 System FC1/FC33
NPS 12 Induction Bends	323.9 [NPS12]	12.72 [0.500 in.]	CSA Z245.1 Gr. 448 Cat. II M20C ERW/SEAMLESS1	Two Part Liquid Epoxy CSA Z245.30-18 System FC1/FC3

**Notes:**

1. Line pipe specifications verified by Combined Stress Calculations and stress analysis.
2. Refer to 110904260PL-CAL0002 R0 for CSA Combined Stress Calculations.
3. Coating to meet requirements from CSA Z662-19, CSA Z245.20-18, CSA Z245.30-18.

**DESIGN PRESSURE (MOP):** For SCPL NPS 12: 9,930 kPag (1,440 psig)

**DESIGN TEMPERATURE CONDITIONS:**

- Installation: > 0°C
- Pressure Test: > 2°C
- Start-Up: > 0°C and < 28°C

- Operation: > -10°C and < 40°C
- Minimum Design Temperature: -20°C
- Maximum Allowable Temperature Differential: 60°C

**OPERATING TEMPERATURE:** Ambient (Soil Temperature)

**CRITICAL UNDERGROUND EXTERNAL TEMPERATURE:** U/G Piping: -10°C

**CORROSION ALLOWANCE:** 0.0 mm

**CLASS LOCATION:** 2

**DESIGN FACTOR:** 0.800 (As per CSA Z662-19)

**LOCATION FACTOR:** 0.900 (As per TSSA FS-238-18 and CSA Z662-19 Clause 4.3.7.4)

**JOINT FACTOR:** 1.000

**TEMPERATURE FACTOR:** 1.000

**TOUGHNESS REQUIREMENTS:** -20°C - Toughness Requirements as per ASME B31.3-18

**WELDING OF LINE PIPE:** As per CSA Z662-19

**WELDING PROCEDURES:** Construction Contractor to provide welding procedure specifications (WPS) for review and application review. WPS's should include potential for high carbon equivalent (CE > 0.40%) in the existing pipe.

**COATING OF REPLACEMENT LINE PIPE:** U/G Coating: Dual layer abrasion resistant fusion bonded epoxy (FBE/ARO). The coating shall meet the requirements applicable to System 2B of CSA Z245.20-18. Refer to Coating Specification 110904260AI-RPT0001.

**COATING OF BENDS:** Plant applied Two Part Liquid Epoxy (e.g., Canusa HBE-DX or SCP SP-2888). The coating shall meet the requirements applicable to System FC1/FC3 of CSA Z245.30-18. Application as per Coating Specification 110904260AI-RPT0001.

**COATING OF FIELD WELDS:** Field applied abrasion resistant Two-Part Liquid Epoxy (e.g., Canusa HBE-DX). The coating shall meet the requirements applicable to System FC1/FC3 of CSA Z245.30-18. Application as per Coating Specification 110904260AI-RPT0001.

**COATING OF TIE-IN WELDS:** Transition from Extruded Polyethylene to Two-Part Liquid Epoxy: CSA Z245.30-18 System FC7 Visco-Elastic Systems (e.g., Kema Series 60, Stopaq). The coating shall meet the requirements applicable to System FC7 of CSA Z245.30-18. Application as per Coating Specification 110904260AI-RPT0001.

#### D.1.4 PRESSURE TESTING

1. This section provides an overview of the hydrostatic pressure testing that consists of the strength test, leak test, pressure test plan, and pre-installation and post installation test.
2. The testing will be completed in accordance with Sun-Canadian best practices and will be the following acts, regulation, standards, and guidelines which apply to testing energy pipeline in Ontario:
  - CSA Z662-19 Oil and Gas Pipeline Systems
  - TSSA Oil and Gas Pipelines – Code Adoption Document (CAD) – February 2018
  - Ontario Regulation 210/01 (O. Reg. 210/01)
  - Code of Practice for the Temporary Diversion of Water for Hydrostatic Testing of Pipelines (January 1999)
  - Code of Practice for the Release of Hydrostatic Test Water from Hydrostatic Testing of Petroleum Liquid and Gas Pipelines (January 1999)
  - CAPP and CEPA Hydrotest Water Management Guidelines (September 1996)
3. The specifications for the pipeline are as follows:
  - Carbon steel material, Diameter: 323.9 mm (12.750 inch) x Wall Thickness: 12.7 mm and Grade: 448 MPa, Design Pressure: 9,930 kPa.
  - The specified minimum yield strength (SMYS) is 448 MPa (65,000 psi).
4. Strength Test
  - A strength test will be performed aboveground prior to pipe installation where the minimum pressure will be 12,413 kPag (9,930 kPag MOP  $\times$  1.25, per CSA Z662-19, Table 8.1 and the maximum pressure will be 12,713 kPag. Testing will occur for one (1) hour (as per CSA Z662-19 Clause 8.7.5.2) for fully exposed new construction. The test pressure shall not exceed a pressure corresponding to 100% of the SMYS of the pipe.
  - A strength test will also be performed underground after pipe installation where the minimum pressure will be 12,413 kPag (9,930 kPag MOP  $\times$  1.25, per CSA Z662-19, Table 8.1 and the maximum pressure will be 12,913 kPag. Testing will be four (4) hours in duration (as per CSA Z662-19 Clause 8.7.5.1), including new construction pipe, bends, and transition spools.

5. Leak Test

- A leak test will be performed in the case of a test section that cannot be or is not visually inspected for leakage during the test (e.g., underground, etc.). Immediately following the strength hydro-test conducted aboveground prior to pipe installation, the pressure shall be reduced, and a visual inspection shall be conducted for leak detection. Duration is as required to conduct a complete Visual Inspection to detect leaks. Minimum Pressure of 10,923 kPag (9,930 kPag MOP  $\times$  1.10 as per CSA Z662-19 Clauses 8.2.5 and 8.7.1.2).
- A leak test will also be conducted following the strength hydro-test that is to be completed underground after pipe installation where the minimum pressure will be 10,923 kPag (9,930 kPag MOP  $\times$  1.10 as per CSA Z662-19 (Clauses 8.2.5 and 8.7.1.1) and maximum pressure will be 11,223 kPag. Testing will occur for a four (4) hour duration (as per CSA Z662-19 Clause 8.7.5.3), including new construction pipe, bends, and transition spools.

6. Test Segments

- The Project has one segment to be tested: East Sixteen Mile Creek Crossing – Approximately 480 meters of 323.9 mm OD (NPS 12) replacement pipe for the creek and road crossing (tie-in to tie-in).

7. Pressure Stages:

- Pressurizing of the test section shall be completed in accordance with all safety precautions outlined in the contractor's test procedure and this document. Filling of the test section to test pressure shall be conducted as follows:
  - 25% test pressure, hold for 10-15 minutes
  - 50% test pressure, hold for 10-15 minutes
  - 75% test pressure, hold for 10-15 minutes
  - 100% test pressure, hold for the duration of the strength test
  - Upon completion of the strength test the pressure shall be reduced to the pressure required for the leak test provided in the Hydrotest Pan Pipe Replacement Design of Sun-Canadian NPS 12 at Sixteen Mile Creek Crossing prepared by Stantec Consulting Ltd (2020).

8. Pre-Installation Test

- Prior to installation of the pipe string for the HDD or HD bores, a one (1) hour above ground pre-test will be conducted. The pipe strings will be visually inspected for leaks near the end of the test duration.
- After the pipe string has been successfully tested, it shall be dewatered and a minimum of 345 kPag (50 psig) of air pressure placed on the section. The pressure in the pipe string shall remain until the pipe string is installed and monitored daily.

9. Post Installation Test

- Once the pipe string has been pulled into the bore and the bends and transition pieces have been attached, a gauging pig survey shall be conducted. The gauging pig survey encompass:
  - A minimum of two gauging plates shall be run in each segment. Please note a single pig may have two plates attached.
  - The gauging plate shall be 95% of the nominal inside diameter.
  - A Sun-Canadian company representative must be onsite to witness.
- If the gauging pig survey is acceptable, the pipe can undergo the post installation hydrotest. For the post installation hydrotest, the strength and leak test durations of the post installation hydrotest shall be at least four hours each, after temperature stabilization is achieved, or extended as necessary to achieve a two-hour period where there is no pressure fluctuation except an acceptable correlation between pressure and temperature change. If pressure drops associated with temperature changes of the fluid cause the pressure at the high point to drop below the minimum strength test pressure plus 100 kPa (ex.  $12,413 + 100 = 12,513$  kPa), water shall be added to bring the pressure up to approximately minimum strength test pressure plus 300 kPa (12,713 kPa). If the pressure for any test section drops below the minimum strength test pressure, the test section shall be deemed unsuccessful and will be depressurized and retested with new pressure and temperature charts for the entire section. The cause of the pressure drop shall be located and repaired in accordance with the specifications prior to retest.

#### **D.1.5 PROJECT COSTS (SECTION NOT APPLICABLE)**

1. Sun-Canadian is a non-rate regulated entity, it is a private corporation, and the cost of the proposed Project will be borne by the Applicant.

## D.1.6 SCHEDULE

1. The entire construction project will occur over a period ranging from 8 to 10 months (Planning, mobilization, execution, demobilization) through the Summer and Fall of 2022. Construction of the replacement pipeline segment is anticipated to take 30 to 45 days. Subject to receipt of all necessary permits and approvals, Sun-Canadian anticipates a proposed line in-service date in late Q3 2022.
2. The project milestones are summarized in Table D.1.6-1, and the construction schedule is shown in Table D.1.6-2. The operation and maintenance phase is predicted to be from 2022 to 2072.

**Table D.1.6-1: Project Milestones**

Project Phase	Anticipated Timeline
ER and technical design	2020 to 2021
Expected LTC approval	Q2 2022
Receipt of permits and approvals	Q2 2022
Commence construction	June 2022
Completion of construction	August 2022
Complete hydrostatic testing	September 2022
Final inspection	October 2022
Line in-service	Q3 2022
Operation and Maintenance	2022 to 2072

**Table D.1.6-2: Project Construction Schedule**

East Sixteen Mile Creek Pipeline Project Schedule	2022			
	June	July	August	September
<b>Construction Phases</b>				
Site Preparation and Clearing				
Grading and Stripping				
Stringing				
Pipe Fabrication				
Horizontal Directional Drilling (HDD)				
Backfilling				
Hydrostatic Testing				
Clean-Up and Restoration				

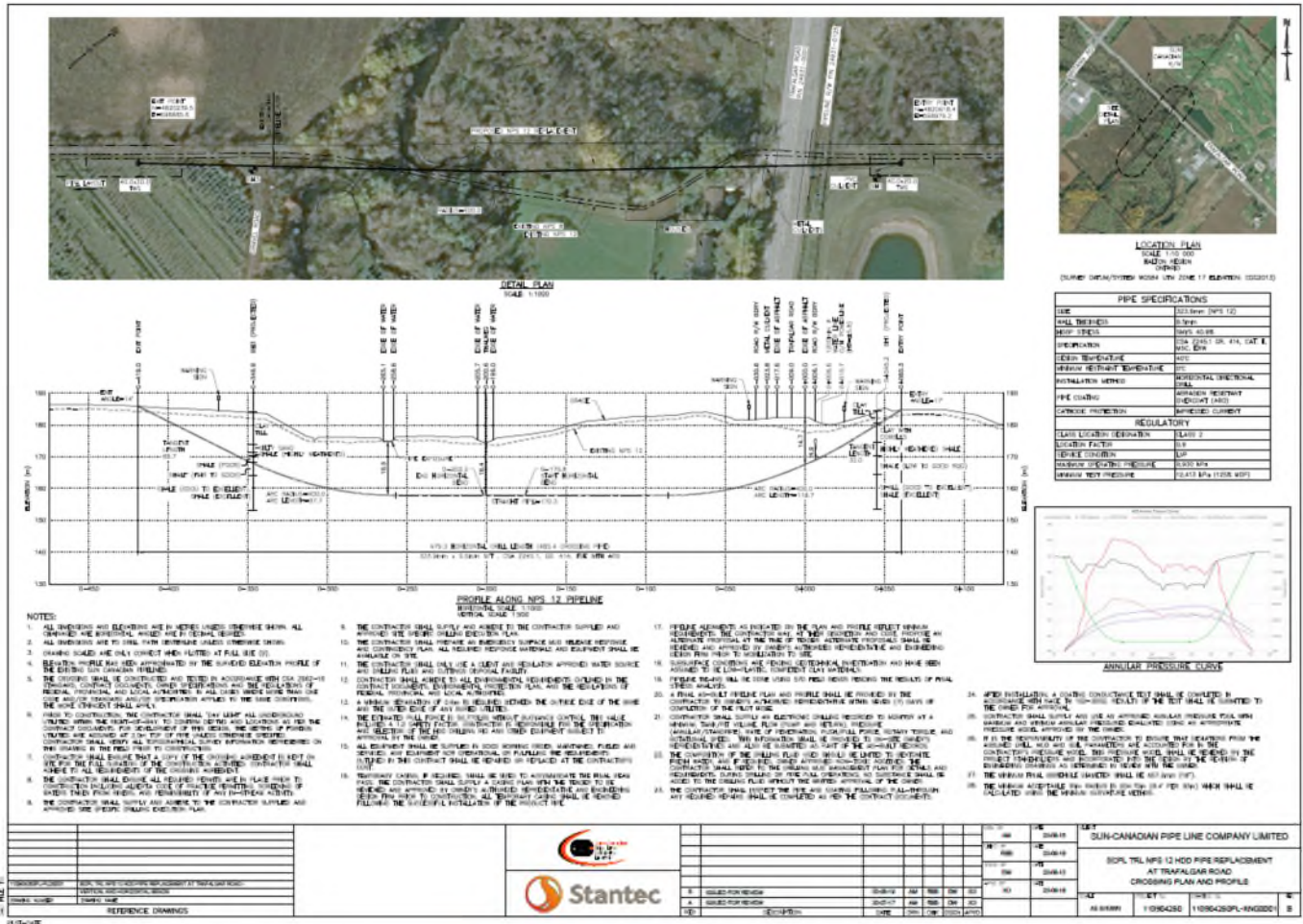


## **EXHIBIT E - LAND MATTERS**

### **E.1.1 SUMMARY OF LAND MATTERS**

1. The replacement pipeline segment generally parallels the existing pipeline alignment. The replacement pipeline segment, which is approximately 480m in length, will follow the existing pipeline alignment as closely as possible, in consideration of environmental and social constraints, and other infrastructure and land uses in the area. Approximately 300m of the replacement pipeline segment will be located outside of the existing Sun-Canadian RoW and will require new easements.
2. Designing the Project to be constructed using HDD reduces the construction footprint and access requirements, which lessens the potential impacts to adjacent landowners and to the environment. Figure E1.1-1 outlines the Project location, proposed access routes, work areas, and laydown areas.
3. Permanent easement is required from two privately owned parcels. Landowners of these parcels have existing easements in place with Sun Canadian for the existing pipeline.
4. Access and temporary workspace is required on two privately owned parcels and one municipally owned parcel. Existing easements are in place with Sun-Canadian on all three parcels for the existing pipeline. Sun Canadian will secure temporary workspaces via existing easement agreements with neighbouring parties. No new landowners will be affected.
5. The Project is located within the Town of Milton, Regional Municipality of Halton.
6. Land use designations for the impacted lands are Agricultural Area and Greenlands A, both designations permit major oil and gas transmission pipelines.

**Figure E.1.1-1: Workspace Locations, TWS Limits, and Laydown Areas**



*Land Rights Required – 2 Landowners*

1. The Project will require the use of existing easement, and new permanent and temporary easement. The existing Sun-Canadian easement is approximately 13m wide and 500m long. The estimated land requirements required for the Project are further detailed in Table E.1.1-1.

**Table E.1.1-1: Estimated Land Requirements**

Land Type	Approximate Area Required Hectares (acres)
Existing Easement	0.65 ha (1.6 acres)
New Permanent Easement	0.14 ha (0.35 acres)
Temporary Workspace	0.96 ha (2.37 acres)
Temporary Access (Existing)	0.0964 ha (0.2382 acres)
<b>Total</b>	<b>1.846 ha (4.562 acres)</b>

2. To the extent practical, the replacement pipeline segment will be located within the existing Sun-Canadian easement. The existing easement will be used for approximately 300m of the new alignment, including the crossing of Trafalgar Road.
3. Two new permanent easements will be required for the replacement pipeline segment. Both easements cross private lands. One is approximately 100m by 13m and the other is approximately 30m by 13m.
4. Three access and temporary workspace easements will be required for construction of the Project. Sun-Canadian will secure temporary workspaces via existing easement agreements with neighbouring parties. No new landowners will be affected.
5. A temporary drill pad approximately 20m by 40m will be constructed on the east side of Trafalgar Road. A temporary drill pad approximately 20 m by 40 m will be constructed west of East Sixteen Mile Creek. A temporary pipe laydown area will also be required that is approximately 20m by 400m. These work areas require a 7m wide temporary workspace, adjacent to the existing 13 m wide easement.
6. Two access roads are required to facilitate construction of the Project. An access road from Trafalgar Road will utilize the existing PAO Horticultural nursery internal site roads. This access will only be accessible to pick-up trucks and small personal vehicles. A second access road is required from 6th Line via an existing agricultural lane. Access to the temporary drill pad east of Trafalgar Road will be directly from Trafalgar Road. Temporary workspace agreements for these access roads will be negotiated with these landowners.

## **E.1.2 NEGOTIATIONS TO DATE**

Impacted landowners/tenants will be compensated for access and disturbance as per Sun-Canadian's standard compensation procedure. Compensation is provided at pre-determined rates for temporary workspace required on or off of the pipeline easement. Applicable rates are determined using a percentage of current property values and crop values. Consideration is given for disturbance and property restoration.

Sun Canadian has been in ongoing direct discussion and negotiation with all landowners directly impacted by new easements. Both landowners have agreed in principle to the new easements and Sun Canadian is continuing negotiations on the final financial terms of those agreements.

Landowners, tenants and neighbours have been advised of the proposed Project and will be kept informed of progress as the work progresses.

### E.1.3 LAND-RELATED PERMITS AND AGREEMENTS REQUIRED

1. The Project will cross Trafalgar Road, a major arterial road maintained by the Regional Municipality of Halton. A variety of municipal infrastructure occupies the road allowance of Trafalgar Road (e.g. waterlines, sewers, hydro lines).

**Table E.1.3-1: Permits and Agreements Required**

Administering Agency	Permit/Approval Name
<b>Town of Milton</b> Engineering Services 150 Mary Street, Milton, ON L9T 6Z5 Diana Jiona, <i>Manager, Infrastructure and Right of Way</i> Telephone: 905 878-7252 ext. 2513 Email: diana.jiona@milton.ca	Road Crossing Agreement Road Occupancy Permit Entrance Permit Utility crossing approval
<b>Halton Region</b> Infrastructure Planning & Policy Public Works Telephone: 905 825-6000 ext. 6032 Email: PWPPermits@halton.ca	Municipal Consent Permit
<b>Enbridge Gas Inc.</b> 500 Consumers Road, North York, ON, M2J 1P8 Jim Arnott, <i>Senior Advisor Capital Planning</i> Asset Management Telephone: 416 758-7901 Tara Kuuskman, <i>Manager, Planning and Design Toronto</i> Distribution Planning & Records Telephone: 416 758-4314 Email: markups@enbridge.com	Permanent crossing approval Temporary equipment crossing approval
<b>Milton Hydro</b> 200 Chisholm Drive, Milton, ON, L9T 3G9 Linda Lundstrom-Collins, <i>Project Manager</i> Telephone: 905 876-4611 ext. 226 Email: lundstrom-collinsl@miltonhydro.com	Permanent crossing approval Temporary equipment crossing approval
<b>Bell Canada (*potential)</b> 140 Bayfield Street, 2 <sup>nd</sup> Floor, Barrie, L4M 3B1 Charleyne Hall, <i>External Liaison – Right of Way</i> Telephone: 705 722-2264 Email: charleyne.hall@bell.ca	Permanent crossing approval Temporary equipment crossing approval
<b>Telus Corporation (*potential)</b> Engineering Operations & Implementations East 22 <sup>nd</sup> Floor, 25 York Street, Toronto, M5J 2V5 Frederic Sua, <i>Design Specialist II – Access Engineering</i> Telephone: 647 837-9112 Email: frederic.sua@telus.com	Permanent crossing approval Temporary equipment crossing approval

## **E.1.4 ATTACHMENT 1 – GRANT OF EASEMENT PIPELINE (ONTARIO) AGREEMENT**

### **Schedule “A”**

#### Pipeline Easement

#### **WHEREAS:**

- A. The Transferor is the owner in fee simple of the lands and premises more particularly described in Schedule “B” attached hereto (hereinafter called the “Transferor’s Lands”).
- B. The Transferee is the owner in fee simple of those lands and premises more particularly described on Schedule “C” attached (hereinafter called the “Transferee’s Lands”).

**IN CONSIDERATION** of the sum of (0.00) of lawful money of Canada (hereinafter called “the consideration”), which sum is payment in full for the rights and interest hereby granted, including payment in full for all such matters as injurious affection to remaining lands, the Transferor does hereby GRANT, CONVEY, SELL AND TRANSFER IN PERPETUITY unto the Transferee, its successors and assigns, to be used and enjoyed as appurtenant to all or any part of the Transferee’s Lands and undertaking a free and unencumbered easement on, over, in, under, along and/or through that part of the Transferor’s Lands more particularly described in Schedule “D” (hereinafter referred to as the “Easement Lands”) to survey, lay, construct, maintain, inspect, patrol (including aerial patrol) alter, relocate, renew, remove, replace, reconstruct, repair, expand, move, keep, use and/or operate pipes and pipelines including without limitation a pipeline for the transmission of petroleum products and all works, appurtenances, attachments, apparatus, appliances, drips, valves, fittings, connections, meters, cathodic protection equipment, markers, fixtures and equipment and other equipment and appurtenances, whether or not similar to the foregoing which the Transferee may deem useful, necessary or convenient in connection with its use of the Easement Lands and in particular for the carriage, conveyance, transportation, storage and/or handling of oil and its products, together with a right-of-way to the Transferee, its successors, assigns, employees, contractors, servants and agents for ingress and egress at any time and from time to time over, along, across and upon the Transferor’s Lands in such ways and locations as the Transferor may direct, acting reasonably, on foot and/or with vehicles, supplies, machinery and equipment necessary or incidental to the exercise and enjoyment of the easement and right-of-way hereby transferred. The Transferee agrees to repair any damage to the Transferor’s Lands caused by such ingress and egress. The Parties hereto mutually covenant and agree each with the other as follows:

1. The Transferee shall at its own expense as soon as reasonably possible after completing any work in accordance with its rights hereunder, remove all surplus sub-soil and debris from the Easement Lands and restore the Easement Lands to the state that they were in prior to the commencement of such work so far as is reasonably practicable.

2. The Transferee shall indemnify the Transferor for all losses, costs, claims, injuries, actions and causes of actions which are directly attributable to the exercise of the rights hereby granted, except to the extent that the losses, costs, claims, injuries, actions and causes of actions have been caused by the negligence or misconduct of the Transferor or persons acting within the control of the Transferor.

3. The Transferor shall have the right to use and enjoy the surface of the Easement Lands except that such use and enjoyment shall not interfere with the rights of the Transferee hereunder. Without limiting the generality of the foregoing, the Transferor shall not without the prior written consent of the Transferee, place or erect any building, structure or fence and shall not excavate, alter the grading, drill, install, erect or permit to be excavated, drilled, installed or erected or permit the grading to be altered above, on, over, in, under or through the Easement Lands any pit, well, foundation, pavement, or other structure or installation (whether or not similar to the foregoing) or to do or permit to be done any mining, quarrying, land levelling or other work, or activity of a similar nature in, on, over, under or through the Easement Lands or to do or permit to be done, anything which might in any manner, impair the safety of any pipes or pipelines and appurtenances thereto in the Easement Lands or which will obstruct or prevent the exercise and enjoyment by the Transferee of its rights hereunder. Notwithstanding the foregoing the Transferee upon request shall consent to the Transferor constructing or repairing fencing pavements, pathways, and walks across, on and in the Easement Lands or any portion or portions thereof, provided that before commencing any of the work referred to in this sentence the Transferor shall (a) give the Transferee at least thirty (30) days clear notice in writing pointing out the work desired so as to enable the Transferee to evaluate, comment and impose reasonable conditions designed to protect the rights granted herein and the pipeline, on the work proposed and to have a representative inspect the site and/or be present at any time during the performance of the work, (b) observe and adhere to such conditions and follow the instructions of the Transferee or its representative as to the performance of such work without damage to the said pipeline, (c) shall exercise a high degree of care in carrying out any such work and, (d) shall perform any such work in such a manner as not to endanger or damage the said pipe line as may be required by the Transferee.

4. The rights, privileges and easement herein granted shall include the right to install, keep, use, operate, service, maintain, repair and/or replace in, under, over, on and above the Easement Lands any valves and/or take-offs subject to additional agreements and to fence in such valves and/or take-offs and to keep same fenced in, but for this right the Transferee shall pay to the Transferor (or to the person or persons entitled thereto) such additional compensation as may be agreed upon and in default of agreement as may be settled by arbitration under the provisions of *The Arbitrations Act*, R.S.O. 1990 Chapter A.24, or any act passed in amendment thereof or substitution therefor.

5. Notwithstanding any rule of law or equity and even though the said pipe line and its appurtenances may become annexed or affixed to the realty, title thereto shall nevertheless remain the Transferee.



6. The Transferor covenants that:

- (i) it has the right to convey this easement and right-of-way to the Transferee;
- (ii) the Transferee shall and may peaceably hold and enjoy the rights, easement and right-of-way hereby transferred without hindrance, molestation or interruption on the part of the Transferor or of any person claiming by, through, under or in trust for, the Transferor;
- (iii) the Transferor or its successors and assigns will, do, execute, acknowledge and deliver or cause to be done, executed, acknowledged and delivered all such further acts, deeds, documents and assurances of this easement and right-of-way (at the Transferee's expense) as may be reasonably required by the Transferee to give effect to this Transfer/Deed of Land, and
- (iv) the Transferor has not done, omitted or permitted anything whereby the Easement Lands is or may be encumbered (except as the records of the land registry office disclose).

7. The Transferee shall not bring any toxic, hazardous, dangerous, noxious or waste substances, flammable, explosive or radioactive materials, pollutants or contaminants on the Easement Lands except as permitted and in accordance with the laws, rules, regulations, orders and guidelines of all applicable public authorities. In acquiring its interests in the Easement Lands pursuant to this Easement, the Transferee shall be deemed not to acquire the care or control of the Easement Lands or any component thereof.

8. This Agreement is subject to the express condition that it is to be effective only if the provisions of the *Planning Act*, R.S.O. 1990, Chapter P13 and amendments thereto are complied with. In accordance with Paragraph 50(3)(d) of the *Planning Act*, the Transferee declares that the easement rights created herein are being acquired for the purpose of a hydrocarbon distribution and transmission line within the meaning of Part VI of the *Ontario Energy Board Act*, 1998.

9. The Transferee shall have the right at any time and from time to time to remove any boulder or rock and to sever, fell, remove or control the growth of any roots, trees, stumps, brush or other vegetation in, on or under the Easement Lands.

10. The rights of the Transferee herein shall be of the same force and effect as a covenant running with the Transferor's Lands and shall be appurtenant to Transferee's Lands.

11. The Transferee shall have the absolute and unfettered right to assign or transfer its rights hereunder in whole or in part however shall be bound to give notice thereof to any party.

12. The parties hereto agree that the terms of this easement supersede all other agreements with respect to the Easement Lands and the use thereof by the Transferee.

13. This easement shall extend to, be binding upon and enure to the benefit of the heirs, executors, administrators, successors and assigns of the parties hereto respectively; and, wherever the singular or masculine is used it shall, where necessary, be construed as if the plural, or feminine or neuter had been used, as the case may be. The Transferor hereby agrees that all provisions herein are reasonable and valid and if any provision herein is determined to be unenforceable, in whole or in part, it shall be severable from all other provisions and shall not affect or impair the validity of all other provisions.

**Schedule “B”**

**Transferor’s Lands**

(Complete description to be provided by counsel)

**Schedule “C”**

**Transferee’s Lands**

The right-of-way and easement herein conveyed is hereby declared to be appurtenant to the lands, premises and facilities of the Transferee located in the City of \_\_\_\_\_, County of \_\_\_\_\_, Province of Ontario, and elsewhere.

**Schedule “D”**

**Easement Lands**

(Complete description to be provided by new R-Plan)

## E.1.5 LINE LIST

Table E.1.5-1: Line List

### Directly Affected Landowners

PIN	Landowner	Mailing Address	Legal Description	Municipality	Agreement Type
249320012	[REDACTED]	[REDACTED]	Part Lot 4, Concession 7 Town of Milton	Halton	Existing Easement, New Easement Required
249320014	[REDACTED]	[REDACTED]	Part Lot 4, Concession 7 Town of Milton	Halton	Existing Easement, New Easement Required
249320011	1066297 Ontario Limited	135 Millwick Drive North York, ON M9L 1Y7	Part Lot 4, Concession 7 Town of Milton	Halton	Existing Easement, Access and Temporary Workspace Required
249320011	PAO Horticultural (Tenant)	5592 Trafalgar Road Hornby, ON L0P 1E0	Part Lot 4, Concession 7 Town of Milton	Halton	Existing Easement, Access and Temporary Workspace Required
249310195	York Trafalgar Golf Corporation (Piper's Heath Golf Club)	5501 Trafalgar Road, Milton, ON L9E 0Z5	Part Lots 4 and 5, Concession 8, Town of Milton	Halton	Existing Easement, Access and Temporary Workspace Required
249310001	Halton Region	1151 Bronte Road Oakville, ON L6M 3L1	Road Allowance between Concessions 7 and 8, Town of Milton	Halton	Existing Easement, Access and Temporary Workspace Required

### Adjacent Landowners

PIN	Landowner	Mailing Address	Legal Description	Municipality	Activity
249320013	[REDACTED]	[REDACTED]	Part Lot 4, Concession 7 Town of Milton	Halton	Notification - Adjacent landowner
249320176	12800 Britannia Road Inc. (Andy Broadbent)	12800 Britannia Road Hornby, ON L0P 1E0	Part Lot 5, Concession 7 Town of Milton	Halton	Notification - Adjacent landowner
249320015	Jade Gardens	5532 Trafalgar Road Milton, ON L9E 0Y8	Part Lot 4, Concession 7 Town of Milton	Halton	Notification - Adjacent landowner
249310175	[REDACTED]	[REDACTED]	Part Lot 4, Concession 8 Town of Milton	Halton	Notification - Adjacent landowner
249320010	5567 Sixth Line Inc.	16 Edvac Drive Brampton, ON L6S 5P2	Part Lot 4, Concession 7 Town of Milton	Halton	Notification - Adjacent landowner

## **EXHIBIT F - INDIGENOUS RELATIONS**



## **F.1.1. INDIGENOUS CONSULTATION SUMMARY**

### *Introduction*

1. This section will elaborate on Sun-Canadian's approach to consultation activities with Indigenous communities for the Project.

### Purpose of Indigenous Consultation

2. Indigenous consultation is required to support the LTC application as stipulated in:
  - a. Section 3.3 of the OEB Environmental Guidelines
  - b. The MOE Delegation Letter dated July 28, 2020.
3. The MOE identifies the purpose of the Indigenous Consultation section of the LTC as:
  - a. Document consultation in order for the MOE to determine if the consultation activities undertaken by the project proponent fulfill the requirements outlined within the Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 2016 and any delegated procedural aspects; and
  - b. Provide a record of comments and information received through consultation and document how these comments were considered, including whether the Project was modified as a result of these comments.
4. Sun-Canadian's approach to consultation, including how it has addressed the Crown's requirements, outline consultation activities undertaken to date and identify how consultation has influenced the project planning and design is outlined in Exhibit F of the Application.

### Sun-Canadian's Guiding Principles

5. Sun-Canadian has an Indigenous Relations program which includes internal Indigenous awareness training, outreach including archeology, consultation, and environmental monitoring. Sun-Canadian has various programs and training which support human rights, environment and land matters.

### Crown's Direction

6. In addition to Sun-Canadian's commitment to Indigenous relations, Sun-Canadian's approach to consultation has been guided by the requirements and expectations of the Crown.
7. The MOE provided a Delegation Letter dated July 28, 2020, delegating the procedural aspect of consultation to Sun-Canadian. While the Crown has a

constitutional duty to consult, and where appropriate, accommodate Indigenous communities, the Crown's may delegate the day-to-day, procedural aspects of consultation to project proponents.

#### Approach to Engagement and Consultation

8. Sun-Canadian's approach to consultation is proactive and flexible and takes reasonable steps to foster positive relationships with Indigenous communities. Identified communities have participated in and influenced consultation activities.
9. Sun-Canadian takes reasonable steps to foster positive relationships with the identified Indigenous communities and has maintained a Record of Consultation, as required by the MOE, describing activities carried out as part of the delegated procedural aspects of consultation. Additionally, Sun-Canadian bears the reasonable costs associated with the procedural aspects of consultation.
10. Sun-Canadian's approach to engagement and consultation has included virtual meetings with Indigenous communities to share the information required for communities to understand and assess the potential impacts on rights and responding to questions and concerns raised by Indigenous communities.

#### Identification of Indigenous communities

11. As described above, formal direction was provided by the MOE on which communities Sun-Canadian was delegated the procedural aspects of consultation. Sun-Canadian has followed the Crown's direction by initiating and continuing consultation efforts for the Project.

#### Crown's Direction on Duty to Consult

12. Indigenous communities were identified through provision of a Project Summary to the MOE on June 6, 2020. In addition to serving as formal notification of the Project in accordance with the Environmental Guidelines issued by the OEB, Sun-Canadian requested that the MOE provide direction on the duty to consult obligation for the Project.
13. MOE provided a response Delegation Letter dated July 28, 2020, delegating the procedural aspect of consultation to Sun-Canadian. While the Crown has a constitutional duty to consult and, where appropriate, accommodate Indigenous communities, procedural aspects of consultation were delegated to Sun-Canadian for:
  - a. The Huron Wendat Nation ("Huron Wendat");
  - b. The Mississaugas of the Credit First Nation (MCFN);
  - c. Six Nations of the Grand River (SNGR);

- The ENDM Delegation Letter noted that consultation is required with both the Six Nations Elected Council and Haudenosaunee Confederacy Chiefs Council (“HCCC”), and all correspondence with the HCCC should copy the Haudenosaunee Development Institute (“HDI”).

#### Meeting the Crown’s Direction

14. Based on the Crown’s direction, which is outlined above, Sun-Canadian is consulting with Huron Wendat, MCFN, Six Nations, HCCC and HDI.

#### *Consultation Activities*

15. The consultation program allowed Indigenous communities to provide input for the Project. Throughout consultation, Sun-Canadian has been clear that it will work to ensure feedback, comments, and concerns can be raised by the communities at any time for consideration and response by Sun-Canadian and that process is not dependent on the OEB’s defined regulatory consultation periods.
16. This section of the LTC consists of records representing the Project information shared and comments received during the pre-application filing period.
17. Exhibit F.1.2 contains a summary of Sun-Canadian’s Indigenous consultation activities for the Project. A contains the records and associated supporting documentation related to Indigenous consultation.

## F.1.2 INDIGENOUS CORRESPONDENCE SUMMARY TABLE

Table F.1.2-1: Summary of Indigenous Correspondence

Line Item	Date of Communication	Community	Correspondent	Method of Communication	Subject	Comment
1	6-Jun-20	Ministry of Energy, Northern Development and Mines	Susan Jackson Sun-Canadian Pipe Line Company (SCPL)	Email	Project Description and Duty to Consult	Sun Canadian provided Project Description and Duty to Consult request.
2	6-Jun-20	Mississaugas of the Credit First Nation (MCFN)	Susan Jackson (SCPL)	Email	Introduction of Project	Sun Canadian introduced the project and noted they will consult with MCFN on the project. Noted Sun-Canadian intends on applying to the Ontario Energy Board which involves notification to the Ministry of Energy, Northern Development and Mines for their determination of Duty to Consult. Anticipate this Ministry will also be notifying MCFN of the application.
3	6-Jun-20	Haudenosaunee Confederacy Chiefs Council (HCCC) c/o Haudenosaunee Development Institute (HDI)	Susan Jackson (SCPL)	Email	Introduction of Project	Sun Canadian introduced the project and noted they will consult with MCFN on the project. Noted Sun-Canadian intends on applying to the Ontario Energy Board which involves notification to the Ministry of Energy, Northern Development and Mines for their determination of Duty to Consult. Anticipate this Ministry will also be notifying HDI of the application.
4	28-Jul-20	Ministry of Energy, Northern Development and Mines	Dan Delaquis	Email	Project Description and Duty to Consult	The MENDM responded to Sun Canadian's Project Description and Duty to Consult request, dated on June 6, 2020 and provided a list of indigenous communities that should be consulted on the basis that they have or may have constitutionally protected Aboriginal or Treaty rights that may be adversely affected by the Project.
5	12-Aug-20	Haudenosaunee Confederacy Chiefs Council (HCCC) c/o	Susan Jackson (SCPL)	Email	Notice of Commencement	Sun Canadian introduced the project, provided information on the Environmental Study process, asked the community to

Line Item	Date of Communication	Community	Correspondent	Method of Communication	Subject	Comment
		Haudenosaunee Development Institute (HDI)				provide comments and extended an offer to hold a virtual meeting.
6	12-Aug-20	Huron Wendat Nation (HWN)	Susan Jackson (SCPL)	Email	Notice of Commencement	Sun Canadian introduced the project, provided information on the Environmental Study process, asked the community to provide comments and extended an offer to hold a virtual meeting.
7	12-Aug-20	Mississaugas of the Credit First Nation (MCFN)	Susan Jackson (SCPL)	Email	Notice of Commencement	Sun Canadian introduced the project, provided information on the Environmental Study process, asked the community to provide comments and extended an offer to hold a virtual meeting.
8	12-Aug-20	Six Nations of the Grand River (SNGR)	Susan Jackson (SCPL)	Email	Notice of Commencement	Sun Canadian introduced the project, provided information on the Environmental Study process, asked the community to provide comments and extended an offer to hold a virtual meeting.
9	9-Sep-20	HWN	M. SCPL Picard	Virtual Meeting	Discussion of the proposed Project	The HWN and Sun Canadian held a virtual meeting to discuss the Project. The HWN noted they expect the project design to preserve cultural resources as necessary. This may include additional measures resulting from any Stage 3 or beyond findings. The HWN noted their interest in the Project is with archaeology. Accordingly, the HWN will participate in all archaeology associated with this project - SCPL noted they will ensure its archaeological consultant works with HWN.
10	22-Sep-20	SNGR	L. Robbin Bomberly Jen Mt. Pleasant Dawn LaForme Tanya Hill-Mountour SCPL	Virtual Meeting	Discussion of the proposed Project	SNGR and Sun Canadian held a virtual meeting to discuss the Project. SNGR would like to participate in the Project via construction monitoring during the construction phase of the project and during archaeology work.

Line Item	Date of Communication	Community	Correspondent	Method of Communication	Subject	Comment
11	23-Sep-20	SNGR	Jen Mt. Pleasant	Email	Information on community	SNGR provided information on treaty rights, stewardship, environment and wildlife. Encouraged SCPL to act honourably and familiarize with the culture and history of SNGR.
12	5-Oct-20	MCFN	M. F. Sault M. SCPL LaForme DeVries	Virtual Meeting	Discussion of the proposed Project	The MCFN and Sun Canadian held a virtual meeting to discuss the Project. The MCFN requested participation in all environmental studies and monitoring, and noted they will participate in the planned Stage 1&2 archaeology (under current monitor agreement).
13a 13b	6-Oct-20	MCFN	Susan Jackson (SCPL)	Email	Meeting minutes	Sun Canadian provided minutes from the October 5, 2020 virtual meeting.
14a 14b	6-Oct-20	SNGR	Susan Jackson (SCPL)	Email	Meeting minutes	Sun Canadian provided minutes from the September 22, 2020 virtual meeting.
15	1-Dec-20	SNGR	Susan Jackson (SCPL)	Email	Invitation for fieldwork	Sun Canadian invited the community to participate in potential bat maternity roosting habitat survey.
16	1-Dec-20	HWN	Susan Jackson (SCPL)	Email	Invitation for fieldwork	Sun Canadian invited the community to participate in potential bat maternity roosting habitat survey.
17	5-Feb-21	HCCC	Susan Jackson (SCPL)	Email	Notice of Release of Environmental Report	Sun Canadian provided a link to the Environmental Report and requested comments.
18	5-Feb-21	HWN	Susan Jackson (SCPL)	Email	Notice of Release of Environmental Report	Sun Canadian provided a link to the Environmental Report and requested comments.
19	5-Feb-21	MCFN	Susan Jackson (SCPL)	Email	Notice of Release of Environmental Report	Sun Canadian provided a link to the Environmental Report and requested comments.

Line Item	Date of Communication	Community	Correspondent	Method of Communication	Subject	Comment
20	5-Feb-21	SNGR	Susan Jackson (SCPL)	Email	Notice of Release of Environmental Report	Sun Canadian provided a link to the Environmental Report and requested comments.
21a 21b	4-Oct-21	HDI	Raechelle Williams	Email/letter	Project participation	HDI Environmental Division has an interest in the project and would like a representative of the division be involved in monitoring fieldwork, site inspections and reviews of all relevant reports. Requested a meeting with SCPL.
21a	22-Oct-21	HDI	Raechelle Williams	Email	Project agreements	HDI confirmed an agreement is in place only for archaeology and an additional agreement would be required for environmental monitoring.
21a	22-Oct-21	SCPL	Susan Jackson (SCPL)	Email	Project agreements	SCPL welcomes HDI environmental monitors during construction. Requested an environmental agreement.

## **EXHIBIT G - RECORD OF CONSULTATION - SUPPORTING DOCUMENTS**



### **G.1.1 CONSULTATION SUMMARY**

1. Notice of Commencement letters were sent via email to all parties identified on the Indigenous Contact List on August 12, 2020, and to all parties identified on the OPCC, Agency and Municipal Contact List on August 20 and 21, 2020 to provide information on the Project, the Preferred Route, and to request any available additional information. A full list of those contacted can be found in Exhibit A.1.5. Letters were also mailed to landowners and residents within approximately 500 m of the Preferred Route via Canada Post regular mail on August 21, 2020.
2. Project update letters were hand delivered to landowners and residents within approximately 500 m of the Preferred Route on September 24, 2020, and December 9, 2020. Letters were also mailed to several landowners via Canada Post regular mail on September 24, 2020, and December 9, 2020. Appended to the letters was a map indicating the Preferred Route location.
3. A letter indicating the Release of the Environmental Report for review was sent to the OPCC and all persons on the Project's Contact List on February 5, 2021. The letter provided a link to the Project's website where the Environmental Report was available for download.
4. Sun-Canadian is committed to sharing Project updates as they became available. A Project webpage was developed on the Sun-Canadian website (<http://sun-canadian.com/mediareleases/>) to provide Project details. The Project webpage was communicated to interested and potentially affected parties on the newspaper notice, Notice of Commencement, Project update letters and Release of the Environmental Report letters.

## G.1.2 ONTARIO ENERGY BOARD CORRESPONDENCE SUMMARY TABLE

Table G.1.2-1: Summary of Correspondence with the Ontario Energy Board (OPCC)

Line Item	Date of Communication	OPCC	Correspondent	Method of Communication	Subject	Comment
1	20-Aug-20	All contacts on OPCC Distribution List	Stantec	Email	Notice of Commencement	Stantec on behalf of Sun-Canadian Pipe Line (SCPL) provided an updated Notice of Commencement.
2	20-Aug-20	ENDM	Jason McCullough	Email	Notice of Commencement	Confirmed receipt of Notice of Commencement
3	24-Aug-20	TSSA	Kourosh Manouchehri	Email	Application required	TSSA noted that an application is required and provided a link to the application
4a and 4b	8-Sep-20	MHSTCI	Joseph Harvey on behalf of Dan Minkin	Email	Guidelines and requirements for the Environmental Report	Outlined MSHTCI's mandate and guidelines and provided advice on how to incorporate consideration of cultural heritage and archaeological resources into the ER. Recommended a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment be completed and sent for review.
5	5-Feb-21	All contacts on OPCC Distribution List	Stantec	Email	Notice of Release of Environmental Report	Stantec on behalf of SCPL provided a link to the Environmental Report and requested comments.
6	10-Feb-21	MTO	Shawn Aurini	Email	Notice of Release of Environmental Report	MTO Central Region was forwarded the Notice of Release of Environmental Report and requested a location map of the Project.
6	16-Feb-21	Stantec	Emily Hartwig	Email	Location of Project	Stantec provided a map and link to the Environmental Report
6	16-Feb-21	MTO	Shawn Aurini	Email	Location of Project	Based on map provided the pipeline route does not impact MTO highway facilities nor is it within MTO corridor control. Inquired if the pipeline being replaced is within existing MTO highway corridors or the GTA West study area.

Line Item	Date of Communication	OPCC	Correspondent	Method of Communication	Subject	Comment
6	16-Feb-21	Stantec	Michael Candido	Email	Location of Project	Stantec provided additional information on the Project location and requested confirmation the Project is not within existing MTO highway corridors or the GTA West study area.
6	16-Feb-21	MTO	Shawn Aurini	Email	Location of Project	MTO assumed the Project is far enough away from Highway 407. Followed up internally to confirm the location is outside of permit control.
6	16-Feb-21	MTO	Kwame Afrani	Email	Location of Project	MTO confirmed the location is outside of permit control area.
7	17-Feb-21	SCPL	Peter Martens	Email	TSSA Application form and report	SCPL submitted the completed application form and Stress Analysis Report.
8	2-Mar-21	IO	Hayley Maskell	Email	Notice of Release of Environmental Report	Initial review indicates no properties are owned by the Minister of Government and Consumer Services within the Project Study area. Noted it is the proponent's responsibility to verify any provincial government property and provided a list of government owners.
7	1-Apr-21	TSSA	Kourosh Manouchehri	Email	Application form and report	TSSA requested clarification on the application and requested the Environmental Report.
9	7-Apr-21	MTO	Amanda Rodek	Email	Notice of Release of Environmental Report	The new route does not impact MTO highway facilities nor is it within MTO corridor control.

Line Item	Date of Communication	OPCC	Correspondent	Method of Communication	Subject	Comment
10a and 10b	8-Apr-21	MHSTCI	Dan Minkin	Email	Comments on Environmental Report	MHSTCI recommended a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment be completed and sent for review prior to submission of the Environmental Report to the OEB. Sections 4.4.9 and 6.1.6 of the Environmental Report contain a summary of the Cultural Heritage Report. Recommended updating wording in the Environmental Report to include built heritage resources and cultural heritage landscapes. Based on the Stage 1 Archaeological Assessment recommending further study, the Environmental Report should commit to a timeline for completion of additional stages of assessment.
11a and 11b	9-Dec-21	Stantec	Michael Candido	Email	Response to MHSTCI Environmental Report comments	Stantec will undertake a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment. No construction will begin until the report has been reviewed by MHSTCI and all necessary approvals are in place. References to built heritage resources and cultural heritage landscapes will be revised in the Environmental Report. A Stage 2 Archaeological Assessment recommended no further work and the report was entered into the Ontario Public Register.
12	20-Dec-21	MHSTCI	Dan Minkin	Email	Response to MHSTCI Environmental Report comments	MHSTCI reiterated that ideally the Cultural Heritage Report be completed and reviewed by MHSTCI in time for the report to be used in support of SCPL's OEB submission

### G.1.3 PROVINCIAL MINISTRIES AND CONSERVATION AUTHORITY CORRESPONDENCE SUMMARY TABLE

**Table G.1.3-1: Summary of Correspondence with Provincial Ministries and Conservation Authority**

Line Item	Date of Communication	Agency	Correspondent	Method of Communication	Subject	Comment
1	20-Aug-20	All Agencies on contact list	Stantec	Email	Notice of Commencement	Stantec on behalf of Sun Canadian Pipe Line (SCPL) provided the Notice of Commencement.
2	20-Aug-20	Conservation Halton	Ben Davis	Email	Notice of Commencement map	CH requested a map and any other information regarding the work as a permit will be required.
3	21-Aug-20	All Agencies	N/A	Email	Notice of Commencement	Stantec on behalf of SCPL provided an updated Notice of Commencement as a map was inadvertently missing from the original notice.
4	21-Aug-20	Ministry of Municipal Affairs and Housing	Erick Boyd	Email	Notice of Commencement	MMAH is forwarding the letter to their Central Region Planning Manager.
5	24-Aug-20	Ontario Ministry of Agriculture, Food and Rural Affairs	Anneleis Eckert	Email	Addition to contact list	Anneleis requested to be added to the contact list.
6	31-Aug-20	Ministry of Natural Resources and Forestry	Maria Jawaid	Email	Notice of Commencement	MNRF noted they have no concerns with the project, but if any in-water works be required that they respect the appropriate timing windows. Records indicate the creek is occupied by Silver Shiner, a species at risk. Recommend contacting Ministry of the Environmental, Conservation and Parks to help inform when in water activities would be appropriate.
7	5-Feb-21	All Agencies on contact list	Stantec	Email	Notice of Release of Environmental Report	Stantec on behalf of SCPL provided a link to the Environmental Report and requested comments.

Line Item	Date of Communication	Agency	Correspondent	Method of Communication	Subject	Comment
8a and 8b	6-Apr-21	Conservation Halton	Ben Davis	Email	Comments on Environmental Report	<p>A permit will be required for the proposed works. Requested details on the following:</p> <p>1. Section 4.3.2 Designated Natural Areas and Vegetation: CH identified wetlands within the study area. Request that proponent obtains a CH GIS data request for wetlands to inform appropriate mitigation measures. Confirm if new alignment will require the permanent removal and/or continual maintenance of vegetation in the RoW. CH recommends existing exposed pipeline be decommissioned and removed.</p> <p>2. Section 4.3 Designated Natural Areas and Vegetation: CH recommends referencing municipal heritage studies (South Milton Phase 4 Sub watershed Study).</p>
9a and 9b	9-Dec-21	Conservation Halton	Stantec	Email	Response to comments on Environmental Report	<p>Acknowledged a permit will be required.</p> <p>A data request for wetland limits will be submitted. Outlined mitigation measures in the Environmental Report that will be implemented. Noted permanent vegetation removal is not anticipated during construction and will not be required for the new pipeline Right-of-Way. Explained that the decommissioned pipeline will be left in place as removing the pipeline would result in ecological impacts to the creek.</p> <p>Explained physical distance during construction will be limited to the drill pads and mitigation measures for biophysical features are outlined in the Environmental Report.</p>

## G.1.4 MUNICIPAL CORRESPONDENCE SUMMARY TABLE

**Table G.1.4-1: Summary of Correspondence with Municipalities**

Line Item	Date of Communication	Municipality	Correspondent	Method of Communication	Subject	Comment
1	20-Aug-20	All municipalities on contact list	Stantec	Email	Notice of Commencement	Stantec on behalf of Sun Canadian Pipe Line (SCPL) provided the Notice of Commencement.
2	20-Aug-20	Halton Region	Curt Benson	Email	Notice of Commencement	Halton Region requested a copy of the map and requested to be updated on the project location.
3	20-Aug-20	Town of Milton	Barb Koopmans	Email	Notice of Commencement	Town of Milton requested a map illustrating the location of the project.
4	21-Aug-20	All municipalities on contact list	Stantec	Email	Notice of Commencement	Stantec on behalf of SCPL provided an updated Notice of Commencement as a map was inadvertently missing from the original notice.
5	21-Aug-20	Town of Milton	Diana Jiona	Email	Notice of Commencement	Milton provided contact information updates for any future correspondence. Noted permitting requirements if project work is required within the Town's right of way or property owned by the Town.
6	11-Sep-20	Town of Milton	Stantec	Email	Municipal Heritage Interests	Stantec provided a map and requested if there are any municipal heritage interests within or adjacent to the Study Area.
6	14-Sep-20	Town of Milton	Anthony Wong	Email	Municipal Heritage Interests	The Town provided a map and list of heritage interests.
7	30-Sep-20	Halton Region	Robert Clackett	Email	Introduction and request for information	Halton Region Senior Planner Robert Clackett informed the Project team he would be managing the 16 Mile Creek replacement from the Region's perspective. Mr. Clackett requested more details with respect to the project, and any critical deadlines to provide information.

Line Item	Date of Communication	Municipality	Correspondent	Method of Communication	Subject	Comment
7	5-Oct-20	Stantec	Michael Candido	Email	Response to request for information	Stantec asked for clarification on the specific details Halton Region is requesting. Noted the Environmental Report would be circulated for review in the future.
8	5-Feb-21	All municipalities on contact list	Stantec	Email	Notice of Release of Environmental Report	Stantec on behalf of SCPL provided a link to the Environmental Report and requested comments.
9	5-Apr-21	Halton Region	Robert Clackett	Email	Environmental Report comments	Halton Region noted the Environmental Report has been circulated to Regional commenting agencies and comments will be submitted in the near future. Asked what the Project timeline is.
9	12-Apr-21	Halton Region	Robert Clackett	Email	Environmental Report comments	Halton Region followed up on Project timelines and asked how their comments will be incorporated into the Project.
9	13-Apr-21	Stantec	Michael Candido	Email	Environmental Report comments	Stantec provided Project timelines, explained how the Region's comments would be incorporated into the Project's planning process and consultation with all stakeholders is on-going
9	29-Apr-21	Stantec	Michael Candido	Email	Environmental Report comments	Stantec followed up with the Region on when comments on the Environmental Report can be expected.
10a and 10b	30-Apr-21	Halton Region	Robert Clackett	Email	Environmental Report comments	The Halton Region provided comments on the draft Environmental Report on impact identification, assessment and mitigation, consultation, soils and soil capability, crop yields, access and impacts to agricultural operations during construction, compensation, hydrology and water wells, land use and planning, and erosion and sediment control.
11a and 11b	10-Dec-21	Stantec	Michael Candido	Email	Response to Environmental	Stantec provided responses to Halton Region on comments received. Noted that physical impacts of the Project on the



Line Item	Date of Communication	Municipality	Correspondent	Method of Communication	Subject	Comment
					Report comments	environment were limited to the Horizontal Directional Drill entry and exit pads. Provided references to the relevant sections of the Environmental Report that had details on some comments from the Region.

## **APPENDIX 1 – ENVIRONMENTAL REPORT**



**NPS 12 East Sixteen Mile  
Creek Pipeline Replacement  
Project:  
Environmental Report**

FINAL REPORT

Prepared for:  
Sun-Canadian Pipe Line Company

Prepared by:  
Stantec Consulting Ltd.  
1-70 Southgate Drive  
Guelph ON N1G 4P5

File: 110904260  
December 21, 2021

## Sign-off Sheet

This document entitled NPS 12 East Sixteen Mile Creek Pipeline Replacement Project: Environmental Report was prepared by (“Stantec”) for the account of Sun-Canadian Pipe Line Company (the “Client”). The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by \_\_\_\_\_  
(signature)

**Emily Hartwig, B.Sc., EP**  
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Prepared by \_\_\_\_\_  
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**Rooly Georgopoulos, B.Sc.**  
Principal - Environmental Services

Reviewed by \_\_\_\_\_  
(signature)

**David Wesenger, BES**  
Operations Leader – Environmental Services



**NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT:  
ENVIRONMENTAL REPORT**

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# NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT

## Executive Summary

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 Pipeline which crosses East Sixteen Mile (E16M) Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres (m) of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement with a new alignment to accommodate the installation of the pipe by a Horizontal Directional Drill (HDD). Construction of the replacement pipeline is planned to begin as early as Summer 2022 and be completed by the end of 2022.

Sun-Canadian has retained Stantec Consulting Ltd. (Stantec) to undertake an environmental study of the construction and operation of the proposed pipeline. The environmental study fulfills the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)* (OEB Environmental Guidelines). The environmental study included the identification of a preferred route, a consultation program, an impact assessment, and a cumulative effects assessment.

A route evaluation was undertaken to identify environmentally acceptable alternative routes and confirm a preferred route. The preferred route is currently illustrated within a general location. Sun-Canadian will undertake detailed design to determine the exact location of the running line, permanent easement, temporary land use requirements and road/watercourse crossings. Detailed design will also be influenced by supplemental studies (including environmental studies) and site-specific requests from landowners and agencies. In general, this micro-siting exercise will seek to avoid sensitive natural and socio-economic features to the extent practicable.

A consultation program was conducted for the project to engage with landowners, municipalities, agencies, Indigenous communities, and other interested parties. The consultation program included a notice in a local newspaper, letters, and virtual meetings. Sun-Canadian and Stantec have also been in direct contact with agency and municipal staff. Sun-Canadian has committed to on-going consultation with directly affected and interested parties throughout the detailed design and construction phases and will continue to respond to concerns through the life of the project.

The potential effects and impacts of the project on physical, biophysical and socio-economic features have been assessed. In the opinion of Stantec, the recommended program of supplemental studies, mitigation and protective measures are considered sufficient to protect the features encountered.

Where appropriate, post construction monitoring will be conducted to assess whether mitigation and protective measures were effective in both the short and long term.





## **NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT**

The potential cumulative effects of the project were assessed by considering development that has a high probability of proceeding just prior to or concurrent with construction and operation of the project. The cumulative effects assessment determined that, provided the mitigation and protective measures outlined in this report are implemented and that concurrent projects implement similar mitigation and protective measures, potential cumulative effects are not anticipated to be significant.

With the implementation of the recommendations in this report, on-going communication and consultation, and adherence to permit, regulatory and legislative requirements, potential adverse residual environmental and socio-economic impacts of the project are not anticipated to be significant.



# NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT

## Abbreviations

AA	Archaeological Assessment
ANSI	Area of Natural and Scientific Interest
BGS	Below ground surface
CA	Conservation Authority
CEA	Cumulative Effects Assessment
CH	Conservation Halton
CHAR	Cultural Heritage Assessment Report
CLI	Canada Land Inventory for Agriculture
COSSARO	Committee on the Status of Species at Risk in Ontario
DFO	Fisheries and Oceans Canada
EASR	Environmental Activity and Sector Registry
ECCC	Environment and Climate Change Canada
END	Endangered
ENDM	Ministry of Energy, Northern Development and Mines
ER	Environmental Report
ESA	<i>Endangered Species Act</i>
ESC	Erosion and Sediment Control
GIS	Geographic Information System
HADD	Harmful Alteration Disruption and Destruction
HDD	Horizontal Directional Drill
IPZ	Intake Protection Zone
LIO	Land Information Ontario
MBCA	<i>Migratory Birds Convention Act</i>
MECP	Ministry of Environment, Conservation and Parks
MNR	Ministry of Natural Resources
MNRF	Ministry of Natural Resources and Forestry



## NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT

MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
MTO	Ministry of Transportation
NHIC	Natural Heritage Information Centre
OBBA	Ontario Breeding Bird Atlas
OEB	Ontario Energy Board
OGS	Ontario Geological Survey
OHA	<i>Ontario Heritage Act</i>
OMAFRA	Ontario Ministry of Agriculture, Food and Rural Affairs
OPCC	Ontario Pipeline Coordinating Committee
O. Reg.	Ontario Regulation
ORAA	Ontario Reptile and Amphibian Atlas
OWES	Ontario Wetland Evaluation System
PTTW	Permit to Take Water
PSW	Provincially Significant Wetland
RoW	Right-of-way
SAR	Species at Risk
SARA	<i>Species at Risk Act</i>
SC	Special Concern
SGRA	Significant Groundwater Recharge Area
Stantec	Stantec Consulting Ltd.
Sun-Canadian	Sun-Canadian Pipe Line Company
SWH	Significant Wildlife Habitat
THR	Threatened
WHPA	Wellhead Protection Area
WWR	Water Well Record(s)



# NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT

Introduction  
December 21, 2021

## 1.0 INTRODUCTION

### 1.1 PROJECT DESCRIPTION

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 Pipeline which crosses East Sixteen Mile (E16M) Creek southeast of the intersection of Britannia Road and Trafalgar Road in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres (m) of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement with a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill (HDD). Construction of the replacement pipeline is planned to begin as early as Summer 2022 and be completed by the end of 2022.

Sun-Canadian has retained Stantec Consulting Ltd. (Stantec) to undertake an environmental study of the construction and operation of the proposed pipeline. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)* (OEB Environmental Guidelines). The environmental study process included consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, a project webpage, and virtual meetings.

For the remainder of this report, the construction and operation of the proposed pipeline is referred to as 'the project'.

### 1.2 ENVIRONMENTAL STUDY

#### 1.2.1 Objectives

A multidisciplinary team of environmental planners and scientists from Stantec conducted the environmental study. Sun-Canadian provided environmental support and engineering expertise throughout the study.

The environmental study was completed in accordance with the OEB Environmental Guidelines, as well as relevant provincial and federal environmental guidelines and regulations.



# **NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT**

Introduction

December 21, 2021

The principal objective of the environmental study was to identify an environmentally preferred route and outline various environmental mitigation and protection measures for the construction and operation of the project while meeting the intent of the OEB Environmental Guidelines. To meet this objective, the environmental study was prepared to:

- Identify a preferred route that reduces potential environmental impacts
- Complete a detailed review of environmental features along the preferred route and assess the potential environmental impacts of the project on these features
- Establish mitigation and protective measures that may be used to reduce or eliminate potential environmental impacts of the project
- Develop a consultation program to receive input from interested and potentially affected parties
- Identify any necessary supplemental studies, monitoring and contingency plans

## **1.2.2 Process**

The environmental study was divided into three main phases:

### **Phase I: Identification of a Project Study Area and Preferred Route**

The initial phase of the environmental study began by defining the project study area (Figure 1, Appendix A), the development of routing parameters and generating routing objectives. Routing was based on the location of the existing section of NPS 12 pipeline which crosses East Sixteen Mile Creek and the tie-in points where the replacement will connect to the existing pipeline. Environmental and socio-economic constraints and opportunities were evaluated through a detailed review of available literature, mapping and digital data, as well as engineering factors and constructability. Sun-Canadian determined a preferred route based on these criteria.

### **Phase II: Gather Information and Consultation**

Phase II of the environmental study process was to gather relevant environmental and socio-economic background data relevant to the study area. Specific information requests were made to several agencies and stakeholders to assist with identifying environmental features, constraints, the potential for presence of Species at Risk (SAR) and their habitat. This data was used to develop mitigation and protective measures based on predicted effects and potential impacts. The gathering of information continued throughout the project.

Feedback on the proposed project was sought through newspaper notices and letters to agencies, municipal representatives, Indigenous communities, landowners and other stakeholders.



# NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT

Introduction  
December 21, 2021

## Phase III: Environmental Report

The third phase involved determining potential environmental and socio-economic impacts and cumulative effects that would result from the project and developing mitigation and protective measures, supplemental studies, monitoring and contingency plans to avoid or reduce potential impacts. The environmental study concluded with the preparation of this Environmental Report (ER).

### 1.2.3 The Environmental Report

The environmental study has relied on technically sound and consistently applied procedures that are replicable and transparent. As previously noted, the study was undertaken in accordance with the OEB Environmental Guidelines, as well as relevant federal and provincial environmental guidelines and regulations. The ER, which documents the environmental study, will form the foundation for future environmental management activities related to the project.

The ER is organized into the following sections:

- 1.0 Introduction:** provides a description of the project and the environmental study
- 2.0 Route Selection:** provides an overview of the pipeline routing process
- 3.0 Consultation Program:** describes the consultation program
- 4.0 Impact Identification, Assessment and Mitigation:** describes the existing conditions, predicts potential effects and impacts, recommends supplemental studies, mitigation and protective measures, and considers net impacts
- 5.0 Cumulative Effects Assessment:** provides an analysis of potential cumulative effects associated with the proposed project
- 6.0 Monitoring and Contingency Plans:** describes monitoring and contingency plans to address potential environmental impacts of the proposed project
- 7.0 Conclusion:** provides a discussion and consideration of the potential environmental impacts associated with the proposed project

The ER also includes references, and appendices for documentation.

### 1.2.4 The OEB Regulatory Process

Once complete, the ER is circulated to affected municipalities, conservation authorities and to the Ontario Pipeline Coordinating Committee (OPCC) for their review and comment. The OPCC is an inter-ministerial committee that includes provincial government ministries, boards, and authorities with potential interest in the construction and operation of hydrocarbon transmission and storage facilities. The ER is also circulated to landowners, Indigenous communities, and other interested parties. The ER will support a future Sun-Canadian 'Leave-to-Construct' application to the OEB for the proposed project.



# **NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT**

Introduction

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Upon receiving the application, the OEB will hold a public hearing. Communication about the hearing will include notices in local newspapers and letters to directly affected landowners, both of which will outline how the public and landowners can get involved with the hearing process. If after the public hearing the OEB finds the project is in the public interest it will approve construction of the project. The OEB typically attaches conditions to approved projects. Sun-Canadian must comply with these conditions at all stages of the project, including construction, site restoration and operation.

## **1.2.5 Additional Environmental Regulatory Processes**

Sun-Canadian will also be required to obtain additional environmental permits, approvals and notifications from federal, provincial and municipal agencies as outlined in Table 1-1 below. This ER will serve to support these permit and approval applications and notifications.



# NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT

Introduction  
December 21, 2021

**Table 1-1: Summary of Potential Environmental Permits/Regulatory Requirements**

Permit/Approval Name	Administering Agency	Description
<b>FEDERAL PERMITS AND APPROVALS</b>		
Clearing of Vegetation under the <i>Migratory Bird Convention Act</i> (MBCA) (1994)	Environment and Climate Change Canada (ECCC)	No permit is necessary; however, precautions need to be taken so that no breeding birds or their nests are harmed or destroyed during the bird nesting season (April 1 to August 31).
Review and authorization under the <i>Fisheries Act</i> (1985)	Fisheries and Oceans Canada (DFO)	DFO review and possible <i>Fisheries Act</i> authorization is required at watercourse crossings containing species protected under the <i>Species at Risk Act</i> (SARA) (2002). The DFO may authorize activities that have the potential to affect fish or mussel species protected under the SARA (2002).  As per Section 35 (1) of the <i>Fisheries Act</i> (1985), "No person shall carry on any work, undertaking or activity that results in harmful alteration, disruption or destruction (HADD) of fish or fish habitat. As per Section 35 (2)(b) of the <i>Fisheries Act</i> (1985), there are some exceptions under which a person may carry on a work, undertaking or activity without contravening subsection (1), including an authorization from DFO, which typically includes a number of conditions.
Permitting under the <i>Species at Risk Act</i> (SARA) (2002)	DFO	As indicated in Section 32 (1) of the SARA (2002), "No person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species."  As indicated in Section 73 (1) of the SARA (2002), "The competent minister may enter into an agreement with a person, or issue a permit to a person, authorizing the person to engage in an activity affecting a listed wildlife species, any part of its critical habitat or the residences of its individuals."
<b>PROVINCIAL PERMITS AND APPROVALS</b>		
Development Permits under <i>Ontario Regulations 162/06</i> (Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses), as per the <i>Conservation Authorities Act</i> (1990)	Conservation Halton (CH)	Required for works within CH Regulated Areas, including shorelines, watercourses, wetlands and hazardous lands (flooding and erosion hazards, and unstable soils and bedrock).
Permit to Take Water (PTTW) or Environmental Activity and Sector Registry (EASR) (surface and	Ministry of the Environment, Conservation and Parks (MECP)	Under Ontario Regulation (O. Reg.) 64/16 and O. Reg. 63/16, the MECP requires a PTTW for dewatering in excess of 400,000 L/day, and an EASR for dewatering between 50,000 and 400,000 L/day. This can include construction dewatering and taking water for hydrostatic





# NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT

Introduction  
December 21, 2021

**Table 1-1: Summary of Potential Environmental Permits/Regulatory Requirements**

Permit/Approval Name	Administering Agency	Description
groundwater) under the <i>Ontario Water Resources Act</i> (1990)		testing from a pond, lake, etc. There are some exceptions for surface water takings where active or passive surface water diversions occur such that all water taken is returned to within another portion of the same surface water feature.
Permitting or registration under the <i>Endangered Species Act</i> (ESA) (2007)	MECP	An ESA permit or Registration is required for activities that could impact species protected under the ESA. Consultation will occur with the MECP to determine ESA permitting requirements.  As indicated in Section 9 (1) a of the ESA (2007), "No person shall kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species."  As indicated in Section 17 (1), "the Minister may issue a permit to a person that, with respect to a species specified in the permit that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species, authorizes the person to engage in an activity specified in the permit that would otherwise be prohibited by section 9 or 10."
Archaeological clearance under the <i>Ontario Heritage Act</i> (OHA) (1990)	Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI)	A Stage 1-2 archaeological assessment (AA) is required along the Right-of-Way (RoW) and temporary land use areas to identify areas of archaeological potential prior to any ground disturbances and/or site alterations. Depending on the results of the Stage 1-2 AA, Stage 3 and 4 AA's may be required. The completed AA reports are forwarded to the MHSTCI for review and comment.
Review of Built Heritage and Cultural Landscape under the OHA (1990)	MHSTCI	Screening for impacts to built heritage and cultural heritage landscapes. Based on the results of the screening a Cultural Heritage Assessment Report (CHAR) maybe be completed to determine the presence of built heritage and cultural landscapes. If identified, a Heritage Impact Assessment is required to determine the effects of the project on heritage resources and recommend mitigation measures, if necessary.
<b>MUNICIPAL PERMITS AND APPROVALS</b>		
Noise Control By-Law 133-2012	Town of Milton	Project activities should adhere to the local noise by-law.
By-Law 32-17 to prohibit, restrict, and regulate access to the regional road system	Regional Municipality of Halton	Project activities that may require approval to use the regional road system.
Tree By-Law 121-05	Regional Municipality of Halton	Project activities that may require tree removal should meet the intent of the tree cutting by-law.



## NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT

Introduction

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**Table 1-1: Summary of Potential Environmental Permits/Regulatory Requirements**

Permit/Approval Name	Administering Agency	Description
Municipal Consent Permit	Regional Municipality of Halton	Project activities that may require authorization to occupy and install new infrastructure within a road Right-of Way.



# **NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT**

Routing  
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## **2.0 ROUTING**

### **2.1 THE PROCESS**

The route selection process was undertaken in accordance with the OEB Environmental Guidelines which identify the environmental and socio-economic features, and the routing principles, to be considered. The proposed pipeline replacement parallels the existing pipeline, utilizing a combination of proposed new easement and existing easement. The drill entry and exit points are located within the existing easement. The drill path is located within both the existing easement and the proposed new easement. The location of the replacement pipeline was determined by considering the confines of available space and the tie-in locations to the existing pipeline. Routing also considered socio-economic constraints, environmental considerations, and constructability while utilizing the most reasonably direct route.

### **2.2 ROUTING PARAMETERS**

#### **2.2.1 Study Area**

The study area is the area within which direct interactions with the socio-economic and natural environment could occur. It is within this area that desktop information on socio-economic and environmental features has been collected. The tie in points (drill entry and exit pits) of the replacement pipeline defined the study area boundaries with a 500 m buffer applied to these locations and the preferred route.

Study area boundaries were established by considering the potential impacts of the route on important biophysical and socio-economic factors that may be affected by the project.

The study area is shown on Figure 1, Appendix A.

#### **2.2.2 Routing Objectives**

The overarching objective in the route selection process is that the selected route presents the least potential for adverse environmental and socio-economic impacts. The following principles support that objective:

1. Routes should follow a reasonably direct path between end-points to reduce length; in general, a shorter route will help eliminate or minimize the extent of most potential environmental and socio-economic impacts.
2. Routes should avoid sensitive environmental and socio-economic features wherever practicable; where such features cannot be avoided, routes should be located to minimize potential impacts.



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3. Existing linear infrastructure should be used or paralleled to the greatest extent feasible to minimize impacts on previously undisturbed environmental and socio-economic features and to limit constraints on future land development.
4. Where new easements are required, existing lot and property lines should be followed to the extent feasible to avoid deviations into previously undisturbed environmental and socio-economic features.

## **2.3 IDENTIFY PREFERRED ROUTE**

The routing objectives were considered by Sun-Canadian and based on the alignment for the proposed pipeline it was determined the location of the preferred route (Figure 2, Appendix A) was environmentally acceptable and potential impacts could be mitigated. The preferred route is approximately 480 m long and will be constructed within a combination of existing easement and proposed new easement. The location of the south western tie-in is the HDD exit point approximately 380 m southwest of Trafalgar Road. The north eastern tie-in is the HDD entry point located approximately 100 m northeast of Trafalgar Road.

Opportunities and constraints were considered in routing the proposed replacement pipeline. Pipeline routing opportunities are existing features which provide a potential location for the alignment of a pipeline to avoid or reduce environmental or socio-economic impact. Pipeline routing constraints are existing features that meet the following criteria:

- Site-specific mitigation measures would be required to reduce potential effects
- The feature has been selected or designated for protection
- The feature has been recognized through local, regional, provincial, or federal policy, plan, or statute, or is otherwise valued as an environmental or socio-economic resource

Pipeline routing opportunities are limited to the existing easement. The pipeline routing constraints present are residences, businesses, engineering and constructability, and environmental features such as East Sixteen Mile Creek, riparian areas adjacent to East Sixteen Mile Creek and aquatic SAR in the creek.

An alternate that was considered was crossing East Sixteen Mile Creek by the open cut crossing method. This is less desirable than the proposed HDD crossing method as it would require physical disturbance to the watercourse and vegetation clearing on and adjacent to the watercourse banks. Additionally, there would be potential disturbance and impacts to aquatic SAR within the watercourse. Crossing by the HDD method reduces the potential environmental impacts. An open cut crossing would also result in disturbance to the property and residence immediately east of the watercourse because of construction equipment access requirements, construction techniques and engineering requirements associated with open cut crossings.



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Another alternate considered was locating the HDD entry pit between Trafalgar Road and East Sixteen Mile Creek. This however would have resulted in the disturbance to the residence and property immediately east of East Sixteen Mile Creek due to construction equipment access requirements, construction techniques and engineering requirements associated with HDD.

Crossing East Sixteen Mile Creek by the HDD crossing method reduces potential environmental impacts. Locating the HDD entry pit east of Trafalgar Road eliminates socio-economic impacts, because of construction requirements, to the residence west of Trafalgar Road.

### **2.4 CONFIRMATION OF THE PREFERRED ROUTE**

Input on the preferred route was sought through consultation (see Section 3). No feedback was received that resulted in a revision to the preferred route location. Based on the environmental and socio-economic factors as outlined in Section 2.3, as well as constructability and engineering factors, the preferred route was confirmed. The preferred route is currently illustrated within a general location. Sun-Canadian will undertake detailed design to determine the exact location of the running line, permanent easement for the section of pipeline that is to be constructed outside of the current RoW, and temporary land use requirements. Detailed design will also be influenced by supplemental studies (including environmental studies) and site-specific requests from landowners and agencies. In general, this micro-siting exercise will seek to avoid sensitive natural features to the extent practicable while considering utilities and infrastructure.



# **NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT**

Consultation Program  
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## **3.0 CONSULTATION PROGRAM**

### **3.1 OBJECTIVES**

Consultation and engagement is an essential requirement of the OEB Environmental Guidelines. Consultation and engagement is the process of identifying interested and potentially affected parties and informing them about the project, soliciting information about their values and local environmental and socio-economic circumstances, and receiving advice about key project decisions before those decisions are finalized.

The consultation program for this project included the following objectives:

- Identify interested and potentially affected parties early in the process
- Inform and educate interested parties about the nature of the project, potential impacts, proposed mitigation measures and how to participate in the consultation program in a clear, concise, relevant and timely manner
- Provide a forum for the identification of issues
- Identify how input will be used in the planning stages of the project
- Summarize issues for resolution, and resolve as many issues as feasible
- Revise the program to meet the needs of those being consulted, as feasible
- Develop a framework for ongoing communication during the construction and operation phase of the project

### **3.2 IDENTIFYING INTERESTED AND POTENTIALLY AFFECTED PARTIES**

The identification of interested and potentially affected parties was undertaken using a variety of sources, including the OEB's OPCC Members List, the MECP's Environmental Assessment Government Review Team Master Distribution List, and the experience of Sun-Canadian and Stantec. Indigenous communities were identified through provision of a Project Summary to the Ministry of Energy, Northern Development and Mines (ENDM) in June 2020 (see Appendix B1).

In addition, the parties listed below were among those considered when developing the initial stakeholder contact lists:

- Federal and provincial agencies and authorities, including the CH, and members of the OPCC
- Municipal personnel
- Special interest groups
- Indigenous communities



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- Directly affected and adjacent landowners

The initial contact list was updated as the environmental study progressed based on changes in personnel. The Agency and Indigenous Contact List is in Appendix B1.

Directly affected and adjacent landowners were identified through use of publicly available mapping and were tracked in a Landowner Contact List. Sun-Canadian also undertook direct consultation with landowners.

## **3.3 COMMUNICATION METHODS**

### **3.3.1 Newspaper Notices**

A Notice of Commencement was published on August 20, 2020 in the Milton Champion. The Notice introduced and described the project, provided a map, and listed project contact information.

A copy of the tear sheet from the newspaper notice is in Appendix B2

### **3.3.2 Letters and Emails**

#### **3.3.2.1 Notice of Commencement**

Notice of Commencement letters were sent via email to all parties identified on the Indigenous Contact List on August 12, 2020 and to all parties identified on the OPCC and Agency Contact List on August 21, 2020 to provide information on the project, the preferred route, and to request any available additional information. Letters were mailed to landowners and residents within approximately 500 m of the preferred route via Canada Post regular mail on August 21, 2020.

Generic copies of the letters noted above are in Appendix B3.

#### **3.3.2.2 Project Updates**

Project update letters were hand delivered to landowners and residents within approximately 500 m of the preferred route on September 24, 2020 and December 9, 2020. The letters were also mailed to several landowners via Canada Post regular mail on September 24, 2020 and December 9, 2020. Appended to the letters was a map of the preferred route.

Generic copies of the letters noted above are in Appendix B3.

### **3.3.3 Project Webpage**

A project webpage was developed on the Sun-Canadian website (<http://sun-canadian.com/media-releases/>) to provide project details. The project webpage was communicated to interested and potentially affected parties on the newspaper notice, Notice of Commencement and Project update letters.



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### **3.3.4 Project Email**

A project specific email address was created that enabled all interested and potentially affected parties to contact the project team regarding the project. The email address was communicated on the newspaper notice, Notice of Commencement and project update letters.

## **3.4 CONSULTATION EVENTS**

### **3.4.1 Virtual Meetings**

Virtual meetings about the project have occurred between Sun-Canadian and agency staff, key stakeholders, Indigenous communities and with directly impacted landowners and will continue as the project progresses towards detailed design and construction.

## **3.5 INPUT RECEIVED**

The consultation and engagement program allowed interested and potentially affected parties to provide input into the project. Input was evaluated and integrated into the project. The following sections summarize key input received.

A comment-response summary table and a copy of all written comments and responses are in Appendix B5.

### **3.5.1 Public Input**

No comments were received from the public, including directly and indirectly impacted landowners at the time of writing this ER.

### **3.5.2 Agency Input**

Four (4) comments were received from agencies at the time of writing this ER.

- MENDM identified Indigenous communities that should be consulted regarding the Project.
- CH noted that a permit under O. Reg. 162/06 will be required.
- MNRF noted no concerns with the project, but if any in-water works are required appropriate in-water works timing windows must be followed.
- MHSTCI recommended that a combined Stage 1-2 AA be completed for the entire study area, and that a Cultural Heritage Report is required to be completed.

### **3.5.3 Municipal Input**

No comments were received from municipalities at the time of writing this ER. The Regional Municipality of Halton Public Works department noted that a Municipal Consent Permit will be required.





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### **3.5.4 Indigenous Input**

Sun-Canadian held virtual meetings with the Huron Wendat on September 9, 2020, Six Nations of the Grand River on September 22, 2020 and Mississaugas of the Credit on October 5, 2020. During these meetings, an overview of the Project was presented, Indigenous community participation in the Project was discussed and questions answered. A copy of the presentation and meeting notes can be found in Appendix B.

A summary of comments received from Indigenous communities are outlined below.

#### **Huron-Wendat**

- Expect the project design to preserve cultural resources as necessary
- Interests in the project remain with archaeology and will participate in the archaeological assessment

#### **Six Nations of the Grand River**

- Would like to participate in the archaeological assessment
- Would like to participate in construction monitoring

#### **Mississaugas of the Credit**

- Requested to participate in environmental studies and monitoring
- Would like to participate in the archaeological assessment

### **3.5.5 Interest Group Input**

No comments were received from interest groups at the time of writing this ER.

## **3.6 REFINEMENTS BASED ON INPUT**

At each stage of the consultation program input received was compiled, reviewed, and incorporated into the environmental study process. Responses were provided, as applicable, to questions and comments received.

Based on input received from agencies:

- Sun-Canadian will follow applicable fish timing window guidelines for any in-water works as required by the MNRF
- It was noted that a permit under O. Reg. 162/06 will be required from CH and correspondence will continue



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Sun-Canadian has committed to on-going consultation with directly and indirectly affected landowners and interested parties during detailed design and construction and will continue to respond to concerns through the life of the project.

The Sun-Canadian lands department will work with directly and indirectly impacted landowners to address specific concerns they may have.

The proposed pipeline will be designed to meet or exceed all safety regulations and codes. In addition, Sun-Canadian has a rigorous safety and integrity program so that the pipeline is constructed and maintained to operate safely.



# NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT

Impact Identification, Assessment and Mitigation  
December 21, 2021

## 4.0 IMPACT IDENTIFICATION, ASSESSMENT AND MITIGATION

### 4.1 METHODOLOGY

The potential effects and impacts of the project on physical, biophysical and socio-economic features have been assessed along the proposed pipeline route. With an understanding of pipeline construction and operation activities (see Sections 4.1.1 and 4.1.2), the assessment:

- Describes the environmental and socio-economic setting along the proposed pipeline route and related facilities
- Predicts the effects and associated impacts of project construction and operation activities
- Recommends supplemental studies, mitigation and protective measures (including construction methods and timing, site-specific mitigation, environmental protection measures, and compensation measures)
- Outlines the net impacts that are likely to remain

The inventory of existing environmental conditions, determination of effects and impacts, and mitigation and protective measures reflect:

- Input received from the consultation program
- Information available from published and unpublished literature
- Maps and digital data
- Mitigation guidance documents
- Desktop assessments of environmental features conducted by Stantec technical staff
- A field assessment conducted by Stantec technical staff
- The pipeline development experience of Sun-Canadian and Stantec

By necessity, the analysis, integration, and synthesis of the data is an iterative process since information becomes available at various stages of the study and at different mapping scales. The level of detail of data and mapping increases as the study moves from analysis of the study area, to analysis of alternative corridors, to a site-specific survey of features along the proposed pipeline route. The data available at the current stage of the environmental study is appropriate for predicting effects and potential impacts and recommending mitigation and protective measures.

Specific information requests were made to several agencies throughout the project. The information collected assisted in identifying environmental features and constraints located on and adjacent to the proposed pipeline route. Information provided also identified the potential presence of SAR and their habitat, predicting effects and potential impacts, and developing mitigation and protective measures.



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Where agencies requested that information be kept confidential, such as the precise location of rare, threatened, vulnerable or endangered species and archaeological sites, such information has been withheld from the report or mapped in such a way that specific site locations cannot be determined.

A field survey was completed in July 2020. Additional site-specific field surveys will be completed prior to construction.

The existing conditions maps (Appendix C) have been generated from data obtained from Land Information Ontario (LIO). Conservation Authority (CA) regulated area data was obtained from CH. Scales have been adjusted from the original source to better represent the features mapped. Stantec has digitally reproduced features added to the base maps. Additional mapping sources are identified on the respective map, and in the references.

There are instances where field investigations are recommended along the proposed pipeline route before construction. Given the location of the project components and experience of Stantec in providing environmental services for pipelines, these supplemental studies are not expected to change the conclusions regarding potential adverse residual impacts. The environmental and socio-economic information presented in the ER is based on sources cited throughout.

## **4.1.1 Construction**

### **Constructing the Proposed Pipeline**

The pipeline construction process includes various activities as described below:

1. **Site Preparation and Clearing:** The first activity is typically the survey and staking, which delineate the boundaries of the RoW and temporary work areas. Next, the RoW and temporary work areas are cleared of brush and trees where required. Safety fence is installed at the edge of the construction RoW where public safety considerations are required, and aspects of the traffic management plan are implemented (i.e., signs, vehicle access). Silt fence is installed at required locations.
2. **Grading and Stripping:** The RoW is graded where required to allow for access by construction equipment. At this stage, the topsoil (on agricultural lands) or the duff layer (on natural lands) is stripped by bulldozers and graders then segregated so it will not be mixed with the subsoil later removed from the entry and exit pits. Existing landscaping is also removed, and dewatering undertaken, where necessary.
3. **Stringing:** Stringing is the process where pipeline sections are delivered to the RoW, placed on wooded skids at the pipe laydown area.
4. **Pipe Fabrication:** The pipeline is welded into a continuous length. The pipe welds are non-destructively tested (e.g. x-ray) and coated.
5. **Horizontal Directional Drilling (HDD):** The drill set up area is graded; Temporary Work Space is prepared for stringing of the drill pull section and entry and exit pits are excavated. The pipeline is then installed utilizing HDD.



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6. **Backfilling:** During backfilling the originally excavated subsoil is placed over the pipe in the entry and exit pits. The pipe will be sand-padded to protect the coating. Topsoil is then replaced.
7. **Hydrostatic Testing:** The pipeline is pressure tested by filling the pipe with water and holding it at a high pressure for a set period of time, typically 24 hours. Water is typically drawn from nearby source if available. Municipal water may also be used for hydrostatic testing. The suitable water source is determined based on discussions with the appropriate authorities. Upon completion of the hydrostatic testing, the pipeline is drained and dried, purged of air and then put into service.
8. **Clean-Up and Restoration:** Clean-up is the restoration of the RoW and other work areas. On agricultural land this may require decompaction of the subsoil to maintain productivity. In natural areas, clean-up restores the environment including re-seeding of the RoW and returning the topography after grading. Any erosion and sediment controls installed during construction are also removed. Clean-up will also restore landscaping, laneways and driveways.

### **4.1.2 Operation**

Upon completion of the Project, the Project components will be transferred to Sun-Canadian's operations department. Sun-Canadian has procedures in place to inspect and maintain the pipelines, including RoW inspection. Sun-Canadian's Pipeline Integrity team has extensive technical, operational, and industry knowledge, and whose members remain current with industry practices. Detailed procedures and programs will be modified to include the replacement pipeline and to ensure the operation and maintenance activities for the Project comply with applicable provincial and federal legislation, regulations and guidelines.

Pipeline operation consists of oil flowing through the pipeline. Mainline valves located at the valve sites will serve to shut off and isolate the pipeline for maintenance and security purposes. Additional above-ground facilities along the pipeline include post-mounted signs identifying the pipeline, aerial patrol signs for fixed wing patrols, fence stiles, foot bridges for ditch crossings (if applicable), and "test boxes" located along fence lines at roads that are used to assess the adequacy of the corrosion protection system.

## **4.2 PHYSICAL FEATURES**

### **4.2.1 Bedrock Geology and Drift Thickness**

#### **Existing Conditions**

The bedrock geology along the proposed pipeline route is comprised of shale, siltstone, with variable calcareous siltstone to sandstone and limestone interbeds of the Queenston Formation (OGS, 1991; Liberty, Bond, Telford, 1976) (Figure 1, Appendix C).

The general depth from the soil surface to the bedrock indicates a drift thickness along the proposed pipeline route ranging from 9 – 15 m (Gao, et al, 2006) (Figure 2, Appendix C).



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A geotechnical investigation was completed with boreholes located at the entry (BH1) and exit (BH3) pit locations. The subsurface conditions encountered in the boreholes were:

- Thin topsoil layer underlain by
- Clayey silt and sandy clay fill materials underlain by
- Very stiff to hard sandy clay till: underlain by
- Very dense silty sand (exit pit only): underlain by
- Shale bedrock with limestone interbedding

Highly to completely weathered shale bedrock of the Queenston Formation was encountered at depths of 13.3 m and 12.6 m in boreholes at BH1 and BH3, respectively. The thickness of this zone was 0.9 m and 1.4 m in the boreholes.

Underlying the upper highly weather zone, the moderately to slightly weathered zone of the shale with limestone interbedding extended to depths of 20.3 m BH1 and 15.8 m at BH3. Slightly weathered to unweathered bedrock extended to depths of 29.4 m at BH1 and 29.4 m at BH3. Unweathered bedrock extended to the termination depths of the boreholes.

## **Potential Impacts**

The planned drill depth will be approximately 2 m below grade at the entry and exit pit locations approximately 15 m below Trafalgar Road and approximately 17 m below East Sixteen Mile Creek at the deepest point. The drill path will be designed to utilize stable soil and bedrock. Based on the moderately deep drift thickness bedrock is not likely to be encountered at the entry and exit locations. As such no potential impacts are anticipated.

## **Mitigation and Protective Measures**

As no potential impacts are anticipated, no mitigation or protective measures are required.

## **Net Impacts**

No significant adverse residual impacts to bedrock geology and drift thickness are anticipated.

## **4.2.2 Physiography and Surficial Geology**

### **Existing Conditions**

The proposed pipeline is located within the Peel Plain physiographic region of southern Ontario (Chapman and Putnam, 1984) which is a region characterized by relatively flat to undulating glaciolacustrine deltaic deposits of sands (up to 27 m thick) and silts which are observed to cover or partially cover the moraines in the area (Chapman and Putnam 1984; Barnett 1982). The proposed



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pipeline route, from the location of the entry pit to the location of the exit pit, crosses the sand plains physiographic feature (Figure 3, Appendix C).

As described in surficial geology mapping (Figure 4, Appendix C), the pipeline route crosses modern alluvial deposits to fine textured glaciolacustrine deposits to glaciolacustrine-derived silty to clayey till. At the tie-in point to the existing system at the southwest extent of the route, the pipeline traverses fine-textured glaciolacustrine deposits for approximately 100 m (interbedded flow till, rainout deposits, and silt and clay) and then, for a short distance crosses glaciolacustrine-derived silty to clayey till. At the mid-point of the route, the pipeline crosses approximately 300 m of modern alluvial deposits and then re-enters an area with deposits of glaciolacustrine-derived silty to clayey till for the remaining extent to the northeastern tie-in point beyond Trafalgar Road (OGS, 2010).

### **Potential Impacts**

Disturbance to the overburden along the proposed pipeline is limited to the entry and exit pit locations and may cause surface soil erosion. Slumping may occur within the entry and exit pits during construction.

### **Mitigation and Protective Measures**

Surface soil erosion can occur in the absence of vegetative cover. Where there is potential for soil erosion, the need for and location of erosion and sediment control (ESC) measures should be determined by an inspector with appropriate qualifications and installed prior to the commencement of work in the area.

When land is exposed, the exposure should be kept to the shortest practical period. Natural features should be preserved to the extent practical. Temporary vegetation and mulching should be used to protect areas as appropriate. Where required, natural vegetation should be re-established as soon as practical.

The Contractor must obtain adequate quantities of materials to control erosion. Additional supplies should be maintained in a readily accessible location for maintenance and contingency purposes. ESC structures should be monitored to maintain their effectiveness through the life of construction and post-construction rehabilitation.

Extreme precipitation events could result in damage to ESC measures which could lead to erosion. When site conditions permit, ESC measures should be repaired and re-installed on erosion susceptible surfaces. If the erosion is resulting from a construction-related activity, the activity should be halted immediately until the situation is rectified.

To avoid the entry and exit pits from slumping, pit walls should be sloped and should be monitored during wet conditions. Trench boxes may be required depending on site specific conditions.



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ESC and stabilization measures should be maintained during construction, restoration and rehabilitation until vegetative cover is established. Where evidence of erosion exists, corrective control measures should be implemented as soon as conditions permit. Permits obtained from CH may contain conditions pertaining to ESC.

### **Net Impacts**

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts on or from physiography and surficial geology are anticipated.

### **4.2.3 Hydrogeology**

#### **Existing Conditions**

Based on physiographic and surficial geology mapping the proposed pipeline route will cross the Peel Plain (modern alluvial deposits to fine textured glaciolacustrine deposits to glaciolacustrine-derived silty to clayey till). It crosses East Sixteen Mile Creek at two locations.

According to CH aquifer vulnerability mapping as well as the Halton Region Source Protection Region, a portion of the route is located within a significant groundwater recharge area (SGRA) with a vulnerability score of 4. This area corresponds to the presence of alluvial and coarse-textured glaciolacustrine materials located in the area surrounding the East Sixteen Mile Creek tributary (Conservation Halton and OGS, 2013).

MECP Water Well Records (WWR) within 500 m of the proposed pipeline signify the presence of approximately 24 water supply wells, 14 of which are domestic (Figure 5, Appendix C). A review of the WWR's for these 14 wells, indicate that they are installed within the overburden at depths ranging from 0 m below ground surface (BGS) to 55.4 m BGS. Of these 14 wells two domestic water wells fall within 50 m of the proposed pipeline and as MECP WWR's indicate, these wells are installed in the overburden at depths ranging from 0 m to 12.5 m BGS. The depth to groundwater in these wells ranged from 6.1 m to 11 m BGS. Readings obtained at BH1 during geotechnical investigations indicate groundwater at a depth of 5.8 m BGS.

Regional groundwater flow near the proposed pipeline route in the overburden aquifer is generally to the south towards Lake Ontario (Town of Milton, 2009). Local groundwater flow conditions are impacted by surface water features.

Within the Halton Region Source Protection Area, municipal drinking water intakes use surface water from various sources to supply drinking water to the residents and other water users in the region. The proposed pipeline does not cross through any wellhead protection areas (WHPA). The closest WHPA is approximately 12 km northwest of the proposed pipeline (Halton Region, 2018). A review of nearby surface water system intake protection zones (IPZs) indicates that the proposed pipeline crosses an IPZ-3 for a surface water system (Conservation Halton, 2018).





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## **Potential Impacts**

### Hydrostatic Testing and Dewatering/Sand-pointing

A hydrostatic test will be undertaken for the proposed pipeline.

Where the entry and exit pits encounter shallow groundwater conditions or following a large precipitation event, removing water (known as dewatering) may be necessary. During dewatering, discharge water will be released to the environment. An uncontrolled discharge of water could cause downstream flooding, erosion, sedimentation, or contamination.

### Private Water Wells

There are approximately 24 water supply wells within 500 m of the proposed pipeline route, 14 of which are domestic. There are two water supply wells within 50 m of the proposed pipeline, both of which are domestic. Depending on the proximity to wells, the depth of the well installation and the groundwater levels encountered during excavation, dewatering has the potential to impact water well quality or quantity at some of the overburden supply wells.

### Municipal Water Supply

The proposed pipeline extends through a SGRA and an IPZ associated with the municipal groundwater supply system (Conservation Halton, 2018).

Based on *the Clean Water Act* (2006), there are no significant chemical, pathogen or dense non-aqueous phase liquids source water threats to municipal supply sources based on the construction or operation of the proposed pipeline.

## **Mitigation and Protective Measures**

### Hydrostatic Testing and Dewatering/Sand-pointing

For groundwater dewatering, the MECP allows registration under the EASR for construction dewatering projects where groundwater takings will be greater than 50,000 L/day and less than 400,000 L/day; however, should groundwater takings exceed 400,000 L/day, a PTTW may be required from the MECP.

If surface water is used as the source water for the hydrostatic test, a PTTW application would be required and would include an assessment of the capacity of the source to provide the required water without impacting the ecosystem, and recommendations for mitigation measures such as screened water intakes to limit intake of debris and organisms and energy dissipation/erosion control measures during discharge to limit erosion and sedimentation.

To reduce the potential for erosion and scouring at discharge locations during construction dewatering/sand-pointing and/or hydrostatic testing, energy dissipation techniques should be used. Discharge piping should be free of leaks and should be properly anchored to prevent bouncing or snaking



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during surging. Protective measures may include dewatering at low velocities, dissipating water energy by discharging into a filter bag or diffuser and utilizing protective riprap or equivalent. If energy dissipation measures are found to be inadequate, the rate of dewatering should be reduced or dewatering discontinued until satisfactory mitigation measures are in place. Discharge should be monitored to make sure that no erosion or flooding occurs.

To assess the potential for introduction of contaminated water to soils or bodies of water, testing of hydrostatic and dewatering discharge water should be considered. Testing requirements can be influenced by the nature and quality of the source water used, any additives to the test water, the nature of the pipeline, and pipeline contents. An environmental consultant should be consulted to determine what testing is necessary for the discharge water.

### Private Water Wells

A private well survey should take place to assess domestic groundwater use near the proposed pipeline and a private well monitoring program may be recommended for residents within 100 m of HDD activities who rely on overburden groundwater supply for domestic use.

### Municipal Water Supply

There are no nearby municipal supply wells, and therefore additional mitigation measures are not required to protect groundwater drinking supply sources.

During construction, the primary concern to surface water quality is the potential for a contaminant spill during a large storm event. To address this concern, the following mitigation measures are proposed:

- Refueling of equipment should be undertaken a minimum of 30 m from wetlands and watercourses to reduce potential impacts to surface water and groundwater quality if an accidental spill occurs. If a 30 m refueling distance is not possible, under approval from on-site environmental personnel, special refueling procedures for sensitive areas should be undertaken that include, at a minimum, using a two-person refueling system with one worker at each end of the hose.
- To reduce the impact of potential contaminant spills, the Contractor should implement spill management protocols such as secondary containment of any temporary fuel storage and preparation of a spill response plan.
- Work should be limited or stopped during and immediately following significant precipitation events (i.e. 100-year storm event), at the discretion of on-site environmental personnel.

### **Net Impacts**

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts on groundwater are anticipated.



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### **4.2.4 Extractive Resources: Aggregates and Petroleum Resources**

#### **Existing Conditions**

No active or abandoned petroleum wells or aggregate resources are located along or near the proposed pipeline route. The proposed pipeline route is located more than approximately 2 km from the nearest active private gas well and more than 4 km from the nearest abandoned natural gas well.

A map of aggregate and petroleum resources is in Figure 6, Appendix C.

#### **Potential Impacts**

Since the proposed pipeline route is located more than approximately 2 km from the nearest active private gas well and more than 4 km from the nearest abandoned natural gas well, no impacts to these resources are anticipated. The pipeline is also not anticipated to constrain development of any aggregate site.

#### **Mitigation and Protective Measures**

As no potential impacts are anticipated, no mitigation or protective measures are required.

#### **Net Impacts**

No significant adverse residual impacts on aggregate and petroleum resources are anticipated.

### **4.2.5 Soil and Soil Capability**

#### **Existing Conditions**

There are three soil types found along the pipeline route, entry and exit pit locations and pipe laydown area: Chinguacousy Clay Loam, Jeddo Clay Loam and Bottom Land. The following is a description of these soils from the Soils of Halton County (Gillespie et al., 1971):

Chinguacousy Clay Loam is part of the imperfectly drained Chinguacousy soil series that is comprised of calcareous, clay loam textured, till material. These imperfectly drained soils are moderately to slowly permeable and have a relatively high-water holding capacity. Excess soil water is often found in the upper soil horizons because of high groundwater or perched conditions during the growing season". While tile drainage is often necessary to improve crop yield, from an agricultural perspective, these soils are regarded as being agriculturally productive as they have only moderate limitation for common field crop.

Jeddo Clay Loam soil is a subsection of the Jeddo soil series, which are the poorly drained members of the Oneida catena. The soil parent material is a slightly stony calcareous clay till. The Jeddo soils are mainly found in narrow, shallow drainage basins or in the depressional areas associated with undulating or rolling topography (Gillespie et al., 1971).



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Bottom Land is the “flat, frequently flooded land found adjacent to some streams”. Flood deposits occurring on Bottom Land are mainly comprised of fine sand and silt (Gillespie et al., 1971).

Soil capability for agriculture is mapped by Agriculture and Agri-Food Canada in the Canada Land Inventory (CLI). Lands classified as Class 1 are the most agriculturally productive, while those classified as Class 7 have the lowest capability for agriculture. Class 1 to 5 agricultural lands are generally arable, while classes 1 through 3 are defined by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) to be prime agricultural soils for common field crop production.

Table 4-1 shows the soil types mapped along the proposed pipeline route (entry/exit pits and drill path), the percentage of the proposed pipeline route that the soil covers and the CLI for Agriculture rating of each soil type. The CLI rating of the majority of lands, approximately 64%, along the proposed pipeline route are rated as 1 under the Soil Capability Classification of Agriculture; soils in this class have no significant limitations in use for crops. Approximately 29% of the proposed pipeline route is rated as 5 under the Soil Capability Classification of Agriculture; soils in this class have very severe limitations that restrict their capacity in producing perennial forage crops, and improvement practices are deemed feasible. Approximately 7% of the proposed pipeline route is rated as 3 under the Soil Capability Classification for Agriculture; soils in this class have moderately severe limitations that restrict the range of crops or required special conservation practices. (AAFC, 2005).

**Table 4-1: Soil Types and Soil Capability along Preferred Route**

Soil Type	% of Route	CLI Class
Jeddo Clay Loam	7	3
Chinguacousy Clay Loam	64	1
Bottom Land	29	5

Maps of soil type and soil capability are on Figures 7 and 8 respectively, Appendix C.

### Potential Impacts

The proposed pipeline crosses agricultural lands. Where there is interaction with agricultural lands, there are potential impacts to topsoil as a result of construction including compaction, loss of organic matter and degraded soil structure. No topsoil will be removed from the site. Excess subsoil may be removed from the site.

Excavation and construction activities across agricultural land have the potential to affect soil quality and agricultural capability. The movement of heavy machinery on wet soil may cause rutting, compaction, and mixing of topsoil with subsoil. When exposed, soils are more prone to erosion due to the loss of vegetative cover. Improperly salvaged topsoil can result in topsoil and subsoil mixing, compaction, rutting, and erosion, which can potentially decrease crop yields.



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## **Mitigation and Protective Measures**

### Excess Soil

It is noted that O.Reg. 406/19 was filed in December 2019 and comes into force January 1, 2021. O.Reg. 406/19 includes regulations for the management of soil on-site as well as the movement of excess soils off-site in the province of Ontario, including stockpile size and setback requirements and environmental soil quality characterization requirements prior to the movement of drilling mud and soil off-site. It is recommended that Sun-Canadian retain a qualified person for environmental site assessment who is knowledgeable in environmental soil quality characterization, as well as O.Reg. 406/19.

The Contractor is solely responsible for the location and management of stockpiles on-site as they relate to traffic management, construction staging, and the effective management of construction productivity. With the exception of such variances as may be allowed under O.Reg. 406/19, Soil Rules, and/or site-specific instruments such as Environmental Compliance Approvals (ECAs), stockpiling and storage of soil shall be according to the Soil Rules referenced by O.Reg. 406/19, including, but not limited to, the following:

- Managed in such a way as to prevent adverse effects relating to noise, dust, mud tracking, leaching, run-off and erosion, and odour or other air impacts.
- Stored in stockpiles with total volume of less than 2,500 m<sup>3</sup>.
- Soil of different quality, or from different areas, or that has not yet been sampled is segregated.
- Stored more than 30 m away from a waterbody, and more than 10 m away from property boundaries.
- Stored in a manner that prevents leaching of contaminants into the groundwater.

Materials that are surplus and required to be removed from site for disposal or reuse must be tested in accordance with O.Reg. 406/19, Reg. 347, or receiving site requirements under a site-specific instrument to determine management options. For excess soil, the Contractor Qualified Person (QP) shall determine sampling frequency and analytical parameters as required by O.Reg. 406/19 and Reg. 347, and in consultation with the CA. The Contractor QP shall be responsible for the production of all required documentation per O.Reg. 406/19.

### Wet Soil Shutdown

To the extent feasible, construction activities should occur during drier times of the year. Lands affected by heavy rainfall events should be monitored for wet soil conditions, to avoid the potential for topsoil and subsoil mixing and loss of structure. Construction activities should be temporarily halted on agricultural lands where excessively wet soil conditions are encountered. Sun-Canadian's on-site inspection team should determine when construction activities may be resumed.



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If a situation develops that necessitates construction during wet soil conditions, soil protection measures should be implemented, such as confining construction activity to the narrowest area practical, installing surface protection measures, and using wide tracked or low ground pressure vehicles.

### High Winds

During construction activities, weather should be monitored to identify the potential onset of high wind conditions and to preserve topsoil. If high winds occur, the Contractor should implement protective measures such as:

- Suspend earth moving operations
- Apply dust suppressants or vegetate soil stockpiles
- Protect soil stockpiles with a barrier or windscreen

In conjunction with the above measures, all required materials and equipment should be readily accessible and available for use as required.

### Soil Stripping

Topsoil depths should be measured prior to stripping so that the proper depth of topsoil is removed and replaced. Where stripping is undertaken on agricultural lands, topsoil and subsoil should be stripped and stockpiled separately to avoid mixing.

If clean-up is not practical during the construction year, it should be undertaken in the year following construction, starting once the soils have sufficiently dried. Interim soil protection measures should be implemented in sensitive areas to stabilize the RoW for over-wintering.

### Soil Compaction

Within agricultural lands where soil has been compacted by the construction process, an agrologist should determine where decompaction may be necessary. Compaction can be alleviated by using farm equipment such as an agricultural subsoiler prior to replacing the topsoil. Sub-soiling with an agricultural subsoiler, followed by discing, chisel ploughing and cultivating, to smooth the surface, should be considered on agricultural lands. In high traffic areas of the RoW where deep compaction persists, additional deep tillage or subsoiling may be required on a site-specific basis. Soil density and/or penetrometer measurements on and off the easement may be used as a means of assessing the relative degree of soil compaction caused by construction along the RoW as well as determining that the RoW has been sufficiently decompacted.

Additionally, rig mats may be utilized during the construction process to aid in reducing the level of soil compaction.



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### **Net Impacts**

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts on soil and soil capability are anticipated.

### **4.2.6 Agricultural Tile Drains**

#### **Existing Conditions**

The preferred pipeline route does not cross any properties mapped as containing either systematic or random agricultural tile drains. A map of agricultural tile drains is located on Figure 9, Appendix C.

#### **Potential Impacts**

Construction activities, including excavation and the movement of heavy machinery, typically have the potential to crush and/or sever agricultural tile drains. As no agricultural tile drains are anticipated to be crossed, no impacts to these resources are anticipated.

#### **Mitigation and Protective Measures**

As no potential impacts are anticipated, no mitigation or protective measures are required.

### **Net Impacts**

No significant adverse residual impacts on agricultural tile drains are anticipated.

### **4.2.7 Natural Hazards**

#### **Existing Conditions**

Natural hazards are elements of the physical environment that have the potential to affect a project in an adverse manner. Potential natural hazards along the proposed pipeline route are limited. Natural hazards that may occur are seismic activity and flooding.

The proposed pipeline route lies within the southern Great Lakes Seismic Zone (Natural Resources Canada, 2016). This zone has a low to moderate level of seismicity when compared to the more active seismic zones to the east, along the Ottawa River and in Quebec. Over the past 30 years, on average, 2 to 3 magnitude 2.5 or larger earthquakes have been recorded in the southern Great Lakes region. By comparison, over the same time period, the smaller region of Western Quebec experienced 15 magnitude 2.5 or greater earthquakes per year.

A map of the regulation limits of CH is located on Figure 10, Appendix C,



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## Potential Impacts

The probability of significant seismic activity in the area traversed by the proposed pipeline is low; therefore, no potential impacts are anticipated.

The likelihood of a flooding event interfering with pipeline construction is reduced by construction occurring outside of the spring freshet. A flooding event during construction could result in construction delays, soil erosion, sedimentation of a watercourse, bore pit slumping, and damage or loss of construction equipment and contamination of a watercourse because of equipment entering a watercourse. The nature of these impacts would depend on the spatial extent, duration, and magnitude of the flooding event.

## Mitigation and Protective Measures

If flooding necessitates a change in the construction schedule, affected landowners and regulatory agencies should be notified and construction should continue at non-affected locations. Temporary workspaces should be located above the floodplain to the extent practical, unless necessary for watercourse crossings. All work in the floodplains will be subject to a permit from CH.

## Net Impacts

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts from natural hazards are anticipated.

## 4.3 BIOPHYSICAL FEATURES

### 4.3.1 Aquatic Features

#### Fish and Fish Habitat

The proposed pipeline crosses the Lower Middle branch of East Sixteen Mile Creek, which is a large permanent watercourse supporting a diverse fish community. The proposed crossing location is shown on (Figure 11, Appendix C). At the proposed crossing location, the channel has an average width of 10 m. It meanders through a wooded valley with an average width of 200 m.

CH maintains a long-term monitoring station approximately 650 m north of the crossing location of the proposed pipeline at the crossing of Britannia Road 170 m west of Trafalgar Road (Station SXM-435) (Conservation Halton 2013). Fifteen (15) fish species were observed at this station in 2011 (Conservation Halton 2013), as summarized in Table 4-2.

**Table 4-2: Fish Species Observed in the Lower East Sixteen Mile Creek in 2011<sup>1</sup>**

Common Name	Latin Name	Thermal Preference <sup>2</sup>
Black Crappie	<i>Pomoxis nigromaculatus</i>	Cool





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**Table 4-2: Fish Species Observed in the Lower East Sixteen Mile Creek in 2011<sup>1</sup>**

Common Name	Latin Name	Thermal Preference <sup>2</sup>
Bluntnose Minnow	<i>Pimephales notatus</i>	Warm
Carp and Minnows	<i>Cyprinidae</i>	Cool / Warm
Fantail Darter	<i>Etheostoma flabellare</i>	Unknown
Fathead Minnow	<i>Pimephales promelas</i>	Warm
Johnny Darter	<i>Etheostoma nigrum</i>	Unknown
Largemouth Bass	<i>Micropterus salmoides</i>	Warm
Longnose Dace	<i>Rhinichthys cataractae</i>	Cool
Northern Hogsucker	<i>Hypentelium nigricans</i>	Warm
Pumpkinseed	<i>Lepomis gibbosus</i>	Warm
Rainbow Darter	<i>Etheostoma caeruleum</i>	Cool
Rock Bass	<i>Ambloplites rupestris</i>	Cool
Silver Shiner	<i>Notropis photogenis</i>	Unknown
Stonecat	<i>Noturus flavus</i>	Warm
White Sucker	<i>Catostomus commersonii</i>	Cool
Sources:		
1) Fish Captured at Station SXM-435 in 2011 by Conservation Halton (2013)		
2) Coker, G.A., C.B. Portt and C.K. Minns. 2001.		

The fish species captured by CH (2013) belong to warm and cool water temperature preference classes (Coker et al. 2001). All species captured are common and widespread in southern Ontario except for Silver Shiner, a fish SAR.

### Fish Species at Risk

The fish community in this reach of East Sixteen Mile Creek includes the presence of a fish SAR, detailed in the following reports:

- Long Term Environmental Monitoring Program Grindstone Creek, Sixteen Mile Creek and Supplemental Monitoring (Conservation Halton 2013)
- Silver Shiner (*Notropis photogenis*) in Ontario: Distribution and Habitat Use. (Glass et al. 2016)

Silver Shiner have been observed in this branch of East Sixteen Mile Creek (Conservation Halton 2013, Glass et al. 2016). Silver Shiner is listed as provincially and federally Threatened. It is afforded protection under the provincial *Endangered Species Act* (ESA) and under Schedule 1 of the federal *Species at Risk Act* (SARA).



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Currently there is no specifically prescribed area, such as mapped critical habitat, for this species in a habitat regulation. Therefore, the protected habitat includes all areas described in a general description by MNRF (2017) as follows:

- Category 1: Flowing pools, runs, and riffles in occupied reaches
- Category 2: Shallow, nearshore habitats, and areas with aquatic vegetation in occupied reaches
- Category 3: Floodplains and riparian edges adjacent to occupied reaches

No other fish or mussel species at risk were identified in this reach of East Sixteen Mile Creek.

### **Potential Impacts**

The proposed pipeline will cross underneath East Sixteen Mile Creek using the HDD method. The HDD process involves drilling a pilot bore hole underneath the watercourse and back-reaming the bore hole to the drill rig. Once the hole is of a sufficient diameter the pipeline is pulled into the hole by the drill rig. HDD typically uses a mixture of freshwater and bentonite to flush drill cutting from the hole and to act as a lubricant. The points of drill entry and exit will be outside the limits of the Sixteen Mile Creek valley. Therefore, there will be no disturbance in the active channel of the watercourse, nearshore habitats, or floodplain and riparian areas. No areas considered to be fish habitat or habitat for Silver Shiner will be disturbed.

HDD is intended to be a less intrusive construction method than traditional open cut crossing of a watercourse. However, there is a possibility of surface (water, riparian, wetland) disturbance if an inadvertent release of drilling fluid or a release of sediment laden groundwater occurs. There is also the potential for sediment laden water or other deleterious substances to enter a surface water feature as the result of grading, drilling excavations, equipment washing, or other construction related activities during directional boring.

Inadvertent releases are typically caused by the pressurization of the drill hole beyond the containment capability of the near surface geologic materials (soil and/or rock). Therefore, the type and depth of these materials, as well as the drilling pressure, are key factors in preventing and managing frac-outs.

### **Mitigation and Protective Measures**

The following general environmental mitigation measures should be taken to protect fish and fish habitat:

- Data obtained from the geotechnical report aided in determining the feasibility of the HDD drill path.
- Design the directional drill so that drilling slurry pressure is reduced, and the drilling rate is reduced in porous materials to reduce the chance of loss of circulation of the drilling slurry.
- HDD should be completed within the permitted construction timing window of July 1 to September 15 to protect sensitive life stages for Silver Shiner and fishes in general. This window was established based on communications with MECP staff for a project in the CH jurisdiction.



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- An experienced and certified environmental monitor (i.e., a Certified Inspector of Sediment and Erosion Control [CISEC]) should be on site during HDD activities.
- Prior to removal of the vegetation cover, effective mitigation techniques for erosion and sedimentation should be in place to protect water quality. Disturbance to the area during construction should be limited and grubbing activities should be delayed until immediately prior to grading operations.
- A drilling mud release contingency plan should be prepared and kept on-site.
- Install as appropriate berms, silt fencing and secondary containment measures (i.e., plastic tarp) around drilling and drilling mud management equipment at both bore entry and bore exit locations to contain operational spills.
- Immediately contain any drilling mud that escapes onto land and transfer it into an on-site containment system.
- Temporary erosion and sediment control measures should be maintained and kept in place until work near a watercourse has been completed and stabilized. Temporary sediment control measures should be removed at the completion of the work but not until permanent erosion control measures have been established.
- Construction material, excess material, construction debris and empty containers should be stored a minimum of 30 m from watercourses and watercourse banks, where practical.
- Equipment maintenance and refueling should be controlled to prevent entry of petroleum products or other deleterious substances, including any debris, waste, rubble, or concrete material, into a watercourse, unless otherwise specified in the contract.
- Deleterious substances (fuel, oil, spoil) should be stored a minimum of 30 m from the watercourse. Any such material that inadvertently enters a watercourse should be removed in a manner satisfactory to the environmental inspector.
- Maintain smooth operation of the drilling string and slurry pumping systems to avoid pressure surges.
- Reduce slurry viscosity through appropriate filtering of drilled material to reduce the pressure gradient along the drill path due to frictional effects.
- Continually monitor slurry volumes to enable a quick response to any indications of lost circulation.
- Clean up operational spills daily to prevent mobilization of drilling mud off site during rain events.
- Drilling mud should be disposed in accordance with the appropriate regulatory authority requirements.
- Following construction, any disturbed vegetation should be restored to pre-construction conditions to the extent possible in accordance with environmental permits.

### **Bore Path Collapse Mitigation Measures**

The following mitigation measures should be applied as recommended by geotechnical studies to prevent HDD borehole collapse from occurring in susceptible soils:



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- Fluid volumes, annular pressure and cutting returns should be strictly monitored to ensure bore hole plugging and fluid losses are detected and addressed immediately.
- Alternative drill paths should be evaluated to reduce exposure to challenging soil materials.
- Drilling mud should be maintained in the borehole until the pipeline is installed. This can be facilitated by positioning the entry and exit points in areas with cohesion less soils (e.g., silt-sand zones).

### Contingency Plan

A drilling mud release contingency plan will be prepared and kept on-site. Spills containment and clean-up procedures will be implemented immediately in the unlikely event of a spill. The proponent will immediately contact the MECP Spills Action Centre. The MECP Spills Action Centre is the first point of contact for spills at the provincial and federal level. In addition, the following agencies will be contacted should conditions warrant:

- DFO (Toll-free: 1-855-852-8320)
- MNRF (Toll-free:1-866-517-0571)
- CH (Tel: 1-905-336-1158)

A contingency plan will be in place to effectively address inadvertent releases of sediment through frac-outs, or other releases of sediment laden water from the project site. The contingency plan outlines the steps that the Contractor is to take in the event of a sediment release or other type of spill. The contingency plan will also outline the steps involved to mitigate an inadvertent release after it occurs.

If a sediment spill occurs within the watercourse, adequate isolation of the release should be provided to contain the sediment. For example, a vacuum truck may be on-site during construction and ready to remove the drilling fluid and any other frac out soil.

The following materials should be readily available during drilling operations and prepared to employ them in the event of a drilling mud spill or inadvertent release: sandbags, straw bales, silt fencing and a hydrovac truck.

All products used on site are to be environmentally safe. Inadvertent release mitigation wells may also be considered to relieve drilling pressures. The Contingency Plan should indicate if, and when, HDD activities are to resume. For example, when mitigation measures have been implemented are deemed to be effective at mitigating potential ecological impacts.

### Permitting

The federal *Fisheries Act* prohibits causing harmful alteration disruption and destruction (HADD) of fish or fish habitat unless authorized by the DFO. It protects all fish and fish habitat and prohibits against causing the death of fish by means other than fishing. HDD construction methods for pipeline water crossings do not require review or Authorization under the *Fisheries Act* provided measures to avoid causing HADD of fish habitat and death of fish are followed during construction. These measures include locating entry and



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exit points at sufficient distance to avoid disturbance to the bed and banks, locating the drill path at an appropriate depth below the channel and installation of appropriate sediment and erosion control measures (i.e., silt fencing around disturbed areas, development of a contingency plan, etc.). If these measures are followed, a project of this nature is low risk to fish and fish habitat and can proceed without review by DFO.

Silver Shiner and its habitat is protected under Sections 9 and 10 of the provincial ESA. The federal SARA also contains prohibitions against the killing and harming of this species and damage or destruction of their habitat (i.e. residences).

The pipeline route will be located within a regulated boundary of CH. A permit under O. Reg. 162/06 will be required prior to construction activities in the regulated boundaries.

### **Net Impact**

With the implementation of the horizontal directional drilling method and the mitigation and contingency measures described in this report, no adverse residual impacts on fish species or fish habitat are anticipated.

With the implementation of the HDD method and the mitigation and contingency measures described in this report, no adverse residual impacts on Silver Shiner or their habitat (residences) are anticipated.

### **4.3.2 Designated Natural Areas and Vegetation**

#### **Existing Conditions**

The proposed pipeline replacement falls within the Niagara section of the Deciduous Forest Region (Rowe, 1972). According to CH (2018), forest conditions in proximity to the proposed pipeline replacement are ranked as Poor or Very Poor, based on a ranking system that considers percentage of forest cover, forest interior (100 m from the forest edge) and forested streamside vegetation. The pipeline replacement will occur within or under (from west to east) an existing private access road, mature forested riparian area, East Sixteen Mile Creek, another forested riparian area, a rural residence and Trafalgar Road.

A map of designated natural areas is provided on Figure 12, Appendix C.

#### Wetlands

The Ontario Wetland Evaluation System (OWES) is used to identify Provincially Significant Wetlands (PSW). An evaluated wetland may be one contiguous unit or may be a series of smaller wetlands functioning as a whole. Evaluated wetlands that do not qualify as provincially significant may be designated as locally significant and may be protected through local planning and policy measures. There may also be unevaluated wetlands in an area.



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A review of MNRF LIO mapping (MNRF, 2019a) and the Natural Heritage Information Centre (NHIC) database (MNRF, 2019b) did not identify any PSWs or unevaluated wetlands within 120 m of the pipeline replacement project.

### Significant Woodlands

A woodland is defined as a treed area, woodlot, or forested area. The Natural Heritage Reference Manual notes that the local planning authority has the responsibility for designating significant woodlands (MNR, 2010). The criteria for designating significant woodlands at a provincial level includes: woodland size; ecological function (shape, proximity to other woodlands or natural features, linkages); species diversity; uncommon characteristics; and, economic and social values (MNR, 2010).

It is the local planning authority's responsibility to designate significant woodlands. The proposed pipeline replacement is in the Town of Milton. The Town of Milton's Official Plan (OP; consolidated August 2008) was reviewed for the identification and designation of significant woodlands that occur within the construction footprint.

The town of Milton identified a significant woodlot as: *... woodlands determined to be significant through an application of the following criteria: size of woodlands, the occurrence of other identified natural heritage features or areas in the woodland, the occurrence of woodlands that are of a composition, age, size or site quality that is uncommon for the planning area for which the evaluation is being undertaken and the provision of important ecological functions such as linkage, buffering or hydrological flow.*

As per OP Section 4.9.1.2, (g), Significant Woodlands are included as part of Greenlands B Area, which are identified on Schedule A. No Greenlands B Areas were identified within 120 m of the proposed pipeline replacement.

### Other Woodlands

Woodlands were identified adjacent to the proposed pipeline replacement in LIO (MNRF 2019a) and confirmed in the field during a site visit conducted by Stantec on July 28, 2020. The vegetation communities observed are common in the province, comprised of a mid-aged to mature deciduous forest community on the west bank of Sixteen Mile Creek. There was a larger mid-aged to mature sugar maple forest and a smaller coniferous plantation comprised of Scot's pine adjacent to the south end of the pipeline laydown area. The edge of the sugar maple forest overlaps with the pipeline laydown area. A narrow hedgerow comprised of young to mid-aged deciduous trees and invasive buckthorn overlapped with the pipeline laydown area located between East Sixteen Mile Creek and the sugar maple forest.

### Areas of Natural and Scientific Interest (ANSI)

Life science ANSIs are significant representative segments of Ontario's biodiversity and natural landscapes, including specific types of forests, valleys, prairies, savannahs, alvars and wetlands, their native plants and animals, and their supporting environments. They contain relatively undisturbed vegetation and landforms, and their associated species and communities. Provincially significant life science ANSIs include the most significant and best examples of the natural heritage features in the



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province, and many will correspond to other significant features and areas such as wetlands, valleylands and woodlands (MNR, 2010).

A review of MNRF LIO mapping (MNRF, 2019a) and the NHIC (MNRF, 2019b) identified one candidate life science ANSI, Sixteen Mile Creek, within 120 m of the proposed pipeline route. The pipeline laydown area encroaches on a small section of the candidate ANSI, located to the north of the work area.

### **Potential Impacts**

The proposed pipeline replacement will be completed using HDD under East Sixteen Mile Creek, reducing impact to riparian woodlands.

Where there is natural vegetation within or adjacent to the proposed pipeline route, potential impacts include the removal of native vegetation, introduction or spread of invasive species, and indirect effects such as dust, erosion, and accidental spills.

### **Mitigation and Protective Measures**

Environmental mitigation and protective measures during construction include the following:

- Where the RoW abuts a woodland on one side, detailed design should avoid the feature where possible.
- Determine municipal requirements or permits for tree removal (if required) prior to construction.
- Clearing should be minimized/avoided to the extent possible in sensitive areas such as woodlots, along watercourses, adjacent to the ANSI and in areas of significant groundwater recharge.
- The limits of clearing should be surveyed and staked in the field, to allow for the protection of off-site natural areas and vegetation.
- All brush and trees should be felled (if required) within the project footprint.
- Clearing should be done during dry soil conditions to the extent practical to limit disturbance to vegetation and terrain.
- Precautionary measures (e.g., equipment washing before site access) may be necessary to mitigate for the spread of non-native species.
- A re-vegetation program should be initiated for all vegetated temporary work areas. Sun-Canadian should consult with landowners and CH to confirm replanting plans.
- Seeding of the disturbed temporary work areas and permanent easement should be done with a native seed mix reviewed by CH. Replaced soils should contain native seed bank, facilitating successful revegetation.
- One year following construction, planted vegetation should be inspected for survival; in areas of severe dieback, dead and diseased planted vegetation should be replaced.



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Mitigation and protective measures are outlined in Section 4.4.5 for dust, Section 4.2.2 for erosion and Section 4.3.1 for accidental spills.

### Net Impacts

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts on designated natural areas and vegetation are anticipated.

### 4.3.3 Wildlife, Wildlife Habitat and Species at Risk

#### Significant Wildlife Habitat

Wildlife habitat is defined as an area where plants, animals and other organisms live, including areas where species concentrate at a vulnerable point in their life cycle, and areas that are important to migratory and non-migratory species (MNR, 2000). Significant wildlife habitats (SWHs) are grouped into four categories:

1. Seasonal concentration areas
2. Animal movement corridors
3. Rare vegetation communities or specialized habitats
4. Habitats of species of conservation concern

The presence of SWH along the proposed pipeline replacement area was determined in two ways. First, publicly available NHIC data was reviewed for SWH (MNRF 2019b). Second, potential SWH was identified using the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF, 2015) which provide descriptions of wildlife habitats and guidance on criteria for determining the presence of SWH. These descriptions were then compared to results of the July 28, 2020 vegetation and wildlife habitat assessment with support from air photo interpretation and GIS data. Details of the significant wildlife assessment are summarized below.

#### Seasonal Concentration Areas

Seasonal Concentration Areas are sites where large numbers of a species gather together at one time of the year, or where several species congregate. Only the best examples of these concentration areas are typically designated as SWH. The potential for seasonal concentration areas to occur within 120 m of the proposed pipeline replacement is assessed in Table D-1, Appendix D. Candidate habitat for the following seasonal concentration areas may be present along the proposed pipeline replacement route:

- Bat maternity roost colonies
- Turtle wintering areas





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### Rare vegetation communities or specialized habitats

Rare vegetation communities or specialized habitats are defined as separate components of SWH. Rare vegetation communities are habitats that are considered rare or uncommon in the ecoregion, as defined in the SWH Criteria Schedules (MNRF, 2019b). These habitats may support wildlife species that are considered significant. Specialized habitats are microhabitats that are critical to some wildlife species. Review of the NHIC (MNRF, 2019b) database did not identify any rare vegetation communities or specialized habitats within the proposed pipeline replacement. Potential rare vegetation communities or specialized habitats based on the SWH Criteria Schedule for Ecoregion 6E (MNRF, 2015) are discussed in Table D-1, Appendix D. Rare communities and specialized habitats were not identified in proximity to the proposed pipeline replacement area.

### Animal Movement Corridors

Animal movement corridors are elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another (MNR, 2000). As wetlands and vernal pools that support breeding amphibians and deer wintering areas were absent in proximity to the proposed pipeline replacement, animal movement corridors are also considered absent.

### Habitat for Species of Conservation Concern

Habitats of Species of Conservation Concern include wildlife species that are listed as Special Concern or rare, that are declining, or are featured species in the province. This includes marsh breeding birds, shrub/early successional breeding bird habitat, terrestrial crayfish, as well as rare species, as defined in the SWH Criteria Schedules (MNRF, 2019b).

Provincially rare (S1-S3 ranked species) are determined by status rankings (S-ranks) for wildlife are based on the number of occurrences in Ontario and have the following meanings:

- S1: critically imperiled; often fewer than 5 occurrences
- S2: imperiled; often fewer than 20 occurrences
- S3: vulnerable; often fewer than 80 occurrences

Designation of Special Concern is determined by the Committee on the Status of Species at Risk in Ontario (COSSARO).

The NHIC database was searched to obtain recent records (1990 - present) of Species of Conservation Concern (S1-S3 ranked species and provincially designated Special Concern species) in the vicinity of the proposed pipeline route. The Ontario Breeding Bird Atlas (Cadman et al., 2007), the Ontario Reptile and Amphibian Atlas (Ontario Nature, 2017) and the Ontario Mammal Atlas (Dobbyn, 1994) were also searched. The exact location of species occurrences is not available from these atlases; instead, occurrences are recorded within 1 x 1 km or 10 x 10 km squares.



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Based on a review of background information, 5 species of conservation concern are known to occur in the vicinity of the proposed pipeline replacement, as shown in Table 4-3 2 reptiles and 3 birds.

**Table 4-3: Potential Terrestrial Species of Conservation Concern Within the Proposed Pipeline Replacement**

Common Name	Scientific Name	Srank	Provincial Status (COSSARO)	Source
<b>Reptiles</b>				
Eastern Milksnake	<i>Lampropeltis triangulum</i>	S3	SC	ORAA
Snapping Turtle	<i>Chelydra serpentina</i>	S3	SC	ORAA
<b>Birds</b>				
Eastern Wood-pewee	<i>Contopus virens</i>	S4B	SC	OBBA
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	S4B	SC	OBBA
Wood Thrush	<i>Hylocichla mustelina</i>	S4B	SC	OBBA

Notes:

Sources: MNRF 2019 (NHIC), Cadman et. al. 2007 (OBBA), Ontario Nature 2018 (ORAA), Dobbyn 1994 (AMO)

SC - Special Concern - a species with characteristics that make it sensitive to human activities or natural events

S1: Critically Imperiled—Critically imperiled in the province (often 5 or fewer occurrences)

S2: Imperiled—Imperiled in the province, few populations (often 20 or fewer)

S3: Vulnerable—Vulnerable in the province, relatively few populations (often 80 or fewer)

S4: Apparently Secure—Uncommon but not rare

S#B- Breeding status rank

S#N- Non Breeding status rank

The potential for species of conservation concern to be present along the proposed pipeline route is limited by habitat suitability and availability; therefore, species listed in Table 4-3 may not occur along the proposed pipeline route. Results of the vegetation and habitat assessment conducted on July 28, 2020 is discussed in Table D-1, Appendix D. Potentially suitable habitat for the following species of conservation concern occur within proximity to the pipeline replacement:

- Snapping Turtle
- Eastern Wood-pewee
- Wood Thrush



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## Species at Risk

Species at Risk (SAR) are those species identified as Endangered or Threatened by provincial (ESA) legislation. The NHIC database was searched to obtain recent records (1990– present) of SAR from the vicinity of the proposed pipeline route. The Ontario Breeding Bird Atlas (Cadman et al., 2007), the Ontario Reptile and Amphibian Atlas (Ontario Nature, 2017) and the Ontario Mammal Atlas (Dobbyn, 1994) were also searched. The exact location of species occurrences is not available from these atlases; instead, occurrences are recorded within 1 x 1 km or 10 x 10 km squares.

Based on a review of background information, 10 SAR are known to occur in the vicinity of the proposed pipeline route, as shown in Table 4-4: 1 plant, 1 amphibian, 4 birds and 4 mammals.

**Table 4-4: Potential Terrestrial Species at Risk (Threatened or Endangered) within Proximity of the Proposed Replacement**

Common Name	Scientific Name	Provincial Status (COSSARO)	Source
<b>Plant</b>			
Butternut	<i>Juglans cinerea</i>	END	Stantec
<b>Amphibians</b>			
Jefferson Salamander	<i>Ambystoma jeffersonianum</i>	END	NHIC
<b>Birds</b>			
Barn Swallow	<i>Hirundo rustica</i>	THR	OBBA
Bobolink	<i>Dolichonyx oryzivorus</i>	THR	NHIC, OBBA
Chimney Swift	<i>Chaetura pelagica</i>	THR	OBBA
Eastern Meadowlark	<i>Sturnella magna</i>	THR	NHIC, OBBA
<b>Mammals</b>			
Little Brown Myotis	<i>Myotis lucifugus</i>	END	AMO
Northern Myotis	<i>Myotis septentrionalis</i>	END	AMO
Eastern Small-footed Myotis	<i>Myotis leibii</i>	END	AMO
Tri-coloured Bat	<i>Perimyotis subflavus</i>	END	AMO

### Notes:

Sources: MNRF, 2019 (NHIC); Cadman et. al., 2007 (OBBA); Ontario Nature, 2013 (ORAA); Dobbyn 1994 (AMO)  
END – Endangered - a species facing imminent extinction or extirpation  
THR – Threatened - a species that is at risk of becoming endangered  
SC - Special Concern - a species with characteristics that make it sensitive to human activities or natural events  
S1: Critically Imperiled—Critically imperiled in the province (often 5 or fewer occurrences)

S2: Imperiled—Imperiled in the province, few populations (often 20 or fewer)

S3: Vulnerable—Vulnerable in the province, relatively few populations (often 80 or fewer)

S4: Apparently Secure—Uncommon but not rare

S? – Rank Uncertain

SH: Possibly Extirpated (Historical)

S#B- Breeding status rank

S#N- Non-Breeding status rank



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Results of the vegetation and habitat assessment conducted on July 28, 2020, in addition with air photo interpretation, were compared to habitat preferences of the SAR identified in Table 4-4, summarized in Table D-2, Appendix D. The following SAR have the potential to occur within proximity to the proposed pipeline replacement:

- Butternut
- Bat SAR
  - Little Brown Myotis
  - Northern Myotis
  - Small-footed Myotis
  - Tri-colored Bat

Results of the bat maternity colony survey conducted on December 9, 2020 identified 11 candidate bat maternity roost trees. Two trees were located in the deciduous forest on the valley slope on the southwest bank of East Sixteen Mile Creek. The other 9 trees were located along the edge of the woodlands adjacent to the pipe laydown area.

### **Potential Impacts**

Potential impacts on wildlife and wildlife habitat from construction include direct mortality from construction vehicles, habitat destruction through vegetation removal, habitat degradation through spills and sensory disturbance of wildlife during construction.

There are no impacts anticipated to the two trees on the valley slope of East Sixteen Mile Creek as they are within the HDD area, and tree removal is not anticipated to be required. Additionally, there are no impacts anticipated to the 9 trees adjacent to the pipe laydown area as tree removal is not anticipated at this location.

### **Mitigation and Protective Measures**

Environmental mitigation and protective measures during construction include the following:

- Detailed design of the proposed pipeline should be reviewed to avoid and reduce the likelihood of impact upon wildlife habitat to the extent possible, and in particular habitats of Endangered, Threatened, Special Concern and rare species.
- Equipment and vehicles should yield the RoW to wildlife.
- Fencing should be erected around deep excavations to prevent wildlife entrapment.
- The Contractor should inform their personnel to not threaten, harass or injure wildlife.
- If wildlife are encountered during construction, personnel are required to move away from the animal and wait for the animal to move off the construction site.



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- A butternut tree is located within 25m of the pipeline laydown area. Avoidance of the tree is recommended. For work within 25m of the trees, consultation with MECP is recommended to confirm requirements under the ESA.
- Tree removal is not anticipated; however, if removal of trees identified as potential bat maternity roots is required, removal should not occur between April 1 and October 1 to avoid direct impacts to bats. Consultation with MECP is recommended to confirm requirements under the ESA.
- Silt fencing is recommended along the perimeter of the HDD work zone to prevent encroachment into East Sixteen Mile Creek, exclude reptiles and amphibians during their active period (approximately April 1 – October 31), as well as prevent sedimentation.
- Construction activities with the potential to remove migratory bird habitat, such as vegetation clearing, should be avoided during the breeding season which is generally from April 1- August 31 in southern Ontario (Environment Canada, 2017). Should vegetation clearing activities be unavoidable during this window, a mitigation program should be developed, which includes measures to reduce and avoid impacts to migratory birds and their nests (Government of Canada, 2018). This program should include preventative and mitigation measures but may also include avoidance of clearing during key sensitive periods and in key locations.
- If SAR are encountered during the proposed pipeline replacement, work will stop and consultation with the MECP regarding the potential need for a permit under the ESA and/or species-specific mitigation will be conducted.

Mitigation and protective measures are outlined in Section 4.3.2 for vegetation removal and Section 4.3.1 for accidental spills.

### **Net Impacts**

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts on wildlife, wildlife habitat and SAR are anticipated.

## **4.4 SOCIO-ECONOMIC ENVIRONMENT**

### **4.4.1 Employment and Business**

#### **Existing Conditions**

In the Town of Milton, the number of people employed increased from 48,060 in 2011, to 59,815 in 2016, while the unemployment rate decreased from 5.7% to 5.6% over the same period. The unemployment rate in the Town of Milton was below the provincial and national average rates of 7.4% and 7.8%, respectively, for 2016. Refer to Table 4-5 for labour characteristics.



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**Table 4-5: Labour Characteristics, Ontario and Milton, 2016**

Location	Total Population 15 years and Over	Labour Force	Employed	Participation Rate (percent)	Employment Rate (percent)	Unemployment Rate (percent)
Ontario	11,038,440	7,141,675	6,612,150	64.7	59.9	7.4
Milton (Town)	80,560	59,815	56,485	74.2	70.1	5.6

Source: Statistics Canada, 2011; 2017

The median income for all census households in Milton in 2015 was \$104,730; the median income for individuals aged 15 years and over was \$32,917 (Table 4-6).

**Table 4-6: Median Income, Ontario and Milton, 2015**

Location	Median Family Income	Median Income of individuals - 15 Years and Over		
		All individuals	Male	Female
Ontario	\$74,287	\$33,539	\$39,889	\$28,676
Milton (Town)	\$104,730	\$42,682	\$52,860	\$34,384

Source: Statistics Canada, 2017

In 2016, the main sources of employment by industry for Milton were retail trade (11.8%), manufacturing (10%), professional, scientific and technical services (9.0%) and health care and social assistance (8.5%) (Statistics Canada, 2017).

Milton's labour force is concentrated in three main occupations: sales and services occupations (20.9%), business, finance and administration occupations (17.9%), and management occupations (14.1%) (Statistics Canada, 2017).

## Potential Impacts

Project construction is expected to take place in the Summer of 2022 and take an estimated 3 months to complete. Project demands for labour and goods and services can result in both beneficial and adverse effects. Positive effects may not be evenly distributed among populations, with some residents in a better position to receive economic benefits than others. Similarly, adverse effects may affect some residents more than others.

Residual effects on employment are related to the project's labour demand compared to the labour supply. Three types of employment are considered:

- Direct employment: labour that is hired directly for the project
- Indirect employment: labour hired by companies to produce and provide goods and services needed for the project



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- Induced employment: labour hired by industries that produce and provide consumer items and services purchased by people who are directly or indirectly employed by the project

Labour conditions will be affected by direct, indirect and induced employment during all project phases.

The project could affect business through purchases of labour, goods and services from local businesses, including businesses owned by Indigenous peoples, and will result in increased local employment income and municipal government revenue. Local businesses will likely benefit from supplying the project with goods and services.

Land clearing and other construction-related project activities could adversely affect agricultural productivity and operations, and businesses along the proposed pipeline route that include PAO Horticultural, Jade Gardens & Greenhouse and Piper's Heath Golf Club. Other potential adverse effects include impairment to the use and enjoyment of property and conflicts with vehicular movement.

### **Mitigation and Protective Measures**

It is expected that the project will generally result in positive effects on employment by employing local and Indigenous people, and by reducing the unemployment rate in the region. These positive effects do not require mitigation, but Sun-Canadian will identify and implement various mechanisms to enhance project benefits.

The potential effects of the project because of employment opportunities and purchasing local goods and services is expected to be positive during construction and operation, so no mitigation will be required.

With respect to potential adverse effects on agricultural and non-agricultural businesses (commercial and industrial), Sun-Canadian will engage with land owners, business operators, and the Town of Milton to address access to the project area, the portion of land that will be altered as part of site preparation, long-term changes to agricultural and non-agricultural land and the development of appropriate and feasible mitigation measures.

### **Net Impacts**

With the above initiatives to encourage local and Indigenous participation on the project, it is anticipated that the effects from the project on employment and business will be positive, including creating positive economic activity through new direct, indirect, and induced employment. Project expenditures on local businesses and suppliers also have the potential to positively affect the local economies. Additionally, those who have worked on the project will gain transferrable skills and experience that could help them gain employment in other industries. Consultation with businesses and landowners will address any concerns to their operations.

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts on employment and business are anticipated.



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## 4.4.2 Community Services & Infrastructure

### Existing Conditions

#### Demographics

In 2016, the Town of Milton had a population of 111,128 (Statistics Canada, 2017). Milton experienced a large population increase between 2011 and 2016, above the population growth in Ontario (Table 4-7).

**Table 4-7: Population Ontario and Milton 2016**

Location	Total Population	Percent Change from 2011
Ontario	13,448,494	4.6
Milton	111,128	30.5

\*Numbers are rounded by Statistics Canada and are reported herein exactly as they are reported by Statistics Canada. Totals may not necessarily add up as a result of rounding.

Source: Statistics Canada, 2017

In 2016, the median age of the population of Milton was 35.3 years (Statistics Canada, 2017); Ontario's median age was 41.3 (Statistics Canada, 2017).

In 2016, 1,040 residents of Milton identified themselves as Aboriginal (Statistics Canada, 2017). Together this represents approximately 0.003% of the provincial Aboriginal population (Statistics Canada, 2017).

By 2021, Milton is projected to have a population of 145,000 and by 2031 a projected population of 235,000 (Town of Milton, 2019a).

#### Permanent and Temporary Accommodations

In 2016, there were 34,260 private dwellings in the Town of Milton. The majority (85.9%) of homes were owned and 4,840 were rental homes (Statistics Canada, 2017).

Within the Town of Milton, there are 3 hotels/motels, as well as one privately owned campground.

#### Municipal Services and Infrastructure

Halton Region operates Waste Management Site, which provides recycling, hazardous household waste, yard waste and other garbage disposal services (Halton Region, 2011). The Town of Milton water supply is a groundwater system from two well fields, Kelso and Walker's Line (Halton Region, 2019).

#### Health and Education Services and Infrastructure

The Town of Milton is serviced by the Halton Region Health Department. There is currently one hospital within Milton, the Milton District Hospital.

#### Roads and Highways





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The proposed pipeline route crosses Trafalgar Road. This four-lane road carries high volumes of traffic.

The Development Services Department of the Town of Milton is responsible for managing the Town of Milton Road system, including pothole repairs, street lighting and sign maintenance, entrance culverts and rural roadside mowing. Within the Town of Milton, there are various classifications of roads and highways, from high volume urban arterials to rural collector roads.

### **Policing, Fire and Emergency Response Services**

The Halton Regional Police Service serves the entire Town of Milton. Patrol 1 Division provides policing services to for the Town of Milton and the Town of Halton Hills. There is one Ontario Provincial Police detachment in the Town of Milton (Ontario Provincial Police, 2019).

The Town of Milton's Fire Department provides fire prevention/public education, fire communications/dispatch, firefighting and rescue operations, medical response with the Milton Paramedic Service, emergency planning/preparedness, and mechanical and fleet services for both Fire and Milton Paramedic Service. There are 3 fire stations within the Town of Milton, with the closest fire station to the study area being Fire Station 4 located at 405 James Snow Parkway South (Town of Milton, 2019b).

### **Potential Impacts**

The presence of temporary workers in the local communities during the construction period has the potential to increase the demand for housing and local community services and infrastructure. Non-local project workers are expected to stay in temporary accommodations, including hotels, motels, and campgrounds. They may also choose to rent houses or apartments. The vacancy rate for temporary rentals will likely be able to accommodate the temporary increase. The short duration that the workers will reside near any one community, as well as the structure of the work shifts, will limit the need for workers to use the services and infrastructure in local communities.

The transportation of project goods, services and workers has the potential to lead to increased use of existing transportation infrastructure. Also, increased traffic volumes along local road networks could increase travel times and reduce road safety, which might lead to increased use of local emergency services due to potential vehicle accidents and workplace accidents. In addition, the production of project-related waste could place additional stress on the capacity of local landfills.

Potential impacts to roads are outlined in Sections 4.4.3 and 4.4.4

### **Mitigation and Protective Measures**

Project employees might require medical attention while staying in the area. The Contractor and Sun-Canadian will have emergency response equipment and trained personnel on-site during construction. In addition, an Emergency Response Plan will be developed and implemented, which will address field health services, emergency call-out procedures and fire response plans. Safety fencing will be used where necessary to separate the work area.



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Environmental mitigation and contingency and management plans will be in place to reduce the likelihood of emergency events and to prepare for the management of emergency events on site. If an emergency incident were to occur, it is anticipated that the comprehensive mitigation, contingency plans, and safety strategies will result in a localized and low-intensity response.

A Traffic Management Plan should be in place for all roads affected by construction, which at a minimum outline measures to:

- Control the movement of materials and personnel to and from the construction site
- Post signs to warn oncoming motorists of construction activity
- Control traffic at road crossings
- Reduce on-road disturbance and land closures
- Store equipment as far from the edge of the road as practical
- Install construction barricades at road crossings

Traffic disruptions during construction will be reduced by adherence to the Traffic Management Plan. Guidelines will be developed for vehicular use on the RoW and associated access roads to avoid traffic congestion and accidents. Access to existing transportation infrastructure will be addressed through standard mitigation and will be reversible once the construction phase ends. Additional mitigation and protective measures for roads are outlined in Section 4.4.3 and 4.4.4.

The capacity of waste disposal sites will be considered and if project needs are not easily accommodated, alternative disposal locations will be considered.

Additional consultation with residents and businesses adjacent to the proposed pipeline route will be held in advance of construction commencement. Contact information for a designated Sun-Canadian representative will be available to address questions and concerns during construction. Consultation has been initiated and will continue with municipal personnel.

### **Net Impacts**

Community services and infrastructure appear to have additional capacity to absorb potential increased temporary demands that may result from the project. Adverse effects on traffic will be minimal because the proposed pipeline route crosses Trafalgar Road by HDD and access to the RoW will be by private road off of Trafalgar Road (passenger vehicles). Construction equipment will access the RoW from 6<sup>th</sup> Line where alternate routes are readily accessible.

Given the available capacity of the local community services and infrastructure, along with the implementation of the mitigation and protective measures outlined above, no significant adverse residual impacts on community services and infrastructure are anticipated.



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### 4.4.3 Perceived Health and Well-Being

#### Existing Conditions

##### Health Indicators

Health indicators are measures that are regularly reported and provide relevant information about a population's health or the performance of the health system. This allows for comparable information between regions and can be used to track changes over time (CIHI, 2009).

Statistics Canada and the Canadian Institute for Health Information completed a survey of health indicators to determine the perceived health and well-being of residents aged 12 years and older within the Halton Regional Health Unit. This health unit is a geographical region created by Statistics Canada. The results represent qualitative perceptions of health and well-being from individuals living within these municipalities (Table 4-8).

**Table 4-8: Health Indicators, Halton Regional Health Unit and Ontario, 2017/2018**

Indicators	Halton Regional Health Unit (%)	Ontario (%)
Perceived health, very good or excellent	69.8	60.7
Perceived mental health, very good or excellent	76.1	69.1
Perceived life stress, most days quite a bit or extremely stressful	23.4	21.6

Source: Statistics Canada, 2019.

In 2017/2018 the population in the project area had perceptions of their health, mental health and life stress which were higher than Ontario as a whole.

##### Traffic and Congestion

Existing conditions for traffic and congestion are outlined in Section 4.4.2.

##### Recreation

There are 4 community centres and 10 recreational facilities in Milton providing many services such as ice arenas, aquatic centres and various sports for all ages. There are over 50 parks, 7 conservation areas within CH regulated boundaries. There are 10 18-hole golf courses and golf centres within the Town of Milton.

#### Potential Impacts

Perceived health and well-being is influenced by a number of factors such as individual lifestyles, social and community networks, living conditions, general socio-economic and environmental conditions. The project has the potential to affect a number of these factors, which could change the way that local residents perceive their health and well-being.



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Since perceived health and well-being is influenced by improved economic conditions, the project is expected to have positive effects by creating direct, indirect, and induced employment, and through project spending within the Town of Milton (see Section 4.4.1). There is also the potential to enhance these benefits further by selecting local and Indigenous businesses to provide services to the project, thus increasing economic activity and the associated benefits (see Section 4.4.1). This economic stimulus could increase local spending and increase income for some residents and their families. Higher income from project employment could increase the real and perceived quality of life of some local residents.

Construction activity will temporarily affect the landscape of the construction area and could impede property access. The potential for project activities to interfere with aesthetic value, property enjoyment, access to business, and with the production of nursery products, could have an adverse effect on perceived health and well-being of some residents. Potential safety concerns also exist at locations where properties, residents and vehicles come in proximity to construction activities.

Potential increases in noise, dust, exhaust (see Section 4.4.5) and traffic congestion on roads could also cause stress and affect how people perceive their quality of life. Increased traffic could also impede customer access to businesses.

The temporary workforce may increase demands on existing recreation facilities and conservation areas, including arenas and swimming pools. Since project construction is scheduled to occur during summer and fall months, winter recreation activities will not be affected.

### **Mitigation and Protective Measures**

Mitigation and protective measures for air quality and noise are outlined in Section 4.4.5.

Access to businesses should always be maintained to reduce stress on local residents and safety fences should be installed at the edge of the construction RoW, where public safety considerations are required.

A Traffic Management Plan should be implemented to reduce effects of project-related traffic on traffic volumes, which could reduce access to businesses (see Section 4.4.2). In addition, Sun-Canadian will work with landowners to address specific concerns they may have regarding monetary compensation and their property, such as access and disruption to business.

While pipeline construction activities have the potential to temporarily affect the local landscape, restoration of the construction area will leave little evidence that a pipeline exists in the area.

Additional consultation with residents and businesses along and adjacent to the proposed pipeline route will take place in advance of construction activity. Sun-Canadian will develop an issues resolution framework to help resolve stakeholder issues that may arise during project construction and operation, and to select the appropriate mitigation measures to resolve these issues.



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### **Net Impacts**

With planned restoration of the construction site after the proposed pipeline has been built, changes to landscapes are anticipated to be short-term. Additionally, Sun-Canadian will complete restoration of the construction area. This will reduce any adverse impact that construction may have on the aesthetic value placed on the land by residents.

In terms of economic contributions to perceived health and well-being, the effect from local economic activity is anticipated to have a positive effect on residents' perceived health and well-being.

With the implementation of the above mitigation and protective measures, the project is not anticipated to alter the lifestyles of residents. Nor will it adversely affect social and community networks or living and environmental conditions. Therefore, no significant adverse residual impacts on perceived health and well-being are anticipated.

### **4.4.4 Infrastructure**

#### **Existing Conditions**

Infrastructure crossed by the proposed pipeline route includes roads, access roads/driveways, hydroelectric lines and a watermain. Other than a private access road at the western extent of the pipeline replacement route, these features will be crossed by HDD. Existing conditions for roads are outlined in Section 4.4.2.

The proposed pipeline route is located adjacent to residences, businesses and a golf course along Trafalgar Road.

The proposed pipeline route intersects with existing overhead hydroelectric and telecommunications utilities.

A variety of buried utilities such as telecommunication cables, low-voltage hydroelectric lines and watermains are in the road RoWs.

Mapped infrastructure crossed by the proposed pipeline route is shown on Figure 13, Appendix C.

#### **Potential Impacts**

Construction activity has the potential to temporarily affect access roads and driveways and landscaping features to residences, businesses and the golf course.

The proposed project will be constructed parallel and overlapping an existing Sun-Canadian easement, with some temporary lands required for construction purposes. Where temporary lands are required limited impacts to residences and businesses may occur. The proposed pipeline has the potential to interact with buildings, roads, hydroelectric lines, and buried and overhead utilities. Potential impacts include damage to the infrastructure and harm to personnel.



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The crossing of Trafalgar Road will be completed by way of HDD. This has the potential to produce extended periods of noise and vibration. There is also the possibility of extended work hours and the need for construction lighting (due to low light conditions).

### **Mitigation and Protective Measures**

Access to residential properties and businesses should always be maintained to reduce stress on local residents and safety fences should be installed at the edge of the construction RoW, where public safety considerations are required.

Arrangements will be made with the community and landowners for replacement of features that are impacted by construction activities.

Mitigation and protective measures for roads is outlined in Section 4.4.2. Consultation is ongoing with the Region of Halton regarding watermain interaction.

The Contractor will be responsible for locating and exposing existing pipelines and utilities on lands that will be affected by excavation and HDD. During construction, machine operators will be informed where electrical transmission lines are present overhead. Lines that may interfere with the operation of construction equipment will be identified with warning poles and red flags.

When crossing Trafalgar Road, the Traffic Management Plan (Section 4.4.2) and additional traffic controls should be implemented. Sun-Canadian will work with nearby landowners and businesses to develop appropriate mitigation measures for noise, vibration and lighting.

Standard construction mitigation measures will be implemented that include:

- Safety fencing will be erected around bore pits
- Wood decking may be installed to support continuous construction access during wet soil conditions, and assist in protecting vegetation and seed beds
- Excavated topsoil and subsoil for bore pits and temporary work areas will be separated prior to stockpiling
- Erosion and sediment control measures will be installed around soil stockpiles

### **Net Impacts**

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts on infrastructure are anticipated.



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### **4.4.5 Air Quality and Noise**

#### **Existing Conditions**

The landscape along the proposed pipeline route is urban, commercial, residential and natural heritage. Urban and commercial operations have the potential to expel air emissions through automobile and equipment use.

According to the MECP's Environmental Noise Guideline (2016), the majority of the landscape along the proposed pipeline route would be categorized as a Class 2 area, meaning "an area with an acoustical environment that has quality representative of both Class 1 and Class 3 areas" with an acoustical environment dominated by the activities of people, usually road traffic during the day, and evening and night background sound defined by natural environment and infrequent human activity.

The area experiences a higher traffic volume on Trafalgar Road that represents a source of noise for most of the proposed pipeline route.

Other minor noise sources within the study area include occasional sounds due to anthropogenic nursery and golf course maintenance activities and occasional sounds due to anthropogenic domestic activities such as property maintenance and recreation.

#### **Potential Impacts**

Residential and business properties may experience noise, dust, vibration and equipment exhaust associated with construction activity. During operation, no substantial air or noise emissions are anticipated to occur.

#### **Mitigation and Protective Measures**

During construction, motorized construction equipment should be equipped with functioning mufflers and silencers. Company and construction personnel should avoid excessive idling of vehicles; vehicles and equipment should be turned off when not in use unless required for operation. To the greatest extent practical, activities that could create noise should be restricted to daylight hours and adhere to local noise by-laws. Sources of continuous noise, such as portable generators, should be shielded or located to reduce disturbance to residents and businesses.

The Contractor should implement site practices during construction that are in line with the Environment Canada document 'Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities' (Cheminfo Services Inc., 2005), which may include:

- Maintaining equipment in compliance with regulatory requirements
- Protecting stockpiles of friable material with a barrier or windscreen in the event of dry conditions and dust
- Dust suppression of source areas



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- Covering loads of friable materials during transport

Watering for dust control must not result in the formation of puddles, rutting by equipment or vehicles, the tracking of mud onto roads or the siltation of watercourses.

See Section 4.2.1 for mitigation and protective measures for blasting activities.

### **Net Impacts**

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts from air quality and noise are anticipated.

### **4.4.6 Waste Management and Landfills**

There are no waste management facilities, active landfills or closed landfills within the study area. Construction activities generate waste that requires appropriate disposal.

### **Potential Impacts**

Improper disposal of waste material generated during construction may result in contamination to soil, groundwater, and/or surface water resources on and off the construction RoW. Litter generated during construction may also become a nuisance to landowners and/or surrounding residents if not contained.

### **Mitigation and Protective Measures**

The Contractor should implement a site-specific waste collection and disposal management plan, which may include:

- Waste materials, sanitary waste and recycling transported off-site by licensed waste contractors.
- The responsible management of fill (see Section 4.2.5).
- Labelling and storage of hazardous and liquid wastes in a secure area that would contain material in the event of a spill.
- Implementation of a waste management program consisting of reduction, reuse, and recycling of materials.

### **Net Impacts**

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts from waste management are anticipated.





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### **4.4.7 Land Use**

#### **Existing Conditions**

The proposed pipeline route is in the Town of Milton. According to the Town of Milton Official Plan (Town of Milton, 2008), the proposed pipeline route crosses land designated as “Agricultural Area” and “Greenlands A Area”. According to Section 2.6.3.41 “major oil and gas transmission pipelines and related facilities [...] shall be permitted in all land use designations with the exception of the Escarpment Natural Area designation and the Greenlands A Area designation within the Niagara Escarpment Plan” (Town of Milton, 2008). The proposed pipeline is outside of the Niagara Escarpment Plan (Niagara Escarpment Commission, 2020).

The proposed pipeline route crosses Trafalgar Road, a designated major arterial road in the Town of Milton Official Plan (2018). According to Section 2.6.3.4 of the Official Plan, major arterial roads “accommodate truck traffic, carry high volumes of traffic and distribute traffic to and from provincial freeways and highways”.

The proposed pipeline route includes areas designated as “protected countryside” under the Greenbelt Plan (Government of Ontario, 2017). These areas are identified under the Greenbelt Plan’s protected countryside. The protected countryside is a continuous agricultural system maintaining the agriculture-food network (Government of Ontario, 2017). According to Section 3.3.3.4 of the Greenbelt Plan, preserving the continuous integrity of utility corridors should be considered by the municipalities for all lands within the protected countryside.

#### **Potential Impacts**

As noted above, oil pipelines are permitted facilities in the various municipal land uses, and thus no impacts to municipal land use designations will occur.

Potential impacts on agricultural and non-agricultural businesses are discussed in Section 4.4.1. Potential impacts on uses of land will be interruption to access or use, including potential increases in traffic during construction.

#### **Mitigation and Protective Measures**

Mitigation and protective measures for agricultural soils and for businesses are discussed in Sections 4.2.5 and 4.4.1, respectively.

Consultation has been initiated, and will continue, with the Town of Milton as well as landowners along the proposed pipeline route in order to identify methods of minimizing disturbance to property and maintaining access to lands, to the extent possible. Where work is to occur within CA regulated areas, permits will be obtained from CH as per O. Reg. 162/06.



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### Net Impacts

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts on land use are anticipated.

### 4.4.8 Archaeological Resources

#### Existing Conditions

A Stage 1 Archaeological Assessment (AA) (Appendix E) has been conducted for the entire route. A copy of the completed Stage 1 AA report has been submitted to the MHSTCI for review and inclusion in the *Ontario Public Register of Archaeological Reports*.

Initial background research included a review of current land use, historic and modern maps and past settlement history. It also involved a review of previously registered archeological resources within 1 km of the project area and previous archaeological assessments within 50 m.

Overall, the Stage 1 AA determined that the majority of the study area has archaeological potential.

A Stage 2 AA (Appendix E) was completed and resulted in the identification of one archaeological location. The find spot does not meet the provincial criteria for Stage 3 assessment and no further work was recommended. The Stage 2 AA was submitted to the MHSTCI and entered into the *Ontario Public Register of Archaeological Reports*.

#### Potential Impacts

Based on the results of the Stage 2 AA the Project should be considered free of archaeological concern and no potential impacts are anticipated.

#### Mitigation and Protective Measures

As no potential impacts are anticipated, no mitigation and protective measures are required.

#### Net Effects

No significant adverse residual impacts on archaeological resources are anticipated.

### 4.4.9 Built Heritage Resources and Cultural Heritage Landscapes

#### Existing Conditions

A Heritage Checklist (Appendix F) has been completed for the preferred route through agency consultation and review of historic mapping. Based on desktop review and consultation with the Town of Milton, indicators of potential cultural heritage value were identified within the study area. These features will be mapped and further assessed to avoid potential effects on the resources as part of a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHRECPIA).



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### **Potential Impacts**

The Project may have the potential to directly impact built heritage resources and cultural heritage landscapes during construction. A CHRECPIA will be completed prior to construction. The report will assess the potential built heritage resources and cultural heritage landscapes, the relationship of each to the Project and the impacts of the proposed undertaking on resources and landscapes. The Report will also provide recommendations pertaining to the mitigation of negative impacts to safeguard these resources during the construction and operation phases of the Project.

### **Mitigation and Protective Measures**

Prior to construction, the above-referenced CHRECPIA will be undertaken and submitted to the MHSTCI for their review and comment. The Report will contain mitigation measures for potential impacts, if required.

### **Net Impacts**

With the implementation of the above mitigation and protective measures, no significant adverse residual impacts on built heritage resources and cultural heritage landscapes are anticipated.

## **4.4.10 Indigenous Interests**

### **Existing Conditions**

ENDM identified the potential for impacts to the following Indigenous communities:

- Mississaugas of the Credit First Nation;
- Six Nations of the Grand River (Six Nations of the Grand River Elected Council);
- Six Nations of the Grand River (Haudenosaunee Confederacy Chiefs); and
- Huron Wendat;

Ontario, as the Crown, has a legal duty to consult with Indigenous peoples regarding projects or decisions that may adversely impact constitutionally protected Indigenous or treaty rights.

### **Potential Impacts**

Although not known to occur, the project may affect traditional territories of Indigenous communities and during construction harvesting and hunting in the construction RoW could be impeded. There is the potential to disturb culturally significant resources or artifacts. Archaeological surveys could also result in the finding of Indigenous artifacts.



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## **Mitigation and Protective Measures**

Sun-Canadian has sought input from the identified Indigenous communities and will continue engaging with Indigenous communities as the project moves forward. Information on the current state of Indigenous engagement will be provided in the application to the OEB.

Mitigation and protective measures for archaeology are discussed in Section 4.4.8.

## **Net Impacts**

By undertaking the above engagement and archaeological assessments, no significant adverse residual impacts on Indigenous interests are anticipated.

## **4.5 SUMMARY OF RECOMMENDATIONS**

Table 4-9 provides a summary of the recommended supplemental studies, mitigation and protective measures identified in Sections 4.2-4.4.



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**Table 4-9: Summary of Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
<b>PHYSICAL FEATURES</b>		
Bedrock Geology <i>Section 4.2.1</i>	No impacts anticipated.	N/A
Physiography and Surficial Geology <i>Section 4.2.2</i>	Disturbance to the overburden along the proposed pipeline is limited to the entry and exit pit locations and may cause surface soil erosion. Slumping may occur within the entry and exit pits during construction.	<p>Surface soil erosion can occur in the absence of vegetative cover. Where there is potential for soil erosion, the need for and location of erosion and sediment control (ESC) measures should be determined by an inspector with appropriate qualifications and installed prior to the commencement of work in the area.</p> <p>When land is exposed, the exposure should be kept to the shortest practical period. Natural features should be preserved to the extent practical. Temporary vegetation and mulching should be used to protect areas as appropriate. Where required, natural vegetation should be re-established as soon as practical.</p> <p>The Contractor must obtain adequate quantities of materials to control erosion. Additional supplies should be maintained in a readily accessible location for maintenance and contingency purposes. ESC structures should be monitored to maintain their effectiveness through the life of construction and post-construction rehabilitation.</p> <p>Extreme precipitation events could result in damage to ESC measures which could lead to erosion. When site conditions permit, ESC measures should be repaired and re-installed on erosion susceptible surfaces. If the erosion is resulting from a construction-related activity, the activity should be halted immediately until the situation is rectified.</p> <p>To avoid the entry and exit pits from slumping, pit walls should be sloped and should be monitored during wet conditions. Trench boxes may be required depending on site specific conditions.</p> <p>ESC and stabilization measures should be maintained during construction, restoration and rehabilitation until vegetative cover is established. Where evidence of erosion exists, corrective control measures should be implemented as soon as conditions permit. Permits obtained from CH may contain conditions pertaining to ESC.</p>
Hydrogeology <i>Section 4.2.3</i>	<u>Hydrostatic Testing and Dewatering/Sand-pointing</u>	<u>Hydrostatic Testing and Dewatering/Sand-pointing</u>



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	<p>A hydrostatic test will be undertaken for the proposed pipeline.</p> <p>Where the entry and exit pits encounter shallow groundwater conditions or following a large precipitation event, removing water (known as dewatering) may be necessary. During dewatering, discharge water will be released to the environment. An uncontrolled discharge of water could cause downstream flooding, erosion, sedimentation, or contamination.</p> <p><u>Private Water Wells</u></p> <p>There are approximately 24 water supply wells within 500 m of the proposed pipeline route, 14 of which are domestic. There are two water supply wells within 50 m of the proposed pipeline, both of which are domestic. Depending on the proximity to wells, the depth of the well installation and the groundwater levels encountered during excavation, dewatering has the potential to impact water well quality or quantity at some of the overburden supply wells.</p> <p><u>Municipal Water Supply</u></p> <p>The proposed pipeline extends through a SGRA and an IPZ associated with the municipal groundwater supply system (Conservation Halton, 2018).</p> <p>Based on the <i>Clean Water Act</i> (2006), there are no significant chemical, pathogen or dense non-aqueous phase liquids</p>	<p>For groundwater dewatering, the MECP allows registration under the EASR for construction dewatering projects where groundwater takings will be greater than 50,000 L/day and less than 400,000 L/day; however, should groundwater takings exceed 400,000 L/day, a PTTW may be required from the MECP.</p> <p>If surface water is used as the source water for the hydrostatic test, a PTTW application would be required and would include an assessment of the capacity of the source to provide the required water without impacting the ecosystem, and recommendations for mitigation measures such as screened water intakes to limit intake of debris and organisms and energy dissipation/erosion control measures during discharge to limit erosion and sedimentation.</p> <p>To reduce the potential for erosion and scouring at discharge locations during construction dewatering/sand-pointing and/or hydrostatic testing, energy dissipation techniques should be used. Discharge piping should be free of leaks and should be properly anchored to prevent bouncing or snaking during surging. Protective measures may include dewatering at low velocities, dissipating water energy by discharging into a filter bag or diffuser and utilizing protective riprap or equivalent. If energy dissipation measures are found to be inadequate, the rate of dewatering should be reduced or dewatering discontinued until satisfactory mitigation measures are in place. Discharge should be monitored to make sure that no erosion or flooding occurs.</p> <p>To assess the potential for introduction of contaminated water to soils or bodies of water, testing of hydrostatic and dewatering discharge water should be considered. Testing requirements can be influenced by the nature and quality of the source water used, any additives to the test water, the nature of the pipeline, and pipeline contents. An environmental consultant should be consulted to determine what testing is necessary for the discharge water.</p> <p><u>Private Water Wells</u></p> <p>A private well survey should take place to assess domestic groundwater use near the proposed pipeline and a private well monitoring program may be recommended within 100 m of HDD activities for residents who rely on overburden groundwater supply for domestic use.</p>



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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
	source water threats to municipal supply sources based on the construction or operation of the proposed pipeline.	<p><u>Municipal Water Supply</u></p> <p>There are no nearby municipal supply wells, and therefore additional mitigation measures are not required to protect groundwater drinking supply sources.</p> <p>During construction, the primary concern to surface water quality is the potential for a contaminant spill during a large storm event. To address this concern, the following mitigation measures are proposed:</p> <p>Refueling of equipment should be undertaken a minimum of 30 m from wetlands and watercourses to reduce potential impacts to surface water and groundwater quality if an accidental spill occurs. If a 30 m refueling distance is not possible, under approval from on-site environmental personnel, special refueling procedures for sensitive areas should be undertaken that include, at a minimum, using a two-person refueling system with one worker at each end of the hose.</p> <p>To reduce the impact of potential contaminant spills, the Contractor should implement spill management protocols such as secondary containment of any temporary fuel storage and preparation of a spill response plan.</p> <p>Work should be limited or stopped during and immediately following significant precipitation events (i.e. 100-year storm event), at the discretion of on-site environmental personnel.</p>
Extractive Resources: Aggregates and Petroleum Resources <i>Section 4.2.4</i>	No impacts anticipated.	N/A
Soil and Soil Capability <i>Section 4.2.5</i>	<p>The proposed pipeline route crosses agricultural land. There are potential impacts to topsoil as a result of construction including compaction, loss of organic matter and degraded soil structure. Excess subsoil may be removed from the site.</p> <p>Excavation and construction activities across agricultural land have the potential</p>	<p><u>Excess Soil</u></p> <p>It is noted that O.Reg. 406/19 was filed in December 2019 and comes into force January 1, 2021. O.Reg. 406/19 includes regulations for the management of soil on-site as well as the movement of excess soils off-site in the province of Ontario, including stockpile size and setback requirements and environmental soil quality characterization requirements prior to the movement of drilling mud and soil off-site. It is recommended that Sun-Canadian retain a qualified person for environmental site assessment who is knowledgeable in environmental soil quality characterization, as well as O.Reg. 406/19.</p>



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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
	<p>to affect soil quality and agricultural capability. The movement of heavy machinery on wet soil may cause rutting, compaction, and mixing of topsoil with subsoil. When exposed, soils are more prone to erosion from the loss of vegetative cover. Improperly salvaged topsoil can result in topsoil and subsoil mixing, compaction, rutting, and erosion, which can potentially decrease crop yields.</p>	<p>The Contractor is solely responsible for the location and management of stockpiles on-site as they relate to traffic management, construction staging, and the effective management of construction productivity. With the exception of such variances as may be allowed under O.Reg. 406/19, Soil Rules, and/or site-specific instruments such as Environmental Compliance Approvals (ECAs), stockpiling and storage of soil shall be according to the Soil Rules referenced by O.Reg. 406/19, including, but not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Managed in such a way as to prevent adverse effects relating to noise, dust, mud tracking, leaching, run-off and erosion, and odour or other air impacts.</li> <li>• Stored in stockpiles with total volume of less than 2,500 m<sup>3</sup>.</li> <li>• Soil of different quality, or from different areas, or that has not yet been sampled is segregated.</li> <li>• Stored more than 30 m away from a waterbody, and more than 10 m away from property boundaries.</li> <li>• Stored in a manner that prevents leaching of contaminants into the groundwater.</li> </ul> <p>Materials that are surplus and required to be removed from site for disposal or reuse must be tested in accordance with O.Reg. 406/19, Reg. 347, or receiving site requirements under a site-specific instrument to determine management options. For excess soil, the Contractor Qualified Person (QP) shall determine sampling frequency and analytical parameters as required by O.Reg. 406/19 and Reg. 347, and in consultation with the CA. The Contractor QP shall be responsible for the production of all required documentation per O.Reg. 406/19.</p> <p><u>Wet Soil Shutdown</u></p> <p>To the extent feasible, construction activities should occur during drier times of the year. Lands affected by heavy rainfall events should be monitored for wet soil conditions, to avoid the potential for topsoil and subsoil mixing and loss of structure. Construction activities should be temporarily halted on agricultural lands where excessively wet soil conditions are encountered, as per Sun-Canadian's standard wet soils shutdown practice. Sun-Canadian's on-site inspection team should determine when construction activities may be resumed.</p>





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**Table 4-9: Summary of Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		<p>If a situation develops that necessitates construction during wet soil conditions, soil protection measures should be implemented, such as confining construction activity to the narrowest area practical, installing surface protection measures, and using wide tracked or low ground pressure vehicles.</p> <p><u>High Winds</u></p> <p>During construction activities, weather should be monitored to identify the potential onset of high wind conditions and to preserve topsoil. In the event that high winds occur, the Contractor should implement protective measures such as: suspend earth moving operations; apply dust suppressants or vegetate the soil stockpiles; protect soil stockpiles with a barrier or windscreen.</p> <p>In conjunction with the above measures, all required materials and equipment should be readily accessible and available for use as required.</p> <p><u>Soil Stripping</u></p> <p>Topsoil depths should be measured prior to stripping so that the proper depth of topsoil is removed and replaced. Where stripping is undertaken on agricultural lands, topsoil and subsoil should be stripped and stockpiled separately to avoid mixing.</p> <p>If clean-up is not practical during the construction year, it should be undertaken in the year following construction, starting once the soils have sufficiently dried. Interim soil protection measures should be implemented in sensitive areas to stabilize the RoW for over-wintering.</p> <p><u>Soil Compaction</u></p> <p>Where soil has been compacted by the construction process on agricultural lands, an agrologist should determine where decompaction may be necessary. Compaction can be alleviated by using farm equipment such as an agricultural subsoiler prior to replacing the topsoil. Sub-soiling with an agricultural subsoiler, followed by discing, chisel ploughing and cultivating, to smooth the surface, should be considered on agricultural lands. In high traffic areas of the RoW where deep compaction persists, additional deep tillage or subsoiling may be required on a site-specific basis. Soil density and/or penetrometer measurements on and off the easement may be used as a means of assessing the relative degree of soil compaction caused by construction along the RoW as well as determining that the RoW has been sufficiently decompacted.</p>



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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		Additionally, rig mats may be utilized during the construction process to aid in reducing the level of soil compaction.
Agricultural Tile Drains <i>Section 4.2.6</i>	No impacts anticipated	N/A
Natural Hazards <i>Section 4.2.7</i>	A flooding event during construction could result in construction delays, soil erosion, sedimentation of a watercourse, bore pit slumping, and damage or loss of construction equipment and contamination of a watercourse because of equipment entering a watercourse.	If flooding necessitates a change in the construction schedule, affected landowners and regulatory agencies should be notified and construction should continue at non-affected locations. Temporary workspaces should be located above the floodplain to the extent practical, unless necessary for watercourse crossings. All work in the floodplains will be subject to a permit from CH.
<b>BIOPHYSICAL FEATURES</b>		
Aquatic Features <i>Section 4.3.1</i>	<p>The proposed pipeline will cross underneath East Sixteen Mile Creek using the HDD method. The HDD process involves drilling a pilot bore hole underneath the watercourse and back-reaming the bore hole to the drill rig. Once the hole is of a sufficient diameter the pipeline is pulled into the hole by the drill rig. HDD typically uses a mixture of freshwater and bentonite to flush drill cutting from the hole and to act as a lubricant.</p> <p>The points of drill entry and exit will be outside the limits of the Sixteen Mile Creek valley. Therefore, there will be no disturbance in the active channel of the watercourse, nearshore habitats, or floodplain and riparian areas. No areas</p>	<p>The following general environmental mitigation measures should be taken to protect fish and fish habitat:</p> <ul style="list-style-type: none"> <li>• Data obtained from the geotechnical report aided in determining the feasibility of the HDD drill path.</li> <li>• Design the directional drill so that drilling slurry pressure is minimized, and the drilling rate is reduced in porous materials to minimize the chance of loss of circulation of the drilling slurry.</li> <li>• HDD should be completed within the permitted construction timing window of July 1 to September 15 to protect sensitive life stages for Silver Shiner and fishes in general. This window was established based on communications with MECP staff for a project in the CH jurisdiction.</li> <li>• An experienced and certified environmental monitor (i.e., a Certified Inspector of Sediment and Erosion Control [CISEC]) should be on site during HDD activities.</li> <li>• Prior to removal of the vegetation cover, effective mitigation techniques for erosion and sedimentation should be in place to protect water quality. Disturbance to the area during construction should be limited and</li> </ul>



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**Table 4-9: Summary of Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
	<p>considered to be fish habitat or habitat for Silver Shiner will be disturbed.</p> <p>HDD is intended to be a less intrusive construction method than traditional open cut crossing of a watercourse. However, there is a possibility of surface (water, riparian, wetland) disturbance if an inadvertent release of drilling fluid or a release of sediment laden groundwater occurs. There is also the potential for sediment laden water or other deleterious substances to enter a surface water feature as the result of grading, drilling excavations, equipment washing, or other construction related activities during directional boring.</p> <p>Inadvertent releases are typically caused by the pressurization of the drill hole beyond the containment capability of the near surface geologic materials (soil and/or rock). Therefore, the type and depth of these materials, as well as the drilling pressure, are key factors in preventing and managing frac-outs.</p>	<p>grubbing activities should be delayed until immediately prior to grading operations.</p> <ul style="list-style-type: none"> <li>• A drilling mud release contingency plan should be prepared and kept on-site.</li> <li>• Install as appropriate berms, silt fencing and secondary containment measures (i.e., plastic tarp) around drilling and drilling mud management equipment at both bore entry and bore exit locations to contain operational spills.</li> <li>• Immediately contain any drilling mud that escapes onto land and transfer it into an on-site containment system.</li> <li>• Temporary erosion and sediment control measures should be maintained and kept in place until work within or near a watercourse has been completed and stabilized. Temporary sediment control measures should be removed at the completion of the work but not until permanent erosion control measures have been established.</li> <li>• Construction material, excess material, construction debris and empty containers should be stored a minimum of 30 m from watercourses and watercourse banks, where practical.</li> <li>• Equipment maintenance and refueling should be controlled to prevent entry of petroleum products or other deleterious substances, including any debris, waste, rubble, or concrete material, into a watercourse, unless otherwise specified in the contract.</li> <li>• Deleterious substances (fuel, oil, spoil) should be stored a minimum of 30 m from the watercourse. Any such material that inadvertently enters a watercourse should be removed in a manner satisfactory to the environmental inspector.</li> <li>• Maintain smooth operation of the drilling string and slurry pumping systems to avoid pressure surges.</li> <li>• Reduce slurry viscosity through appropriate filtering of drilled material to reduce the pressure gradient along the drill path due to frictional effects.</li> </ul>



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**Table 4-9: Summary of Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		<ul style="list-style-type: none"> <li>Continually monitor slurry volumes to enable a quick response to any indications of lost circulation.</li> <li>Clean up operational spills daily to prevent mobilization of drilling mud off site during rain events.</li> <li>Drilling mud should be disposed in accordance with the appropriate regulatory authority requirements.</li> <li>Following construction, any disturbed vegetation will be restored to pre-construction conditions to the extent possible in accordance with environmental permits.</li> </ul> <p><u>Bore Path Collapse Mitigation Measures</u></p> <p>The following mitigation measures should be applied as recommended by geotechnical studies to prevent HDD borehole collapse from occurring in susceptible soils:</p> <ul style="list-style-type: none"> <li>Fluid volumes, annular pressure and cutting returns should be strictly monitored to ensure bore hole plugging and fluid losses are detected and addressed immediately.</li> <li>Alternative drill paths should be evaluated to minimize exposure to challenging soil materials.</li> <li>Drilling mud should be maintained in the borehole until the pipeline is installed. This can be facilitated by positioning the entry and exit points in areas with cohesion less soils (e.g., silt-sand zones).</li> </ul> <p><u>Contingency Plan</u></p> <p>A drilling mud release contingency plan should be prepared and kept on-site. Spills containment and clean-up procedures will be implemented immediately in the unlikely event of a spill. The proponent will immediately contact the Ministry of Environment and Conservation and Parks (MECP) Spills Action Centre. The MECP Spills Action Centre is the first point of contact for spills at the provincial and federal level. In addition, the following agencies will be contacted:</p> <ul style="list-style-type: none"> <li>DFO (Toll-free: 1-855-852-8320)</li> <li>MNRF (Toll-free:1-866-517-0571)</li> </ul>



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**Table 4-9: Summary of Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		<ul style="list-style-type: none"> <li>• CH (Tel: 1-905-336-1158)</li> </ul> <p>A contingency plan will be in place to effectively address inadvertent releases of sediment through frac-outs, or other releases of sediment laden water from the project site. The contingency plan outlines the steps that the Contractor is to take in the event of a sediment release or other type of spill. The contingency plan will also outline the steps involved to mitigate an inadvertent release after it occurs.</p> <p>If a sediment spill occurs within the watercourse, adequate isolation of the release should be provided to contain the sediment. For example, a vacuum truck may be on-site during construction and ready to remove the drilling fluid and any other frac out soil.</p> <p>The following materials should be readily available during drilling operations and prepared to employ them in the event of a drilling mud spill or inadvertent release: sand bags, straw bales, silt fencing and a hydrovac truck.</p> <p>All products used on site are to be environmentally safe. Inadvertent release mitigation wells may also be considered to relieve drilling pressures. The Contingency Plan should indicate if, and when, HDD activities are to resume. For example, when mitigation measures have been implemented are deemed to be effective at mitigating potential ecological impacts.</p>
Designated Natural Areas and Vegetation <i>Section 4.3.2</i>	Where there is natural vegetation within or adjacent to the proposed pipeline route, potential impacts include the removal of native vegetation, introduction or spread of invasive species, and indirect effects such as dust, erosion, and accidental spills.	<p>Environmental mitigation and protective measures during construction include the following:</p> <ul style="list-style-type: none"> <li>• Where the RoW abuts a woodland on one side, detailed design should avoid the feature where possible.</li> <li>• Determine municipal requirements or permits for tree removal (if required) prior to construction.</li> <li>• Clearing should be minimized/avoided to the extent possible in sensitive areas such as woodlots, along watercourses, adjacent to the ANSI and in areas of significant groundwater recharge.</li> <li>• The limits of clearing should be surveyed and staked in the field, to allow for the protection of off-site natural areas and vegetation.</li> <li>• All brush and trees should be felled (if required) within the project footprint.</li> </ul>



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**Table 4-9: Summary of Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		<ul style="list-style-type: none"> <li>Clearing should be done during dry soil conditions to the extent practical to limit disturbance to vegetation and terrain.</li> <li>Precautionary measures (e.g., equipment washing before site access) may be necessary to mitigate for the spread of non-native species.</li> <li>A re-vegetation program should be initiated for all vegetated temporary work areas. Sun Canadian should consult with landowners and CH to confirm replanting plans.</li> <li>Seeding of the disturbed temporary work areas and permanent easement should be done with a native seed mix reviewed CH. Replaced soils should contain native seed bank, facilitating successful revegetation.</li> <li>One year following construction, planted vegetation should be inspected for survival; in areas of severe dieback, dead and diseased planted vegetation should be replaced.</li> </ul> <p>Mitigation and protective measures are outlined in Section 4.4.5 for dust, Section 4.2.2 for erosion and Section 4.3.1 for accidental spills.</p>
Wildlife, Wildlife Habitat and Species at Risk <i>Section 4.3.3</i>	Potential impacts on wildlife and wildlife habitat from construction include direct mortality from construction vehicles, habitat destruction through vegetation removal, habitat degradation through spills and sensory disturbance of wildlife during construction.	<p>Environmental mitigation and protective measures during construction include the following:</p> <ul style="list-style-type: none"> <li>Detailed design of the proposed pipeline should be reviewed to avoid and reduce the likelihood of impact upon wildlife habitat to the extent possible, and in particular habitats of Endangered, Threatened, Special Concern and rare species.</li> <li>Equipment and vehicles should yield the RoW to wildlife.</li> <li>Fencing should be erected around deep excavations to prevent wildlife entrapment.</li> <li>The Contractor should inform their personnel to not threaten, harass or injure wildlife.</li> <li>If wildlife are encountered during construction, personnel are required to move away from the animal and wait for the animal to move off the construction site.</li> <li>A butternut tree is located within 25m of the pipeline laydown area. Avoidance of the tree is recommended. For work within 25m of the trees, consultation with MECP is recommended to confirm requirements under the ESA.</li> </ul>



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**Table 4-9: Summary of Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		<ul style="list-style-type: none"> <li>Tree removal is not anticipated; however if removal of trees identified as potential bat maternity roots is required, removal should not occur between April 1 and October 1 to avoid direct impacts to bats. Consultation with MECP is recommended to confirm requirements under the ESA.</li> <li>Silt fencing is recommended along the perimeter of the HDD work zone to prevent encroachment into East Sixteen Mile Creek, exclude reptiles and amphibians during their active period (approximately April 1 – October 31), as well as prevent sedimentation.</li> <li>Construction activities with the potential to remove migratory bird habitat, such as vegetation clearing, should be avoided during the breeding season which is generally from April 1- August 31 in southern Ontario (Environment Canada, 2017). Should vegetation clearing activities be unavoidable during this window, a mitigation program should be developed, which includes measures to reduce and avoid impacts to migratory birds and their nests (Government of Canada, 2018). This program should include preventative and mitigation measures but may also include avoidance of clearing during key sensitive periods and in key locations.</li> <li>If SAR are encountered during the proposed pipeline replacement, work will stop and consultation with the MECP regarding the potential need for a permit under the ESA and/or species-specific mitigation will be conducted.</li> </ul> <p>Mitigation and protective measures are outlined in Section 4.3.2 for vegetation removal and Section 4.3.1 for accidental spills.</p>
<b>SOCIO-ECONOMIC ENVIRONMENT</b>		
Employment and Business <i>Section 4.4.1</i>	<p>Project demands for labour and goods and services can result in both beneficial and adverse effects. Positive effects may not be evenly distributed among populations, with some residents in a better position to receive economic benefits than others. Similarly, adverse effects may affect some residents more than others.</p> <p>Residual effects on employment are related to the project's labour demand</p>	<p>It is expected that the project will generally result in positive effects on employment by employing local and Indigenous people, and by reducing the unemployment rate in the region. These positive effects do not require mitigation, but Sun-Canadian will identify and implement various mechanisms to enhance project benefits.</p> <p>The potential effects of the project because employment opportunities and purchasing local goods and services is expected to be positive during construction and operation, so no mitigation will be required.</p> <p>With respect to potential adverse effects on agricultural and non-agricultural businesses (commercial and industrial), Sun-Canadian will engage with land</p>



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**Table 4-9: Summary of Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
	<p>compared to the labour supply. Three types of employment are considered:</p> <ul style="list-style-type: none"> <li>• Direct employment: labour that is hired directly for the project</li> <li>• Indirect employment: labour hired by companies to produce and provide goods and services needed for the project</li> <li>• Induced employment: labour hired by industries that produce and provide consumer items and services purchased by people who are directly or indirectly employed by the project</li> </ul> <p>Labour conditions will be affected by direct, indirect and induced employment during all project phases.</p> <p>The project could affect business through purchases of labour, goods and services from local businesses, including businesses owned by Indigenous peoples, and will result in increased local employment income and municipal government revenue. Local businesses will likely benefit from supplying the project with goods and services.</p> <p>Land clearing and other construction-related project activities could adversely affect agricultural productivity and operations, and businesses along the proposed pipeline route that include PAO Horticultural, Jade Gardens &amp; Greenhouse and Piper's Heath Golf Club. Other potential adverse effects include impairment to the use and enjoyment of</p>	<p>owners, business operators, and the Town of Milton to address access to the project area, the portion of land that will be altered as part of site preparation, long-term changes to agricultural and non-agricultural land and the development of appropriate and feasible mitigation measures.</p>





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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
	property and conflicts with farm machinery and other vehicular movement.	
Community Services and Infrastructure <i>Section 4.4.2</i>	<p>The presence of temporary workers in the local communities during the construction period has the potential to increase the demand for housing and local community services and infrastructure. Non-local project workers are expected to stay in temporary accommodations, including hotels, motels, and campgrounds. They may also choose to rent houses or apartments. The vacancy rate for temporary rentals will likely be able to accommodate the temporary increase. The short duration that the workers will reside near any one community, as well as the structure of the work shifts, will limit the need for workers to use the services and infrastructure in local communities.</p> <p>The transportation of project goods, services and workers has the potential to lead to increased use of existing transportation infrastructure. Also, increased traffic volumes along local road networks could increase travel times and reduce road safety, which might lead to increased use of local emergency services due to potential vehicle accidents and workplace accidents. In addition, the production of project-related waste could place additional stress on the capacity of local landfills.</p>	<p>Project employees might require medical attention while staying in the area. The Contractor and Sun-Canadian will have emergency response equipment and trained personnel on-site during construction. In addition, an Emergency Response Plan will be developed and implemented, which will address field health services, emergency call-out procedures and fire response plans. Safety fencing will be used where necessary to separate the work area.</p> <p>Environmental mitigation and contingency and management plans will be in place to reduce the likelihood of emergency events and to prepare for the management of emergency events on site. If an emergency incident were to occur, it is anticipated that the comprehensive mitigation, contingency plans, and safety strategies will result in a localized and low-intensity response.</p> <p>A Traffic Management Plan should be in place for all roads affected by construction, which at a minimum outline measures to:</p> <ul style="list-style-type: none"> <li>• Control the movement of materials and personnel to and from the construction site</li> <li>• Post signs to warn oncoming motorists of construction activity</li> <li>• Control traffic at road crossings</li> <li>• Reduce on-road disturbance and land closures</li> <li>• Store equipment as far from the edge of the road as practical</li> <li>• Install construction barricades at road crossings</li> </ul> <p>Traffic disruptions during construction will be reduced by adherence to the Traffic Management Plan. Guidelines will be developed for vehicular use on the RoW and associated access roads to avoid traffic congestion and accidents. Access to existing transportation infrastructure will be addressed through standard mitigation and will be reversible once the construction phase ends.</p> <p>The capacity of waste disposal sites will be considered and if project needs are not easily accommodated, alternative disposal locations will be considered.</p> <p>Additional consultation with residents and businesses adjacent to the proposed pipeline route will be held in advance of construction commencement. Contact</p>



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**Table 4-9: Summary of Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		<p>information for a designated Sun-Canadian representative will be available to address questions and concerns during construction. Consultation has been initiated and will continue with municipal personnel.</p> <p>The proposed pipeline does not cross any roads and access to the RoW will be by private road off of Trafalgar Road (passenger vehicles). Construction equipment will access the RoW from 6<sup>th</sup> Line where alternate routes are readily accessible.</p>
<p>Perceived Health and Well-Being <i>Section 4.4.3</i></p>	<p>Perceived health and well-being is influenced by a number of factors such as individual lifestyles, social and community networks, living conditions, general socio-economic and environmental conditions. The project has the potential to affect a number of these factors, which could change the way that local residents perceive their health and well-being.</p> <p>Since perceived health and well-being is influenced by improved economic conditions, the project is expected to have positive effects by creating direct, indirect, and induced employment, and through project spending within the Town of Milton (see Section 4.4.1). There is also the potential to enhance these benefits further by selecting local and Indigenous businesses to provide services to the project, thus increasing economic activity and the associated benefits (see Section 4.4.1). This economic stimulus could increase local spending and increase income for some residents and their families. Higher income from project employment could increase the real and</p>	<p>Mitigation and protective measures for air quality and noise are outlined in Section 4.4.5.</p> <p>Access to businesses should always be to reduce stress on local residents and safety fences should be installed at the edge of the construction RoW, where public safety considerations are required.</p> <p>A Traffic Management Plan should be implemented to reduce effects of project-related traffic on traffic volumes, which could reduce access to businesses and farmland (see Section 4.4.2). In addition, Sun-Canadian will work with landowners to address specific concerns they may have regarding monetary compensation and their property, such as access and disruption to business.</p> <p>While pipeline construction activities have the potential to temporarily affect the local landscape, restoration of the construction area will leave little evidence that a pipeline exists in the area.</p> <p>Additional consultation with residents and businesses along and adjacent to the proposed pipeline route will take place in advance of construction activity. Sun-Canadian will develop an issues resolution framework to help resolve stakeholder issues that may arise during project construction and operation, and to select the appropriate mitigation measures to resolve these issues.</p>



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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
	<p>perceived quality of life of some local residents.</p> <p>Construction activity will temporarily affect the landscape of the construction area and could impede property access.</p> <p>Construction activities also have the potential to disturb the perceived aesthetic value that residents place on their property and the area in general. The potential for project activities to interfere with aesthetic value, property enjoyment, access to business and production of nursery products, could have an adverse effect on perceived health and well-being of some residents. Potential safety concerns also exist at locations where properties, residents and vehicles come in proximity to construction activities.</p> <p>Potential increases in noise, dust, exhaust (see Section 4.4.5) and traffic congestion on roads could also cause stress and affect how people perceive their quality of life. Increased traffic could also impede customer access to businesses.</p> <p>The temporary workforce may increase demands on existing recreation facilities and conservation areas, including arenas and swimming pools. Since project construction is scheduled to occur during summer and fall months, winter recreation activities will not be affected.</p>	
Infrastructure <i>Section 4.4.4</i>	Construction activity has the potential to temporarily affect access roads and driveways and landscaping features to	Access to residential properties and businesses should always be maintained to reduce stress on local residents and safety fences should be installed at the edge of the construction RoW, where public safety considerations are required.



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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
	<p>residences, businesses and the golf course.</p> <p>The proposed project will be constructed parallel and overlapping an existing Sun-Canadian easement, with some temporary lands required for construction purposes. Where temporary lands are required limited impacts to residences and businesses may occur. The proposed pipeline has the potential to interact with buildings, roads/highways, hydroelectric lines, and buried and overhead utilities. Potential impacts include damage to the infrastructure and harm to personnel.</p> <p>The crossing of Trafalgar Road will be completed by way of Horizontal Directional Drill (HDD). This has the potential produce extended periods of noise and vibration. There is also the possibility of extended work hours and the need for construction lighting (due to low light conditions).</p>	<p>Arrangements will be made with the community and landowners for replacement of features that are impacted by construction activities.</p> <p>Mitigation and protective measures for roads is outlined in Section 4.4.2. Consultation is ongoing with the Region of Halton regarding watermain interaction.</p> <p>The Contractor will be responsible for locating and exposing existing pipelines and utilities on lands that will be affected by excavation and HDD. During construction, machine operators will be informed where electrical transmission lines are present overhead. Lines that may interfere with the operation of construction equipment will be identified with warning poles and red flags.</p> <p>When crossing Trafalgar Road the Traffic Management Plan (Section 4.4.2) and additional traffic controls should be implemented. Sun-Canadian will work with nearby landowners and businesses to develop appropriate mitigation measures for noise, vibration and lighting.</p> <p>Standard construction mitigation measures will be implemented that include:</p> <ul style="list-style-type: none"> <li>• Safety fencing will be erected around bore pits</li> <li>• Wood decking should be installed to support continuous construction access during wet soil conditions, and assist in protecting vegetation and seed beds</li> <li>• Excavated topsoil and subsoil for bore pits will be separated prior to stockpiling</li> <li>• Erosion and sediment control measures will be installed around soil stockpiles</li> </ul>
Air Quality and Noise <i>Section 4.4.5</i>	<p>Residential and business properties may experience noise, dust, vibration and equipment exhaust associated with construction activity. During operation, no substantial air or noise emissions are anticipated to occur.</p>	<p>During construction, motorized construction equipment should be equipped with functioning mufflers and silencers. Company and construction personnel should avoid excessive idling of vehicles; vehicles and equipment should be turned off when not in use unless required for operation. To the greatest extent practical, activities that could create noise should be restricted to daylight hours and adhere to local noise by-laws. Sources of continuous noise, such as portable generators, should be shielded or located to reduce disturbance to residents and businesses.</p> <p>The Contractor should implement site practices during construction that are in line with the Environment Canada document 'Best Practices for the Reduction of Air</p>



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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		<p>Emissions from Construction and Demolition Activities' (Cheminfo Services Inc., 2005), which may include:</p> <ul style="list-style-type: none"> <li>• Maintaining equipment in compliance with regulatory requirements</li> <li>• Protecting stockpiles of friable material with a barrier or windscreen in the event of dry conditions and dust</li> <li>• Dust suppression of source areas</li> <li>• Covering loads of friable materials during transport</li> </ul> <p>Watering for dust control must not result in the formation of puddles, rutting by equipment or vehicles, the tracking of mud onto roads or the siltation of watercourses.</p>
Waste Management and Landfills <i>Section 4.4.6</i>	Improper disposal of waste material generated during construction may result in contamination to soil, groundwater, and/or surface water resources on and off the construction RoW. Litter generated during construction may also become a nuisance to landowners and/or surrounding residents if not contained.	<p>The Contractor should implement a site-specific waste collection and disposal management plan, which may include:</p> <ul style="list-style-type: none"> <li>• Waste materials, sanitary waste and recycling transported off-site by licensed waste contractors.</li> <li>• The responsible management of fill (see Section 4.2.5).</li> <li>• Labelling and storage of hazardous and liquid wastes in a secure area that would contain material in the event of a spill.</li> <li>• Implementation of a waste management program consisting of reduction, reuse, and recycling of materials.</li> </ul>
Land Use <i>Section 4.4.7</i>	<p>Oil pipelines are permitted facilities in the various municipal land uses, and thus no impacts to municipal land use designations will occur.</p> <p>Potential impacts on agricultural and non-agricultural businesses are discussed in Section 4.4.1. Potential impacts on uses of land will be interruption to access or use, including potential increases in traffic during construction.</p>	<p>Mitigation and protective measures for agricultural soils and for businesses are discussed in Sections 4.2.5 and 4.4.1, respectively.</p> <p>Consultation has been initiated, and will continue, with the Town of Milton as well as landowners along the proposed pipeline route in order to identify methods of minimizing disturbance to property and maintaining access to lands, to the extent possible. Where work is to occur within CA regulated areas, permits will be obtained from CH as per O. Reg. 162/06.</p>
Archaeological Resources	No impacts anticipated.	N/A



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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
<i>Section 4.4.8</i>		
Built Heritage Resources and Cultural Heritage Landscapes <i>Section 4.4.9</i>	The Project may have the potential to directly impact built heritage resources and cultural heritage landscapes during construction. A CHRECPIA will be completed prior to construction. The report will assess the potential built heritage resources and cultural heritage landscapes, the relationship of each to the Project and the impacts of the proposed undertaking on the resources and landscapes. The Report will also provide recommendations pertaining to the mitigation of negative impacts to safeguard these resources during the construction and operation phases of the Project.	Prior to construction, a CHRECPIA will be undertaken and submitted to the MHSTCI for their review and comment. The Report will contain mitigation measures for potential impacts, if required.
Indigenous Interests <i>Section 4.4.10</i>	Although not known to occur, the project may affect traditional territories of Indigenous communities and during construction harvesting and hunting in the construction RoW could be impeded. There is the potential to disturb culturally significant resources or artifacts. Archaeological surveys could also result in the finding of Indigenous artifacts. Potential permits and approvals required for the project (see Section 1.2.5) may trigger a duty to consult.	Sun-Canadian has sought input from the identified Indigenous communities and will continue engaging with Indigenous communities as the project moves forward. Information on the current state of Indigenous engagement will be provided in the application to the OEB.  Mitigation and protective measures for archaeology are discussed in Section 4.4.8.



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## 5.0 CUMULATIVE EFFECTS ASSESSMENT

The recognition of cumulative effects assessment as a best practice is reflected in many regulatory and guidance documents. Regarding the development of hydrocarbon pipelines in Ontario, the *OEB Environmental Guidelines* (2016) note that cumulative effects of pipeline construction should be identified and discussed in the ER as an integral part of the assessment.

Building upon the intent of the *OEB Environmental Guidelines* (2016), the OEB has specified that only those effects that are additive or that interact with effects that have already been identified as resulting from the Project are to be considered under cumulative effects. In such cases, it will be necessary to determine whether these effects warrant mitigation measures such as alterations in routing, timing of construction, or other measures that can address the cumulative effects. The cumulative effects assessment (CEA) has been prepared with consideration of this direction from the OEB.

### 5.1 METHODOLOGY

This assessment describes the potential cumulative effects resulting from the interaction of residual effects of the construction and operation of the proposed pipeline with the effects of other unrelated projects. The other projects assessed are those that are either existing or approved and that have a high likelihood of proceeding.

Cumulative effects include the temporal and spatial accumulations of change that occur within an area or system due to past, present, and future activities. Change can accumulate within systems by either an additive (i.e., cumulative) or interactive (i.e., synergistic) manner. Positive residual effects, such as the continued supply of oil, employment or in property taxes, have not been assessed in the CEA.

By applying the principles of avoidance, minimization, and compensation to limit project-specific effects, potential adverse residual effects on environmental and socio-economic features have been greatly limited before accounting for the effects of other unrelated projects.

The cumulative effects assessment methodology is designed to evaluate and manage the additive and interactive effects from the following sources:

- Existing infrastructure, facilities, and activities as determined from available data sets
- The proposed pipeline
- Future activities where the undertaking will proceed, or has a high probability of proceeding

Although rare in occurrence, it is plausible that accidents or emergency events may arise due to an unforeseen chain of events during the project's construction or operational life. Due to the rarity and magnitude of such events, they have not been assessed here, as they are extreme in nature when



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compared to the effects of normal construction and operation activities and require separate response plans.

## 5.2 STUDY BOUNDARIES

### Spatial

To make assumptions about the magnitude and probability of effects, an approximate 100 m boundary around the proposed pipeline route was used for the CEA. The 100 m boundary has been found, through previous experience with pipeline construction, to be appropriate for the most common net effects. The boundary selected is considered conservative in terms of managing both effects and risks in that it considers all those features and areas that could be affected by construction.

### Temporal

The temporal boundaries for the CEA reflect the nature and timing of project activities, and the availability of information surrounding future projects with a high probability of proceeding. The project schedule identifies three key milestone activities:

1. ER and technical design – 2020/2021
2. Construction – 2022 (summer and fall)
3. Operation and Maintenance – 2022 to 2072\*

*\*Fifty years of operation is used as an assumption, although the pipeline may be operational beyond fifty years.*

Based upon these milestone activities, two time periods were selected for evaluation: 2022 and 2024. The year 2022 was selected to represent the construction period, and the year 2024 was selected to represent the operation and maintenance period. Forecasting beyond 2024 increases the uncertainty in predicting whether projects will proceed, and the effects associated with these projects.

## 5.3 PROJECT INCLUSION LIST

The project inclusion list was developed by reviewing publicly available information for projects and activities with the potential to interact with the identified effects of the proposed pipeline within the spatial and temporal study boundaries. The following resources were reviewed:

- Impact Assessment Agency of Canada, Canadian Impact Assessment Registry (IAAC, 2020)
- Government of Ontario, Environmental Assessment Projects by Category (Government of Ontario, 2020)
- Ministry of Transportation (MTO), Southern Highways Program (2017-2021) (MTO, nd)
- Halton Region, Construction Projects (2020)





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- Town of Milton, Town Projects (2019)
- Canada Energy Regulator, Major Facilities Applications (CER, 2020)
- OEB Applications Currently Before the Board (facilities applications only) (OEB, 2020)

Based on the review of publicly available resources, the project inclusion list in Table 5-1 identifies the following projects for consideration of cumulative effects:

**Table 5-1: Project Inclusion List for Cumulative Effects**

Project Name	Project Location	Proponent	Schedule	Project Description	Interaction with the Proposed Pipeline
Trafalgar Secondary Plan	The Trafalgar Secondary Plan is in the Town of Milton's Urban Expansion Area, bounded by Derry Road (north), Eighth Line (east), and Greenbelt Plan Area (south/west)	Town of Milton	Halton Region is reviewing the Plan as of March 25, 2019. The overall growth and development plan for the Town of Milton is scheduled from 2021 – 2031.	A proposed major transit station was identified in the area at Derry and Trafalgar Roads. This area is physically separated from the urban area by the Sixteen Mile Creek Valley and has an opportunity to accommodate higher density development and taller buildings.	Potential for traffic management issues and congestion due to construction vehicles.
*Milton Logistics Hub Project <sup>1</sup>	Milton, Ontario	Canadian National Railway Company	The IAAC is currently hosting virtual information sessions on the potential environmental assessment conditions of the project.	The Canadian National Railway Company is proposing the construction and operation of a logistics hub, designed to transfer containers between trucks and railcars.	Potential for traffic management issues and congestion due to construction vehicles.
*Britannia Road Corridor Improvement	Milton, ON (James Snow Parkway to Highway 407)	Halton Region	Construction for the James Snow Parkway to Highway 407 segment anticipated to start in 2020 and conclude in 2024	To accommodate growth, provide safe alternative transit options and improve traffic flow, Halton Region is planning to make improvements to Britannia Road.	Britannia Road is parallel to the proposed pipeline route, located approximately 600m north-west of the proposed route. This may result in traffic management issues and congestion due to construction vehicles.

1. Canadian National Railway Company (2019)

\*The projects referenced are more than 100 m away however are large in magnitude and therefore have been included in this assessment to be conservative.



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In addition to the above, it is assumed that on-going improvements, upgrades and maintenance to municipal infrastructure such as bridges, culverts, drains or roads will occur within the spatial and temporal study boundaries.

## **5.4 ANALYSIS OF CUMULATIVE EFFECTS**

Sections 4.2-4.4 of the ER consider the potential impacts of the project on specific features and conditions and propose mitigation and protective measures to eliminate or reduce the potential impacts. The cumulative effects assessment evaluates the significance of residual impacts (after mitigation) of the project along with the effects of other unrelated projects.

### **5.4.1 Construction – Summer and Fall 2022**

Residual project impacts which may occur during project construction are outlined in Sections 4.2-4.4. To consider the additive and interactive effects at their maximum intensity, the cumulative effects assessment assumes that construction of other unrelated projects and the proposed pipeline construction will occur concurrently.

Potential cumulative effects resulting from the proposed pipeline construction and the concurrent projects are additive effects on soil, vegetation, wildlife and wildlife habitat, air quality and the acoustic environment.

#### **Soil**

Soil erosion and reduced soil capability is a potential residual effect associated with construction of the project. Mitigation and protective measures for soil are outlined in Section 4.2.2. Provided that concurrent projects follow mitigation measures similar to those outlined in this report, the probability of erosion control failure occurring concurrently is low and based on the nature of the proposed projects the magnitude of such an event would be low. As such, adverse cumulative residual effects on the natural environment from erosion are not anticipated to be significant, and cumulative effects on soil capability are not anticipated to occur.

#### **Vegetation**

Where there is natural vegetation within or adjacent to the proposed pipeline route, potential impacts include the removal of native vegetation, and indirect effects such as dust, erosion, and accidental spills. However, with the implementation of the mitigation and protective measures outlined in this report, such as vegetation replanting, and provided that concurrent projects follow mitigation measures similar to those outlined in this report, adverse cumulative residual effects on vegetation are not anticipated to be significant.



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### **Wildlife and Wildlife Habitat**

Potential residual effects on wildlife and wildlife habitat associated with construction of the project are accidental direct mortality, habitat removal and sensory disturbance. Mitigation and protective measures for wildlife and wildlife habitat are outlined in Section 4.3.3. In the event of project-related wildlife deaths, the MNRF and/or MECP will be contacted. If mortality occurs between concurrent projects for similar species, the Ministry will be able to note the occurrences and coordinate with Sun-Canadian to adjust construction activities. Potential cumulative effects resulting from sensory disturbance (i.e., noise, air pollution and dust) are discussed below.

Provided that the above measures are undertaken, and provided that concurrent projects follow mitigation measures similar to those outlined in this report, adverse cumulative residual effects on wildlife and wildlife habitat will be of low probability and will be mitigated as coordinated through the MECP, and therefore are not anticipated to be significant.

### **Air Quality and Acoustic Environment**

Potential residual effects on air quality associated with construction of the project and concurrent projects are an increase in noise and air pollutants from operation of vehicles and equipment, and an increase in dust from construction activities. Mitigation and protective measures for air quality and the acoustic environment are outlined in Section 4.4.5. Provided that the concurrent projects follow mitigation measures similar to those outlined in this report, cumulative effects will be of low magnitude and reversible. Therefore, adverse residual cumulative effects on air quality and the acoustic environment are not anticipated to be significant.

### **5.4.2 Operation and Maintenance – Year 2024**

Development and maintenance activities which have a probability of proceeding during operation and maintenance of the project include:

- Road works: Future road rehabilitation and resurfacing
- Water works: Future installation of water and wastewater pipelines
- Pipeline construction and maintenance: Future pipeline construction and maintenance of existing hydrocarbon pipelines

Operation and maintenance activities undertaken by Sun-Canadian will be completed in a manner that considers potential impacts on natural heritage and socio-economic environment. Appropriate mitigation measures will be developed and implemented based on the proposed maintenance work. Sun-Canadian will obtain all necessary agency permits and approvals, as required. Given the limited scale of impact of any potential operation and maintenance activities, it is anticipated that residual impacts will be minimal and that should any interaction occur with other projects, significant adverse residual effects are not anticipated to be significant.



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## **5.5 SUMMARY OF CUMULATIVE EFFECTS**

The potential cumulative effects of the project were assessed by considering development that has a high probability of proceeding just prior to or concurrent with construction of the project. An approximate 100 m boundary around the project site was used to assess the potential for additive and interactive effects of the project and other developments on environmental and socio-economic features.

Municipal projects may contribute to cumulative effects within the study boundaries. Improvements to municipal infrastructure such as bridges, culverts, drains or roads may occur during the operational phase of the project. The cumulative effects assessment determined that, provided the mitigation and protective measures outlined in this report are implemented and that concurrent projects implement similar mitigation and protective measures, potential cumulative effects are not anticipated to occur, or if they do occur are not anticipated to be significant.



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## 6.0 MONITORING AND CONTINGENCY PLANS

### 6.1 MONITORING

The primary objective of compliance and effects monitoring is to check that mitigation and protective measures are effectively implemented and to measure the impacts of activities associated with construction on environmental and socio-economic features. Ultimately, the knowledge gained from monitoring is used to avoid or reduce issues which may arise during construction of subsequent pipeline projects.

Previous pipeline construction experience, and a review of post-construction monitoring reports from other projects, indicates that impacts from pipeline construction are for the most part temporary. The mitigation and protective measures to eliminate or reduce impacts are well known and have been shown to be effective. Accordingly, Sun-Canadian should adhere to the following general monitoring practices:

- Trained personnel should be on-site to monitor construction and should be responsible for checking that the mitigation and protective measures and monitoring requirements within the ER are executed. Sun-Canadian should implement an orientation program for inspectors and Contractor personnel to provide information regarding Sun-Canadian's environmental program and commitments, as well as safety measures;
- Recommendations and commitments made in this ER and other applicable permits and reports should be incorporated into clearing and construction activities. The commitments of this ER and other permits and reports should become part of the contract specification with the Contractor selected to construct the project, as noted in section 5.8.4 of the OEB Environmental Guidelines;
- A walking inspection of the entire pipeline route should be done approximately one year after construction to determine whether areas require further rehabilitation. Additional rehabilitation measures should be completed as necessary, and additional follow-up monitoring should be conducted.

The following sections list specific environmental monitoring activities recommended for the project.

#### 6.1.1 Exposed Soils

Where soils are exposed for construction activities, potential effects may include surface soil erosion, entry/exit pit slumping, and sedimentation of natural features. The movement of heavy machinery on wet soil may cause excessive rutting, compaction, and mixing of topsoil and subsoil. Improperly salvaged topsoil can result in mixing topsoil with subsoil, compaction, rutting and erosion, which can potentially decrease crop yields. Improper water discharge can lead to erosion, sedimentation or flooding. Monitoring of potential effects on exposed soils should occur during construction by Sun-Canadian's on-site inspection team. Restored areas should be inspected one year after construction for erosion, and restoration measures should occur as necessary.



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### **6.1.2 Water Wells**

Before construction, a private water well survey should take place to assess domestic groundwater use near the proposed pipeline route and determine the need for a water well monitoring program, as outlined in Section 4.2.3.

### **6.1.3 Watercourse Crossing**

The watercourse crossing has the potential to affect fish, fish habitat, and water quality. Sun-Canadian's on-site inspection team should oversee the watercourse crossing and confirm that work is conducted as outlined in Section 4.3.1, and as per the conditions of relevant permits (see Section 1.2.5).

### **6.1.4 Vegetation**

For at least one year after construction, planted vegetation should be inspected for survival. Dead and diseased vegetation should be replaced in areas of severe dieback or in areas with important environmental functions (e.g. riparian or slope cover).

### **6.1.5 Species at Risk**

Should SAR be identified during vegetation, wildlife, and/or wildlife habitat field surveys, construction monitoring may need to be undertaken. The exact nature of monitoring will be determined in consultation with the MECP and DFO and will depend on the species present.

### **6.1.6 Built Heritage Resources and Cultural Heritage Landscapes Resources**

Any built heritage resources within 50 m of the proposed pipeline route will require site plan controls that will need monitoring. In addition, if a vibration assessment results in additional mitigation measures, these will need to be monitored where construction activities occur within 50 m of a built heritage resource. Further details are provided in Section 4.4.9.

### **6.1.7 Residents and Business**

Construction activities will impact directly affected landowners and surrounding residents and businesses. During construction, a designated Sun-Canadian representative will be available to monitor and respond to requests and concerns voiced by residents and business owners. Landowners affected by construction will be notified in advance of construction activities in their area, as feasible. The notification will provide the contact information for a designated Sun-Canadian representative.

Sun-Canadian's on-site inspection team will also monitor the Contractors' implementation of the Traffic Management Plan, to see that site access to residences and businesses has been maintained and that traffic is not being unnecessarily interrupted.



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While efforts will be undertaken to reduce impacts, a comment tracking system will also be implemented. A Sun-Canadian representative will record the time and date of calls, the nature of the concern, the corrective action taken, and the time and date of follow-up contact.

Following completion of construction, Sun-Canadian will contact residents and businesses along the easement to continue ongoing communications where necessary. During the first two years, particular attention will be paid to monitoring and documenting impacts associated with construction of the proposed pipeline.

### **6.2 CONTINGENCY**

Contingency planning is necessary to prevent a delayed or ineffective response to unexpected events or conditions that may occur during construction of the proposed pipeline. An essential element of contingency planning is the preparation of plans and procedures that can be implemented if unexpected events occur. The absence of contingency plans may result in short or long term environmental or socio-economic impacts and possibly threaten public safety.

The following unexpected events require contingency planning during construction: adverse weather causing watercourse sedimentation, human error causing accidental spills, and the discovery of unexpected finds. Although unexpected problems are not anticipated to occur during construction, Sun-Canadian and the Contractor should be prepared to act when unexpected events occur. Construction personnel should be made aware of and know how to implement contingency measures.

#### **6.2.1 Inadvertent Releases during HDD**

For the watercourse being crossed by HDD, operations should be monitored continuously by qualified personnel. An emergency response and contingency plan for an inadvertent fluid release should be developed by the Contractor and implemented during construction. At the very least, the plan should address containment, clean-up and remediation, alternative drilling/crossing plans, disposal of waste materials, monitoring and reporting.

#### **6.2.2 Watercourse Sedimentation**

Even with properly installed ESC measures, extreme runoff events could result in collapse of silt fencing, overflow or bypass of barriers, slope or bore pit failures, and other problems which could lead to sedimentation of watercourses.

If sedimentation occurs, immediate action should be taken to repair dysfunctional ESC features or install temporary measures that will contain the erosion as quickly as practical. When site conditions permit, permanent protection measures should be installed on erosion-susceptible surfaces. If the erosion and sedimentation results from a construction-related activity, the activity should be halted immediately until the situation is rectified.



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### **6.2.3 Accidental Spills**

During construction, an accidental spill of fluids may occur. The impact of the spill will depend upon the magnitude, extent, and nature of the spill and the environmental and socio-economic conditions in which it takes place. Upon release of a hydrocarbon-based construction fluid, Sun-Canadian should immediately determine the magnitude and extent of the spill and rapidly take measures to contain it. Release of sediment should also be treated as a spill depending on the magnitude and extent. If necessary, the MECP Spills Action Center should be notified at 1-800-268-6060.

A Spills Response Plan should be developed, reviewed with personnel, and posted in site trailers. Spill containment equipment should be readily available, especially near watercourses. Personnel should be trained in the use of spill containment equipment.

Should a spill occur in the project area the spill response contingency plan should be implemented. Specifics of the contingency plan will be documented on site.

### **6.2.4 Unexpected Finds: Archaeological or Heritage Resources and Unknown Contaminated Soils**

Should previously unknown archaeological or heritage resources be uncovered or suspected of being uncovered during construction, ground disturbance in the find location should cease immediately. The MHSTCI and an archaeologist licensed in the Province of Ontario should be notified immediately. A site-specific response plan should then be employed following further investigation of the specific find. The response plan would indicate under which conditions the ground disturbance activity in the find location may resume.

In the event that human remains are uncovered or suspected of being uncovered during ground disturbance, the above measures should be implemented along with notifying local police, the coroner's office, and the Cemeteries Regulation Unit of the Ontario Ministry of Government and Consumer Services (1-800-889-9768).

If previously unknown materials or contaminated soils are uncovered or suspected of being uncovered, construction in the find location should cease immediately. In such an instance, Sun-Canadian should retain expert advice on assessing and developing a plan to include soil sampling, handling, disposal and remediation.





# **NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT**

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## **7.0 CONCLUSION**

The environmental study investigated data on the physical, biophysical, and socio-economic environment along the proposed pipeline route. In the opinion of Stantec, the recommended program of supplemental studies, mitigation and protective measures, and contingency measures are considered appropriate to protect the features encountered. Monitoring will assess whether mitigation and protective measures were effective in both the short and long term.

With the implementation of the recommendations in this report, on-going communication and consultation, and adherence to permit, regulatory and legislative requirements, potential adverse residual environmental and socio-economic impacts of the project are not anticipated to be significant.



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## NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT: ENVIRONMENTAL REPORT

### References

December 21, 2021

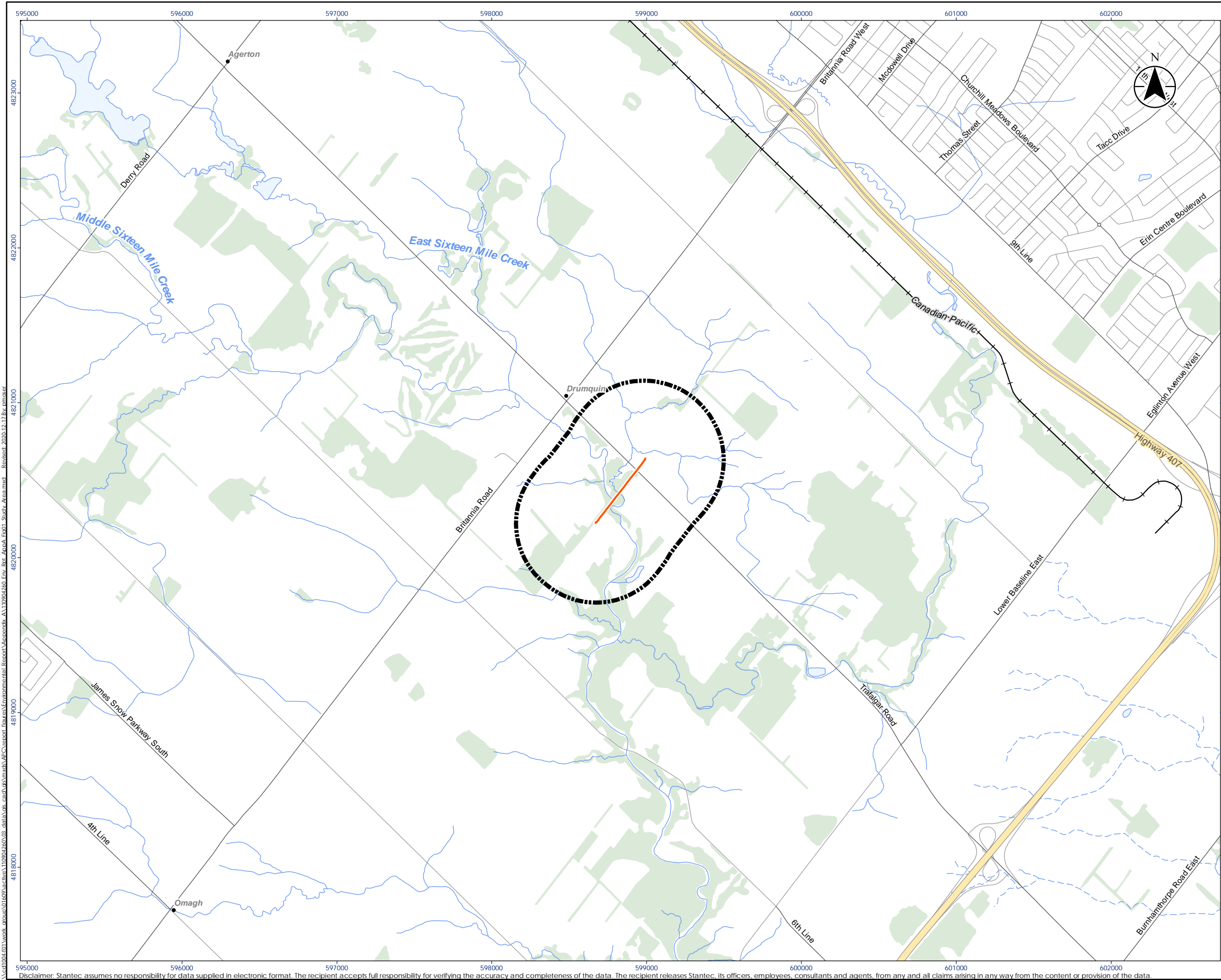
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## **APPENDIX A: ROUTE FIGURES**







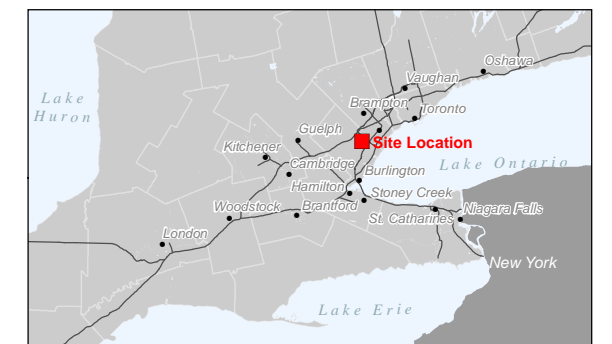
Legend

- Project Study Area
- Proposed NPS 12 Replacement
- Expressway / Highway
- Major Road
- Minor Road
- Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Wooded Area

0 0.5 1 km  
1:25,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2020.

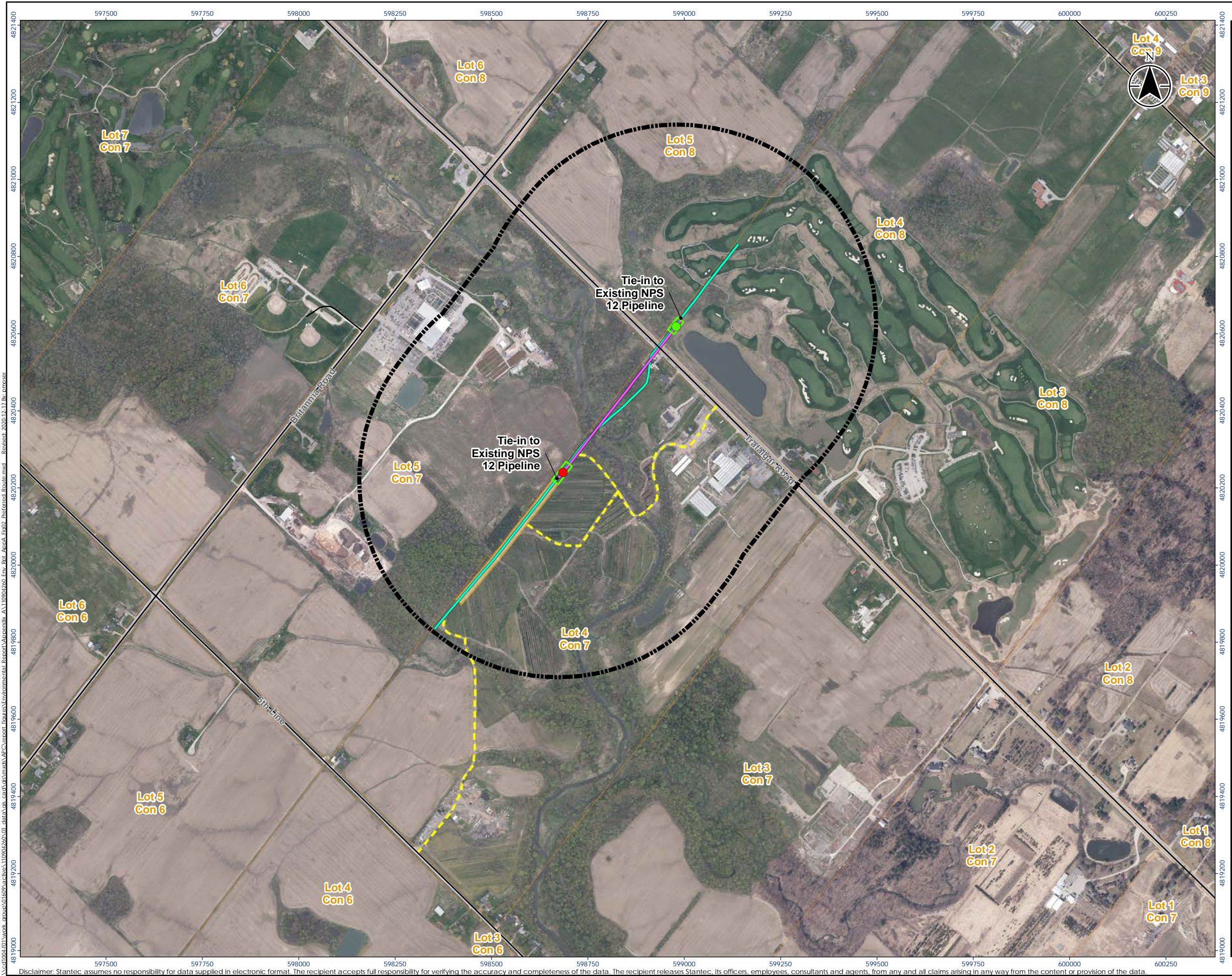


Project Location: Town of Milton  
110904260 REVA  
Prepared by PRM on 2020-12-17  
Technical Review by MC on 2020-12-17

Client/Project:  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.:  
1  
Title:  
Study Area





#### Legend

- Project Study Area
- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Road
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Lot Boundary

0 250 500  
1:10,000 (At original document size of 11x17) m

#### Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2020.
3. Orthoimagery © First Base Solutions, 2020. Imagery Date, 2019.



Project Location 110904260 REVA  
Town of Milton Prepared by PRM on 2020-12-17  
Technical Review by MC on 2020-12-17

Client/Project  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.

2

Title

Preferred Route

\\cd\004\01\work\_circue\01\09\ac\m\110904260\03\_data\ak\_cad\as\m\as\AP\N\sect\fares\Environmental\Report\Appendix\_A\110904260\_Env\_Rpt\_Aqua\_E16M\_Creek\_Pipeline\_Replacement\_Report.mxd Revised: 2020-12-17 by cmcrose

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



## **APPENDIX B: CONSULTATION**



*APPENDIX B1:  
PROJECT SUMMARY AND  
CONTACT LIST*





June 6, 2020

**VIA EMAIL – dan.delaquis@ontario.ca**

Ministry of Energy, Northern Development and Mines  
Mr. Dan Delaquis - Manager, Indigenous Energy Policy  
77 Grenville Street, 6th floor Toronto ON M7A 2C1

Dear Mr. Delaquis,

**RE: SCPL East Sixteen Mile Crossing Replacement**

The purpose of this letter is to inform the Ministry of Energy, Northern Development and Mines that Sun Canadian Pipe Line Limited has identified the need to replace a segment of an existing pipeline near Trafalgar Road and south of Britannia Road in the Town of Milton. Accordingly, we will be submitting an application to the Ontario Energy Board and following the *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7th Edition 2016*.

Attachment 1 provides project description details for your review and aid in commentating on the obligations of the Crown's duty to consult for intra-provincial pipelines.

This important project is required for maintaining the integrity of the pipeline. We would appreciate expediting review and comment as soon as possible. Please do not hesitate to contact me with any questions.

Regards,

Susan J. Jackson  
Manager Environment, Health & Safety

## **Attachment 1: East Sixteen Mile Crossing Replacement Project**

### **Project Summary**

Sun-Canadian Pipe Line (SCPL) has identified the need to replace approximately 500m segment of an existing 12 inch diameter pipeline (TRL system) near Trafalgar Road and south of Britannia Road in the Town of Milton. The existing pipeline segment crosses under East Sixteen Mile creek and has become exposed in several locations in the watercourse due to ongoing erosion and creek meander. This project intends to install a new segment of 12 inch diameter pipe via horizontal directional drilling at a greater depth to eliminate the environmental risks of the current pipe exposure.

### **Project Information**

SCPL's TRL system supplies finished petroleum products including gasoline, jet fuel, and diesel fuels to terminals in Southern Ontario. The TRL system originates in Sarnia and has connections to distribution terminals in London, Pearson Airport, and Toronto. This system is critical to ensuring adequate supply of fuels products throughout the Greater Toronto Area.

The current segment of the TRL system that requires replacement is located in the Town of Milton. Drill entry is located on Piper's Heath golf course in Town of Milton. Drill exit is located on PAO Tree Nursery in Town of Milton. See Figure 1 below for existing and proposed pipeline routing as well as coordinates of the two temporary work locations. The drill entry and drill exit sites are both located on previously disturbed lands. Both sites will be accessed by existing roads. Temporary matting will be used at both work locations to minimize disturbance.

### **Indigenous Engagement**

Earlier this month, we reached out to the Mississauga of the Credit and Six Nations of the Grand River by phone and by email to briefly introduce the project. While most administrations remain temporarily closed for the COVID-19 outbreak, we did receive a positive acknowledgement from the Mississauga of the Credit First Nation to participate in project discussions of the project in the near future.

### **Authorizations and Recommendations Required**

This project is being planned in accordance with OEB regulations and will request a "Leave to Construct" under subsection 90 from the OEB. An environmental assessment will be completed as part of that process. Engagement with landowners, Indigenous communities, Conservation Halton, and the municipality will also be enacted. Other authorization, notification, permits, and/or approvals may be required and identified as part of this process.

### **Project Activities**

Design of the new pipe segment will be done to ensure safe and reliable long-term operation of the pipeline system as well as compliance with Technical Standards and Safety Authority (TSSA) regulations and Canadian Standards Association (CSA) Z662 standard. Design of the horizontal directional drill plan

will be done to prevent drill fluid losses and ensure proper control of the drill path. Major phases of this project include engineering design, environmental assessment, landowner/Indigenous engagement, approvals, contractor selection, and construction/decommissioning.

Public consultation will be undertaken as part of the Leave to Construct process. Landowners impacted by this proposed work will be engaged and access agreements and/or easement agreements will be put in place. Identified landowners and tenants impacted by this work include:

- York Trafalgar Golf Corp
- Mr. Sundeep Ghuman
- MG&N Sihota
- Mr. V. Gagliardi
- Terra Greenhouses
- PAO Nursery

Construction will require temporary work sites at the drill entry and exit points. Both work sites have existing road access. Brush clearing and temporary matting will be needed to ensure a safe work space. The new pipe segment will be assembled, hydrotested, and installed from the drill exit location. The TRL pipeline system will then be shut down and drained, and the new pipe segment will be tied in at the drill entry and exit locations. The existing pipe removed from service will be cleaned, capped, and filled with grout. All work locations will then be backfilled and returned to their original condition.

### **Potential Environmental Effects and Mitigation Measures**

The Environmental Assessment will assess physical, natural and socio-economical features potentially impacted by construction activities (such as minor brushing and ground disturbance at the drill entry and exit). Mitigation measures will be recommended as part of the screening to minimize potential adverse effects to the environment. The mitigation recommendations, together with SCPL project management processes, should effectively serve to protect environmental features within the proposed work locations.

It is anticipated that the majority of adverse and/or socio-economic effects will be construction-related temporary and transitory, and likely avoided by locating the drill sites outside of the creek valley and on previously disturbed areas.

### **Project Benefits**

This project will eliminate the environmental risk due to exposed pipe in the East Sixteen Mile Creek watershed. It will ensure continued reliable operation of the TRL system to allow fuel supply to be maintained to the Greater Toronto Area.

### **Contact Information**

Regulatory Affairs, Indigenous Relations and Environment Matters:  
 Susan Jackson  
[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)  
 647-465-8159

Technical Contact:

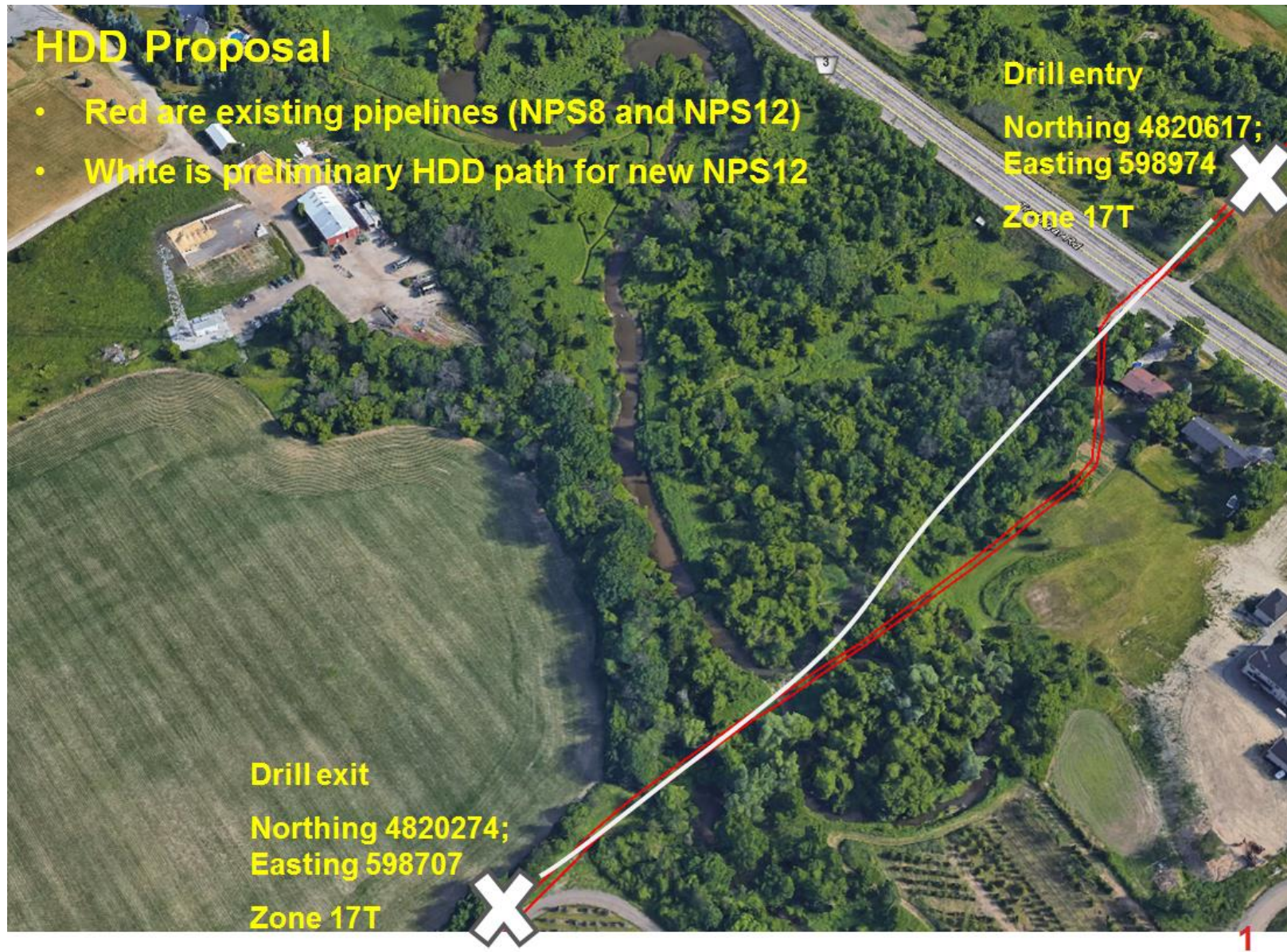
Peter Martens

[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)

289-230-4350



Figure 1: Map of HDD proposal



NPS 12 East Sixteen Mile Creek Pipeline Replacement Project:  
Environmental Report

Agency Contacts

First Name	Last Name	Title	Representing	Address	Town	Province	Postal Code	Phone	Email
Brad	Allen	District Manager, Aurora District	Ministry of Natural Resources and Forestry	50 Bloomington Rd	Aurora	ON	L4G 0L8	905-713-7372	<a href="mailto:brad.allan@ontario.ca">brad.allan@ontario.ca</a>
Maria	Jawaid	District Planner, Aurora District	Ministry of Natural Resources and Forestry	50 Bloomington Rd	Aurora	ON	L4G 0L8	907-713-7367	<a href="mailto:maria.jawaid@ontario.ca">maria.jawaid@ontario.ca</a>
James	Hamilton	Manager, Heritage Planning Unit	Ministry of Heritage, Sport, Tourism and Culture Industries	401 Bay Street	Toronto	ON	M7A 0A7	416-212-7505	<a href="mailto:james.hamilton@ontario.ca">james.hamilton@ontario.ca</a>
Ben	Davis	Regulations Officer	Conservation Halton	2596 Britannia Road West	Burlington	ON	L7P 0G3	905-336-1158 x 2278	<a href="mailto:bdavis@hrca.on.ca">bdavis@hrca.on.ca</a>
Anneleis	Eckert	Rural Planner	Ministry of Agriculture, Food and Rural Affairs	6484 Wellington Road 7	Elora	ON	N0B 1S0	519-827-6040	<a href="mailto:anneleis.eckert@ontario.ca">anneleis.eckert@ontario.ca</a>

OPCC Contacts

First Name	Last Name	Title	Representing	Address	Town	Province	Postal Code	Phone	Email
Zora	Crnojacki		Ontario Energy Board	PO Box 2319, 2300 Yonge Street, 26th Floor	Toronto	ON	M4P 1E4	416-440-8104	<a href="mailto:zora.crnojacki@oeb.ca">zora.crnojacki@oeb.ca</a>
Helma	Geerts	Land Use Policy & Stewardship	Ministry of Agriculture, Food and Rural Affairs	1 Stone Road West, 3rd Floor SE	Guelph	ON	N1G 4Y2	519-546-7423	<a href="mailto:helma.geerts@ontario.ca">helma.geerts@ontario.ca</a>
Dan	Minkin	Heritage Planner	Ministry of Heritage, Sport, Tourism and Culture Industries	401 Bay Street	Toronto	ON	M7A 0A7	416-314-7147	<a href="mailto:dan.minkin@ontario.ca">dan.minkin@ontario.ca</a>
Tony	Difabio		Ministry of Transportation	301 St. Paul Street, 2nd Floor	St. Catharines	ON	L3R 7R4	905-704-2656	<a href="mailto:tony.difabio@ontario.ca">tony.difabio@ontario.ca</a>
Kourosh	Manouchehri		Technical Standards and Safety Authority	345 Carlingview Drive	Toronto	ON	M9W 6N9	416-734-3539	<a href="mailto:kmanouchehri@tssa.org">kmanouchehri@tssa.org</a>
Sally	Renwick	Team Lead, Environmental Planning, Land Use and Environmental Planning Section	Ministry of Natural Resources and Forestry	300 Water Street	Peterborough	ON	K9J 8M5	705-755-5195	<a href="mailto:sally.renwick@ontario.ca">sally.renwick@ontario.ca</a>
Scott	Oliver	Western Municipal Services Office	Ministry of Municipal Affairs and Housing	659 Exeter Rd, 2nd Floor	London	ON	N6E 1L3	519-873-4033	<a href="mailto:scott.oliver@ontario.ca">scott.oliver@ontario.ca</a>
			Ministry of Environment, Conservation and Parks, Central Region	Place Nouveau 9th Flr, 5775 Yonge St	Toronto	ON	M2M 4J1		<a href="mailto:eanotification.cregion@ontario.ca">eanotification.cregion@ontario.ca</a>
Cory	Ostrowka	Environmental Specialist, Environmental Management	Infrastructure Ontario	1 Dundas Street West, Suite 2000	Toronto	ON	M5G 2L5	416-571-8294	<a href="mailto:cory.ostrowka@infrastructureontario.ca">cory.ostrowka@infrastructureontario.ca</a>
Jason	McCullough	Senior Advisor, Indigenous Energy Policy Unit	Ministry of Energy, Northern Development and Mines	6th Floor, 77 Grenville Street	Toronto	ON	M7A 2C1	416-526-2963	<a href="mailto:jason.mccullough@ontario.ca">jason.mccullough@ontario.ca</a>
Debbie	Scanlon	Manager Approvals Section	Ministry of Environment, Conservation and Parks	40 St. Clair Av. W, 14th Floor	Toronto	ON	M4V 1M2	647-627-5917	<a href="mailto:sourceprotectionscreening@ontario.ca">sourceprotectionscreening@ontario.ca</a>

NPS 12 East Sixteen Mile Creek Pipeline Replacement Project:  
Environmental Report

Municipal Contacts

First Name	Last Name	Title	Representing	Address	Town	Province	Postal Code	Phone	Email
Barbara	Koopmans	Commissioner, Planning & Development	Town of Milton	150 Mary Street	Milton	ON	L9T 6Z5	905-878-7252 x 2398	<a href="mailto:planning@milton.ca">planning@milton.ca</a>
Troy	McHarg	Commissioner, Corporate Services/Town Clerk	Town of Milton	150 Mary Street	Milton	ON	L9T 6Z5	905-878-7252	<a href="mailto:towncler@milton.ca">towncler@milton.ca</a>
Graham	Milne	Regional Clerk	Halton Region	1151 Bronte Road	Oakville	ON	L6M 3L1	905-825-6000 x 7110	<a href="mailto:graham.milne@halton.ca">graham.milne@halton.ca</a>
Robert	Clackett	Senior Planner	Halton Region	1151 Bronte Road	Oakville	ON	L6M 3L1	905-825-600 x 7554	<a href="mailto:robert.clackett@halton.ca">robert.clackett@halton.ca</a>
Diana	Jiona	Manager, Infrastructure & Right of Way	Town of Milton	150 Mary Street	Milton	ON	L9T 6Z5	905-878-7252 x 2513	<a href="mailto:diana.jiona@milton.ca">diana.jiona@milton.ca</a>
Shawn	Clewlowl		Town of Milton	150 Mary Street	Milton	ON	L9T 6Z5		<a href="mailto:shawn.clewlowl@milton.ca">shawn.clewlowl@milton.ca</a>

*APPENDIX B2:  
NEWSPAPER NOTICE*





# GOING THE DISTANCE IN HONOUR OF DEPARTED DAD

## #HUMANISOHALTON

**ROLAND CILLIERS**  
rcilliers@metroland.com

InsideHalton.com's #HumansofHalton series is aimed at showcasing the exceptional, influential and just plain remarkable people in our community. Know of a Milton, Burlington, Oakville or Halton Hills resident who should be featured? Email us at rcilliers@metroland.com or



tweet using the hashtag #HumansofHalton. Frank Burnett was described by those who knew him as a charming and caring man, right up to the end.

On Saturday (Aug. 15), his son, Jeff Burnett, cycled 250 kilometres as part of a live-streamed journey to honour his father and raise awareness and funds for ALS — the disease that ultimately took Frank.

Here are four things to know about this remarkable quest and the people who were central to it.

1. The meaning in the miles. Jeff's Aug. 15 journey was picked for a particular reason. He began at his childhood home in Milton and travelled all the way to his dad's final resting place in Leith. The route retraced the same path they did as a family over 35 years earlier for regular happy trips on Owen Sound.

2. A brutal ordeal. In the later part of his life, Jeff began documenting his father's decline as a result of ALS through social media channels. He wanted to show the reality of anguish that the disease brought as it cut through his body. He did this in hopes of shining a light on this little understood disease.

3. Ride-along supporters took part in the journey as Jeff live-streamed the whole



Jeff Burnett photo

Jeff Burnett celebrated the life of his father with a 250 km bike journey. He hopes to raise awareness and money for ALS - the disease which ultimately resulted in the death of his father, Frank Burnett.

way.

4. It's about an inspirational man who was lost.

"You will be challenged with adversity,

in life, which means troubles. You have to be strong, work through them, try and understand them, and learn from them." — Frank Burnett

## NOTICE OF COMMENCEMENT

### Sun-Canadian Pipe Line Replacement Project: NPS 12 E16M Creek Pipeline Replacement Project

#### The Project

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

#### The Process

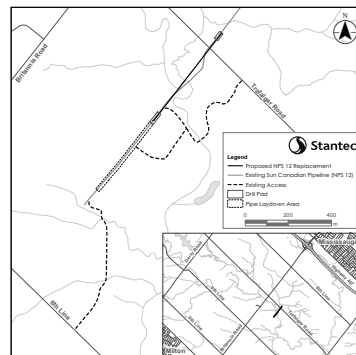
As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Additional project information is available at:  
<http://sun-canadian.com/media-releases/>

If you have any project-related questions or would like to provide input, please contact:

16milecreekreplacement@stantec.com.



**BARNETT**  
REAL ESTATE TEAM  
Katherine Barnett  
Broker  
905-858-3434  
cell 416-856-5161  
[www.katherinebarnett.com](http://www.katherinebarnett.com)  
[sales@katherinebarnett.com](mailto:sales@katherinebarnett.com)



Gorgeous 4 bedroom, 3 bathroom detached home with double car garage backing onto greenspace in Milton. Beautifully landscaped lot with a large stone patio, gazebo and mature trees for added privacy. Featuring hardwood floors, upgraded kitchen, with quartz countertops, gorgeous fireplace with stone wall, main floor laundry and separate dining room. Fantastic location walking distance to schools, Bristol District Park, Metro Plaza, and walking/bike trails.



**BARNETT**  
REAL ESTATE TEAM  
Katherine Barnett  
Broker  
905-858-3434  
cell 416-856-5161  
[www.katherinebarnett.com](http://www.katherinebarnett.com)  
[sales@katherinebarnett.com](mailto:sales@katherinebarnett.com)



Stunning 2 bedroom freehold townhome in the desirable Willmott neighbourhood. Quiet low traffic street, steps to Sunny Mount Park, off leash dog park, school and Milton Marketplace plaza. Main floor laundry room, spacious living/dining room with a walkout to balcony, hardwood floors and stairs. Kitchen with gas stove and breakfast bar. No sidewalk, parking up to 3 cars. Contact Katherine to view this beautiful property.

*APPENDIX B3:  
LETTERS*





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

«First\_Name» «Last\_Name», «Title»  
«Representing»  
«Address»  
«Town», «Province» «Postal\_Code»  
«Email\_»

SENT VIA EMAIL

Dear «First\_Name» «Last\_Name»,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

A map of the proposed pipeline route is attached (the map was inadvertently not included with the previous letter, dated August 20<sup>th</sup>).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

August 21, 2020

Page 2 of 2

Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).  
Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.





August 12, 2020

Haudenosaunee Confederacy Chiefs Council  
c/o Haudenosaunee Development Institute  
P.O. Box 714  
Ohsweken, ON N0A 1M0  
HaudenosauneeConfederacy.ca

SENT VIA EMAIL

Haudenosaunee Confederacy Council,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mail outs, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

The Haudenosaunee Confederacy Council is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun-Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line

**Attachment:** Map of Proposed Pipeline Route



c. Tracey General, Haudenosaunee Development Institute  
Todd Williams, Haudenosaunee Development Institute  
Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line



August 12, 2020

Maxime Picard  
Huron-Wendat  
255 place chef Michel Laveau  
Wendake, QC G0A 4V0  
administration@cnhw.qc.ca

SENT VIA EMAIL

Dear Mr. Picard,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mail outs, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

The Huron-Wendat First Nation is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun-Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line

**Attachment:** Map of Proposed Pipeline Route



c. Administration, Huron-Wendat First Nation  
Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line



August 12, 2020

Mark LaForme  
Mississauga of the Credit First Nation  
2789 Mississauga Road, R. R. #6  
Hagersville ON N0A 1H0  
mark.laforme@mcfn.ca

SENT VIA EMAIL

Dear Mr. LaForme,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mail outs, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Mississauga of the Credit First Nation is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun-Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line



**Attachment:** Map of Proposed Pipeline Route

c. Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line



August 12, 2020

Lonny Bomberry  
Six Nations Lands & Resources  
Six Nations of the Grand River Elected Council  
PO Box 5000  
Oshweken, ON  
lonnybomberry@sixnations.ca

SENT VIA EMAIL

Dear Mr. Bomberry,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mail outs, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Six Nations of the Grand River First Nation is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun-Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line



**Attachment:** Map of Proposed Pipeline Route

c. Dawn LaForme, Six Nations of the Grand River First Nation  
Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 25, 2020  
File: 110904260

Attention: Milton Green Environmental Association  
info@miltongreen.org

SENT VIA EMAIL

Dear Sir / Madam,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).

Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

«Name1»  
«Name2»  
«Address1»  
«Address2\_RR»  
«City», «Prov» «PostalCode»

Dear «Name1» and «Name2»,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

You are receiving this letter because the Project is located on or in proximity to your property. A map of the proposed pipeline route is attached (the map was inadvertently not included with the previous letter, dated August 20<sup>th</sup>).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

August 21, 2020

Page 2 of 2

Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).  
Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC

Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

September 24, 2020  
File: 110904260

Dear Landowner/Resident,

**Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update**

The purpose of this letter is to provide you with an update on Project activities as the Project is located on or in proximity to your property. A map of the proposed pipeline route is attached.

### **Project Overview**

- Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline, which crosses East Sixteen Mile Creek in Milton, ON.
- Sun-Canadian is proposing to replace a portion of the existing pipeline with approximately 480 metres of new, deeper pipeline and eliminate three areas of shallow cover in East Sixteen Mile Creek.
- A section of the replaced pipe will be constructed outside the existing right-of-way (RoW); to be installed using Horizontal Directional Drilling (HDD).
- If approved by the Ontario Energy Board (OEB), construction of the replaced pipeline could begin as early as Summer 2021 and be complete by the end of 2021.

### **Environmental Study Process**

The environmental study and Environmental Report will be completed as per the OEB's "Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)."

The study will:

- Undertake consultation with landowners, municipalities and agencies to understand the views of interested and potentially affected parties.
- Consult and engage with Indigenous communities to understand interests and potential impacts.
- Identify potential impacts of the Project
- Develop environmental mitigation and protective measures to avoid or reduce potential impacts.
- Develop appropriate environmental inspection, monitoring and follow-up programs, as necessary.

## Ontario Energy Board Process

The Ontario Energy Board (OEB) is the body that regulates hydrocarbon projects in Ontario, in the public interest. The application to the OEB will include information on the Project including:

- The need for the Project
- Environmental Report and mitigation measures
- Pipeline design and construction
- Land requirements
- Consultation with Indigenous Communities
- Consultation with various stakeholders including landowners and government agencies

The OEB will then hold a public hearing to review the Project. If the OEB determines that the Project is in the public interest it will approve construction of the Project.

## Aquatic Resources

Sun-Canadian recognizes the importance of protecting aquatic resources during construction and will implement recognized mitigation measures to reduce possible environmental effects.

- The Study Area contains two (2) watercourses – Sixteen Mile Creek and East Sixteen Mile Creek.
- The pipeline will only cross East Sixteen Mile Creek and will be crossed using the HDD method.
- Silver Shiner, an aquatic Species at Risk (SAR) under the Endangered Species Act (ESA) has been identified through background data review in East Sixteen Mile Creek.
- Standard erosion and sediment control measures will be used during construction to reduce potential impacts to fish and fish habitat.
- Monitoring will be in place for inadvertent returns of drilling mud during HDD installation process.

## Terrestrial Resources

Preliminary field studies conducted by a terrestrial biologist identified the following features:

- **Species at Risk:** one (1) Butternut was identified at the southwest end of the Pipe Laydown Area.

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

- **Significant Wildlife Habitat:** large diameter trees observed in the Pipe Laydown Area and adjacent to the HDD Entry Pit Location (potential to provide candidate bat maternity roost habitat). Potential habitat for turtles in East Sixteen Mile Creek, however no potential turtle nesting habitat was observed.
- **Migratory Bird Nesting Habitat:** potential for migratory birds to nest throughout the Study Area.
- **Natural Vegetation Communities:** mid-aged to mature sugar maple forest (edge of the forest, overlaps with the Pipe Laydown Area) and small coniferous plantation (Scot's Pine) adjacent to the south end of the Pipe Laydown Area were identified. These vegetation communities are common in the province.
- **Designated Natural Heritage Features:** no designated natural heritage features identified in the Study Area.

Mitigation measures will be implemented to protect terrestrial resources and further developed through consultation with regulatory authorities during the permitting process.

## Project Schedule

### 2020

#### Summer

- Start the environmental planning process
- Initiation of environmental field studies

#### Fall

- Stage 1 and 2 Archaeological Assessment
- Complete Environmental Report
- Circulate Environmental Report to agencies, Indigenous communities and landowners for comments
- Complete OEB filing application

### 2021

#### Spring

- Receive OEB approval, complete permitting, pipeline design and construction plan

September 24, 2020

Page 4 of 4

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

### **Summer**

- Begin construction

### **Fall**

- Conclude construction
- Site cleanup and restoration
- Pipeline in service

### **2022**

- Post-construction monitoring

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com). Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

Design with community in mind



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

December 9, 2020  
File: 110904260

Dear Landowner/Resident,

**Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Second Project Update**

The purpose of this letter is to provide you with an update on Project activities as the Project is located on or in proximity to your property. A map of the proposed pipeline route is attached.

**Update to Project Activities**

- Stage 1 Archaeological Assessment complete
- Stage 2 Archaeological Assessment scheduled for Spring 2021
- Additional natural heritage studies planned for the week of December 7<sup>th</sup>, 2020
- Completion of the Environmental Report anticipated by end of 2020

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

Please direct any questions, comments and/or concerns to the undersigned.

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com). Additional project information is available at: <http://sun-canadian.com/media-releases/>.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route  
c. Peter Martens, Sun-Canadian Pipe Line Ltd.



*APPENDIX B4:  
PROJECT CORRESPONDENCE*



NPS 12 East Sixteen Mile Creek Pipeline Replacement Project:  
Environmental Report

OPCC CORRESPONDENCE

Line Item	Date of Communication	Agency	Correspondent	Method of Communication	Subject	Comment	Date of Response	Response and Issue Resolution (if applicable)	Follow-up Required
1	21-Aug-20	OPCC	OPCC members	Email	Notice of Commencement	Stantec on behalf of Sun Canadian provided an updated Notice of Commencement.			

PROVINCIAL AND FEDERAL GOVERNMENT AGENCY CORRESPONDENCE

Line Item	Date of Communication	Agency	Correspondent	Method of Communication	Subject	Comment	Date of Response	Response and Issue Resolution (if applicable)
1	21-Aug-20	All Agencies	N/A	Letter via Email	Notice of Commencement	Stantec on behalf of Sun Canadian provided a Notice of Commencement.	N/A	N/A
2	21-Aug-20	Ministry of Municipal Affairs and Housing	Erick Boyd	Email	Notice of Commencement	MMAH is forwarding the letter to their Central Region Planning Manager.	N/A	N/A
3	24-Aug-20	Ontario Ministry of Agriculture, Food and Rural Affairs	Anneleis Eckert	Email	Notice of Commencement	Anneleis requested to be added to the contact list.	N/A	N/A
4	31-Aug-20	Ministry of Natural Resources and Forestry	Maria Jawaid	Email	Notice of Commencement	MNRF noted they have no concerns with the project, but if any in-water works be required that they respect the appropriate timing windows.	N/A	N/A
5	8-Sep-20	Minstry of Heritage, Sport, Tourism and Culture Industries	Dan Minkin	Email	Notice of Commencement	MHSTCI provided comments on the project.	N/A	N/A

MUNICIPAL CORRESPONDENCE

Line Item	Date of Communication	Municipality	Correspondent	Method of Communication	Subject	Comment	Date of Response	Response and Issue Resolution (if applicable)	Follow-up Required
1	21-Aug-20	Town of Milton and Halton Region	N/A	Email	Notice of Commencement	Stantec on behalf of Sun Canadian provided a Notice of Commencement.	N/A	N/A	N/A
2	21-Aug-20	Town of Milton	Diana Jiona	Email	Notice of Commencement	Milton provided contact information updates for any future correspondence.	N/A	N/A	N/A
3	11-Sep-20	Town of Milton	Anthony Wong	Email	Municipal Heritage Interests	The Town of Milton contacted Stantec to identify the boundary of the study area.	14-Sep-20	Stantec replied to the request and provided a map showing the study area boundaries.	N/A
4	14-Sep-20	Town of Milton	Anthony Wong	Email	Municipal Heritage Interests	The Town of Milton provided information on the municipal heritage interests.	N/A	N/A	N/A
5	30-Sep-20	Halton Region	Robert Clackett	Email	General	Halton Region Senior Planner Robert Clackett informed the Project team he would be managing the 16 Mile Creek replacement from the Region's perspective. Mr. Clackett requested more details with respect to the project, and any critical deadlines to provide information.	05-Oct-20	Stantec responded to the Halton Region Senior Planner to clarify what details they are requesting. Stantec noted that the Environmental Report would be circulated for review in a few weeks, and asked to confirm who the appropriate contact at Halton Region would be.	N/A
6	19-Oct-20	Halton Region	Robert Clackett	Email	General	Halton Region Senior Planner Robert Clackett noted they would like to receive as much detail as possible, including all materials that have been released to the public to date and confirmed the appropriate contact at Halton Region moving forward.	03-Nov-20	Stantec responded to the Halton Region Senior Planner and stated all available information to date has been provided and noted that once more information is available it will be provided.	N/A

NPS 12 East Sixteen Mile Creek Pipeline Replacement Project:  
Environmental Report

INDIGENOUS CORRESPONDENCE

Line Item	Date of Communication	Community	Correspondent	Method of Communication	Subject	Comment	Date of Response	Response and Issue Resolution (if applicable)	Follow-up Required
1	28-Jul-20	Ministry of Energy, Northern Development and Mines	Dan Delaquis	Email	Project Description and Duty to Consult	The MENDM responded to Sun Canadian's Project Description and Duty to Consult request, dated on June 6, 2020 and provided a list of indigenous communities that should be consulted on the basis that they have or may have constitutionally protected Aboriginal or Treaty rights that may be adversely affected by the Project.	N/A	N/A	N/A
2	12-Aug-20	Haudenosaunee Confederacy Chiefs Council (HCCC)	Haudenosaunee Confederacy Council	Letter via Email	Notice of Commencement	Sun Canadian notified HCCC of the Project in a Notice of Commencement letter, sent via email.	N/A	N/A	N/A
3	12-Aug-20	Huron Wendat Nation (HWN)	M.Picard	Letter via Email	Notice of Commencement	Sun Canadian notified HWN of the Project in a Notice of Commencement letter, sent via email.	N/A	N/A	N/A
4	12-Aug-20	Mississauga of the Credit First Nation (MCFN)	M. LaForme	Letter via Email	Notice of Commencement	Sun Canadian notified MCFN of the Project in a Notice of Commencement letter, sent via email.	N/A	N/A	N/A
5	12-Aug-20	Six Nations of the Grand River (SNGR) Elected Council	L. Bomberry	Letter via Email	Notice of Commencement	Sun Canadian notified SNGR Elected Council of the Project in a Notice of Commencement letter, sent via email.	N/A	N/A	N/A
6	9-Sep-20	Huron Wendat Nation (HWN)	M. Picard	Virtual Meeting	Discussion of the proposed Project	The HWN and Sun Canadian held a virtual meeting to discuss the Project. The HWN noted they expect the project design to preserve cultural resources as necessary. This may include additional measures resulting from any Stage 3 or beyond findings. The HWN noted their interest in the Project is with archaeology. Accordingly, the HWN will participate in all archaeology associated with this project - SCPL noted they will ensure its archaeological consultant works with HWN.	N/A	N/A	N/A
7	22-Sep-20	Six Nations of the Grand River (SNGR) Elected Council	L. Bomberry Robbin Vanstone Jen Mt. Pleasant Dawn LaForme Tanya Hill-Mountour	Virtual Meeting	Discussion of the proposed Project	SNGR and Sun Canadian held a virtual meeting to discuss the Project. SNGR would like to participate in the Project via construction monitoring during the construction phase of the project and during archaeology work.	N/A	N/A	N/A
8	23-Sep-20	Six Nations of the Grand River (SNGR) Elected Council	J. MtPleasant	Letter via Email	Discussion of the proposed Project	In response to the virtual meeting and presentation held on September 22, SNGR Elected Council provided a letter to Sun Canadian detailing historical treaties made between the Haudenosaunee (people of the Six Nations) and settlers and the Crown. SNGR Elected Council noted their communities shared interest in Stewardship, the Environment, and Wildlife, and encouraged all levels of government, developers and affiliates to act honourably when engaging with SNGR.	N/A	N/A	N/A
9	5-Oct-20	Mississauga of the Credit First Nation (MCFN)	M. LaForme F.Sault M. DeVries	Virtual Meeting	Discussion of the proposed Project	The MCFN and Sun Canadian held a virtual meeting to discuss the Project. The MCFN requested participation in all environmental studies and monitoring, and noted they will participate in the planned Stage 1&2 archaeology (under current monitor agreement).	N/A	N/A	N/A

NPS 12 East Sixteen Mile Creek Pipeline Replacement Project:  
Environmental Report

PUBLIC CORRESPONDENCE

Line Item	Date of Communication	Affiliation (if any)	Correspondent	Method of Communication	Subject	Comment	Date of Response	Response and Issue Resolution (if applicable)	Follow-up Required
1	21-Aug-20	N/A	N/A	Letter	Notice of Commencement	Stantec on behalf of Sun Canadian provided the Notice of Commencement.	N/A	N/A	N/A
2	24-Sep-20	N/A	N/A	Letter	Project Update	Stantec on behalf of Sun Canadian provided a project update via hand delivered letter.	N/A	N/A	N/A
3	8-Dec-20	N/A	N/A	Letter	Second Project Update	Stantec on behalf of Sun Canadian provided a second project update via hand delivered letter.	N/A	N/A	N/A

THIRD-PARTY CORRESPONDENCE

Line Item	Date of Communication	Company / Association / Group	Correspondent	Method of Communication	Subject	Comment	Date of Response	Response and Issue Resolution (if applicable)	Follow-up Required
1	25-Aug-20	Milton Green Environmental Association	N/A	Email	Notice of Commencement	Stantec on behalf of Sun Canadian provided the Notice of Commencement.			

**Hartwig, Emily**

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 8:56 AM  
**To:** brad.allan@ontario.ca  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_BAllen\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:32 PM  
**To:** brad.allan@ontario.ca  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**  
Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8  
Phone: (905) 944-7785  
Cell: (437) 235-2984  
[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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**Hartwig, Emily**

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 8:56 AM  
**To:** bdavis@hrca.on.ca  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_BDavis\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:34 PM  
**To:** bdavis@hrca.on.ca  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**  
Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8  
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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 8:57 AM  
**To:** planning@milton.ca  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_BKoopmans\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
 Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:34 PM  
**To:** planning@milton.ca  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
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**Jackie Corr, HBAsc, MES**  
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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 8:57 AM  
**To:** curt.benson@halton.ca  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_CBenson\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
 Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:35 PM  
**To:** curt.benson@halton.ca  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
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**Jackie Corr, HBAsc, MES**  
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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 8:57 AM  
**To:** 'Ostrowka, Cory (IO)'  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_COstrowka\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:35 PM  
**To:** Ostrowka, Cory (IO) <Cory.Ostrowka@infrastructureontario.ca>  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 8:57 AM  
**To:** Marriott, David (OMAFRA)  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_DMarriott\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
 Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:36 PM  
**To:** Marriott, David (OMAFRA) <David.Marriott@ontario.ca>  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
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**Hartwig, Emily**

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 8:59 AM  
**To:** dan.minkin@ontario.ca  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_DMinkin\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:36 PM  
**To:** dan.minkin@ontario.ca  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

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Thank you,  
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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:01 AM  
**To:** sourceprotectionscreening@ontario.ca  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_DScanlon\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
 Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:37 PM  
**To:** sourceprotectionscreening@ontario.ca  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

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Thank you,  
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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:33 AM  
**To:** erick.boyd@Ontario.ca  
**Cc:** Candido, Mike  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_EBoyd\_20200820.pdf

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:02 AM  
**To:** graham.milne@halton.ca  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_GMilne\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
 Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:37 PM  
**To:** graham.milne@halton.ca  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:02 AM  
**To:** helma.geerts@ontario.ca  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_HGeerts\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:38 PM  
**To:** helma.geerts@ontario.ca  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**  
Environmental Consultant  
Assessment and Permitting Team  
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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:03 AM  
**To:** 'james.hamilton@ontario.ca'  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_JHamilton\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:38 PM  
**To:** james.hamilton@ontario.ca  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

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**Hartwig, Emily**

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:03 AM  
**To:** jason.mccullough@ontario.ca  
**Cc:** Candido, Mike  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_JMcCullough\_20200820.pdf

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:39 PM  
**To:** 'jason.mccullough@ontario.ca' <jason.mccullough@ontario.ca>  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:19 AM  
**To:** jen.turnbull@ontario.ca  
**Cc:** Candido, Mike  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_JTurnbull\_20200820.pdf

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
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**Hartwig, Emily**

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:23 AM  
**To:** kmanouchehri@tssa.org  
**Cc:** Candido, Mike  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_KManouchehri\_20200820.pdf

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
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**Hartwig, Emily**

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:23 AM  
**To:** michele.doncaster@ontario.ca  
**Cc:** Candido, Mike  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_MDoncaster\_20200820.pdf

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

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Thank you,  
Jackie

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Assessment and Permitting Team  
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**Hartwig, Emily**

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:24 AM  
**To:** maria.jawaid@ontario.ca  
**Cc:** Candido, Mike  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_MJawaid\_20200820.pdf

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
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Assessment and Permitting Team  
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**Hartwig, Emily**

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:25 AM  
**To:** environment.toronto@ontario.ca  
**Cc:** Candido, Mike  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_MoE\_Conserv-Parks\_20200820.pdf

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

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**Hartwig, Emily**

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:25 AM  
**To:** Scott.Oliver@ontario.ca  
**Cc:** Candido, Mike  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_SOliver\_20200820.pdf

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

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Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**

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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:25 AM  
**To:** sally.renwick@ontario.ca  
**Cc:** Bradley, Michael  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_SRenwick\_20200820.pdf

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

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Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**

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300W-675 Cochrane Drive, Markham ON L3R 0B8  
Phone: (905) 944-7785  
Cell: (437) 235-2984  
[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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## Hartwig, Emily

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:26 AM  
**To:** Tony.Difabio@ontario.ca  
**Cc:** Candido, Mike  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_TDifabio\_20200820.pdf

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**

Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8  
Phone: (905) 944-7785  
Cell: (437) 235-2984  
[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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**Hartwig, Emily**

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:27 AM  
**To:** townclerk@milton.ca  
**Cc:** Candido, Mike  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_TMcHarg\_20200820.pdf

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**

Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8  
Phone: (905) 944-7785  
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[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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**Hartwig, Emily**

---

**From:** Corr, Jacqueline  
**Sent:** Friday, August 21, 2020 9:28 AM  
**To:** Zora.Crnojacki@oeb.ca  
**Cc:** Candido, Mike  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Attachments:** let\_NoC\_ZCrnojacki\_20200820.pdf

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**

Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8  
Phone: (905) 944-7785  
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[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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**From:** Boyd, Erick (MMAH)  
**To:** [Corr, Jacqueline](#)  
**Cc:** [Watt, Heather \(MMAH\)](#)  
**Subject:** FW: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Friday, August 21, 2020 9:43:07 AM  
**Attachments:** [let\\_NoC\\_EBoyd\\_20200820.pdf](#)

---

Hi Jackie,

Thanks for your email regarding the Sun-Canadian Pipe Line EA. I am sending this to Heather Watt, my planning manager colleague in our Central Region as this project is within her region.

Erick

**Erick Boyd, RPP, MCIP**

Manager, Community Planning and Development  
Ministry of Municipal Affairs and Housing  
Municipal Services Office - Western  
659 Exeter Road, 2nd Floor  
London, ON N6E 1L3  
Ph.: 226-688-9058  
Fax: 519-873-4018  
Email: [Erick.Boyd@ontario.ca](mailto:Erick.Boyd@ontario.ca)

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---

**From:** Corr, Jacqueline <Jacqueline.Corr@stantec.com>  
**Sent:** August 21, 2020 9:33 AM  
**To:** Boyd, Erick (MMAH) <Erick.Boyd@ontario.ca>  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**

Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8

Phone: (905) 944-7785

Cell: (437) 235-2984

[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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**From:** [Eckert, Anneleis \(OMAFRA\)](#)  
**To:** [Candido, Mike](#)  
**Cc:** [Doncaster, Michele \(OMAFRA\)](#); [Marriott, David \(OMAFRA\)](#); [Geerts, Helma \(OMAFRA\)](#); [Turnbull, Jen \(OMAFRA\)](#)  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement  
**Date:** Monday, August 24, 2020 8:44:01 AM

---

Good Morning Michael,

I am the OMAFRA rural planner that covers Halton. Please add my name to the contact list and remove:

Michele Doncaster, David Marriott, Helma Geerts, and Jen Turnbull.

A list of coverage areas and a map are available through this site:

<http://www.omafra.gov.on.ca/english/landuse/staff.htm>

Let me know if you need additional information.

Thank you,

**Anneleis Eckert** (pronouns she/her)

Rural Planner

Land Use Policy and Stewardship, Policy Division

Ontario Ministry of Agriculture, Food and Rural Affairs

6484 Wellington Road 7, Elora, ON, N0B 1S0

519-827-6040 | [anneleis.eckert@ontario.ca](mailto:anneleis.eckert@ontario.ca)

“Please Note: As part of providing [accessible customer service](#), please let me know if you have any accommodation needs or require communication supports or alternate formats.”

**From:** Jawaid, Maria (MNRF)  
**To:** [Corr, Jacqueline](#)  
**Cc:** [Fortini, Natosha \(MNRF\)](#)  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Monday, August 31, 2020 5:14:11 PM  
**Attachments:** [image001.png](#)

---

Hi Jacqueline,

Thank you for the opportunity to comment on the Sun-Canadian Pipeline Replacement Project occurring in Milton Ontario.

The project includes the replacement of an existing pipeline across the East Sixteen Mile Creek. MNRF has no concerns with this project, however notes that should any in-water works be required, they respect the appropriate timing window. Our records indicate that this reach of the Creek is occupied by Silver Shiner, a Species at Risk under the *Endangered Species Act*. As such, MNRF recommends that the project team contact MECP for a timing window to help inform when in water activities would be appropriate.

Please let me know if you have any questions.

Sincerely,

**Maria Jawaid (she/her)**

District Planner | Aurora District  
 Ministry of Natural Resources and Forestry  
 50 Bloomington Road, 3<sup>rd</sup> Floor, Aurora, ON | L4G 0L8  
 ☎ 905-713-7367 | ✉ [maria.jawaid@ontario.ca](mailto:maria.jawaid@ontario.ca)




---

**From:** Corr, Jacqueline <Jacqueline.Corr@stantec.com>  
**Sent:** August-21-20 9:24 AM  
**To:** Jawaid, Maria (MNRF) <Maria.Jawaid@ontario.ca>  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
 Jackie

**Jackie Corr, HBAsc, MES**

Environmental Consultant  
Assessment and Permitting Team

Stantec

300W-675 Cochrane Drive, Markham ON L3R 0B8

Phone: (905) 944-7785

Cell: (437) 235-2984

[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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**From:** Harvey, Joseph (MHSTCI)  
**To:** [Candido, Mike](#)  
**Cc:** [zora.crnojacki@oeb.ca](mailto:zora.crnojacki@oeb.ca); [Minkin, Dan \(MHSTCI\)](#); [Barboza, Karla \(MHSTCI\)](#); [Corr, Jacqueline](#)  
**Subject:** File 0012763: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Tuesday, September 8, 2020 12:24:58 PM  
**Attachments:** [2020-09-08\\_SunCanadian-MHSTCI-Ltr.pdf](#)

---

Michael Candido,

Please find attached MHSTCI comments on the above referenced project. Please do not hesitate to contact Dan Minkin if you have any questions.

Joseph Harvey

*On behalf of*

Dan Minkin  
Heritage Planner  
Heritage Planning Unit  
[Dan.Minkin@ontario.ca](mailto:Dan.Minkin@ontario.ca)

**Ministry of Heritage, Sport,  
Tourism and Culture Industries**

Programs and Services Branch  
401 Bay Street, Suite 1700  
Toronto, ON M7A 0A7  
Tel: 416.786.7553

**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: 416.786.7553



September 8, 2020

EMAIL ONLY

Michael Candido  
Project Manager  
Stantec Consulting Ltd.  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

<b>MTCS File #</b>	<b>:</b>	<b>0012763</b>
<b>Proponent</b>	<b>:</b>	<b>Sun-Canadian Pipe Line Company Limited (Sun-Canadian)</b>
<b>Project</b>	<b>:</b>	<b>NPS 12 E16M Creek Pipeline Replacement Project</b>
<b>Location</b>	<b>:</b>	<b>Town of Milton</b>

---

Dear Michael Candido:

Thank you for contacting the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) about the above-referenced project, which requires Ontario Energy Board (OEB)'s leave to construction under the Ontario Energy Board Act.

Please note that the OEB issued the [Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition](#) to assist applicants how to identify, manage and document environmental impacts. The Guidelines encourage applicants to consult with the Ontario Pipeline Coordinating Committee (which MHSTCI is a member) and other agencies. MHSTCI's interest in this process 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.

Among the planning activities outlined in Chapter 2 of the Guidelines, an applicant is advised to:

- describe the rationale for study area delineation (including construction staging, land requirements);
- identify existing baseline environmental conditions;
- identify potential environmental impacts expected to occur during construction and operation of the project, including cumulative impacts;
- describe proposed measures to mitigate potential negative impacts.

This letter provides advice on how to incorporate consideration of cultural heritage in the above-mentioned planning activities and expands on sections 4.3 and 5.3 of the Guidelines by outlining the technical cultural heritage studies and level of detail required to address cultural heritage in pipeline and facilities projects. The outcomes and recommendations of the studies will be reported in the Environmental Report and form the basis for any future commitments.

**Project Summary**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill.

**Identifying Cultural Heritage Resources**

While some cultural heritage resources may have already been formally identified, others may be identified through assessment.

**Archaeological Resources (Land and Marine, if applicable)**

MHSTCI recommends that, as a best practice, a combined Stage 1-2 archaeological assessment (AA) be completed for the entire study area during the planning phase.

At a minimum, a Stage 1 AA will be undertaken for the entire study area during the planning phase. The results of the Stage 1 AA will inform the OEB and will be summarized in the Environmental Report. If the Stage 1 AA recommends further AA(s), then MHSTCI recommends that further stages of AA be completed as early as possible during the design phase of the project, and prior to the completion of detailed design.

Archaeological assessments are required to be undertaken by an archaeologist licenced under the *Ontario Heritage Act*, who is responsible for submitting the report directly to MHSTCI for review.

The Environmental Report must include specific information from the AA report(s). The Executive Summary of each AA report provides a brief summary of the work completed and the recommendations for next steps, whether for further archaeological assessment, in which case the report will include a map that identifies those areas, or for no further assessment. The Environmental Report must also include clear commitments to undertake any further AA stages recommended, and a timeline for their completion.

**Built Heritage Resources and Cultural Heritage Landscapes**

A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment will be undertaken for the entire study area during the planning phase to inform the OEB and will be summarized in the Environmental Report. This study will:

1. Identify existing baseline cultural heritage conditions within the study area.
  - Study Area: The consultants preparing the Cultural Heritage Report will need to define a study area and explain their rationale. The common practice has been to define a study area as including the right-of-way (ROW) and a 50-metre buffer (construction zone) on either side of the ROW.
  - The report will include a historical summary of the study area and will identify all known or potential built heritage resources and cultural heritage landscapes in the study area. MHSTCI has developed screening criteria that may assist with this exercise: [Criteria for Evaluating for Potential Built Heritage Resources and Cultural Heritage Landscapes](#).

2. Identify preliminary potential project-specific impacts on the known and potential built heritage resources and cultural heritage landscapes that have been identified. The report should include a description of the anticipated impact to each known or potential built heritage resource or cultural heritage landscape that has been identified.
3. Recommend measures to avoid or mitigate potential negative impacts to known or potential built heritage resources and cultural heritage landscapes. The proposed mitigation measures are to inform the next steps of project planning and design.

Where a known or potential built heritage resource or cultural heritage landscape may be directly and adversely impacted<sup>1</sup>, and where it has not yet been evaluated for Cultural Heritage Value or Interest (CHVI), completion of a Cultural Heritage Evaluation Report (CHER) is required to fully understand its CHVI and level of significance. The CHER must be completed as part of the Environmental Report. If a potential resource is found to be of CHVI, then a Heritage Impact Assessment (HIA) will be undertaken by a qualified person. The HIA will be completed in consultation with MHSTCI and the proponent as early as possible during detail design, following the OEB's Leave to Construct.

While some cultural heritage landscapes are contained within individual property boundaries, others span across multiple properties. For certain cultural heritage landscapes, it will be more appropriate for the CHER and HIA to include multiple properties, in order to reflect the extent of that cultural heritage landscape in its entirety.

Cultural Heritage Reports will be undertaken by a qualified person who has expertise, recent experience, and knowledge relevant to the type of cultural heritage resources being considered and the nature of the activity being proposed.

Community input should be sought to identify locally recognized and potential cultural heritage resources. Sources include, but are not limited to, municipal heritage committees, historical societies and other local heritage organizations.

Cultural heritage resources are often of critical importance to Indigenous communities. 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 them.

### **Environmental Reporting**

The findings of the above-mentioned studies should be summarized as part of the Environmental Report discussion of existing conditions, impact assessment, mitigation, and future commitments. Commitments for further studies should clearly state what is to be done, who is responsible for implementation, and when. Recommendations from the technical cultural heritage studies described above should be reflected as commitments in the Environmental Report.

MHSTCI welcomes the opportunity to review and comment upon relevant sections of the draft Environmental Report, before the final draft Environmental Report is submitted to the OPCC for review.

---

<sup>1</sup> A direct adverse impact would have a permanent and irreversible negative effect on the cultural heritage value or interest of a property or result in the loss of a heritage attribute on all or part of the property. Examples include, but are not limited to: removal or demolition of a heritage attribute, land disturbance, alterations that are not sympathetic to the CHVI of the property, introduction of new elements that diminish the integrity of the property, changing the character of the property, intensification of the property without conservation of heritage attributes.

Thank you for consulting MHSTCI on this project and please continue to do so throughout the OEB process. If you have any questions, require clarification, or would like additional examples to assist with project reporting, do not hesitate to contact Dan Minkin.

Sincerely,

Joseph Harvey

*On behalf of*

Dan Minkin

Heritage Planner

Heritage Planning Unit

[Dan.Minkin@ontario.ca](mailto:Dan.Minkin@ontario.ca)

Copied to: Jackie Corr, Environmental Consultant, Stantec Consulting Ltd  
Zora Crnojacki, Project Advisor, Ontario Energy Board

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. MHSTCI makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MHSTCI be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Please notify MHSTCI if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the *Ontario Heritage Act* and the *Standards and Guidelines for Consultant Archaeologists*.

If human remains are encountered, all activities must cease immediately and the local police as well as the Registrar, Burials of the Ministry of Government and Consumer Services must be contacted. In situations where human remains are associated with archaeological resources, MHSTCI should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

VIA EMAIL

July 28, 2020

Susan Jackson  
Manager Environment, Health & Safety  
Sun-Canadian Pipe Line  
150 – 6th Avenue S.W.  
Calgary, Alberta T2P 3E3

**Re: SCPL East Sixteen Mile Crossing Replacement**

Dear Susan Jackson:

Thank you for your email dated June 11, 2020 notifying the Ministry of Energy, Northern Development and Mines (ENDM) of Sun-Canadian Pipe Line's intention to apply to the Ontario Energy Board (OEB) for Leave to Construct for the SCPL East Sixteen Mile Crossing Replacement (the Project).

I understand that Sun-Canadian Pipe Line is has identified the need to replace approximately 500m segment of an existing 12-inch diameter pipeline (TRL system) near Trafalgar Road and south of Britannia Road in the Town of Milton. The existing pipeline segment crosses under East Sixteen Mile creek and has become exposed in several locations in the watercourse due to ongoing erosion and creek meander. This project intends to install a new segment of 12-inch diameter pipe via horizontal directional drilling at a greater depth to eliminate the environmental risks of the current pipe exposure.

On behalf of the Government of Ontario (the Crown), ENDM has reviewed the information provided by Sun-Canadian Pipe Line with respect to the Project and assessed it against the Crown's current understanding of the interests and rights of Aboriginal communities who hold or claim Aboriginal or treaty rights protected under Section 35 of Canada's Constitution Act 1982 (Indigenous Communities) in the area. In doing so, ENDM has determined that the Project may have the potential to affect such Indigenous communities.

The Crown has a constitutional duty to consult and, where appropriate, accommodate Indigenous communities when the Crown contemplates conduct that might adversely impact established or asserted Aboriginal or Treaty rights. These consultations are in addition to consultation imposed by statute.

While the legal responsibility to meet the duty to consult lies with the Crown, the Crown may delegate the day-to-day, procedural aspects of consultation to project Proponents. Such a delegation by the Crown to Proponents is routine practice for ENDM.

I am writing to advise you that on behalf of the Crown, ENDM is delegating the procedural aspects of consultation in respect of the Project to Sun-Canadian Pipe Line (Proponent) through this letter. ENDM expects that the Proponent will undertake the procedural aspects of consultation with respect to any regulated requirements for the proposed Project. The Crown will fulfill the substantive aspects of consultation and retain oversight over all aspects of the process for fulfilling the Crown's duty.

Please see the appendix for information on the roles and responsibilities of both the Crown and the Proponent.

Based on the Crown's assessment of First Nation and Métis community rights and potential project impacts, the following Indigenous communities should be consulted on the basis that they have or may have constitutionally protected Aboriginal or Treaty rights that may be adversely affected by the Project.

<b>Community</b>	<b>Mailing Address</b>
Mississaugas of the New Credit First Nation	2789 Mississauga Road R.R. #6 Hagersville, ON N0A 1H0
Six Nations of the Grand River *	Six Nations of the Grand River Elected Council PO Box 5000 Ohsweken, Ontario N0A 1M0  Haudenosaunee Confederacy Chiefs Council P.O Box 714 Ohsweken, ON N0A 1M0
Huron Wendat**	255, place Chef Michel Laveau Wendake, QC G0A 4V0

*\*Please note, proponents are required to consult with both, Six Nations Elected Council and Haudenosaunee Confederacy Chiefs Council (HCCC). Please copy Haudenosaunee Development Institute (HDI) on all correspondence to Haudenosaunee Confederacy Chiefs Council (HCCC).*

*\*\*interests are specific to archeological resources*

This rights-based consultation list is based on information that is subject to change. Consultation is ongoing throughout the duration of the project, including project development and design, consultation, approvals, construction, operation and decommissioning. First Nation and Métis communities may make new rights assertions

at any time, and further project related developments can occur that may require additional First Nation and/or Métis communities to be notified and/or consulted. If you become aware of potential rights impacts on Indigenous communities that are not listed above at any stage of project, please bring this to the attention of ENDM with any supporting information regarding the claim at your earliest convenience.

ENDM is assuming a coordinating role within government in relation to rights-based Aboriginal consultation on the Project. We recommend contacting the following ministry representatives if you have any questions or concerns relating to a specific ministry's mandate:

<b>Ministry/Contact</b>	<b>Phone/Email</b>
<b>Ministry of Energy, Northern Development and Mines</b>  Kristen Bromfield – Policy Advisor, Indigenous Energy Policy Unit	(416) 735-3297 <a href="mailto:kristen.bromfield@ontario.ca">kristen.bromfield@ontario.ca</a>
<b>Ministry of Environment, Conservation and Parks</b>  Peter Brown – Consultation Advisor, Environmental Assessment and Permissions Division	(416) 314-0149 <a href="mailto:peter.brown@ontario.ca">peter.brown@ontario.ca</a>
<b>Ministry of Transportation</b>  Donna Bigelow - Team Lead, Indigenous Relations Branch	(647) 537-9423 <a href="mailto:donna.bigelow@ontario.ca">donna.bigelow@ontario.ca</a>
<b>Ministry of Government and Consumer Services</b>  Uyen Ha – Senior Policy Advisor, Infrastructure Projects - Realty	(437) 994-8446 <a href="mailto:Uyen.ha@ontario.ca">Uyen.ha@ontario.ca</a>
<b>Ministry of Heritage, Sport, Tourism and Culture Industries</b>  Karla Barboza - Team Lead, Heritage, Tourism and Culture Division	(416) 314-7120 <a href="mailto:karla.barboza@ontario.ca">karla.barboza@ontario.ca</a>

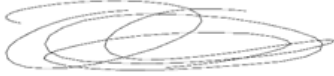
### **Acknowledgement**

By accepting this letter, the Proponent acknowledges this Crown delegation and the procedural consultation responsibilities enumerated in the appendix. If you have any questions about this request, you may contact Kristen Bromfield (see above).



I trust that this information provides clarity and direction regarding the respective roles of the Crown and Sun-Canadian Pipe Line. If you have any questions about this letter or require any additional information, please contact me directly.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dan Delaquis', with a stylized, overlapping loop structure.

Dan Delaquis  
Manager, Indigenous Energy Policy

C: Ontario Pipeline Coordinating Committee (OPCC)

## **APPENDIX: PROCEDURAL CONSULTATION**

### **Roles and Responsibilities Delegated to the Proponent**

On behalf of the Crown, please be advised that your responsibilities as Project Proponent for this Project include:

- providing notice and information about the Project to Indigenous communities, with sufficient detail and at a stage in the process that allows the communities to prepare their views on the Project and, if appropriate, for changes to be made to the Project. This can include:
  - accurate, complete and plain language information including a detailed description of the nature and scope of the Project and translations into Aboriginal languages where appropriate;
  - maps of the Project location and any other affected area(s);
  - information about the potential negative effects of the Project on the environment, including their severity, geographic scope and likely duration. This can include, but is not limited to, effects on ecologically sensitive areas, water bodies, wetlands, forests or the habitat of species at risk and habitat corridors;
  - a description of other provincial or federal approvals that may be required for the Project to proceed;
  - whether the Project is on privately owned or Crown controlled land;
  - any information the Proponent may have on the potential effects of the Project, including particularly any likely adverse impacts on established or asserted Aboriginal or treaty rights;
  - a written request asking the Indigenous community to provide in writing or through a face-to-face meeting:
    - any information available to them that should be considered when preparing the Project documentation;
    - any information the community may have about any potential adverse impacts on their Aboriginal or treaty rights; and
    - any suggested measures for avoiding, minimizing or mitigating potential adverse impacts;
    - information about how information provided by the Indigenous community as part of the consultation process will be collected, stored, used, and shared for their approval;
  - identification of any mechanisms that will be applied to avoid, minimize or mitigate potential adverse impacts;
  - identification of a requested timeline for response from the community and the anticipated timeline for meeting Project milestones following each notification;

- an indication of the Proponent's availability to discuss the process and provide further information about the Project;
- the Proponent's contact information; and
- any additional information that might be helpful to the community;
- following up, as necessary, with Indigenous communities to ensure they received Project notices and information and are aware of the opportunity to comment, raise questions or concerns and identify potential adverse impacts on their established or asserted rights;
- gathering information about how the Project may adversely affect Aboriginal or treaty rights;
- bearing the reasonable costs associated with the procedural aspects of consultation (paying for meeting costs, making technical support available, etc.) and considering reasonable requests by communities for capacity funding to assist in participating in the consultation process;
- considering and responding to comments and concerns raised by Indigenous communities and answering questions about the Project and its potential impacts on Aboriginal or treaty rights;
- as appropriate, discussing and implementing changes to the Project in response to concerns raised by Indigenous communities. This could include modifying the Project to avoid or minimize an impact on an Aboriginal or treaty right (e.g. altering the season when construction will occur to avoid interference with mating or migratory patterns of wildlife); and
- informing Indigenous communities about how their concerns were taken into consideration and whether the Project proposal was altered in response. It is considered a best practice to provide the Indigenous community with a copy of the consultation record as part of this step for verification.

If you are unclear about the nature of a concern raised by an Indigenous community, you should seek clarification and further details from the community, provide opportunities to listen to community concerns and discuss options, and clarify any issues that fall outside the scope of the consultation process. These steps should be taken to ensure that the consultation process is meaningful and that concerns are heard and, where possible, addressed.

You can also seek guidance from the Crown at any time. It is recommended that you contact the Crown if you are unsure about how to deal with a concern raised by an Indigenous community, particularly if the concern relates to a potential adverse impact on established or asserted Aboriginal or treaty rights.

The consultation process must maintain sufficient flexibility to respond to new information, and we request that you make all reasonable efforts to build positive relationships with all Indigenous communities potentially affected by the Project. If a community is unresponsive to efforts to notify and consult, you should nonetheless make attempts to update the community on the progress of the Project, the environmental assessment (if applicable) and other regulatory approvals.

If you reach a business arrangement with an Indigenous community that may affect or relate to the Crown's duty to consult, we ask that that Crown be advised of those aspects of such an arrangement that may relate to or affect the Crown's consultation obligations, and that the community itself be apprised of the Proponent's intent to so-apprise the Crown. Whether or not any such business arrangements may be reached with any community, the Crown expects the Proponent to fulfill all of its delegated procedural consultation responsibilities to the satisfaction of the Crown.

If the Crown considers that there are outstanding issues related to consultation, the Crown may directly undertake additional consultation with Indigenous communities, which could result in delays to the Project. The Crown reserves the right to provide further instructions or add communities throughout the consultation process.

### **Roles and responsibilities assumed directly by the Crown**

The role of the Crown in fulfilling any duty to consult and accommodate in relation to this Project includes:

- identifying for the Proponent, and updating as appropriate, the Indigenous communities to consult for the purposes of fulfillment of the Crown duty;
- carrying out, from time to time, any necessary assessment of the extent of consultation or, where appropriate, accommodation, required for the project to proceed;
- supervising the aspects of the consultation process delegated to the Proponent;
- determining in the course of Project approvals whether the consultation of Indigenous communities was sufficient;
- determining in the course of Project approvals whether accommodation of Indigenous communities, if required, is appropriate and sufficient.

### **Consultation Record**

It is important to ensure that all consultation activities undertaken with Indigenous communities are fully documented. This includes all attempts to notify or consult the community, all interactions with and feedback from the community, and all efforts to respond to community concerns. Crown regulators

require a complete consultation record in order to assess whether Aboriginal consultation and any necessary accommodation is sufficient for the Project to receive Ontario government approvals. The consultation record should include, but not be limited to, the following:

- a list of the identified Indigenous communities that were contacted;
- evidence that notices and Project information were distributed to, and received by, the Indigenous communities (via courier slips, follow up phone calls, etc.). Where a community has been non-responsive to multiple efforts to contact the community, a record of such multiple attempts and the responses or lack thereof.
- a written summary of consultations with Indigenous communities and appended documentation such as copies of notices, any meeting summaries or notes including where the meeting took place and who attended, and any other correspondence (e.g., letters and electronic communications sent and received, dates and records of all phone calls);
- responses and information provided by Indigenous communities during the consultation process. This includes information on Aboriginal or treaty rights, traditional lands, claims, or cultural heritage features and information on potential adverse impacts on such Aboriginal or treaty rights and measures for avoiding, minimizing or mitigating potential adverse impacts to those rights; and
- a summary of the rights/concerns, and potential adverse impacts on Aboriginal or treaty rights or on sites of cultural significance (e.g. burial grounds, archaeological sites), identified by Indigenous communities; how comments or concerns were considered or addressed; and any changes to the Project as a result of consultation, such as:
  - changing the Project scope or design;
  - changing the timing of proposed activities;
  - minimizing or altering the site footprint or location of the proposed activity;
  - avoiding impacts to the Aboriginal interest;
  - environmental monitoring; and
  - other mitigation strategies.

As part of its oversight role, the Crown may, at any time during the consultation and approvals stage of the Project, request records from the Proponent relating to consultations with Indigenous communities. Any records provided to the Crown will be subject to the *Freedom of Information and Protection of Privacy Act*, however may be exempted from disclosure under section 15.1 (Relations with

Aboriginal communities) of the Act. Additionally, please note that the information provided to the Crown may also be subject to disclosure where required under any other applicable laws.

The contents of what will make up the consultation record should be shared at the onset with the Indigenous communities consulted with and their permission should be obtained. It is considered a best practice to share the record with the Indigenous community prior to finalizing it to ensure it is a robust and accurate record of the consultation process.



August 12, 2020

Haudenosaunee Confederacy Chiefs Council  
c/o Haudenosaunee Development Institute  
P.O. Box 714  
Ohsweken, ON N0A 1M0  
HaudenosauneeConfederacy.ca

SENT VIA EMAIL

Haudenosaunee Confederacy Council,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mail outs, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

The Haudenosaunee Confederacy Council is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun-Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line

**Attachment:** Map of Proposed Pipeline Route



c. Tracey General, Haudenosaunee Development Institute  
Todd Williams, Haudenosaunee Development Institute  
Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line





August 12, 2020

Maxime Picard  
Huron-Wendat  
255 place chef Michel Laveau  
Wendake, QC G0A 4V0  
administration@cnhw.qc.ca

SENT VIA EMAIL

Dear Mr. Picard,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

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The Huron-Wendat First Nation is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun-Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line

**Attachment:** Map of Proposed Pipeline Route



c. Administration, Huron-Wendat First Nation  
Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line



August 12, 2020

Mark LaForme  
Mississauga of the Credit First Nation  
2789 Mississauga Road, R. R. #6  
Hagersville ON N0A 1H0  
mark.laforme@mcfn.ca

SENT VIA EMAIL

Dear Mr. LaForme,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mail outs, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Mississauga of the Credit First Nation is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun-Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line



**Attachment:** Map of Proposed Pipeline Route

c. Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line



August 12, 2020

Lonny Bomberry  
Six Nations Lands & Resources  
Six Nations of the Grand River Elected Council  
PO Box 5000  
Oshweken, ON  
lonnybomberry@sixnations.ca

SENT VIA EMAIL

Dear Mr. Bomberry,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mail outs, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Six Nations of the Grand River First Nation is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun-Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line



**Attachment:** Map of Proposed Pipeline Route

c. Dawn LaForme, Six Nations of the Grand River First Nation  
Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line



## MEETING MINUTES

### E16 Mile Creek Pipeline Segment Replacement Project - Meeting #1

Wednesday September 9, 2020 - VIA MS Teams

#### Attendees:

##### Huron-Wendat:

M. Picard – Project Coordinator

##### Sun-Canadian Pipe Line (SCPL):

S. Jackson – Manager Environment, Health and Safety

P. Martens – Pipeline Engineer

#### Regrets:

M. Vincent – Project Coordinator, Huron Wendat

## SUMMARY NOTES OF MEETING

#### PRESENTATION BY SCPL :

- Purpose: The purpose of the meeting is for Sun-Canadian Pipe Line Limited to introduce and share information regarding the proposed Project and to hear from the Huron-Wendat as to how they wish to participate in the Project.
- Presentation (power point): “NPS 12 E16M Creek Pipeline Segment Replacement Project” with project details, and mapping.

#### QUESTION & ANSWER:

- Q-HW: What is the overall length of the pipeline system, the length of the pipe segment and access routes to the drill sites?
  - A-SCPL: Overall length of pipeline system: NPS12 is approximately 300 kms long; NPS 8 is approximately 240 km long; proposed pipe (NPS 12) segment replacement length is approximately 500 m long; access roads are along existing drives (shown in slide 7) with the exception of approximately 100 m which will be matted.
- Q-HW: Does SCPL have a policy for archaeological sites and protecting cultural resources?
  - A-SCPL: SCPL aims to meet or exceed regulatory standards for archaeological sites which includes the protection of cultural resources. SCPL has worked successfully with the Huron-Wendat on archaeology for another project just recently in the summer and fall of 2019.

#### SUMMARY OF COMMENTS:

- Huron-Wendat:
  - The Huron-Wendat expect the project design to preserve cultural resources as necessary. This may include additional measures resulting from any Stage 3 or beyond findings.
  - The Huron-Wendat confirms its interests in this project remain with archaeology only. Accordingly, the Huron-Wendat will participate in all archaeology associated with this project – SCPL to ensure its archaeological consultant works with Huron-Wendat.

- There are no further questions or comments from the Huron-Wendat at this time





## MEETING MINUTES

### E16 Mile Creek Pipeline Segment Replacement Project - Meeting #1

Monday October 5, 2020 - VIA MS Teams

#### Attendees:

#### Mississauga's of Credit River:

M. LaForme – Director, DOCA

F. Sault – Consultation Manager

M. DeVries – Archaeological Coordinator

#### Sun-Canadian Pipe Line (SCPL):

S. Jackson – Manager Environment, Health and Safety

## SUMMARY NOTES OF MEETING

### PRESENTATION BY SCPL :

- Purpose: The purpose of the meeting is for Sun-Canadian Pipe Line Limited to introduce and share information regarding the proposed Project and to hear from the Mississauga's of the Credit First Nation of the Grand River as to how they wish to participate in the Project.
- Presentation (power point): "NPS 12 E16M Creek Pipeline Segment Replacement Project" with project details, and mapping.

### QUESTION & ANSWER:

- Q-MCFN: What is the name of the golf course at the drill entry location?
  - A-SCPL: Piper's Health Golf Club <http://pipersheath.com/>
- Q-MCFN: When did the environmental survey take place? When will the report from this survey be available?
  - A-SCPL: The survey was on July 28. The survey report is complete and will be included in the Environmental Report.

### SUMMARY OF COMMENTS:

- MCFN:
  - requests participation in all environmental studies and monitoring
  - will participate in the planned Stage 1&2 archaeology (under current monitor agreement)
  - has no further questions or comments at this time





## MEETING MINUTES

### E16 Mile Creek Pipeline Segment Replacement Project - Meeting #1

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Tuesday September 22, 2020 - VIA MS Teams

#### Attendees:

##### Six Nations of the Grand River (SNGR):

L. Bomberry – Director, Lands & Resources  
Robbin Vanstone – Land Use Officer  
Jen Mt. Pleasant – Consultation Point Person  
Dawn LaForme – Secretary/Receptionist  
Tanya Hill-Mountour – Archaeological Coordinator

##### Sun-Canadian Pipe Line (SCPL):

S. Jackson – Manager Environment, Health and Safety

#### Regrets:

H. Hill – Chief, SNGR  
N. Wright - Councilor  
W. Bomberry – Wildlife Manager  
P. Monture – Lands and Treaty Rights Consultant

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## SUMMARY

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#### **PRESENTATION BY SCPL:**

- Purpose: The purpose of the meeting is for Sun-Canadian Pipe Line Limited to introduce and share information regarding the proposed Project and to hear from the SNGR as to how they wish to participate in the Project.
- Presentation (power point): “NPS 12 E16M Creek Pipeline Segment Replacement Project” with project details, and mapping.

#### **QUESTION & ANSWER:**

- Q-SNGR: We have been hearing news in Sarnia about First Nations objective to refineries, how is SCPL handling those issues?
  - A-SCPL: Sun Canadian does not control, operate or own a refinery, we are distribution ('shippers') only. This project is located solely in the Town of Milton, Ontario.
- Q-SNGR: What are the refined petroleum products?
  - A-SCPL: Jet, gasoline and diesel fuels.

- Q-SNGR: Is the access a road or not?
  - A-SCPL: All access to drill exit location is with existing roads. Access to drill entry will be via public road except for final ~100m to drill site, which will be matted. The existing access to the drill exit pit is shown with dashed yellow lines on the Project Location figure in the presentation and labelled as “Existing Access”.
- Q-SNGR: what is the name of the golf course that the entrance point is on?
  - A-SCPL: Piper’s Health Golf Course
- Q-SNGR: what specific measures will Sun Canadian take to protect the Silver Shiner?
  - A-SCPL: Both work sites will have appropriate erosion and sediment controls in place around them. A drilling fluid release contingency plan will be prepared and kept on-site to effectively address inadvertent releases of sediment through frac-outs, or other releases of sediment laden water from the project site. Spills containment and clean-up procedures will be implemented immediately in the unlikely event of a spill. If a sediment spill occurs within the watercourse, adequate isolation of the release will be provided to contain the sediment. Additional measures will include having a supply of materials readily available that can be used to isolate an inadvertent release during drilling operations (i.e sand bags, straw bales, silt fencing)
- Q-SNGR: What will be the impact of this project to the Silver Shiner?
  - A-SCPL: There is no expected impact on Silver Shiner due to depth of bore under East Sixteen Mile Creek. One of the primary reasons for selecting horizontal directional drilling installation is to avoid disruption to the creek system. The points of entry and exit for horizontal directional drilling will be outside the limits of the East Sixteen Mile Creek valley. Therefore, there will be no disturbance in the active channel of the watercourse, nearshore habitats, or floodplain and riparian areas. No areas considered to be fish habitat or habitat for Silver Shiner will be disturbed.
- Q-SNGR: is SCPL working with Conservation Halton on this project?
  - A-SCPL: Conservation Halton is part of the OEB review process and will be sent a copy of the Environmental Report for review and comment, if requested. Additionally SCPL will be working with Conservation Halton during the permitting process. All conditions of permit approval will be implemented.
- Q-SNGR: Can you provide information on the drilling fluids, how they will be managed and where/how they will be disposed of?
  - A-SCPL: Bentonite and polymers shall be the only approved lubricants permitted for horizontal directional drilling. Any additives used shall be chemically inert, biodegradable and non-toxic. No petroleum-based additives shall be permitted. No fluid will be approved or utilized that does not comply with permit requirements and environmental regulations. As previously mentioned a drilling fluid release contingency plan will be prepared and kept on-site. If inadvertent surface releases of drilling fluids occur, they shall be immediately contained with hand placed barriers (i.e. straw bales, sand bags, silt fencing, etc.) and collected using pumps as practical. If the amount of the surface return is not great enough to allow practical collection, the affected area shall be diluted with fresh water and the fluid will be allowed to dry and dissipate naturally. If the amount of the surface return exceeds what can be contained with hand placed barriers, then small collection sumps (less than 3 cubic metres) may be used. If the amount of the surface return exceeds that which can be contained and collected using small sumps, horizontal directional drilling operations shall be suspended until surface return volumes can be brought under control.

- Q-SNGR: when will the detailed mitigation efforts be available? We want to input into these prior.
  - A-SCPL: Detailed mitigation measures will be available in the draft Environmental Report that will be circulated for review and comment. Mitigation measures may be refined and built upon during the permitting process based on consultation and feedback from regulatory agencies and other stakeholders.
- Q-SNGR: How many trees will be taken down? How many will be put back up?
  - A-SCPL: We are targeting and expect to achieve minimum tree removal aside from tree nursery trees. All tree removal will be occurring on private property and replacement details will be determined through consultation with those individuals.
- Q-SNGR: how will SCPL identify a leak in the pipe if it is 20 metres underground?
  - A-SCPL: SCPL maintains a leak detection system at all times during pipeline operation. Depth of pipe has no impact on the operation of our leak detection. In addition, the new pipe run is fully pressure tested prior to installation and again once it is in place underground.
- Q-SNGR: How far below the surface will the new segment of pipe be?
  - A-SCPL: approximately 20 metres deep average for the straight portion of the pipe. However the pipe could be as deep as approximately 25 metres and as shallow as 16.4 metres through this stretch. At the drill entry and exit locations, the pipe will be more than 5 metres deep after approximately 20 metres of horizontal distance.

#### **DISCUSSION:**

- SNGR commends SCPL for reaching out to the Six Nations early on in the project and are looking forward to working with SCPL on this project
- SNGR would like to participate in this project:
  - via construction monitoring during the construction phase of this project
  - archaeology



23 September 2020

Re: Sun-Canadian Pipe Line Company Limited: NPS 12 E16M Creek Pipeline Replacement Project

Sge:noh, Sekon, Hello:

Six Nations of the Grand River territory is the largest First Nation in Canada with a population of over 27,000 people. Since European contact, significant treaties were made between the Haudenosaunee (People of the Six Nations) and settlers and the Crown, which are recognized and affirmed in Section 35 of the *Canadian Constitution Act, 1982*.

These treaties which were all conducted on a Nation to Nation basis, include but are not limited to:

- Guswenta or Two Row Wampum Treaty, 1613: Outlines the relationship that settlers are to have with the Haudenosaunee people while they reside (or develop) on Haudenosaunee territory;
- Fort Albany Treaty also known as Nanfan Treaty, 1701: Sets out the borders of the Beaver Hunting Grounds for the purposes of hunting, fishing and gathering and harvesting medicines and food, in which the Haudenosaunee people are to thrive on and enjoy forever.
- Treaty of Niagara, 1764: Includes at least 24 signatory Nations, including the Haudenosaunee and the Crown. This treaty is the result of and can be taken into consideration with the Royal Proclamation of 1763. It was understood and mutually agreed on that although the Crown assumed sovereignty of what is known today as Canada, the land was to stay in the possession of its rightful titleholders, Indigenous people.
- Haldimand Proclamation Treaty, 1784: A tract of land granted to the Haudenosaunee people, six miles on either side of the Grand River, in Southern Ontario, from its mouth to its source and consisting of roughly 950,000 acres.
- Jay Treaty, 1794: Made between Great Britain and the United States and stipulates that Indigenous people may travel freely across international boundaries.

Six Nations of the Grand Rivers' "Aboriginal" and Treaty Rights throughout Southern Ontario are well documented through archaeological findings, historical facts and written Treaty

Agreements. The Haldimand Treaty and the 1701 Fort Albany/Nanfan Treaty have been recognized in past court proceedings and are presented as factual evidence in the ongoing litigation between Six Nations of the Grand River and Crowns Canada and Ontario.

Due to loss of land through questionable means, the people of the Six Nations were forced onto a smaller parcel of land which is known today as Six Nations of the Grand River Territory, Reserve No. 40, consisting of roughly 46, 000 acres and is located within the boundaries of the Haldimand Tract. To address loss of land, Six Nations filed litigation against both Crown Canada and Crown Ontario in 1995. These land claims continue to be stalled in the courts, by both governments while Six Nations continues to be subjected to encroachment on their lands by extensive development.

### Stewardship

According to Indigenous ways of knowing, developers and their associates, including municipalities, need to be held to the highest standard when it comes to land stewardship. They have a responsibility to take care of the land for as long as that development and project exists. When we refer to “land” we also include: waters and wetlands; air; resources; wildlife; birds and other winged species; and, aquatic life.

In order to live a more sustainable lifestyle we must minimize our adverse impacts in regards to waters, land, resources and air. We cannot keep pushing animals to the brink of extinction, particularly by continually destroying their natural habitat. This also means that any development, construction, or associated activity related to the proposed project should not be conducted during mating, nesting or hibernating seasons of any species that lives within the project development area.

Indigenous lives are governed by the laws of respect for Mother Earth and we as Haudenosaunee people must remain adamant that any person or group that develops within our treaty territories, must respect and adhere to these same laws.

All of this goes far beyond an environmental stance, it is traditional Indigenous knowledge, culture and ways of knowing to ensure everyone who resides on and engages in development and/or construction on Haudenosaunee Treaty lands is held to the same and highest standard. This, in essence, makes developers, agencies and/or governments “co-stewards” of the natural environment on which these project(s) reside.

### Environment

In terms of adverse impacts to the environment, Six Nations of the Grand River feels that a replacement/mitigation ratio of 10:1 is well within the parameters of conscious environmental stewardship. For instance, for every one fish that may not survive the construction process, ten fish should be the replacement ratio. For every one tree that needs to be removed, regardless of the current state of health of that tree, ten healthy trees should be planted to mitigate that loss and if a specific habitat whether it is bird, reptilian, fish, or wildlife is destroyed, the potential for more habitats of the same kind should replace it.

Kayanase is an ecological restoration and native plant and seed business based out of Six Nations of the Grand River Territory. Please refer to their website for recommendations on Indigenous plant species (<https://kayanasegreenhouse.weebly.com/>).

### Wildlife

Part of the role of the Wildlife Manager of the Six Nations of the Grand River is to review hunting and fishing licenses for Six Nations community members. Every year thousands of Six Nations community members exercise their right to hunt, trap, fish, and gather medicines within both the Haldimand Tract and Nanfan/Fort Albany Treaty areas. This is both a right and a practice that would have been exercised throughout the year, each year since time immemorial.

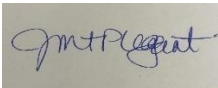
Today, hunters, trappers, anglers, spear fishers and medicine gatherers do not tend to share the exact locations of their hunting/fishing/medicine gathering areas for cultural reasons. Six Nations may not be able to provide specific frequency or duration associated with harvesting traditional activities in the vicinity of the Project area but these practices would have been a part of their day-to-day lives. It also important to note that Haudenosaunee people have always practiced responsible and sustainable hunting, fishing and medicine gathering practices. That is, there are times of the year when hunting was allowed of certain species. There were certain types of fish that would not be harvested, ie pregnant and spawning fish. There are also traditional Haudenosaunee guidelines as to what types of animals should not be killed, including but not limited to: those that are pregnant, babies and pack elders.

### Conclusion

We encourage all levels of government, developers and their affiliates to act honourably when engaging with the Six Nations of the Grand River and to familiarize yourselves with the culture and history of our people and to do so utilizing appropriate sources of knowledge and information that is respectful and truthful.

Thank you for taking our concerns into consideration.

Sincerely,



Jen MtPleasant  
Consultation Point Person  
Consultation & Accommodation Process Team  
Lands & Resources Department  
Six Nations of the Grand River Elected Council



**From:** [Corr, Jacqueline](#)  
**To:** [townclerk@milton.ca](mailto:townclerk@milton.ca)  
**Cc:** [Candido, Mike](#)  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Friday, August 21, 2020 9:27:00 AM  
**Attachments:** [let\\_NoC\\_TMcHarg\\_20200820.pdf](#)

---

Good morning,

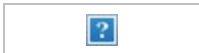
Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**

Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8  
Phone: (905) 944-7785  
Cell: (437) 235-2984  
[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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**From:** [Candido, Mike](#)  
**To:** [diana.jiona@milton.ca](mailto:diana.jiona@milton.ca); [16 Mile Creek Replacement](#)  
**Cc:** [Shawn.Clewlow@milton.ca](mailto:Shawn.Clewlow@milton.ca)  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Monday, August 24, 2020 10:36:59 AM  
**Attachments:** [RE Sun-Canadian Pipe Line Replacement Project - Notice of Commencement.msg](#)  
[image001.png](#)

---

Hi Diana. I will update the contact list for the project as per your directions below.

An updated letter (see attached) was sent later Friday with a map of the project location. The first letter did not have the map attached – my apologies. Once you have an opportunity to review the map please let me know if you have any questions. Thanks.

Mike

**Michael Candido** CAN-CISEC  
Project Manager - Assessment and Permitting

Direct: 519 780-8139  
Mobile: 519 829-8159  
Fax: 519 836-2493  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

Stantec  
1-70 Southgate Drive  
Guelph ON N1G 4P5



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---

**From:** [diana.jiona@milton.ca](mailto:diana.jiona@milton.ca) <[diana.jiona@milton.ca](mailto:diana.jiona@milton.ca)>  
**Sent:** Friday, August 21, 2020 11:17 AM  
**To:** [16 Mile Creek Replacement](#) <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>; Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Cc:** [Shawn.Clewlow@milton.ca](mailto:Shawn.Clewlow@milton.ca)  
**Subject:** re: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Hi Michael,

In reference to the letter attached, can you please ensure that any future communication related to this project is sent through to myself at [diana.jiona@milton.ca](mailto:diana.jiona@milton.ca) with a cc to Shawn Clewlow at [shawn.clewlow@milton.ca](mailto:shawn.clewlow@milton.ca)

If any work related to this project is required within the Town of Milton's right of way or within property owned by the Town, the permitting requirements would be identified by our group, and depending on the scope of work, may involve other departments as well.

If you have any plans at this point showing the work proposed in Milton, that would be appreciated.

Thanks in advance,

Diana



**Diana Jiona**, P.Eng.  
Manager, Infrastructure & Right Of Way  
150 Mary Street, Milton ON, L9T 6Z5  
905-878-7252 x2513  
[www.milton.ca](http://www.milton.ca)

The Town of Milton is re-opening as it is safe to do so for the community and our staff. We continue to serve you online or by phone for many services.  
For information about our services and continued closures, visit [Milton.ca/coronavirus](http://Milton.ca/coronavirus)

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**From:** [Corr, Jacqueline](#)  
**To:** [planning@milton.ca](mailto:planning@milton.ca)  
**Cc:** [Candido, Mike](#)  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Friday, August 21, 2020 8:56:00 AM  
**Attachments:** [let\\_NoC\\_BKoopmans\\_20200820.pdf](#)

---

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:34 PM  
**To:** [planning@milton.ca](mailto:planning@milton.ca)  
**Cc:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**  
Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8  
Phone: (905) 944-7785  
Cell: (437) 235-2984  
[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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**From:** [Corr, Jacqueline](#)  
**To:** [curt.benson@halton.ca](mailto:curt.benson@halton.ca)  
**Cc:** [Candido, Mike](#)  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Friday, August 21, 2020 8:56:00 AM  
**Attachments:** [let\\_NoC\\_CBenson\\_20200820.pdf](#)

---

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:35 PM  
**To:** [curt.benson@halton.ca](mailto:curt.benson@halton.ca)  
**Cc:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

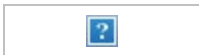
Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**  
Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8  
Phone: (905) 944-7785  
Cell: (437) 235-2984  
[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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**From:** [Corr, Jacqueline](#)  
**To:** [graham.milne@halton.ca](mailto:graham.milne@halton.ca)  
**Cc:** [Candido, Mike](#)  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Friday, August 21, 2020 9:01:00 AM  
**Attachments:** [let\\_NoC\\_GMilne\\_20200820.pdf](#)

---

Good morning,

My apologies, please see the attached Notice. The previous version was missing the map attachment.

Thank you,  
Jackie

---

**From:** Corr, Jacqueline  
**Sent:** Thursday, August 20, 2020 2:37 PM  
**To:** [graham.milne@halton.ca](mailto:graham.milne@halton.ca)  
**Cc:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

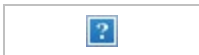
Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

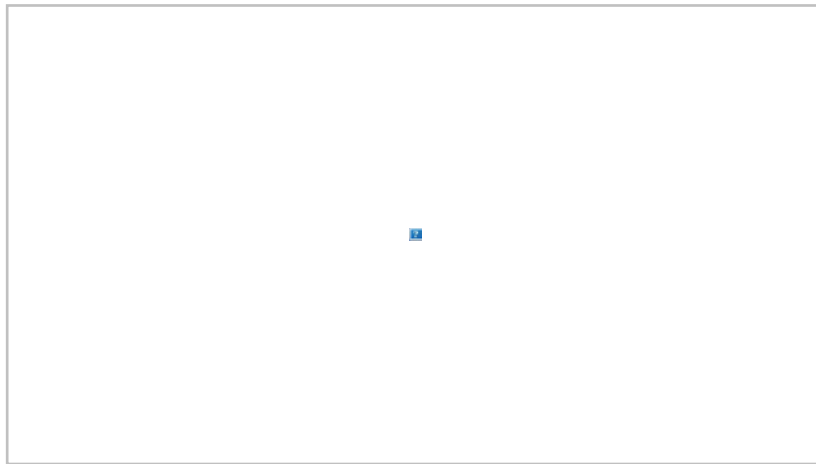
**Jackie Corr, HBAsc, MES**  
Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8  
Phone: (905) 944-7785  
Cell: (437) 235-2984  
[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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Regards,

---

**From:** [noreply@esolutionsgroup.ca](mailto:noreply@esolutionsgroup.ca) <[noreply@esolutionsgroup.ca](mailto:noreply@esolutionsgroup.ca)>  
**Sent:** Friday, September 11, 2020 12:51 PM  
**To:** [MB.Planning@milton.ca](mailto:MB.Planning@milton.ca) <[Incoming-Planning.Email@milton.ca](mailto:Incoming-Planning.Email@milton.ca)>  
**Subject:** Website feedback - Heritage Milton - Frank Smith Ref #: 2020-09-11-048

Hello Development Services,

Please note the following response to Planning and Development has been submitted at Friday September 11th 2020 12:51 PM with reference number 2020-09-11-048.

- **First Name:**  
Frank
- **Last Name**  
Smith
- **Street Address:**  
171 Queens Avenue, 600
- **Town**  
London
- **Postal Code:**  
n6a5j7
- **Email Address:**  
[frank.smith@stantec.com](mailto:frank.smith@stantec.com)
- **Phone number:**  
519 675-6665
- **Category**  
Heritage Milton
- **Comments**  
To Whom It May Concern:

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project

Stantec Consulting Ltd. has been retained by Sun-Canadian Pipe Line Company Limited (SCPL) to prepare a Heritage Overview as part of an environmental study for the NPS 12 E16M Pipeline Replacement Project. SCPL is proposing to replace the existing pipeline in the vicinity of the East Sixteen Mile Creek crossing with approximately 480 m of new deeper pipe and eliminate three areas of shallow soil cover. The new pipeline will be installed by horizontal directional drill. The Study Area is located within the following Lots and Concessions in the former Trafalgar Township, now part of the Town of Milton.

- Lots 4-5, Concession 7
- Lots 4-5, Concession 8

Are you aware of any municipal heritage interests within or adjacent to the Study Area?

For the ease of review, mapping has been provided depicting the proposed Study Area. This map appears in draft form and may contain confidential information not yet released to the public. We ask that you maintain confidentiality when responding to this inquiry.

Regards,  
STANTEC CONSULTING LTD.

[This is an automated email notification -- please do not respond]



**esolutionsNoReply - External Contact**

, ON,  
[www.milton.ca](http://www.milton.ca)



**From:** [Clackett, Robert](#)  
**To:** [16 Mile Creek Replacement](#)  
**Subject:** 16 Mile Creek Replacement - Halton Region Introduction  
**Date:** Wednesday, September 30, 2020 10:40:47 AM

---

Good morning,

I wanted take the time to introduce myself. My name is Robert Clackett and I am the Sr. Planner at Halton Region responsible for matters in the Town of Milton. As such, I will be managing the 16 Mile Creek replacement from the Region's perspective.

I was wondering if you could please provide me with more details with respect to the project. Additionally, could you also provide the critical deadlines that have been set out? With this information we can provide you with a set of comprehensive comments in a timely manner.

In the meantime, if you have any further questions of the Region please do not hesitate to contact me.

Thank you,

**Robert Clackett, MCIP, RPP**

**Senior Planner**

Planning Services

Legislative & Planning Services

**Halton Region**

905-825-6000, ext. 7554 | 1-866-442-5866



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---

**From:** Candido, Mike  
**Sent:** Tuesday, November 3, 2020 11:58 AM  
**To:** Clackett, Robert <Robert.Clackett@halton.ca>  
**Subject:** RE: 16 Mile Creek Replacement - Halton Region Introduction

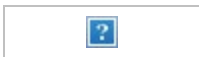
Hi Robert. That is all the information that is available at this time. Once more information is available I will ensure it is sent along for your review. Thanks.

Mike

**Michael Candido** B.Sc. (Env.), CAN-CISEC  
Project Manager - Assessment and Permitting

Direct: 519 780-8139  
Mobile: 519 829-8159  
Fax: 519 836-2493  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

Stantec  
1-70 Southgate Drive  
Guelph ON N1G 4P5



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---

**From:** Clackett, Robert <[Robert.Clackett@halton.ca](mailto:Robert.Clackett@halton.ca)>  
**Sent:** Monday, October 19, 2020 8:40 PM  
**To:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Subject:** RE: 16 Mile Creek Replacement - Halton Region Introduction

Hi Michael ,

Thank you for your email. We are just looking for as much detail as possible at this point to start to complete a fulsome review. If all the material that has been released is all that is available for public review, then that is fine. I just wanted to make sure that I had all that was available.

Yes, moving forward, please replace Curt Benson's name with mine.

Thanks,

Robert

---

**From:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Sent:** Monday, October 5, 2020 4:12 PM  
**To:** Clackett, Robert <[Robert.Clackett@halton.ca](mailto:Robert.Clackett@halton.ca)>  
**Subject:** RE: 16 Mile Creek Replacement - Halton Region Introduction

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Hello Robert and thank you for your email. Can you specify the details that you are looking for?

The environmental report for the project is scheduled to be circulated for review and comment in the upcoming weeks.

For future project communications should I replace Curt Benson (who received the initial project notification) with yourself on the project contact list?

Mike

**Michael Candido** CAN-CISEC  
Project Manager - Assessment and Permitting

Direct: 519 780-8139  
Mobile: 519 829-8159  
Fax: 519 836-2493  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

Stantec  
1-70 Southgate Drive  
Guelph ON N1G 4P5



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---

**From:** Clackett, Robert <[Robert.Clackett@halton.ca](mailto:Robert.Clackett@halton.ca)>  
**Sent:** Wednesday, September 30, 2020 10:55 AM  
**To:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Subject:** FW: 16 Mile Creek Replacement - Halton Region Introduction

Good morning Mike,

Please see my introduction/info request below. I had sent it before being provided with your email contact info.

Thanks,  
Robert

**Robert Clackett, MCIP, RPP**

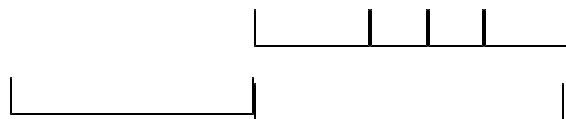
**Senior Planner**

Planning Services

Legislative & Planning Services

**Halton Region**

905-825-6000, ext. 7554 | 1-866-442-5866



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---

**From:** Clackett, Robert

**Sent:** Wednesday, September 30, 2020 10:41 AM

**To:** '16milecreekreplacement@stantec.com' <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>

**Subject:** 16 Mile Creek Replacement - Halton Region Introduction

Good morning,

I wanted take the time to introduce myself. My name is Robert Clackett and I am the Sr. Planner at Halton Region responsible for matters in the Town of Milton. As such, I will be managing the 16 Mile Creek replacement from the Region's perspective.

I was wondering if you could please provide me with more details with respect to the project. Additionally, could you also provide the critical deadlines that have been set out? With this information we can provide you with a set of comprehensive comments in a timely manner.

In the meantime, if you have any further questions of the Region please do not hesitate to contact me.

Thank you,





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 25, 2020  
File: 110904260

Attention: Milton Green Environmental Association  
info@miltongreen.org

SENT VIA EMAIL

Dear Sir / Madam,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).

Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Dear Landowner / Resident

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

You are receiving this letter because the Project is located near/adjacent to your property. A map of the proposed pipeline route is attached (the map was inadvertently not included with the previous letter, dated August 20<sup>th</sup>).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

August 21, 2020

Page 2 of 2

Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).  
Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**

A handwritten signature in black ink, appearing to read 'Michael Candido', with a stylized flourish at the end.

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

September 24, 2020  
File: 110904260

Dear Landowner/Resident,

**Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update**

The purpose of this letter is to provide you with an update on Project activities as the Project is located on or in proximity to your property. A map of the proposed pipeline route is attached.

**Project Overview**

- Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline, which crosses East Sixteen Mile Creek in Milton, ON.
- Sun-Canadian is proposing to replace a portion of the existing pipeline with approximately 480 metres of new, deeper pipeline and eliminate three areas of shallow cover in East Sixteen Mile Creek.
- A section of the replaced pipe will be constructed outside the existing right-of-way (RoW); to be installed using Horizontal Directional Drilling (HDD).
- If approved by the Ontario Energy Board (OEB), construction of the replaced pipeline could begin as early as Summer 2021 and be complete by the end of 2021.

**Environmental Study Process**

The environmental study and Environmental Report will be completed as per the OEB's "Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)."

The study will:

- Undertake consultation with landowners, municipalities and agencies to understand the views of interested and potentially affected parties.
- Consult and engage with Indigenous communities to understand interests and potential impacts.
- Identify potential impacts of the Project
- Develop environmental mitigation and protective measures to avoid or reduce potential impacts.
- Develop appropriate environmental inspection, monitoring and follow-up programs, as necessary.

September 24, 2020

Page 2 of 4

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

## Ontario Energy Board Process

The Ontario Energy Board (OEB) is the body that regulates hydrocarbon projects in Ontario, in the public interest. The application to the OEB will include information on the Project including:

- The need for the Project
- Environmental Report and mitigation measures
- Pipeline design and construction
- Land requirements
- Consultation with Indigenous Communities
- Consultation with various stakeholders including landowners and government agencies

The OEB will then hold a public hearing to review the Project. If the OEB determines that the Project is in the public interest it will approve construction of the Project.

## Aquatic Resources

Sun-Canadian recognizes the importance of protecting aquatic resources during construction and will implement recognized mitigation measures to reduce possible environmental effects.

- The Study Area contains two (2) watercourses – Sixteen Mile Creek and East Sixteen Mile Creek.
- The pipeline will only cross East Sixteen Mile Creek and will be crossed using the HDD method.
- Silver Shiner, an aquatic Species at Risk (SAR) under the Endangered Species Act (ESA) has been identified through background data review in East Sixteen Mile Creek.
- Standard erosion and sediment control measures will be used during construction to reduce potential impacts to fish and fish habitat.
- Monitoring will be in place for inadvertent returns of drilling mud during HDD installation process.

## Terrestrial Resources

Preliminary field studies conducted by a terrestrial biologist identified the following features:

- **Species at Risk:** one (1) Butternut was identified at the southwest end of the Pipe Laydown Area.

Design with community in mind

September 24, 2020

Page 3 of 4

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

- **Significant Wildlife Habitat:** large diameter trees observed in the Pipe Laydown Area and adjacent to the HDD Entry Pit Location (potential to provide candidate bat maternity roost habitat). Potential habitat for turtles in East Sixteen Mile Creek, however no potential turtle nesting habitat was observed.
- **Migratory Bird Nesting Habitat:** potential for migratory birds to nest throughout the Study Area.
- **Natural Vegetation Communities:** mid-aged to mature sugar maple forest (edge of the forest, overlaps with the Pipe Laydown Area) and small coniferous plantation (Scot's Pine) adjacent to the south end of the Pipe Laydown Area were identified. These vegetation communities are common in the province.
- **Designated Natural Heritage Features:** no designated natural heritage features identified in the Study Area.

Mitigation measures will be implemented to protect terrestrial resources and further developed through consultation with regulatory authorities during the permitting process.

## Project Schedule

### 2020

#### Summer

- Start the environmental planning process
- Initiation of environmental field studies

#### Fall

- Stage 1 and 2 Archaeological Assessment
- Complete Environmental Report
- Circulate Environmental Report to agencies, Indigenous communities and landowners for comments
- Complete OEB filing application

### 2021

#### Spring

- Receive OEB approval, complete permitting, pipeline design and construction plan

Design with community in mind

September 24, 2020

Page 4 of 4

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

**Summer**

- Begin construction

**Fall**

- Conclude construction
- Site cleanup and restoration
- Pipeline in service

**2022**

- Post-construction monitoring

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com). Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

December 9, 2020  
File: 110904260

Dear Landowner/Resident,

**Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Second Project Update**

The purpose of this letter is to provide you with an update on Project activities as the Project is located on or in proximity to your property. A map of the proposed pipeline route is attached.

**Update to Project Activities**

- Stage 1 Archaeological Assessment complete
- Stage 2 Archaeological Assessment scheduled for Spring 2021
- Additional natural heritage studies planned for the week of December 7<sup>th</sup>, 2020
- Completion of the Environmental Report anticipated by end of 2020

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

Please direct any questions, comments and/or concerns to the undersigned.

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com). Additional project information is available at: <http://sun-canadian.com/media-releases/>.

Regards,

**Stantec Consulting Ltd.**

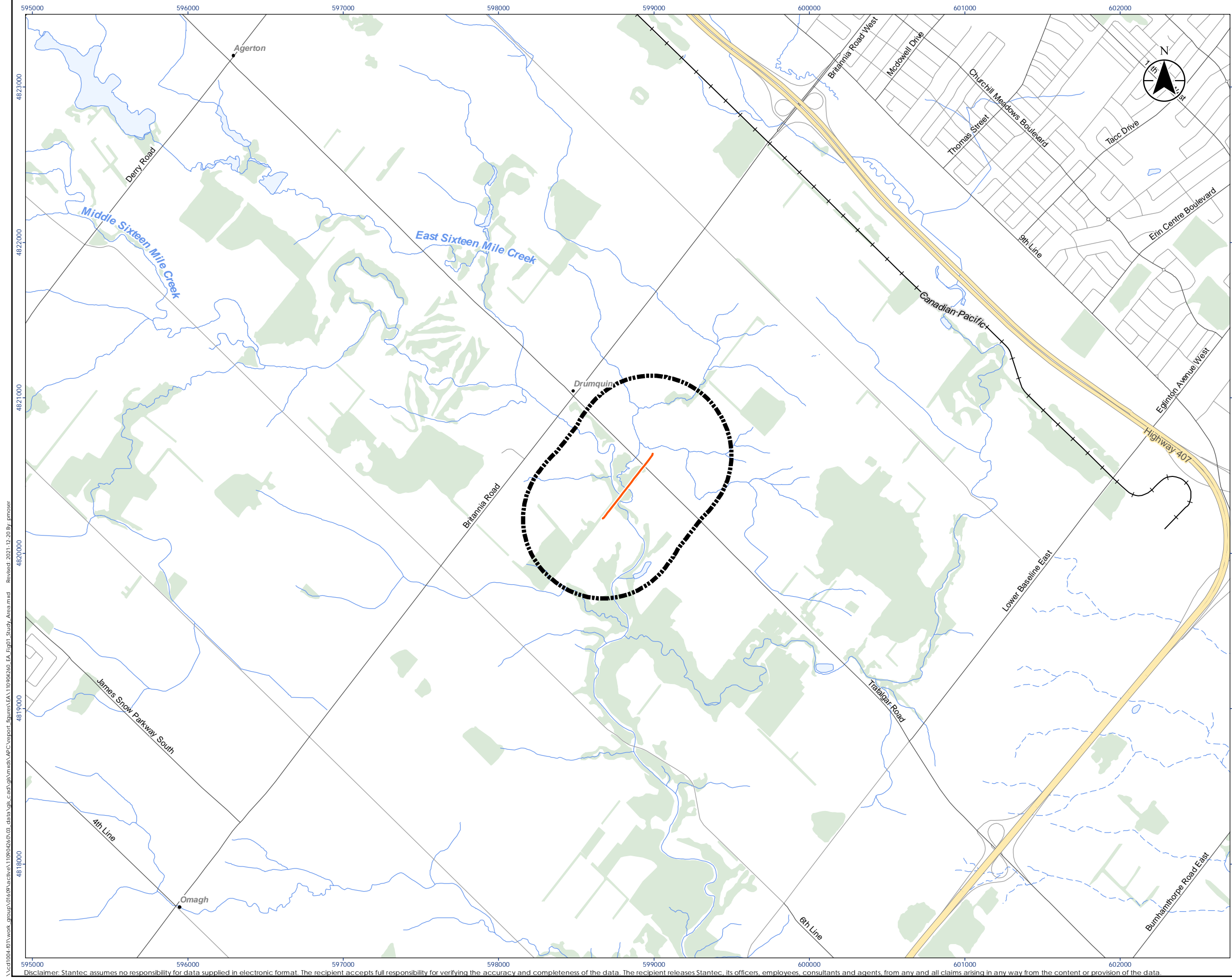
A handwritten signature in black ink, appearing to read 'Michael Candido'.

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route  
c. Peter Martens, Sun-Canadian Pipe Line Ltd.

## **APPENDIX C: EXISTING CONDITIONS FIGURES**



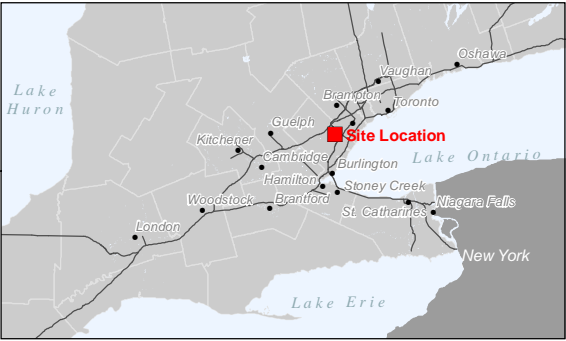


Legend

- Proposed NPS 12 Replacement
- Expressway / Highway
- Major Road
- Minor Road
- Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Wooded Area
- Project Study Area

0 0.5 1 km  
1:25,000 (At original document size of 11x17)

- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2020.



Project Location: Town of Milton  
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Technical Review by MC on 2021-12-20

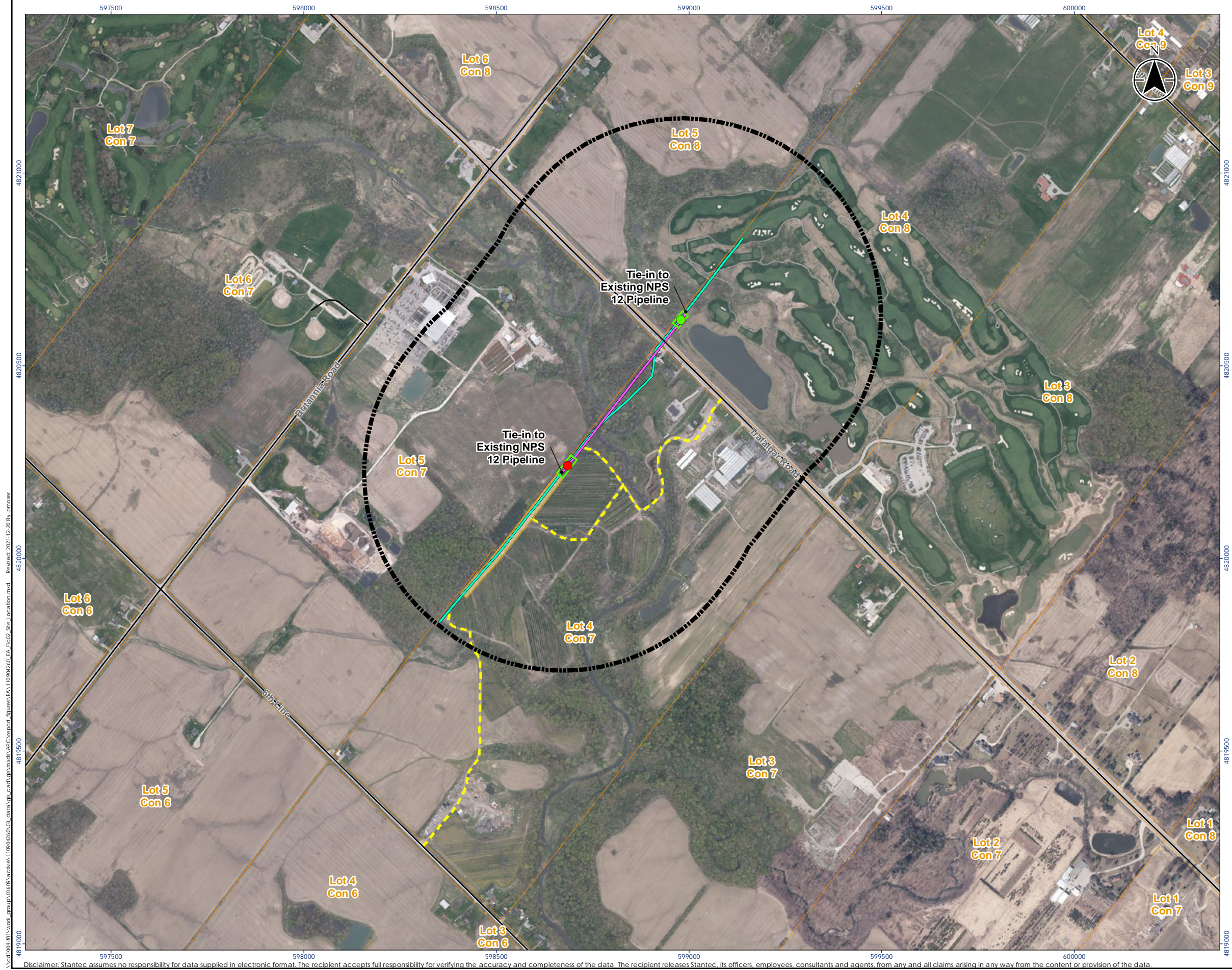
Client/Project:  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.  
1  
Title  
Study Area

595000 596000 597000 598000 599000 600000 601000 602000  
4823000 4822000 4821000 4820000 4819000 4818000  
Agerton  
Derry Road  
Middle Sixteen Mile Creek  
East Sixteen Mile Creek  
Drumquin  
Britannia Road  
Canadian Pacific  
Meadow Drive  
Churchill Meadows Boulevard  
Thomas Street  
Tacc Drive  
Erin Centre Boulevard  
9th Line  
Highway 407  
Eglinton Avenue West  
Lower Baseline East  
Totlager Road  
James Snow Parkway South  
4th Line  
Omagh  
6th Line  
Burnhamthorpe Road East

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Legend

- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Road
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Lot Boundary
- Project Study Area

0 250 500 m

1:10,000 (At original document size of 11x17)

Notes

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Client/Project  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.  
2

Title  
Site Location

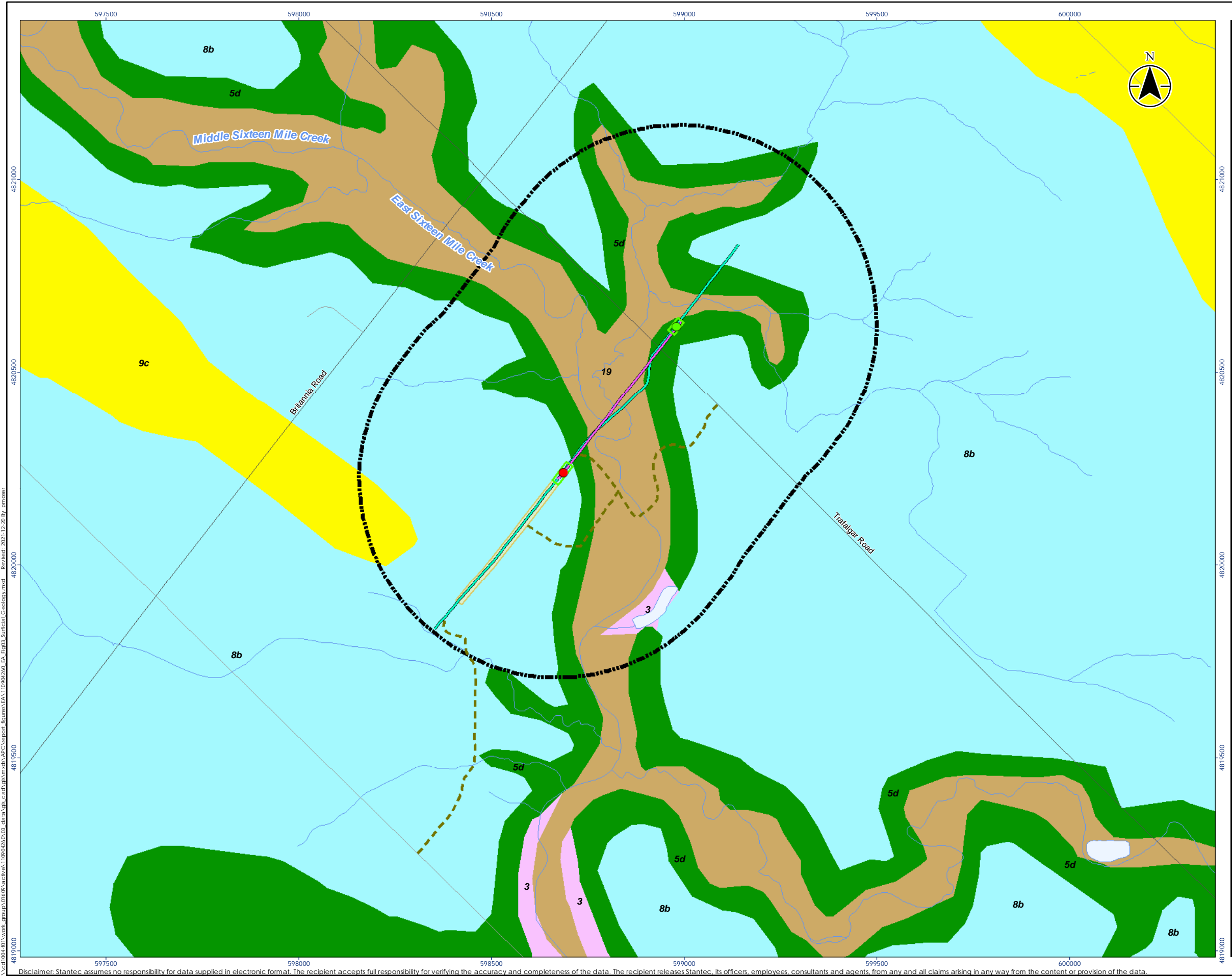
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4819000 4819500 4820000 4820500 4821000

597500 598000 598500 599000 599500 600000

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**Legend**

- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Expressway / Highway
- Major Road
- Minor Road
- Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area

**Surficial Geology**

- 19: Modern alluvial deposits
- 9c: Coarse-textured glaciolacustrine deposits (Foresore-basinal deposits)
- 8b: Fine-textured glaciolacustrine deposits (Interbedded flow till, rainout deposits and silt and clay)
- 5d: Glaciolacustrine-derived silty to clayey till
- 3: Paleozoic bedrock

**Project Study Area**

0 250 500 Meters

1:10,000 (At original document size of 11x17)

**Notes**

- Coordinate System: NAD 1983 UTM Zone 17N
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- Surficial geology data source: Ontario Geological Survey 2010. Surficial geology of Southern Ontario: Ontario Geological Survey, Miscellaneous Release--Data 128-REV ISBN 978-1-4435-2483-4.



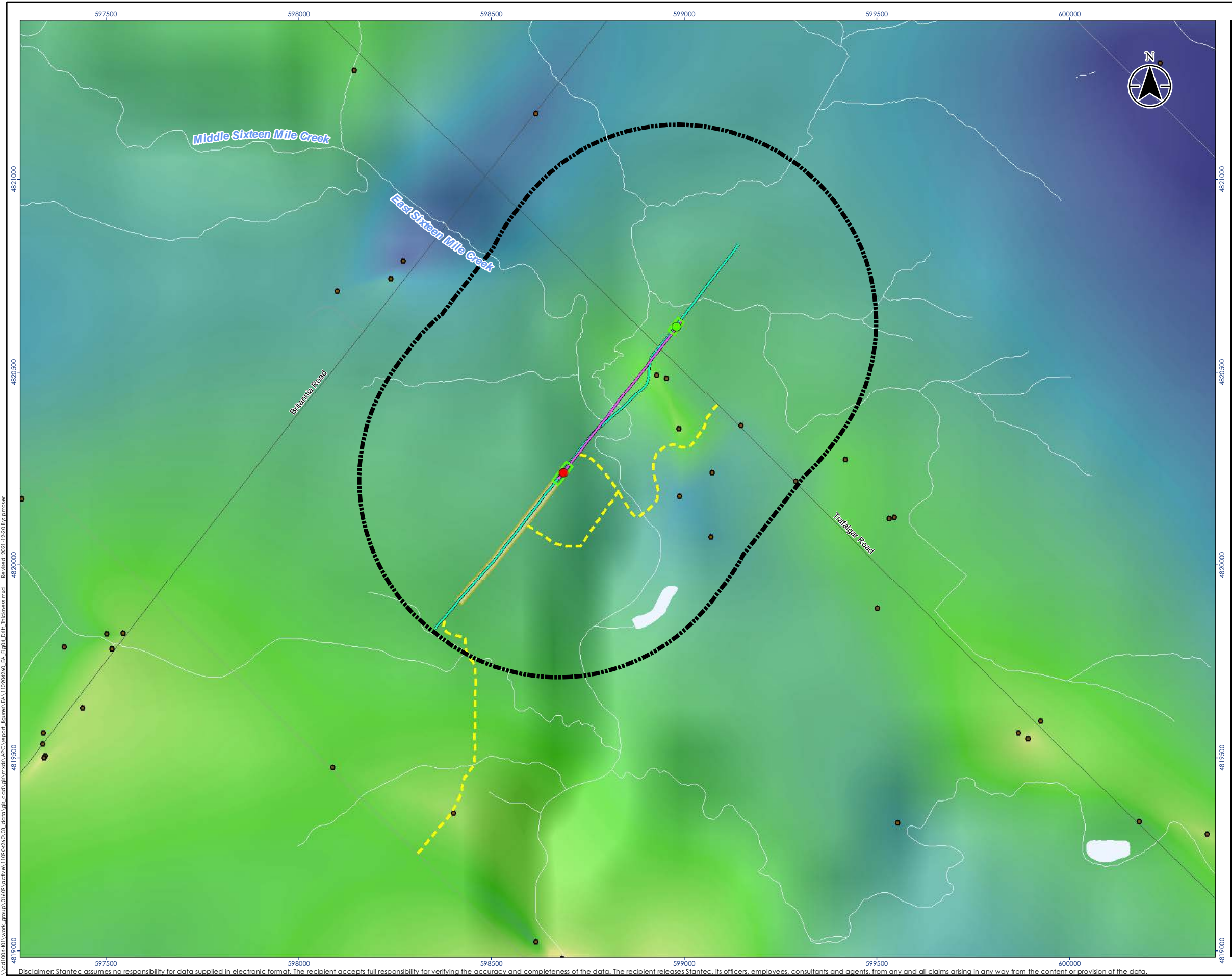
Project Location: Town of Milton  
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Prepared by PRM on 2021-12-20  
Technical Review by MC on 2021-12-20


Client/Project:  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.:  
3  
Title:  
Surficial Geology

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# Stantec

Legend


- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Expressway / Highway
- Major Road
- Minor Road
- Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Project Study Area

Drift Thickness (m)  
High : 20  
Low : 5

0 250 500 m  
1:10,000 (At original document size of 11x17)

Notes

- Coordinate System: NAD 1983 UTM Zone 17N
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- Drift thickness data source: Gao, C., Shiota, J., Kelly, R.J., Brunton, F.R. and van Haften, S. 2006. Bedrock topography and overburden thickness mapping, Southern Ontario; Ontario Geological Survey, Miscellaneous Release—Data 207.



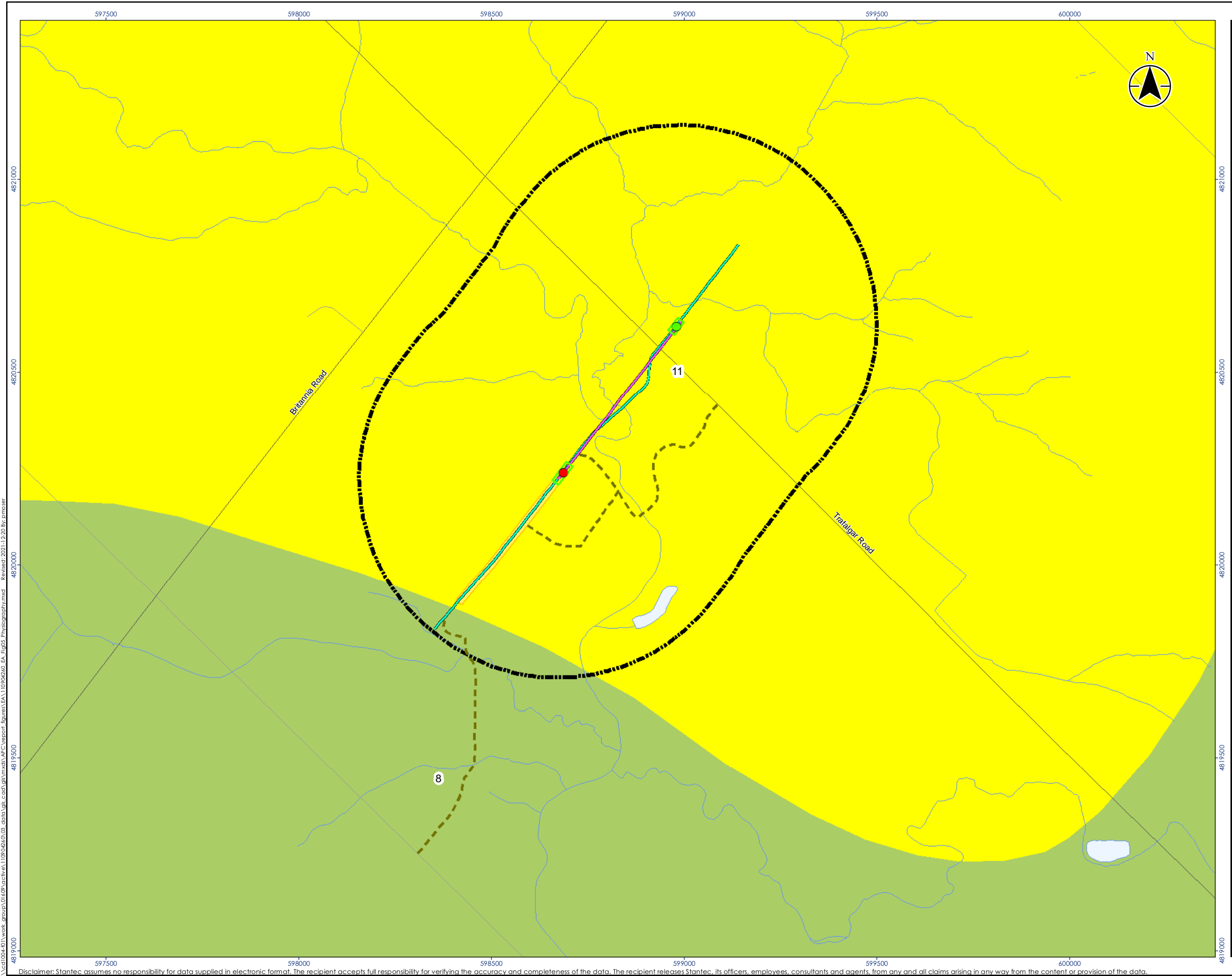
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Prepared by PRM on 2021-12-20  
Technical Review by MC on 2021-12-20

Client/Project  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
SUN - E16M PIPE REPLACEMENT

Figure No.  
4

Title  
Drift Thickness



Legend

- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Major Road
- Minor Road
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Project Study Area

Physiography

- 8: Bevelled Till Plains
- 11: Sand Plains

0 250 500 m

1:10,000 (At original document size of 11x17)

Notes

- Coordinate System: NAD 1983 UTM Zone 17N
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- Physiography data source: Chapman, L.J. and Putnam, D.F. 2007. Physiography of southern Ontario; Ontario Geological Survey, Miscellaneous Release—Data 228.

Project Location  
Town of Milton

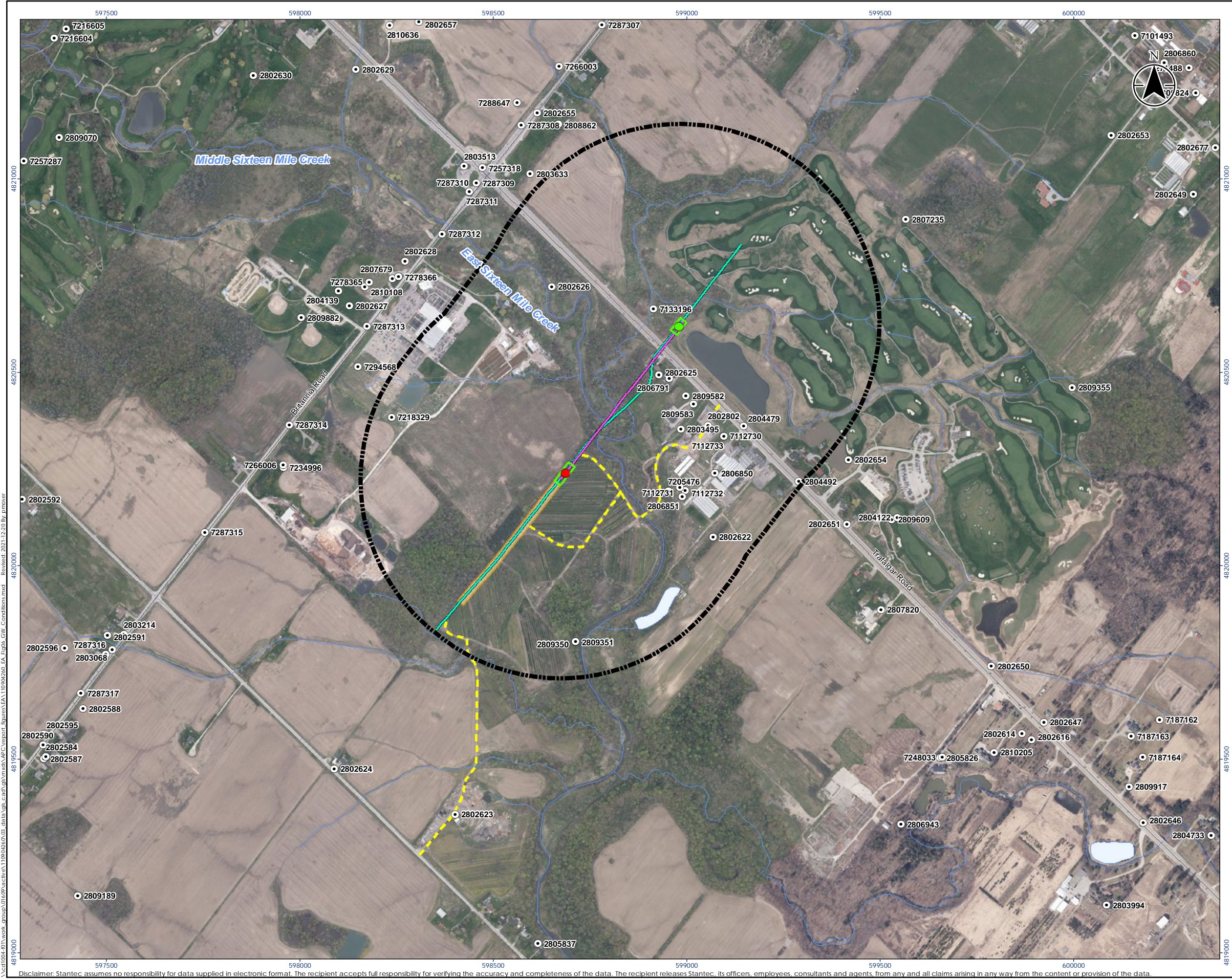
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Client/Project  
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NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

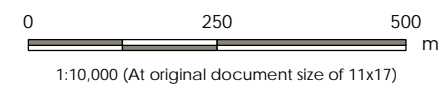
Figure No.  
5

Title  
Physiography





- Legend
- HDD Entry Point
  - HDD Exit Point
  - Water Well Location
  - Existing Sun Canadian Pipeline (NPS 12)
  - Proposed NPS 12 Replacement
  - Existing Access
  - Major Road
  - Minor Road
  - Watercourse (Intermittent)
  - Watercourse (Permanent)
  - Waterbody
  - Drill Pad (Entry & Exit)
  - Pipe Laydown Area
  - Project Study Area



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  - Orthoimagery © First Base Solutions, 2020. Imagery Date, 2019.
  - MECP water well record locations have been positioned based on published UTM coordinates and their locations should be considered approximate.



Project Location  
Town of Milton

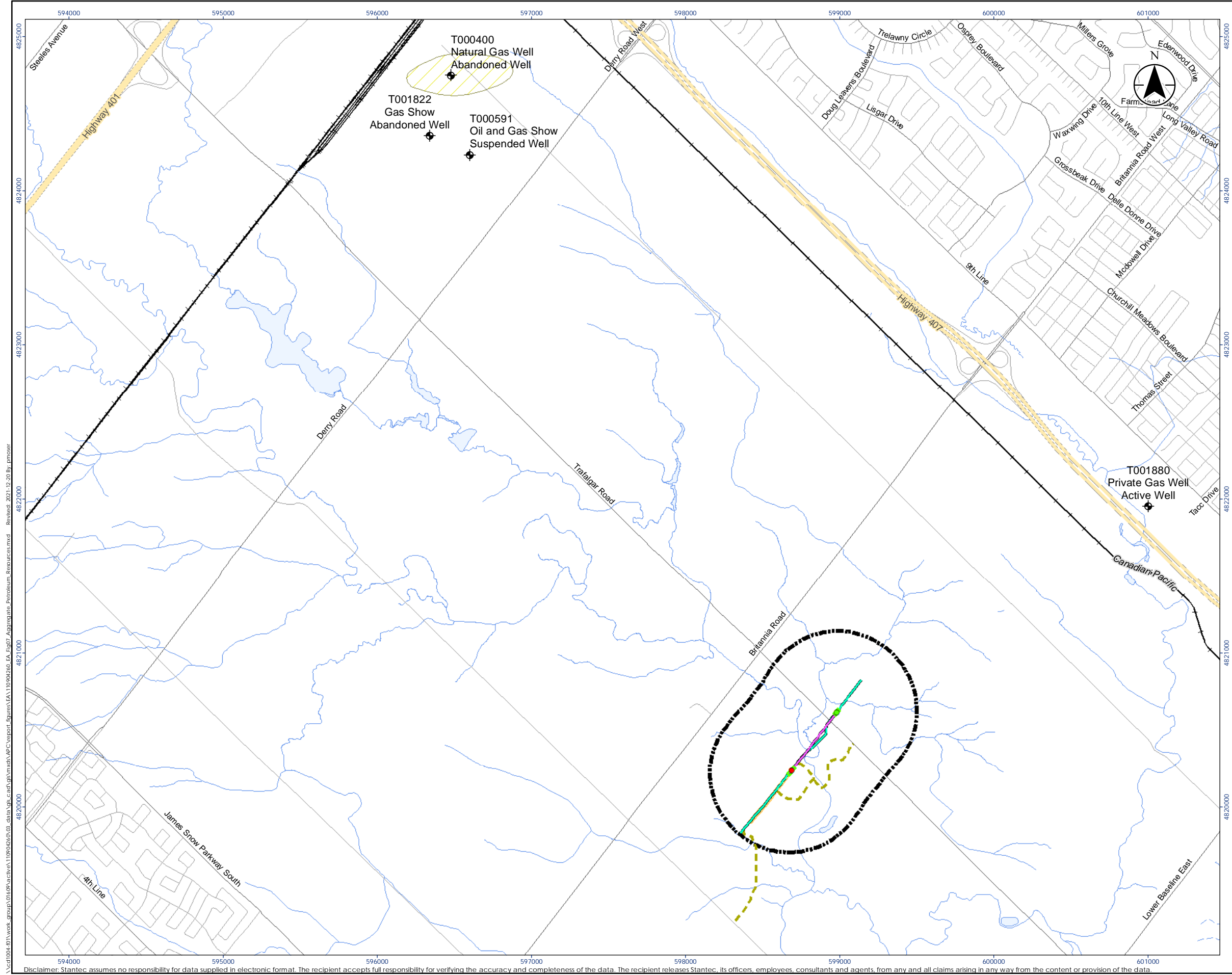
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Technical Review by MC on 2021-12-20


Client/Project  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.  
6

Title  
Groundwater Conditions







## Stantec

**Legend**


- HDD Entry Point
- HDD Exit Point
- Petroleum Well
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Expressway / Highway
- Major Road
- Minor Road
- Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Project Study Area
- Petroleum Pool
- Natural Gas Pool - Abandoned

0 500 1,000 m

1:25,000 (At original document size of 11x17)

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Town of Milton

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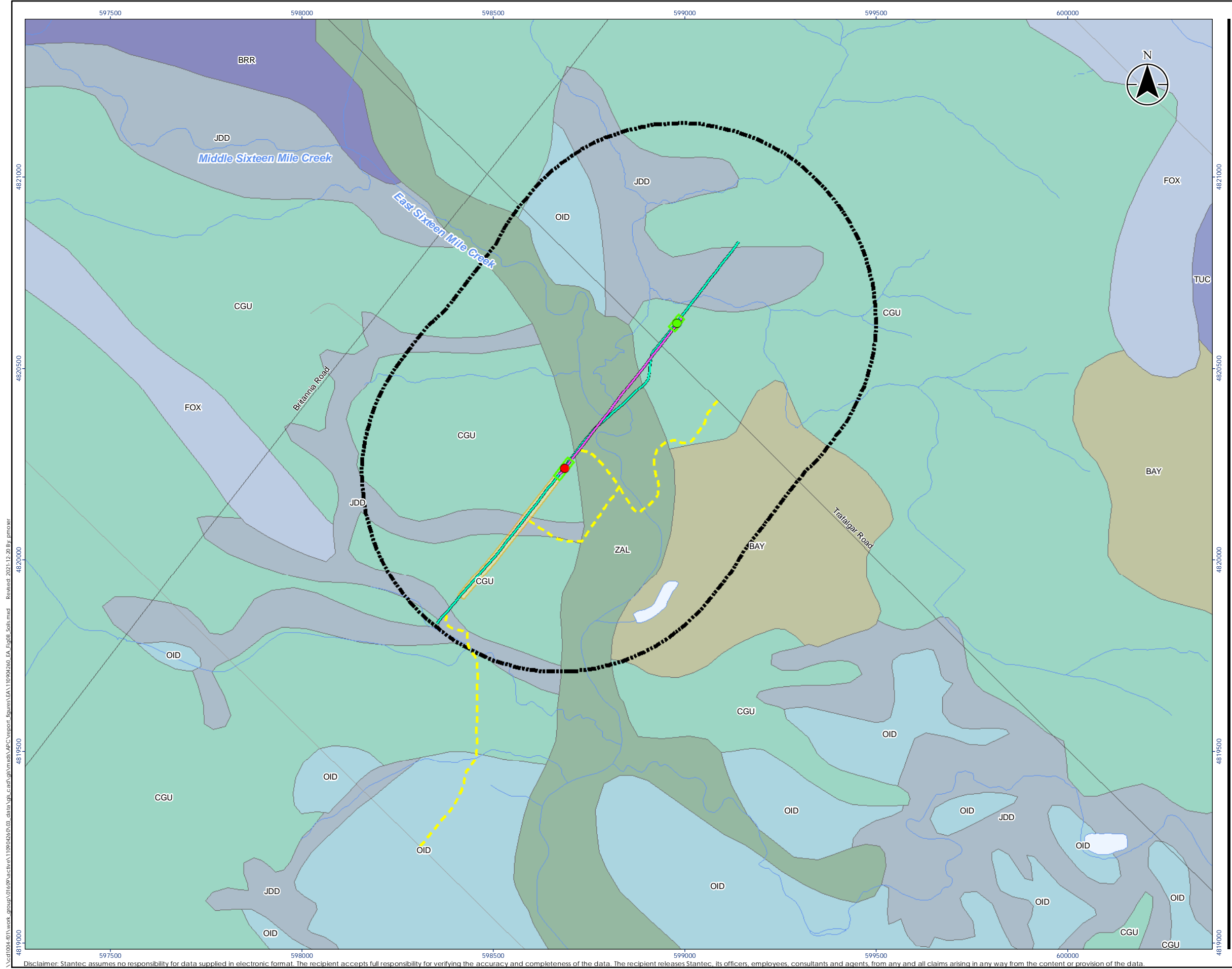
Client/Project  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.  
7

Title  
Aggregate and Petroleum Resources

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Legend

- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Project Study Area

Soil Type

- BAY, BRADY SANDY LOAM
- BRR, BERRIEN SANDY LOAM
- CGU, CHINGUACOUSY CLAY LOAM
- FOX, FOX SANDY LOAM
- JDD, JEDDO CLAY LOAM
- OID, ONEIDA CLAY LOAM
- TUC, TUSCOLA SILT LOAM
- ZAL, BOTTOM LAND

0 250 500 m

1:10,000 (At original document size of 11x17)

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Project Location  
Town of Milton

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Client/Project  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

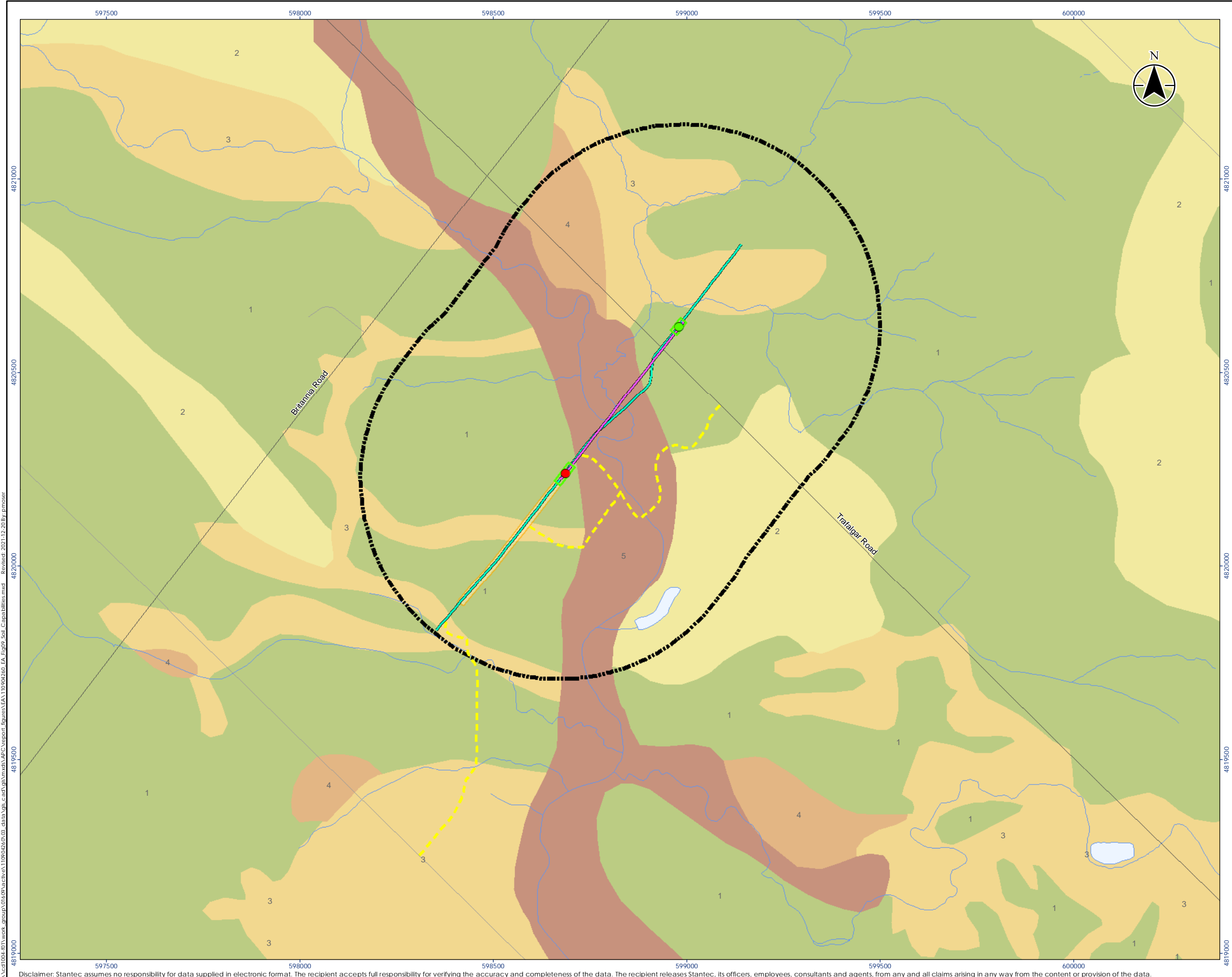
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Figure No.  
8

---

Title  
Soil Types

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Legend

- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Project Study Area

Soil Capability Classification of Agriculture

- 1: Soils in this class have no significant limitations in use for crops
- 2: Soils in this class have moderate limitations that restrict the range of crops or require moderate conservation practices
- 3: Soils in this class have moderately severe limitations that restrict the range of crops or require special conservation practices
- 4: Soils in this class have severe limitations that restrict the range of crops or require special conservation practices
- 5: Soils in this class have very severe limitations that restrict their capability in producing perennial forage crops, and improvement practices are feasible

0250500

m

1:10,000 (At original document size of 11x17)

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Technical Review by MC on 2021-12-20

Client/Project

SUN-CANADIAN PIPE LINE COMPANY LIMITED

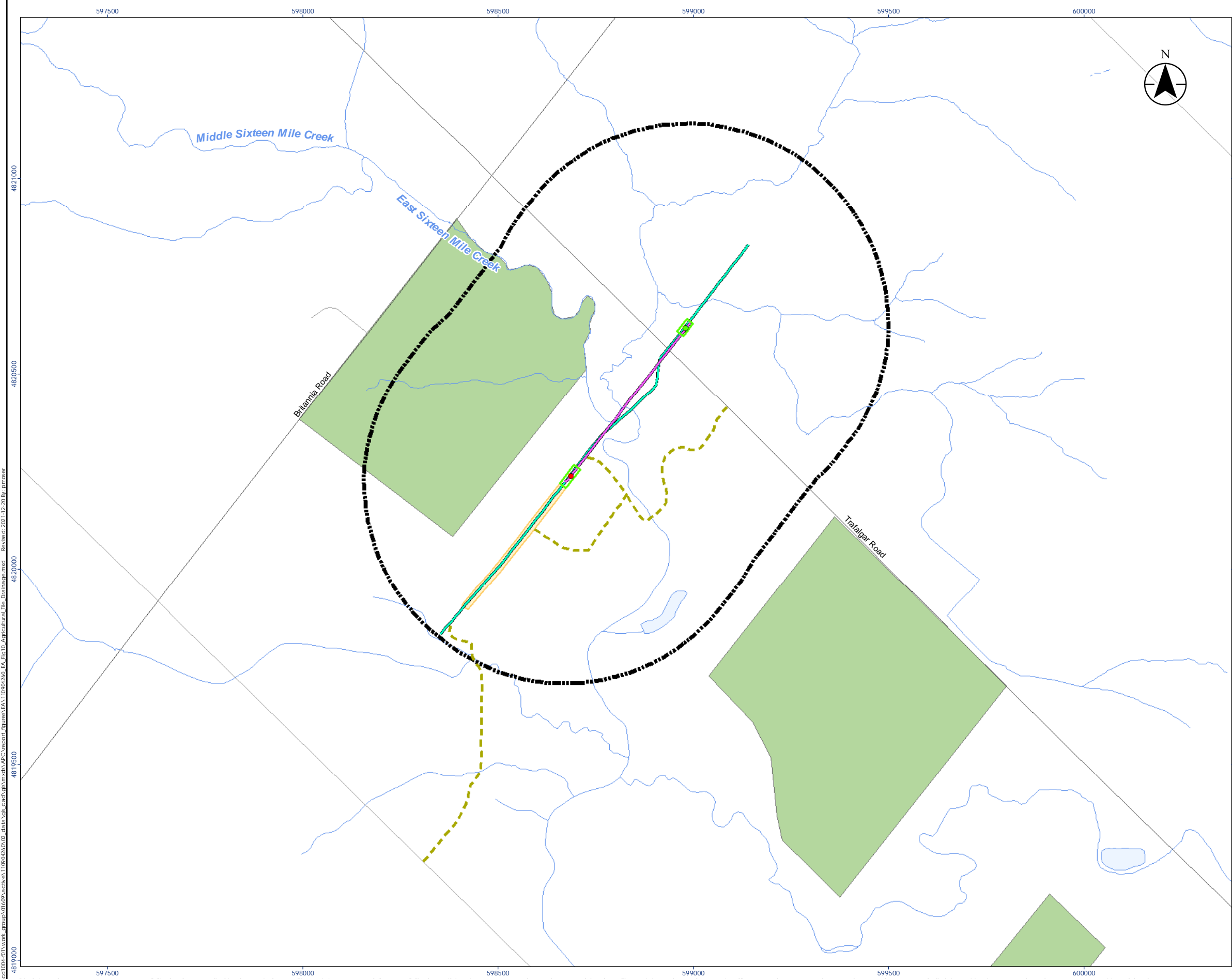
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.

9

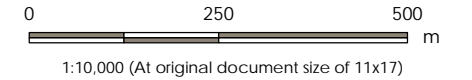
Title

Soil Capability



#### Legend

- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Major Road
- Minor Road
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Project Study Area
- Tile System Type
- Systematic



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NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

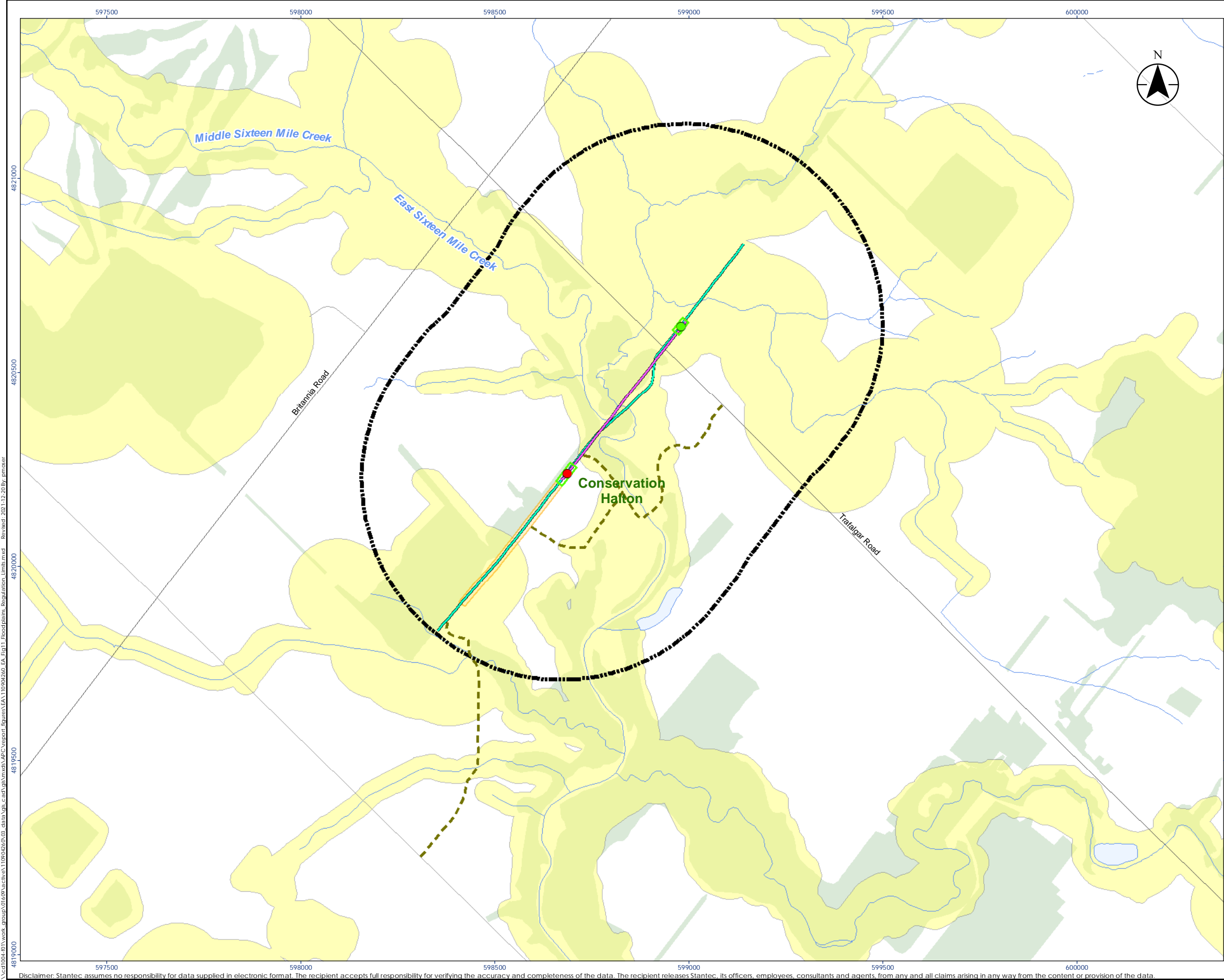
Figure No.:  
10

Title:  
Known Agricultural Tile Drainage

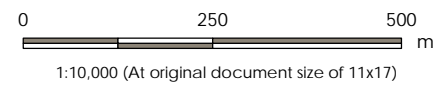
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- Legend
- HDD Entry Point
  - HDD Exit Point
  - Existing Sun Canadian Pipeline (NPS 12)
  - Proposed NPS 12 Replacement
  - Existing Access
  - Major Road
  - Minor Road
  - Watercourse (Intermittent)
  - Watercourse (Permanent)
  - Waterbody
  - Wooded Area
  - Regulated Area
  - Drill Pad (Entry & Exit)
  - Pipe Laydown Area
  - Study Area



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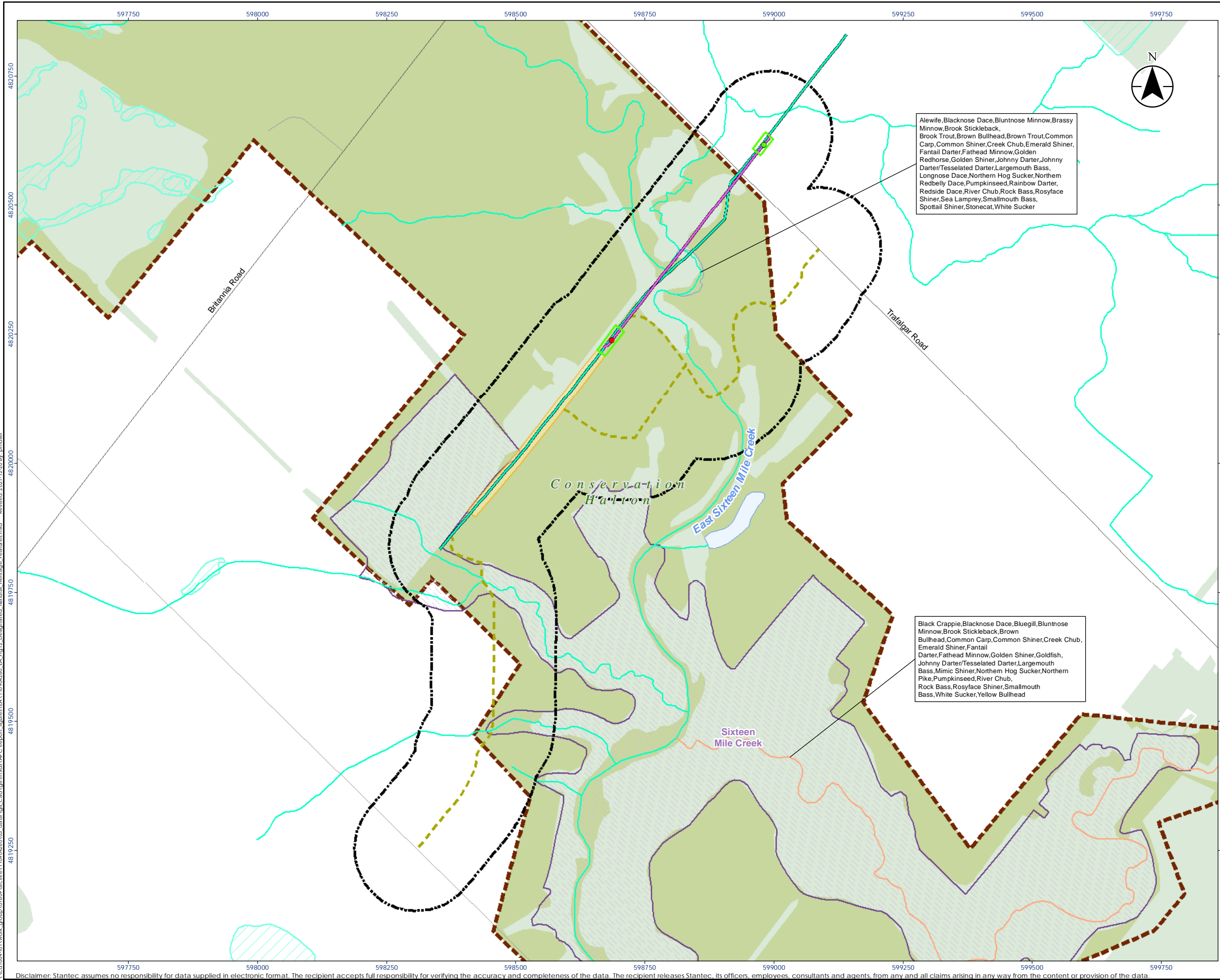
Project Location: Town of Milton  
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Prepared by PRM on 2021-12-20  
Technical Review by MC on 2021-12-20

Client/Project:  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.:  
11  
Title:  
Floodplains and Regulation Limits

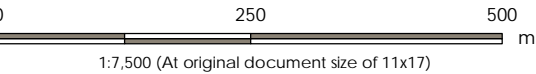
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Legend

- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Major Road
- Minor Road
- Thermal Regime, Cool
- Thermal Regime, Warm
- Watercourse (Permanent)
- Waterbody
- Wetland, Not evaluated per OWES
- Candidate ANSI, Life Science
- Wooded Area
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Project Buffer (120 m)
- Greenbelt Designation
- Protected Countryside
- Greenbelt Plan Boundary



- Notes
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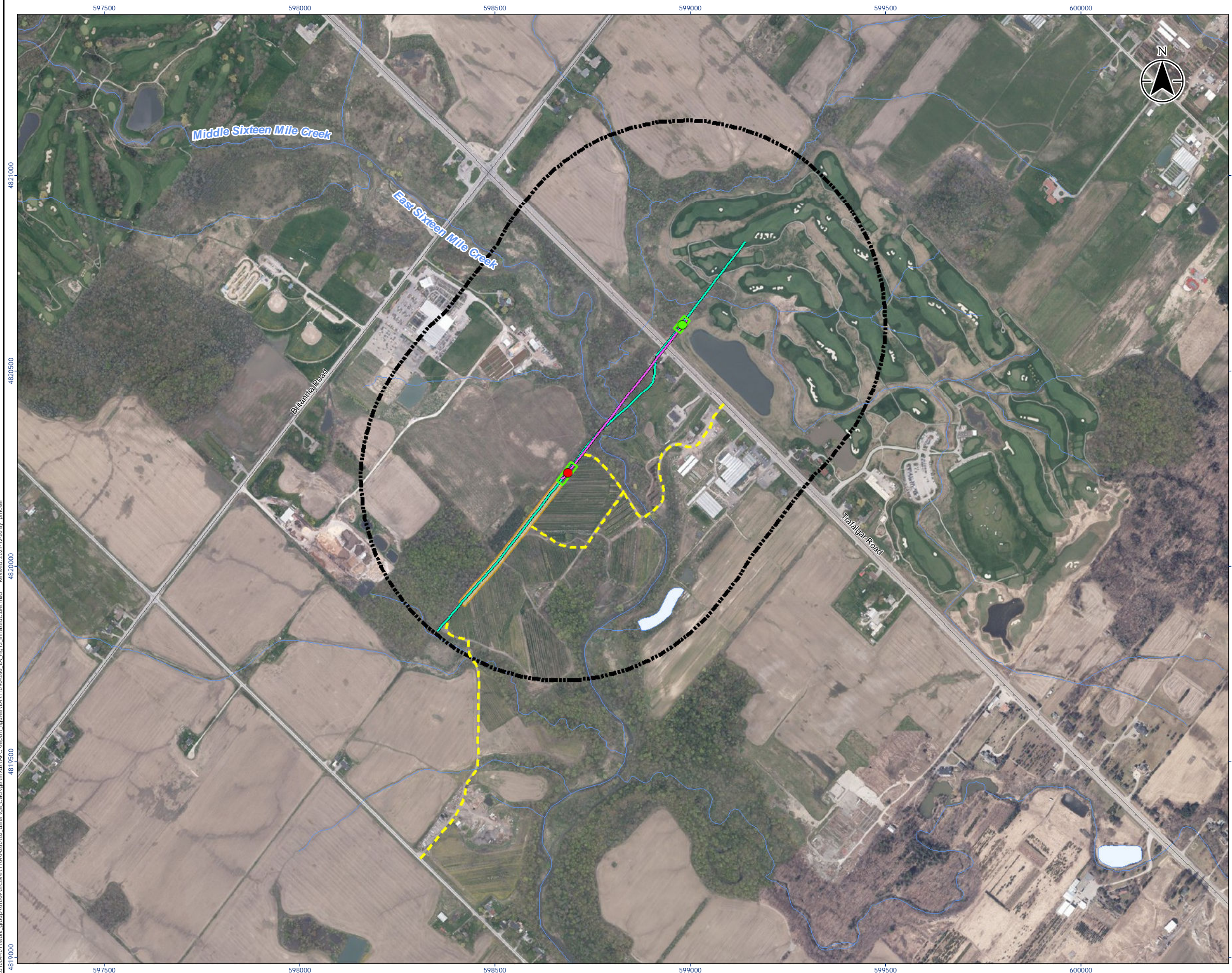


Project Location: Town of Milton  
110904260 REVA  
Prepared by PRM on 2021-12-20  
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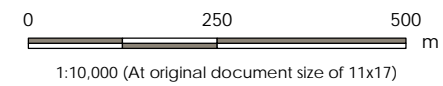
Client/Project:  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.:  
12  
Title:  
Designated Natural Heritage Features





- Legend
- HDD Entry Point
  - HDD Exit Point
  - Existing Sun Canadian Pipeline (NPS 12)
  - Proposed NPS 12 Replacement
  - Existing Access
  - Major Road
  - Minor Road
  - Watercourse (Intermittent)
  - Watercourse (Permanent)
  - Waterbody
  - Drill Pad (Entry & Exit)
  - Pipe Laydown Area
  - Project Study Area



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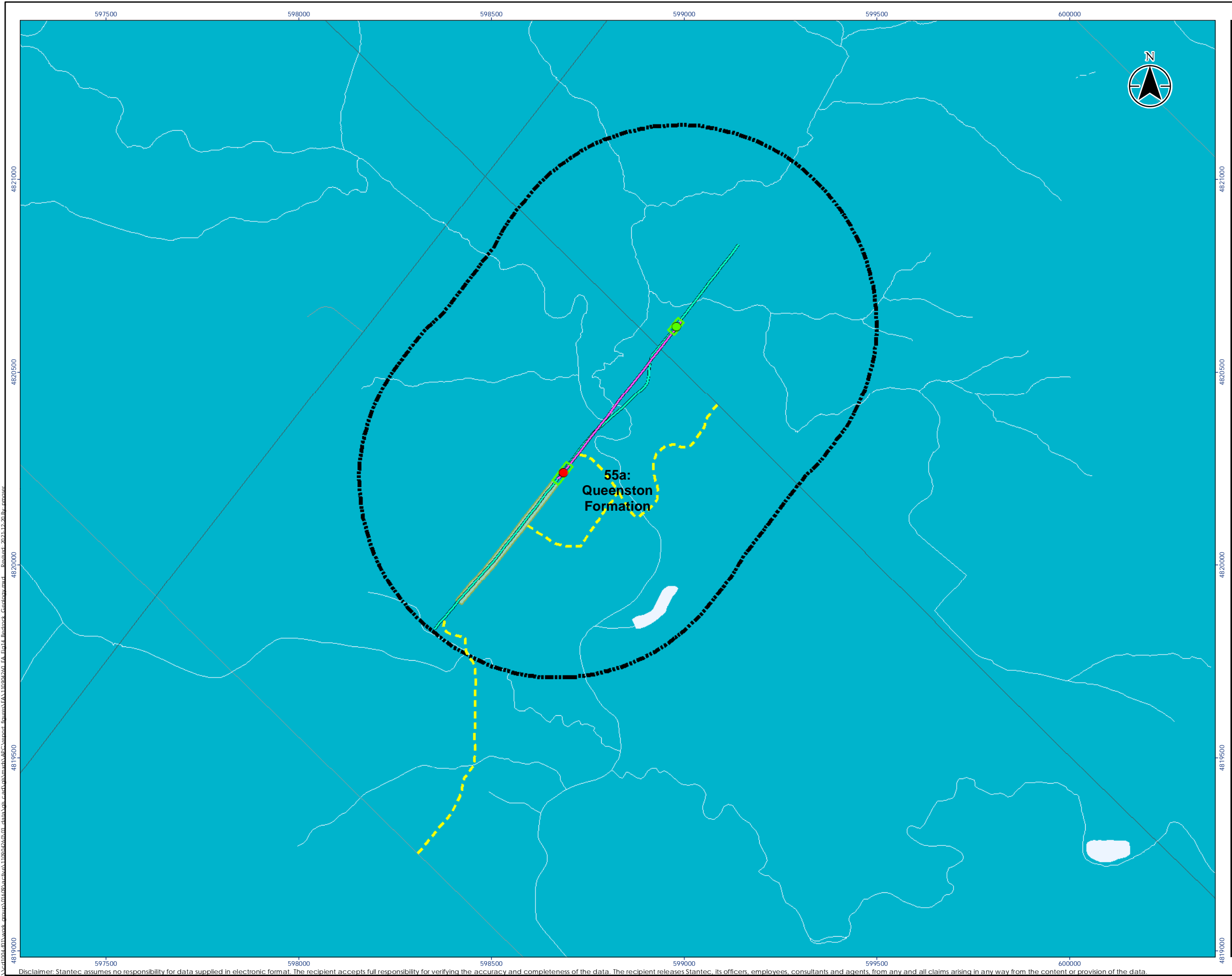
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Technical Review by MC on 2021-12-20

Client/Project:  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.:  
13

Title:  
Infrastructure and Socio-Economic  
Features





Legend

- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Major Road
- Minor Road
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Project Study Area
- Bedrock Geology
- 55a: Queenston Fm.

0 0.25 0.5 km

1:10,000 (At original document size of 11x17)

Notes

- Coordinate System: NAD 1983 UTM Zone 17N
- Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.
- Bedrock geology data source: Ontario Geological Survey 2011, 1:250 000 scale bedrock geology of Ontario; Ontario Geological Survey, Miscellaneous Release-Data 126-Revision 1. ISBN 978-1-4435-5704-7 (CD) ISBN 978-1-4435-5705-4

Project Location  
City of Hamilton

110904260 REVA  
Prepared by PRM on 2021-12-20  
Technical Review by MC on 2021-12-20

Client/Project  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.  
14

Title  
Bedrock Geology

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## **APPENDIX D: TERRESTRIAL HABITAT**



## Appendix D-1 Wildlife Habitat Assessment in Proximity to Proposed Pipeline Replacement (Ecoregion 6E)

Wildlife Habitat Type	Criteria	Methods	Habitat Assessment
<b>SEASONAL CONCENTRATION AREAS</b>			
Waterfowl Stopover and Staging Area (Terrestrial and Aquatic)	Field with evidence of annual spring flooding from meltwater or runoff; aquatic habitats such as ponds, marshes, lakes, bays, and watercourses used during migration, including large marshy wetlands.	Vegetation and wildlife habitat assessments completed on July 28, 2020 in addition to air photo interpretation was used to assess features in proximity to the proposed pipeline replacement that may support waterfowl stopover and staging areas.	Pond present in study area, east of Trafalgar Road. Results of habitat assessment determined habitat not suitable due to a lack of aquatic vegetation. Other suitable staging habitat absent in proximity to the proposed pipeline replacement.
Shorebird Migratory Stopover Area	Beaches and un-vegetated shorelines of lakes, rivers, and wetlands.	Vegetation and wildlife habitat assessments completed on July 28, 2020 were used to assess features in proximity to the proposed pipeline replacement that may support migratory shorebirds.	Natural unvegetated shoreline habitat is absent in proximity to the proposed pipeline replacement.
Raptor Wintering Area	Combination of fields and woodland (>20 ha).	Vegetation and wildlife habitat assessments completed on July 28, 2020 in addition to air photo interpretation were used to assess features in proximity to the proposed pipeline replacement that may support wintering raptors.	Suitable upland habitat is absent in proximity to the proposed pipeline replacement.
Bat Hibernacula	Hibernacula may be found in caves, mine shafts, underground foundations and karsts.	Vegetation and wildlife habitat assessments conducted on July 28, 2020 in addition to air photo interpretation were used to assess features in proximity to the proposed pipeline replacement that may support bat hibernacula.	Crevices, caves or abandoned mines are absent in proximity to the proposed pipeline replacement.

## Appendix D-1 Wildlife Habitat Assessment in Proximity to Proposed Pipeline Replacement (Ecoregion 6E)

Wildlife Habitat Type	Criteria	Methods	Habitat Assessment
Bat Maternity Colonies	Maternity colonies considered significant wildlife habitat are found in forested ecosites.	<p>Vegetation and wildlife habitat assessments conducted on July 28, 2020 were used to assess features in proximity to the proposed pipeline replacement that may support bat maternity colonies.</p> <p>A bat roost survey was conducted on December 9, 2020 to record candidate bat maternity colonies in the forested communities in the Study Area.</p>	<p>Forest habitat is present in proximity to the proposed pipeline laydown area and replacement footprint. Large diameter trees were observed during July 2020 site investigations in the pipe laydown area and a large bur oak was identified adjacent to the HDD entry location.</p> <p>During December 2020 bat tree roost survey nine candidate bat maternity roost trees were identified in the forested communities adjacent to the proposed pipeline laydown area and two candidate bat maternity roost trees were identified in the forested community adjacent to the pipeline replacement footprint. Removal of these candidate trees is not anticipated as part of the pipeline replacement project.</p>
Turtle Wintering Areas	Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate dissolved oxygen. Water has to be deep enough not to freeze and have soft mud substrate.	Vegetation and wildlife habitat assessments conducted on July 28, 2020 in addition to air photo interpretation were used to assess features in proximity to the proposed pipeline replacement that may support areas of permanent standing water but not deep enough to freeze.	East Sixteen Mile Creek may provide turtle overwintering habitat.
Reptile Hibernaculum	Rock piles or slopes, stone fences, crumbling foundations	Vegetation and wildlife habitat assessments conducted on July 28, 2020 were used to document features in proximity to the proposed pipeline replacement that may support snake hibernacula.	Rock piles/fences and crumbling foundations are absent in proximity to the proposed pipeline replacement.
Colonial-Nesting Bird Breeding Habitat (Bank and Cliff)	Eroding banks, sandy hills, steep slopes, rock faces or piles	Vegetation and wildlife habitat assessments conducted on July 28, 2020 in addition to air photo interpretation was used to assess features in proximity to the proposed pipeline replacement that may support bank and cliff colonial bird breeding habitat.	Suitable bank and cliff habitat are absent in proximity to the proposed pipeline replacement.

## Appendix D-1 Wildlife Habitat Assessment in Proximity to Proposed Pipeline Replacement (Ecoregion 6E)

Wildlife Habitat Type	Criteria	Methods	Habitat Assessment
Colonial-Nesting Bird Breeding Habitat (Tree/Shrubs)	Dead trees in large marshes and lakes, flooded timber, and shrubs, with nests of colonially nesting heron species.	Vegetation and wildlife habitat assessments conducted on July 28, 2020 were used to assess features in proximity to the proposed pipeline replacement that may support tree and shrub colonial bird breeding habitat.	LIO identified the presence of mixed wader nesting colonies.  Tree/shrub colonial bird nests were absent in proximity to the proposed pipeline replacement.
Colonial-Nesting Bird Breeding Habitat (Ground)	Rock islands and peninsulas in a lake or large river.	Vegetation and wildlife habitat assessments conducted on July 28, 2020 were used to assess features in proximity to the proposed pipeline replacement that may support ground colonial bird breeding habitat.	Nests for ground-nesting colonial birds were absent in proximity to the proposed pipeline replacement.
Migratory Butterfly Stopover Areas	Meadows and forests that are a minimum of 10 ha and are located within 5km of Lake Ontario.	GIS analysis was used to measure distance from the Lake Ontario shoreline.	Not located within 5 km of Lake Ontario.
Landbird Migratory Stopover Areas	Woodlands of a minimum size located within 5 km of Lake Ontario.	GIS analysis was used to measure distance from the Lake Ontario shoreline.	Not located within 5 km of Lake Ontario.
Deer Winter Congregation Areas	Deer winter congregation's areas are mapped by MNRF and species use surveys are not required.	The LIO database was used to identify deer winter congregation areas.	Deer wintering areas absent in proximity to the proposed pipeline replacement.
<b>RARE VEGETATION COMMUNITIES</b>			
Sand Barren, Alvar, Cliffs and Talus Slopes	Sand barren, Alvar, Cliff and Talus ELC Community Classes, and other areas of exposed bed rock and patchy soil development, near vertical exposed bedrock and slopes of rock rubble.	Vegetation surveys conducted on July 28, 2020 and air photo interpretation were used to assess vegetation communities in proximity to the proposed pipeline replacement.	Barren, alvar, cliff, and talus slopes absent in proximity to the proposed pipeline replacement.
Old-growth Forest	Relatively undisturbed, structurally complex; dominant trees > 100 years' old.	Vegetation surveys conducted on July 28, 2020 and air photo interpretation were used to assess vegetation communities in proximity to the proposed pipeline replacement.	Old-growth forests absent in proximity to the proposed pipeline replacement.



## Appendix D-1 Wildlife Habitat Assessment in Proximity to Proposed Pipeline Replacement (Ecoregion 6E)

Wildlife Habitat Type	Criteria	Methods	Habitat Assessment
Tallgrass Prairie and Savannah	Open canopy habitats (tree cover < 60%) dominated by prairie species.	Vegetation surveys conducted on July 28, 2020 and air photo interpretation were used to assess vegetation communities in proximity to the proposed pipeline replacement.	Prairie and savannahs absent in proximity to the proposed pipeline replacement.
Other Rare Vegetation Communities	Provincially Rare S1, S2 and S3 vegetation communities listed by the NHIC.	Vegetation surveys conducted on July 28, 2020 and air photo interpretation were used to assess vegetation communities in proximity to the proposed pipeline replacement.	Rare vegetation communities absent in proximity to the proposed pipeline replacement.
<b>SPECIALIZED HABITAT FOR WILDLIFE</b>			
Waterfowl Nesting Area	Upland habitats adjacent to wetlands (within 120m).	Vegetation and wildlife habitat assessments conducted on July 28, 2020 in addition to air photo interpretation were used to assess features in proximity to the proposed pipeline replacement that may support waterfowl nesting.	Wetlands absent in proximity to the proposed pipeline replacement.
Bald Eagle and Osprey nesting, Foraging, and Perching Habitat	Treed communities adjacent to rivers, lakes, ponds, and other wetlands with stick nests of Bald Eagle or Osprey.	Vegetation and wildlife habitat assessments conducted on July 28, 2020 in addition to air photo interpretation were used to assess features in proximity to the proposed pipeline replacement that may support Bald Eagle and Osprey nesting.	Bald Eagle and Osprey nests absent in proximity to the proposed pipeline replacement.
Woodland Raptor Nesting Habitat	Forested ELC communities >30 ha with 10 ha of interior habitat.	Vegetation and wildlife habitat assessments conducted on July 28, 2020 in addition to air photo interpretation and GIS analysis were used to assess features in proximity to the proposed pipeline replacement that may support nesting habitat for woodland raptors.	Suitable forests (i.e., >10 ha of interior habitat) absent within proximity to the proposed pipeline replacement.
Turtle Nesting Areas	Exposed soil, including sand and gravel in open sunny areas near wetlands.	Vegetation and wildlife habitat assessments conducted on July 28, 2020 in addition to air photo interpretation was used to assess features in proximity to the proposed pipeline replacement that may support turtle nesting areas.	Exposed soils absent within proximity to the proposed pipeline replacement.

## Appendix D-1 Wildlife Habitat Assessment in Proximity to Proposed Pipeline Replacement (Ecoregion 6E)

Wildlife Habitat Type	Criteria	Methods	Habitat Assessment
Seeps and Springs	Any forested area with groundwater at surface within the headwaters of a stream or river system	Site investigations conducted on July 28, 2020 and air photo interpretation was used to assess areas/features of groundwater upwelling, including seeps and springs.	Seeps and springs absent within proximity to the proposed pipeline replacement.
Amphibian Breeding Habitat (Woodland and Wetland)	Treed uplands with vernal pools, and wetland ecosites	Vegetation and wildlife habitat assessments conducted on July 28, 2020 in addition to air photo interpretation were used in proximity to the proposed pipeline replacement that may support woodland breeding amphibians.	Wetland and vernal pools absent within proximity to the proposed pipeline replacement.
Woodland Area-sensitive Bird Breeding Habitat	Large mature forest stands, woodlots >30ha and >200m from the forest edge.	Vegetation assessments conducted on July 28, 2020 in addition to air photo interpretation and GIS analysis were used to determine whether woodlots that occurred in proximity to the proposed pipeline replacement were >30 ha with interior habitat present (>200 m from edge).	Suitable forests (with interior habitat) absent in proximity to the proposed pipeline replacement.
<b>HABITAT FOR SPECIES OF CONSERVATION CONCERN</b>			
Marsh Bird Breeding Habitat	Wetlands with shallow water and emergent aquatic vegetation.	Vegetation assessments conducted on July 28, 2020 in addition to air photo interpretation were used to identify marshes with shallow water and emergent vegetation in proximity to the proposed pipeline replacement that may support marsh breeding birds.	Wetlands absent in proximity to the proposed pipeline replacement.

## Appendix D-1 Wildlife Habitat Assessment in Proximity to Proposed Pipeline Replacement (Ecoregion 6E)

Wildlife Habitat Type	Criteria	Methods	Habitat Assessment
Open Country Bird Breeding Habitat	Large grasslands and fields (>30ha).	Vegetation assessments conducted on July 28, 2020 in addition to air photo interpretation and GIS analysis were used to identify grassland communities in proximity to the proposed pipeline replacement that may support area-sensitive breeding birds.	Large grasslands and fields absent in proximity to the proposed pipeline replacement.
Shrub/Early Successional Bird Breeding Habitat	Large shrub and thicket habitats (>10ha).	Vegetation assessments conducted on July 28, 2020 in addition to air photo interpretation and GIS analysis were used to identify large communities that may support shrub/early successional breeding birds.	Large shrub and thickets absent in proximity to the proposed pipeline replacement.
Terrestrial Crayfish	Wet meadows and edges of shallow marshes.	Vegetation assessments conducted on July 28, 2020 and air photo interpretation were used to identify shallow marsh and meadow marsh communities that occurred in proximity to the proposed pipeline replacement. Searches for crayfish chimneys were conducted during wildlife habitat assessments.	Terrestrial crayfish are absent in proximity to the proposed pipeline replacement.
<b>SPECIES OF CONSERVATION CONCERN</b>			
Eastern Milksnake	The Milksnake is frequently reported in and around buildings, especially old structures. However, it is found in a variety of habitats, including prairies, pastures, hayfields, rocky hillsides and a wide variety of forest types. Two important features of ideal habitat are proximity to water, and suitable locations for basking and egg-laying sites may include compost or manure piles, stumps, under boards, or in loose soil (COSEWIC, 2002).	Vegetation and habitat assessments conducted on July 28, 2020 were used to identify suitable habitat to support Eastern Milksnakes in proximity to the proposed pipeline replacement.	Suitable basking and nesting site absent in proximity to the proposed pipeline replacement.

## Appendix D-1 Wildlife Habitat Assessment in Proximity to Proposed Pipeline Replacement (Ecoregion 6E)

Wildlife Habitat Type	Criteria	Methods	Habitat Assessment
Eastern Wood-Pewee	The Eastern Wood-Pewee is a forest bird of deciduous and mixed woods. Nest-site selection favors open space near the nest, typically provided by clearings, roadways, water, and forest edges. Nests are cryptic as they are covered with lichens, typically appearing like a knot on top of a branch and little is known about nesting behavior (Cadman et al, 2007).	Vegetation and habitat assessments conducted on July 28, 2020 were used to identify suitable habitat to support Eastern Wood-pewee in proximity to the proposed pipeline replacement.	Suitable forested habitat is present adjacent to the proposed pipeline replacement.
Red-headed Woodpecker	The Red-headed Woodpecker Occupies a wide range of habitats, but most are characterized by open areas for feeding; snags for roosting, and a secure food supply. This species requires multiple snags for nesting, roosting, and foraging. Some of the habitats used are open deciduous and riparian woodlands, orchards, parks, agricultural lands, savanna-like grasslands, beaver ponds with snags, forest edges, burned forests, and flooded bottomland forests. Habitats are similar in both breeding and wintering range, but winter distribution most determined by presence of food. Have been known to move north in winter if mast is heavy (N.A.S., 2012; Smith et al, 2000).	Vegetation and habitat assessments conducted on July 28, 2020 were used to identify suitable habitat to support Red-headed Woodpecker in proximity to the proposed pipeline replacement.	Open woodlands absent in proximity to the proposed pipeline replacement.
Snapping Turtle	Snapping Turtles inhabit ponds, sloughs, streams, rivers, and shallow bays that are characterized by slow moving water, aquatic vegetation, and soft bottoms. Females show strong nest site fidelity and nest in sand or gravel banks at waterway edges in late May or early June (COSEWIC, 2008).	Vegetation and habitat assessments conducted on July 28, 2020 were used to identify suitable habitat to support Snapping Turtles in proximity to the proposed pipeline replacement.	Eastern Sixteen Mile Creek may support summer and overwintering habitat for Snapping Turtles.
Wood Thrush	Wood Thrush prefer deciduous and mixed forests in southern Ontario, ranging from small and isolated to large and contiguous woodlots. The presence of tall trees and a thick understory are preferred (Cadman et al., 2007).	Vegetation and habitat assessments conducted on July 28, 2020 were used to identify suitable habitat to support Wood Thrush in proximity to the proposed pipeline replacement.	Suitable forested habitat is present adjacent to the proposed pipeline replacement.

## Appendix D-1 Wildlife Habitat Assessment in Proximity to Proposed Pipeline Replacement (Ecoregion 6E)

Wildlife Habitat Type	Criteria	Methods	Habitat Assessment
<b>ANIMAL MOVEMENT CORRIDORS</b>			
Amphibian Movement Corridor	Corridors may be found in all ecosites associated with water. Determined based on identifying significant amphibian breeding habitat (wetland).	Identified after Amphibian Breeding Habitat - Wetland is confirmed. Movement corridors should be considered when amphibian breeding habitat is confirmed as SWH from Amphibian Breeding Habitat (Wetland).	Wetland and vernal pools absent within proximity to the proposed pipeline replacement.
Deer Movement Corridor	Corridors may be found in all forested ecosites. Determined based on MNRF identifying Deer Wintering Areas.	Movement corridors should be considered when Deer Wintering Areas are identified.	Deer wintering areas absent within proximity to the proposed pipeline replacement.

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**APPENDIX E:  
STAGE 1 AND 2 ARCHAEOLOGICAL  
ASSESSMENT REPORTS**



**NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT:  
ENVIRONMENTAL REPORT**

**Stage 1 Archaeological Assessment**



**Stage 1 Archaeological Assessment  
Sun-Canadian Pipe Line  
NPS12 Pipeline Replacement (E16M)  
Part of Lot 4, Concessions 7 and 8 New Survey  
Geographic Township of Trafalgar (North)  
Now the Town of Milton  
Regional Municipality of Halton, Ontario**

Submitted to

**Sun-Canadian Pipe Line**  
P.O. Box 470  
Waterdown, Ontario, L0R 2H0

and

**The Ontario Ministry of Heritage, Sport, Tourism and Culture Industries**

Prepared by



**Timmins Martelle  
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Our File: 2020-206  
PIF Number: P324-0571-2020

January 2021  
Original report submitted to the Ministry of Heritage, Sport, Tourism and Culture  
Industries  
7 January 2021



## Executive Summary

Sun-Canadian Pipe Line Company Limited (SPCL) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton. SCPL is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way (ROW) within a new alignment to account for the installation of the pipe by a horizontal directional drill (HDD). Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board (OEB).

Timmins Martelle Heritage Consultants Inc. (TMHC) was contracted to carry out a Stage 1 archaeological assessment of lands with potential for impact by proposed pipeline maintenance in the Town of Milton. The project area is roughly 1.507 ha in size and falls within Lot 4, Concessions 7 and 8 New Survey, Geographic Township of Trafalgar (North), now Regional Municipality of Halton, Ontario. The project area consists of the Drill Entry and Drill Exit Areas point on either side of Trafalgar Road, a linear Pipe Laydown Area west of Trafalgar Road, and the Drill Path beneath Trafalgar Road, East Sixteen Mile Creek and its unnamed tributary. The Stage 1 archaeological assessment was undertaken as part of SCPL's submission of the OEB. All work was done in accordance with the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011). The purpose of the Stage 1 archaeological assessment was to establish whether there was potential for archaeological resources to exist within the project area.

The Stage 1 background study included a review of current land use, historic and modern maps, past settlement history for the area and a consideration of topographic and physiographic features, soils, and drainage. It also involved a review of previously registered archaeological resources within 1 km of the project area, and previous archaeological assessments within 50 m. The background study indicated that the property had potential for the recovery of archaeological resources due the proximity (i.e., within 300 m) to several features that signal archaeological potential, namely: 1) a watercourse (East Branch of Sixteen Mile Creek and a tributary of the East Branch of Sixteen Mile Creek); 2) mapped 19<sup>th</sup> century structures (Sam Anderson's and John Hall's farmsteads); and, 3) previously registered archaeological sites (AjGw-60, AjGw-264, AjGw-320, AjGw-321 and AjGw-322).

A Stage 1 property inspection was also conducted to further evaluate the current conditions within the project area. Based on the information compiled in the background study and property inspection, the following recommendations are made:

- 1) The areas of woodlot, the tree farm and the manicured lawns have archaeological potential and require Stage 2 archaeological assessment (55.5%; 0.837 ha). In keeping with provincial standards, these unploughable areas are recommended for test pit survey using a 5 m transect interval.

- 2) The sloped areas (1.0%; 0.015 ha), low-lying and wet areas (0.8%; 0.016 ha), and the obviously disturbed areas (27.6%; 0.416 ha) are considered to be of low archaeological potential and were photo-documented and no further work is recommended.
- 3) The Trafalgar Road ROW and the Project area to the east of Trafalgar Road have been previously assessed and no further work is recommended (15.1%; 0.227 ha).
- 4) If the Project area is changed to incorporate lands not included in this report, additional archaeological assessment may be required.

These recommendations are subject to the conditions laid out in Section 7.0 of this report and to the Ministry of Heritage, Sport, Tourism and Culture Industries' review and acceptance of this report into the provincial register.



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### **Project Personnel**

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<b>Field Director:</b>	Liam Browne, M.A. (P1048)



**Stage 1 Archaeological Assessment  
Sun-Canadian Pipe Line  
NPS12 Pipeline Replacement (E16M)  
Part of Lot 4, Concessions 7 and 8 New Survey  
Geographic Township of Trafalgar (North)  
Now the Town of Milton  
Regional Municipality of Halton, Ontario**

## **1.0 PROJECT CONTEXT**

### **1.1 Development Context**

#### **1.1.1 Introduction**

Sun-Canadian Pipe Line Company Limited (SPCL) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton. SCPL is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way (ROW) within a new alignment to account for the installation of the pipe by a horizontal directional drill (HDD). Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board (OEB).

Timmins Martelle Heritage Consultants Inc. (TMHC) was contracted to carry out a Stage 1 archaeological assessment of lands with potential for impact by proposed pipeline maintenance in the Town of Milton. The project area is roughly 1.507 ha in size and falls within Lot 4, Concessions 7 and 8 New Survey, Geographic Township of Trafalgar (North), now Regional Municipality of Halton, Ontario. The project area consists of the Drill Entry and Drill Exit Areas point on either side of Trafalgar Road, a linear Pipe Laydown Area west of Trafalgar Road, and the Drill Path beneath Trafalgar Road, East Sixteen Mile Creek and its unnamed tributary. The Stage 1 archaeological assessment was undertaken as part of SCPL's submission of the OEB. All work was done in accordance with the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011). The purpose of the Stage 1 archaeological assessment was to establish whether there was potential for archaeological resources to exist within the project area.

All archaeological consulting activities were performed under the Professional Archaeological License of Matthew Beaudoin, Ph.D. (P324) and in accordance with the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011). Legal permission to enter and conduct all necessary fieldwork activities within the assessed lands was obtained by SCPL.



### ***1.1.2 Purpose and Legislative Context***

The Stage 1 archaeological assessment work was conducted in accordance with Section 4.3.4 Cultural Heritage Resources in the *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (OEB 2016). The purpose of a Stage 1 background study is to determine if there are known cultural resources within the proposed areas of impact or potential for such resources to exist. Subsequently, it can act as a planning tool by identifying areas of concern that, where possible, could be avoided to minimize environmental impact. It is also used to determine the need for a Stage 2 field assessment involving the search for archaeological sites. If significant sites are found, a strategy (usually avoidance, preservation or excavation) must be put forth for their mitigation.

The Regional Municipality of Halton's *Master Plan of Archaeological Resources* is a planning tool developed to implement these requirements by identifying areas where there is potential for archaeological sites to exist. If properties are deemed to have potential for archaeological sites, a Stage 1 and 2 archaeological assessment is required.

## **2.0 STAGE 1 BACKGROUND STUDY**

### **2.1 Research Methods and Sources**

A Stage 1 overview and background study was conducted to gather information about known and potential cultural heritage resources within the Project area. According to the *Standards and Guidelines*, a Stage 1 background study must include a review of:

- an up-to-date listing of sites from the Ontario's Past Portal for 1 km around the Project area;
- reports of previous archaeological fieldwork within a radius of 50 m around the Project area;
- topographic maps at 1:10,000 (recent and historical) or the most detailed scale available;
- historic settlement maps (e.g., historical atlas, surveys);
- archaeological management plans or other archaeological potential mapping (when available); and
- commemorative plaques or monuments on or near the Project area.

For this Project, the following activities were carried out to satisfy or exceed the above requirements:

- a database search was completed through the Ministry of Heritage, Sport, Tourism and Culture Industries' Past Portal (PastPort) system that compiled a list of registered archaeological sites within 1 km of the Project area (completed November 20<sup>th</sup>, 2020);



- a review of known prior archaeological reports for the Project area and adjacent lands  
(note: the Ministry of Heritage, Sport, Tourism and Culture Industries currently does not keep a publicly accessible record of archaeological assessments carried out in the Province of Ontario, so a complete inventory of prior assessment work nearby is not available);
- Ontario Base Mapping (1:10,000) was reviewed through ArcGIS and mapping layers provided by geographynetwork.ca;
- detailed mapping providing by the client was also reviewed;
- a series of historic maps and photographs was reviewed related to post-1800 land settlement; and,
- additional sources of information were also consulted, including modern aerial photographs, local history accounts, soils and physiography data provided by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), and both 1:50,000 (Natural Resources Canada) and finer scale topographic mapping.

There are no commemorative plaques or monuments within the immediate vicinity of the Project area.

The Project area falls within the Regional Municipality of Halton's *Master Plan of Archaeological Resources* (ASI 2008). This document provides an archaeological site potential model based on the mapped locations of registered archaeological sites, local environmental characteristics and other features indicating archaeological potential.

When compiled, this information was used to create a summary of the characteristics of the subject lands, in an effort to evaluate their archaeological potential. The Province (MTC 2011 – Section 1.3.1) has recently defined the criteria that identify archaeological potential as:

- previously identified archaeological sites;
- water sources;
  - primary water sources (lakes, rivers, streams, creeks);
  - secondary water courses (intermittent streams and creeks, springs, marshes, swamps);
  - features indicating past water sources (e.g., 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 topography, shorelines of drained lakes or marshes, cobble beaches);
  - accessible or inaccessible shoreline (e.g., high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh);
- elevated topography (e.g., eskers, drumlins, large knolls, plateau);
- 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 (e.g., migratory routes, spawning areas, prairie);
    - scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert);
    - early Euro-Canadian industry (e.g., fur trade, logging, prospecting, mining);
  - areas of early 19<sup>th</sup> century settlement. These include places of early military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks.
  - early historical transportation routes (e.g., trails, passes, roads, railways, portage routes);
  - property listed on a municipal register or designated under the *Ontario Heritage Act* or that is a federal, provincial, or municipal historic landmark or site; and
  - property that local histories or informants have identified with possible archaeological sites, historical events, activities or occupations.

In southern Ontario (south of the Canadian Shield), any lands within 300 m of any of the features listed above is considered to have potential for the discovery of archaeological resources.

Typically, a Stage 1 assessment will determine potential for Indigenous and historic era sites independently. This is due to the fact that lifeways varied considerably during these eras so that criteria used to evaluate potential for each type of site also varies.

It should be noted that some factors can also negate the potential for discovery of intact archaeological deposits. Subsection 1.3.2 of the *Standards and Guidelines* indicates that archaeological potential can be removed in instances where land has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. Major disturbances indicating removal of archaeological potential include, but are not limited to:

- quarrying;
- major landscaping involving grading below topsoil;
- building footprints; and
- sewage and infrastructure development.

Some activities (agricultural cultivation, surface landscaping, installation of gravel trails, etc.) may result in minor alterations to the surface topsoil but do not necessarily affect or remove archaeological potential. It is not uncommon for archaeological sites, including structural foundations, subsurface features and burials, to be found intact beneath major surface features like roadways and parking lots. Archaeological potential is, therefore, not removed in cases where there is a chance of deeply buried deposits, as in a developed or



urban context or floodplain where modern features or alluvial soils can effectively cap and preserve archaeological resources.

## **2.2 Project Context: Archaeological Context**

### ***2.2.1 Project Area: Overview and Physical Setting***

The Project area is roughly 1.5 hectares in size and falls within Lot 4, Concessions 7 and 8 New Survey, Geographic Township of Trafalgar (North), Halton County, Ontario. (Map 1 and 2). The Project area consists of the Drill Entry and Drill Exit Areas point on either side of Trafalgar Road, a linear Pipe Laydown Area west of Trafalgar Road, and the Drill Path beneath Trafalgar Road and the watercourses.

The Project area falls within the Peel Plain physiographic region, as defined by Chapman and Putnam (1984; Map 3). The Peel Plain is a relatively flat tract of clay soils that covers large portions of the Regional Municipalities of York, Peel, and Halton. The plain is dominated by till soils that contain large amounts of shale and limestone. The Project area occurs within a sand plain surrounded by bevelled till plains. The extreme southwestern end of the Project area falls within the bevelled till plain. The soil types within the Project area are Chinguacousy Clay Loam, Jeddo Clay Loam and Bottom Land (Map 4). The most prominent soil type is Chinguacousy Clay Loam, an imperfectly drained calcareous clay loam (Gillespie et al. 1971:27). To the west of Trafalgar Road, small pockets of Jeddo Clay Loam, which is a poorly drained soil, are present. The ravine associated with East Sixteen Mile Creek is identified as Bottom Land.

The Project area is located within the East Sixteen Mile Creek watershed (Map 5). East Sixteen Mile Creek is located west of Trafalgar Road between the Drill Entry Area and Drill Exit Area portions of the Project area. A tributary of East Sixteen Mile Creek is located approximately 100 m to the west of the western edge of the Project area. The Drill Entry Area is adjacent to a ravine which features two small, unnamed tributaries of East Sixteen Mile Creek.

A general reconstruction of 19<sup>th</sup>-century vegetation is made possible through the consultation of mapping which visually depicts the descriptive and anecdotal accounts contained in early surveyors' log books. The early 19<sup>th</sup>-century vegetation in both Lot 4, Concessions 7 and 8 have been described as predominantly maple-beech forest with hemlock and basswood (Findlay 1974).

### ***2.2.2 Summary of Registered or Known Archaeological Sites***

According to the Ministry of Heritage, Sport, Tourism and Culture Industries' registered site database (accessed November 20<sup>th</sup>, 2020), there are 20 registered archaeological sites within 1 km of the Project area.



Of the 20 registered sites, four are 19<sup>th</sup>-century settler homesteads, one is a Late Archaic period Indigenous findspot, one is Late Archaic period Indigenous artifact scatter, one is a Middle Archaic period Indigenous findspot, one is a Late Archaic and Early Woodland period Indigenous artifact scatter, and the remaining 12 are Indigenous findspots or artifact scatters which cannot be dated. A total of five sites are located within 300 m of the Project area: AjGw-60, AjGw-264, AjGw-320, AjGw-321 and AjGw-322.

The nearest of these sites is AjGw-264, which is a 19<sup>th</sup>-century homestead located approximately 125 m south of the Drill Entry Area. This site has been fully mitigated and its former location falls within what is now a large artificial pond.

**Table 1: Registered Archaeological Sites within 1 km of the Project Area**

Borden Number	Site Name	Time Period	Affinity	Site Type
AjGw-60	Robert Plant	19 <sup>th</sup> -Century	Settler	Homestead
AjGw-59		Pre-Contact	Indigenous	Unknown
AjGw-58		Late Archaic	Indigenous	Scatter
AjGw-57		Pre-Contact	Indigenous	Findspot
AjGw-569		Middle Archaic	Indigenous	Findspot
AjGw-568		Pre-Contact	Indigenous	Scatter
AjGw-566	H1	19 <sup>th</sup> -Century	Settler	Homestead
AjGw-56		Pre-Contact	Indigenous	Scatter
AjGw-55		Pre-Contact	Indigenous	Findspot
AjGw-52		Pre-Contact	Indigenous	Scatter
AjGw-51	Nursery 2	Pre-Contact	Indigenous	Findspot
AjGw-50	Nursery 1	Pre-Contact	Indigenous	Scatter
AjGw-393	York II	Pre-Contact	Indigenous	Unknown
AjGw-392	York I	Pre-Contact	Indigenous	Unknown
AjGw-323	Gruehl III	Late Archaic	Indigenous	Findspot
AjGw-322	Gruehl II	Pre-Contact	Indigenous	Scatter
AjGw-321	Gruehl I	Pre-Contact	Indigenous	Scatter
AjGw-320	Hall II	19 <sup>th</sup> -Century	Settler	Homestead
AjGw-264	Hall I	19 <sup>th</sup> -Century	Settler	Homestead
AjGw-19	Nielsen	Late Archaic, Early Woodland	Indigenous	Scatter

### 2.2.3 Summary of Past Archaeological Investigations within 50m

During the course of this study, records of four archaeological investigations within 50 m of the Project area were identified. Each of these investigations involved the assessment of areas that fall within the current Project area. However, it should be noted that the Ministry of Heritage, Sport, Tourism and Culture Industries currently does not provide an inventory of archaeological assessments to assist in this determination.

In 1996, Leslie Currie undertook a Stage 1 assessment of the east and west Trafalgar Road right-of-way (ROW) between Highway 403 and a point 500 m north of the intersection of Trafalgar Road and Britannia Road ahead of a proposed widening of Trafalgar Road from two lanes to four. The Stage 1 background research determined that



the Project area retained archaeological potential and would therefore require a Stage 2 survey. In keeping with provincial standards, any ploughed agricultural lands were recommended for pedestrian survey, using a 5 m transect interval. Any non-ploughable lands are recommended for a test pit survey at a 5 m transect interval. The details of this Stage 1 archaeological assessment were presented in a report entitled *The Stage 1 Archaeological Assessment, Trafalgar Road (RR3) Widening and Reconstruction, Highway 403 to North of Britannia Road, Regional Municipality of Halton* (Currie 1996; licensee Leslie Currie; PIF 95-073).

In 1996, Leslie Currie and Associates undertook a Stage 2 assessment of the east and west Trafalgar Road ROW between Highway 403 and a point 500 m north of the intersection of Trafalgar Road and Britannia Road ahead of a proposed widening of Trafalgar Road from two lanes to four. The Stage 2 assessment methodology consisted of a pedestrian survey at a 5 m transect interval of any ploughed agricultural lands and a test pit survey at a 5 m transect interval of any non-ploughable lands. The area assessed included the portions of the Drill Path within the current Trafalgar Road ROW (Maps 6 and 12). The Stage 2 survey resulted in the discovery of three archaeological sites: AjGw-263 (Site 1), AjGw-264 (Site 2), and AjGw-265 (Smith). AjGw-263 and AjGw-264 were both recommended for Stage 3 assessment to evaluate their cultural and archaeological significance as well as to identify the portion of these sites which would be impacted by the road widening. AjGw-265 was recommended for Stage 3 and Stage 4 assessment to evaluate their cultural and archaeological significance as well as to identify the portion of these sites which would be impacted by the road widening. According to MHSTCI's registered site database AjGw-264 is located approximately 125 m south of the Drill Entry Area portion of the current project area. The details of this Stage 2 archaeological assessment were presented in a report entitled: *The Stage 2 Archaeological Assessment, Trafalgar Road (RR3) Widening and Reconstruction, Highway 403 to North of Britannia Road, Regional Municipality of Halton* (Leslie Currie and Associates 1996; licensee Leslie Currie; PIF 96-052).

In 2001, Archaeological Assessments Ltd. undertook a Stage 1-2 assessment of an 80 hectare parcel of land forming part of Lots 4 and 5, Concession 8 New Survey, Geographic Township of Trafalgar (North) prior to the development of the land for use as a golf course (SD Map 1). The Stage 1 background research determined that the property retained archaeological potential and was therefore was subject to a Stage 2 survey. The area assessed included the entire Drill Entry Area portion of the current Project area as well as the very northeastern end of the Drill Path (Map 12). As the property at that time consisted of three separate agricultural fields it was assessed through a pedestrian survey at 5 m transect intervals. The Stage 2 survey resulted in the identification of 12 archaeological locations including: one 19<sup>th</sup> century homestead (AjGw-320, Featherstone/Hall 2); two Indigenous campsites of unknown age (AjGw-321, Greuhl I; AjGw-321, Greuhl II); one Late Archaic findspot (AgGw-323); and eight non-diagnostic Indigenous findspots. The survey also resulted in the relocation of AjGw-64 (Hall); a 19<sup>th</sup> century homestead site previously identified in 1996. AjGw-64 (Hall), AjGw-320 (Featherstone/Hall 2), AjGw-321 (Greuhl I) and AjGw-321 (Greuhl II) were recommended



for further investigation. The details of this Stage 1-2 archaeological assessment were presented in a report entitled *The Stage 1-2 Archaeological Assessment of the Proposed Trafalgar-Britannia Golf Course, Part of Lots 4 & 5, Concession 8, Town of Milton, Halton Region* (Archaeological Assessments Ltd. 2001; licensee Richard Sutton; CIF 2001-035-010).

In 2005, Archaeological Assessments Ltd. completed the Stage 4 excavations of AjGw-264 and AjGw-320 that they previously identified within the Britannia Links Golf Course. This work consisted of the mechanical topsoil removal and feature documentation at both 19<sup>th</sup>-century sites. Both sites were entirely excavated and were of no further archaeological concern. The details of this Stage 4 archaeological assessment were presented in a report entitled *The Stage 4 Excavation of the Hall Site (AjGw-264) and the Featherston Site (AjGw-320), Britannia Golf Course, Town File LOPA-01/00 and Z-03/00 Revised, Town of Milton, Halton Region* (Archaeological Assessments Ltd. 2007; licensee Richard Sutton; CIF P013-147).

#### **2.2.4 Dates of Archaeological Fieldwork**

The Stage 1 property inspection was conducted on November 19<sup>th</sup>, 2020 under sunny and clear weather conditions. The field director was Liam Browne (P1048).

### **2.3 Project Context: Historical Context**

#### **2.3.1 Indigenous Settlement in Milton**

There is archaeological evidence of Indigenous settlement in Milton and vicinity since the time of glacial retreat some 12,000 years ago through to the modern era. Nonetheless, our knowledge of past Indigenous land use in the area is incomplete due primarily to a lack of archeological investigation of many areas prior to urban development. Nonetheless, using province-wide and region-specific data, a general model of Indigenous settlement in the area can be proposed. The following paragraphs provide a basic textual summary of the known general cultural trends and archaeological periods and a tabular summary appears in Table 2.



**Table 2: Cultural Chronology for Indigenous Settlement in Milton**

Period			Time Range (circa)	Diagnostic Features	Complexes
Paleo	Early		9000-8400 B.C.	Fluted projectile points	Gainy, Barnes, Crowfield
	Late		8400-8000 B.C.	Non-fluted and lanceolate points	Holcombe, Hi-Lo, Lanceolate
Archaic	Early		8000-6000 B.C.	Serrated, notched, bifurcate base points	Nettling
	Middle		6000-2500 B.C.	Stemmed, side & corner notched points	Brewerton, Otter Creek, Stanley/Neville
	Late		2000-1800 B.C.	Narrow points	Lamoka
			1800-1500 B.C.	Broad points	Genesee, Adder Orchard, Perkiomen
			1500-1100 B.C.	Small points	Crawford Knoll
	Terminal		1100-950 B.C.	First true cemeteries	Hind
Woodland	Early		950-400 B.C.	Expanding stemmed points, Vinette pottery	Meadowood
	Middle		400 B.C.- A.D. 500	Dentate, pseudo-scallop pottery	Saugeen
	Transitional		A.D. 500-900	First corn, cord-wrapped stick pottery	Princess Point
	Late		A.D. 900-1300	First villages, corn horticulture, longhouses	Glen Meyer, Pickering
			A.D. 1300-1400	Large villages and houses	Uren, Middleport
			A.D. 1400-1650	Tribal emergence, territoriality	Neutral Iroquois, Wendat
Contact		Indigenous	A.D. 1650 - present	Treaties, mixture of Indigenous & European items	Mississauga, Six Nations
		Settler	A.D. 1796 - present	English goods, homesteads	European settlement, pioneer life

### *Paleo Period*

The first human populations to inhabit the area came to the region between 10,000 and 12,000 years ago, coincident with the end of the last period of glaciation. Climate and environmental conditions were significantly different than they are today; local environs would not have been welcoming to anything but short-term settlement. Termed Paleo by archaeologists, Ontario's first peoples would have crossed the landscape in small groups (i.e., bands or family units) searching for food, particularly migratory game species. In this area, caribou may have provided the staple of Paleo diet, supplemented by wild plants, small game and fish. Given the low density of populations on the landscape at this time and their mobile nature, Paleo sites are small and ephemeral. They are usually identified by the presence of distinctive fluted projectile points, usually manufactured on high quality raw materials, including Onondaga chert from the Niagara Escarpment and Fossil Hill chert from Blue Mountains. Paleo sites have commonly been found in association with relic glacial lakeshores throughout Ontario.

### *Archaic Period*

Settlement and subsistence patterns changed significantly during the Archaic period as both the landscape and ecosystem adjusted to the retreat of the glaciers. Building on earlier patterns, early Archaic populations continued the mobile lifestyle of their predecessors. Through time and with the development of more resource rich local environments, these groups gradually reduced the size of the territories they exploited on a regular basis. A seasonal pattern of warm season riverine or lakeshore settlements and interior cold weather occupations has been documented in the archaeological record. The large cold-weather mammals that formed the basis of the Paleo subsistence pattern became extinct or moved northward with the onset of warmer climate conditions. Thus, Archaic populations had a more varied diet, exploiting a range of plant, bird, mammal and fish





species. Over time, reliance on specific food resources like fish, deer and nuts became more pronounced and the presence of more hospitable environments and resource abundance led to the expansion of band and family sizes. This is evident in the archaeological record in the form of larger sites and aggregation camps, where several families or bands would come together in times of plenty. The change to more preferable environmental circumstances led to a rise in population density. As a result, Archaic sites are more plentiful than those from the earlier period. Artifacts typical of these occupations include a variety of stemmed and notched projectile points, chipped stone scrapers, ground stone tools (e.g., celts, adzes) and ornaments (e.g., bannerstones, gorgets), bifaces or tool blanks, animal bone (where and when preserved) and waste flakes, a by-product of the tool making process.

#### *Early, Middle and Transitional Woodland Periods*

Significant changes in cultural and environmental patterns are witnessed in the Early, Middle and Transitional Woodland periods (ca. 950 B.C. to A.D. 1000). Occupations became increasingly more permanent in this period, culminating in major semi-permanent villages by 1,000 years ago. Archaeologically, one of the most significant changes by Woodland times is the appearance of artifacts manufactured from modeled clay and the emergence of more sedentary villages. The Woodland Period is often defined by the occurrence of pottery, storage facilities and residential areas similar to those that define the early agricultural or Neolithic period in Europe. The earliest pottery was crudely made by the coiling method and early house structures were simple oval enclosures. Both the Early and Middle Woodland sub-periods are characterized by an elaborate burial complex that in some areas in Ontario involved the construction of large burial mounds. Trade in exotic items, including rare stone and shell objects, became common at this time, reflecting interconnections between Ontario populations and those in the Ohio and Mississippi river valleys to the south.

#### *Late Woodland Period*

Beginning circa A.D. 1000 the archaeological record documents the emergence of more substantial, semi-permanent settlements and the adoption of corn horticulture. These developments are most often associated with Iroquoian-speaking populations, the ancestors of the Wendat (Huron), Tionontati (Petun) and Attawandaron (Neutral) nations who were known to have resided in the province at the time of the arrival of the first European explorers and missionaries. Iroquoian villages incorporated a number of longhouses, multi-family dwellings that contained several families related through the female line. Precontact Iroquoian sites may be identified by a predominance of well-made pottery decorated with various simple and geometric motifs, triangular projectile points, clay pipes and ground stone artifacts. Sites post-dating European contact are recognized through the appearance of various items of European manufacture. The latter include materials acquired by trade (e.g., glass beads, copper/brass kettles, iron axes, knives and other metal implements) in addition to the personal items of European visitors and Jesuit missionaries (e.g., finger rings, stoneware, rosaries, and glassware).



Large Iroquoian village sites, many presumably Huron-Wendat, are known along the upper and middle areas of the Humber and Don rivers, which clearly demonstrates the Iroquoian use of the waterfront on the north shore of Lake Ontario prior to European contact. When European explorers and missionaries arrived in Ontario in the 17th century, the Huron-Wendat no longer inhabited the lakeshore and instead occupied a vast area between Lake Simcoe and Georgian Bay. By 1650, many Wendat had fled their 17<sup>th</sup> century homeland due to the onset of epidemic disease and increasing raids by Five Nations Iroquois groups who had established an increasing presence along Lake Ontario. At least two major Seneca villages were established on the Rouge River later that century. At the same time, Algonquian-speaking populations were utilizing the watershed for hunting and trapping.

By the 17th century, the Seneca no longer inhabited the Lake Ontario shores and the Algonquin-speaking Mississaugas began moving southward into the area. It was the Mississaugas who had settled the area by the time the British arrived in the late 18th century and from whom the Crown secured land for settlement.

### ***2.3.2 19<sup>th</sup> Century and Municipal Settlement***

#### *Halton County*

Halton County was named after Major William Mathew Halton, a British Army officer, who was appointed in 1805 as Secretary to Lieutenant-Governor Sir Francis Gore. Settlers started to arrive in the county in the early 1780s. The south portion of the county was first settled by United Empire Loyalists, while the north part mainly by immigrants from the British Isles. Along with Wentworth County, Halton County was created in 1816 as part of the Gore District consisting of the townships of Trafalgar, Nelson, Flamborough and Beverly, among other lands and was further expanded in 1821. When the Gore District was abolished in 1850, some townships were withdrawn from its boundaries with only the townships of Esquesing, Trafalgar, Nassageweya and Nelson remaining. As settlement progressed, several towns and villages developed mainly within the south portion of the county (Walker & Miles 1877).

#### *Township of Trafalgar and Crown – Indigenous Peoples Treaty Context*

In 1805 a treaty was signed between the British Crown and the Anishnabeg (Mississaugas) for an estimated area of 84,000 acres, with a mile-wide strip of land on either side of the Credit River reserved for the Anishnabeg (Walker and Miles 1877:60). The Anishnabeg occupied the lands along Lake Ontario during the 17<sup>th</sup> and 18<sup>th</sup> centuries. The lands were surveyed in 1806 by Samuel Street Wilmot and divided into the townships of Toronto, Trafalgar and Nelson. The first European settlement in the Township of Trafalgar is said to have taken place in 1807. In 1818 William Claus met with the Anishnabeg to propose the purchase of an additional 648,000 acres of land which lay to the north of the land previously purchased in 1805. Faced with the continual inflow of settlers to the lands north of Lake Ontario and the accelerating erosion of their traditional





economy and resource base the Chief Ajetance, on behalf of the Anishnabeg, agreed to cede these lands to the Crown in return for £522.10 of goods paid annually. The treaty ceding these lands is known as the Ajetance Treaty, No. 19 (1818) (Durcic 2017). A portion of the land purchased was incorporated into an expanded Trafalgar Township, this land was known as the “new survey.” Like the County of Halton in general, the township was settled by immigrants who came directly from the British Isles or by United Empire Loyalist families who journeyed here from Niagara (Clarke 1955:11). Early settlement focused on Sixteen Mile Creek which provided a source of power for grist and saw mills. The earliest settlers concentrated in the then tiny communities like Milton and Oakville. By 1817 the township boasted 548 occupants. The mills soon attracted both industrial and residential growth. Smaller communities including Palermo, Postville (later Trafalgar), Sheridan, Proudfoot Hollow, Merton, Bronte Station, Glenorchy, Ash, Snider, Omaha, Auburn, Drumquin and the Boyne soon appeared through the township. By mid-century, the population of Trafalgar Township grew to over 4,000 (Walker and Miles 1877:59).

### *Town of Milton*

The earliest settlers to what would come to be known as Milton were Jasper Martin and his wife Sarah who emigrated from England in 1821. After constructing a grist mill on Sixteen Mile Creek, Martin went on to build a sawmill, ashery, and small store, thus establishing himself as one of the most important early pioneers in the entire county. This is evidenced by the community’s earliest moniker, “Martin’s Mills”. Following his death in 1833 Jasper’s four sons suggested the town’s name be changed to Milton, after the renowned poet, which was obviously well received (Cook 1977:4-5). It should be noted that Milton hosted the first (provisional) County Council in July 1853 (Walker and Miles 1877:54).

### **2.3.3 Review of Historic Maps and Imagery**

The project area falls within Lot 4, Concessions 7 and 8 New Survey, Geographic Township of Trafalgar (North), now Regional Municipality of Halton, Ontario.

According to the 1860 Tremaine Map (Map 7), the northeastern half of Lot 4, Concession 7 is owned by Sam Anderson. The southwestern half of Lot 4, Concession 7 is owned by Margaret Ford. The southwestern ¼ of Lot 4, Concession 8 is owned by John Hall. No structures are depicted on either property or within the vicinity of the project area. Trafalgar Road is shown as open at this time. The East Branch of Sixteen Mile Creek is shown within the Drill Path portion of the project area. The community of Drumquin is shown approximately 600 m northwest of the project area. The only structure depicted in the community is an inn is at the eastern corner of the intersection of Trafalgar Road and Britannia Road.

According to the 1877 Illustrated Historical Atlas Map (Map 8), the northeastern half of Lot 4, Concession 7 is owned by Sam Anderson. Anderson’s home and orchard are shown immediately to the southwest of Trafalgar Road near to the centre of his portion of



the lot. The southwestern half of Lot 4, Concession 7 is owned by Hamilton Ford. Ford's home and orchard are shown near to the centre of his portion of the lot, set back a distance from 6<sup>th</sup> Line. The southwestern ¼ of Lot 4, Concession 8 is owned by John R. Hall. Hall's home, a secondary structure and orchard are shown to the northeast of Trafalgar Road near to the centre of his portion of the lot. Anderson and Hall's structures are both within 300 m of the project area. There are no additional structures depicted within 300 m of the project area on adjacent lots. An unnamed tributary of the East Branch of Sixteen Mile Creek is shown approximately 65 m northwest of the Drill Entry Area portion of the project area. The community of Drumquin is shown approximately 600 m northwest of the project area. The community has grown since the drafting of the 1860 Tremaine Map (Map 7), now a post office and structures are depicted at all four corners of the intersection of Trafalgar Road and Britannia Road.

Several historical aerial photographs of the project area were also reviewed. The 1954 aerial photograph (Map 9) depicts the area currently occupied by the tree farm as a ploughed agricultural field. The project area runs along the northern edge of the field. The East Sixteen Mile Creek ravine area appears largely as it does today. It is difficult to determine the land use of the area between East Sixteen Mile Creek and Trafalgar Road however beyond the area immediately to the northeast of the creek it appears to be a ploughed agricultural field bounded by a treeline. At this time the dwelling at 5636 Trafalgar Road has not yet been built. The area to the northeast of Trafalgar Road appears to be a ploughed agricultural field. Trafalgar Road at this time is a two-lane roadway. The 2010 aerial photograph (Map 10) depicts the reforestation of the area between East Sixteen Mile Creek and Trafalgar Road as well as the dwelling at 5636 Trafalgar Road. The deposition of a large amount of soil in the Drill Entry Area to the northeast of Trafalgar Road is apparent. The 2015 aerial photograph (Map 11) depicts the conversion of the ploughed agricultural field in the southwestern half of the project area to a tree farm. A roadway is shown running along the northern edge of the former agricultural field.

### **3.0 STAGE 1 PROPERTY INSPECTION**

A Stage 1 property inspection was conducted to document and evaluate the current conditions of the project area.

The Pipe Laydown Area contains a paved roadway running northeast-southwest with a woodlot on its northern side and a planted tree farm on its southern side (Images 1 and 2). The Drill Exit contains the paved roadway and a larger section of the tree farm (Image 3). The Drill Path contains a portion of the paved roadway, as well as an open area atop a steep slope leading down to the East Sixteen Mile Creek ravine (Image 4). The ravine at the base of the slope is dry and features some scrub brush (Image 5). The Drill Path crosses East Sixteen Mile Creek and runs along its northern bank before crossing the unnamed tributary of East Sixteen Mile Creek (Image 6). The area to the east of the creek is comprised of a woodlot (Image 7). A steep slope leads down to this woodlot from the area of the dwelling at 5636 Trafalgar Road (Image 8). The portion of the Drill Path within the 5636 Trafalgar Road is landscaped but it not clear that archaeological potential has been



removed from this area (Image 9). The northeastern end of the Drill Path and the Drill Entry Area on the eastern side of Trafalgar Road is artificially built up and is now a significantly elevated area (Image 10).

The results of the Stage 1 archaeological assessment, as well as the location and orientation of report photographs, are presented on Map 12. The proponent map was provided as a KMZ files, so we have not presented the Stage 1 results on the proponent mapping.

#### 4.0 ANALYSIS AND CONCLUSIONS

As noted in Section 2.1, the Province of Ontario has identified numerous factors that signal the potential of a property to contain archaeological resources. The Stage 1 background study included a review of current land use, historic and modern maps, registered archaeological sites and previous archaeological studies, past settlement history for the area and a consideration of topographic and physiographic features, soils and drainage. According to the map-based review and background research, potential for the discovery of archaeological sites is indicated by the proximity to (within 300 m):

- 1) a watercourse (East Sixteen Mile Creek and a tributary of the East Branch of Sixteen Mile Creek);
- 2) mapped 19<sup>th</sup> century structures (Sam Anderson's and John Hall's farmsteads); and,
- 3) previously registered archaeological sites (AjGw-60, AjGw-264, AjGw-320, AjGw-321 and AjGw-322).

The Stage 1 property inspection visually confirmed that the areas of woodlot, the planted tree farm area and the ravine within the Pipe Laydown Area, the Drill Exit Area and the Drill Path have archaeological potential and require Stage 2 archaeological assessment (55.5%; 0.837 ha). The sloped areas (1.0%; 0.015 ha), low-lying and wet areas (0.8%; 0.016 ha), and the obviously disturbed areas (27.6%; 0.416 ha) are considered to be of low archaeological potential and were photo-documented and no further work is recommended. The Trafalgar Road ROW and the Project area to the east of Trafalgar Road have been previously assessed and no further work is recommended (15.1%; 0.227 ha).

**Table 3: Documentary Records**

<b>Field Notes and Field Maps</b>	Dated November 19 <sup>th</sup> , 2020
<b>Photo Catalogue</b>	September 22 <sup>nd</sup> , 2020 (27 digital photos)
<b>Location of Records</b>	1600 Attawandaron Road, London, Ontario N6G 3M6



## **5.0 RECOMMENDATIONS**

Based on the information compiled in the background study and property inspection, the following recommendations are made:

- 1) The areas of woodlot, the tree farm and the manicured lawns have archaeological potential and require Stage 2 archaeological assessment (55.5%; 0.837 ha). In keeping with provincial standards, these unploughable areas are recommended for test pit survey using a 5 m transect interval.
- 2) The sloped areas (1.0%; 0.015 ha), low-lying and wet areas (0.8%; 0.016 ha), and the obviously disturbed areas (27.6%; 0.416 ha) are considered to be of low archaeological potential and were photo-documented and no further work is recommended.
- 3) The Trafalgar Road ROW and the Project area to the east of Trafalgar Road have been previously assessed and no further work is recommended (15.1%; 0.227 ha).
- 4) If the Project area is changed to incorporate lands not included in this report, additional archaeological assessment may be required.

These recommendations are subject to the conditions laid out in Section 7.0 of this report and to the Ministry of Heritage, Sport, Tourism and Culture Industries' review and acceptance of this report into the provincial register.



## **6.0 SUMMARY**

Timmins Martelle Heritage Consultants Inc. (TMHC) was contracted to carry out a Stage 1 archaeological assessment of lands with potential for impact by proposed pipeline maintenance in the Town of Milton. The project area is roughly 1.507 ha in size and falls within Lot 4, Concession 7 and Lot 4, Concession 8 New Survey, Geographic Township of Trafalgar (North), now Regional Municipality of Halton, Ontario. The project area consists of the Drill Entry and Drill Exit Areas point on either side of Trafalgar Road, a linear Pipe Laydown Area west of Trafalgar Road, and the Drill Path beneath Trafalgar Road, East Sixteen Mile Creek and its unnamed tributary. The Stage 1 archaeological assessment was undertaken as part of SCPL's emerging Indigenous relations program in advance of the proposed maintenance. Background research indicated that the project area was in proximity to features signalling archaeological potential and a Stage 1 property inspection was undertaken. The Stage 1 property inspection visually confirmed that the areas of woodlot, the planted tree farm area and the ravine within the Pipe Laydown Area, the Drill Exit Area and the Drill Path have archaeological potential and require Stage 2 archaeological assessment (55.5%, 0.837 ha). The sloped areas (1.0%, 0.015 ha) consisting of the steep slope leading down to the East Sixteen Mile Creek ravine and the steep slope leading down from 5636 Trafalgar Road within the Drill Path are considered to be of low archaeological potential. The low-lying and wet areas (0.8%, 0.016 ha) within the Drill Path associated with courses of East Sixteen Mile Creek and the tributary of the East Branch of Sixteen Mile Creek are considered to be of low archaeological potential. The sections of paved roadway within the Pipe Laydown Area, the Drill Exit Area and the Drill Path have been previously disturbed (27.6%, 0.416 ha). The artificially built up area on the eastern side of Trafalgar Road within the Drill Path and the Drill Entry Area and the western ROW of Trafalgar Road have been previously assessed (15.1%, 0.227 ha).



## **7.0 ADVICE ON COMPLIANCE WITH 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*, R.S.O 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 fieldwork and report recommendations ensure the conservation, protection and preservation 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 fieldwork 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 (i.e., unknown or deeply buried) 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 Section 48(1) of the *Ontario Heritage Act*.

The *Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33* requires that any person discovering human remains must notify the police or coroner and the Registrar of Burial Sites, War Graves, Abandoned Cemeteries and Cemetery Closures, Ontario Ministry of Government and Consumer Services. Nancy Watkins is the Registrar. Her telephone number is 416 212-7499 and her e-mail address is Nancy.Watkins@ontario.ca.



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## **9.0 IMAGES**



**Image 1: Woodlot, Tree Farm and Paved Roadway Conditions (looking northeast)**



**Image 2: Paved Surface of Roadway in Pipe Laydown Area, Drill Exit Area and Drill Path**





**Image 3: Overview of Woodlot, Paved Roadway and Tree Farm Conditions (looking northeast)**



**Image 4: Top of Slope Leading Down to East Sixteen Mile Creek (looking northeast)**





**Image 5: Ravine and Slope Leading Down to East Sixteen Mile Creek (looking northeast)**



**Image 6: East Sixteen Mile Creek (looking northeast)**





**Image 7: Woodlot East of East Sixteen Mile Creek (looking northeast)**



**Image 8: Steeply Slope from 5636 Trafalgar Road (looking north)**





**Image 9: 5636 Trafalgar Road (looking southwest)**

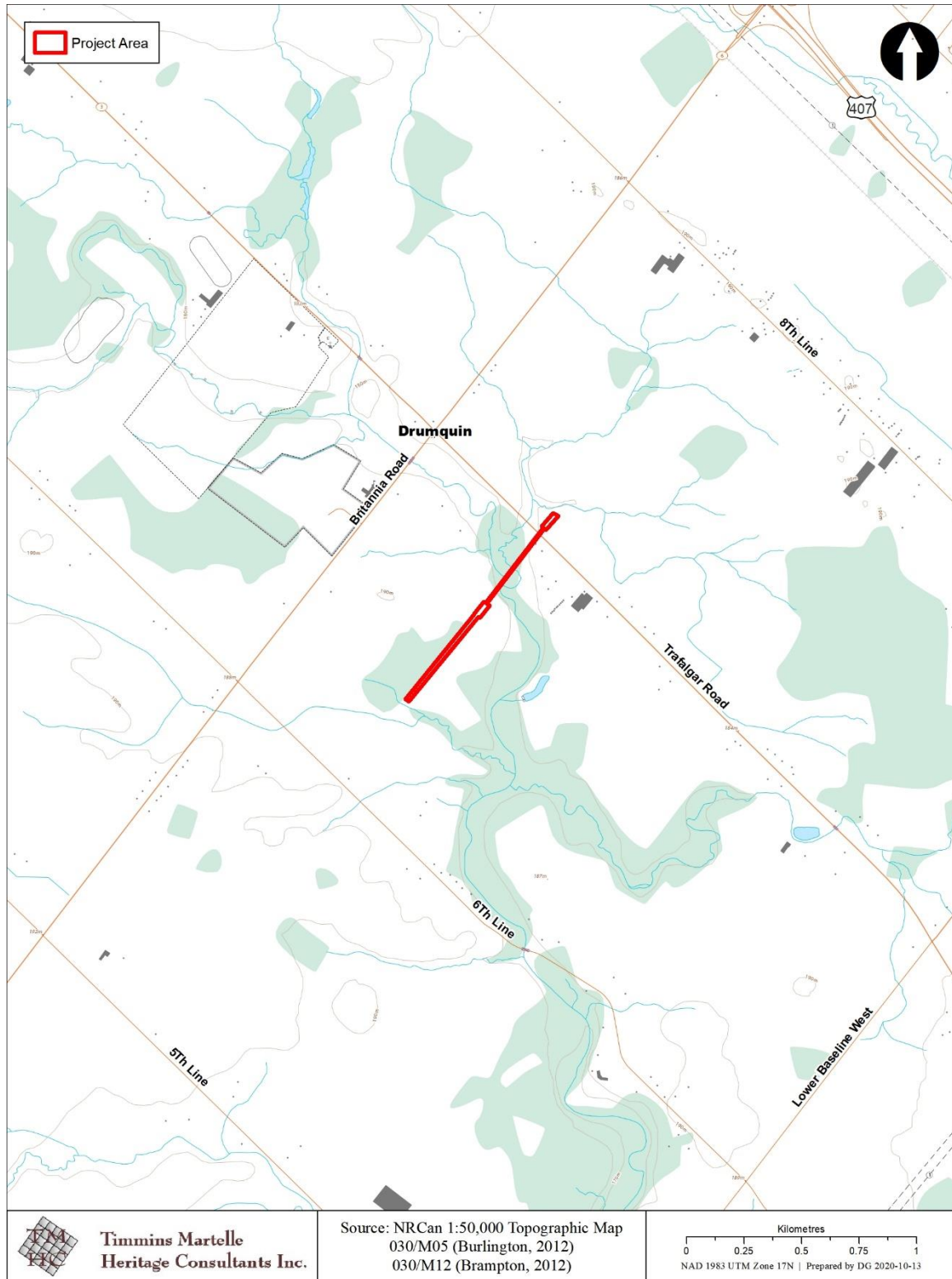


**Image 10: Previously Assessed Area East of Trafalgar Road (looking northeast)**



## **10.0 MAPS**





**Map 1: Location of the Project Area in Milton, ON**

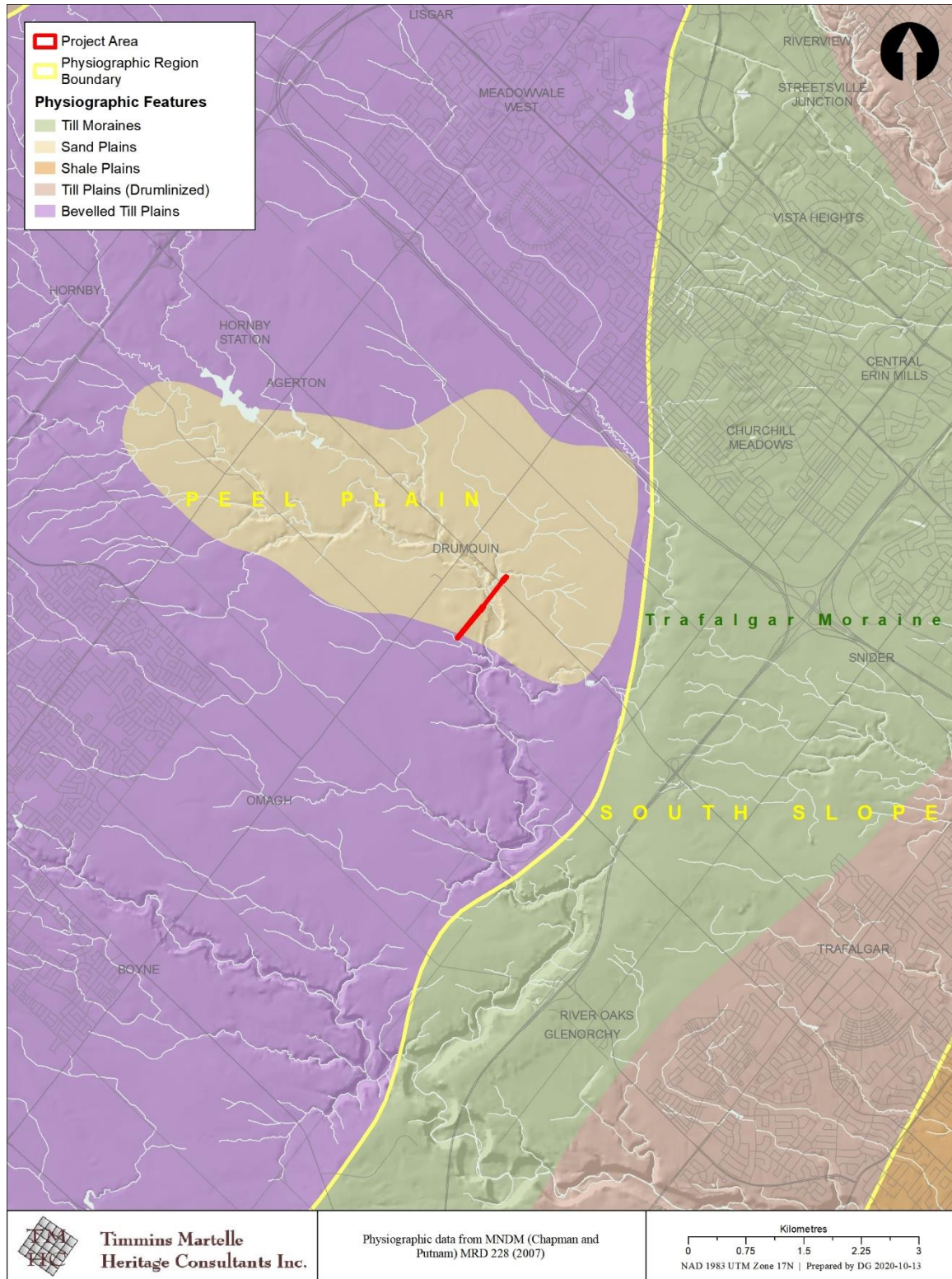




**Map 2: Aerial Photograph Showing the Location of the Project Area in Milton**

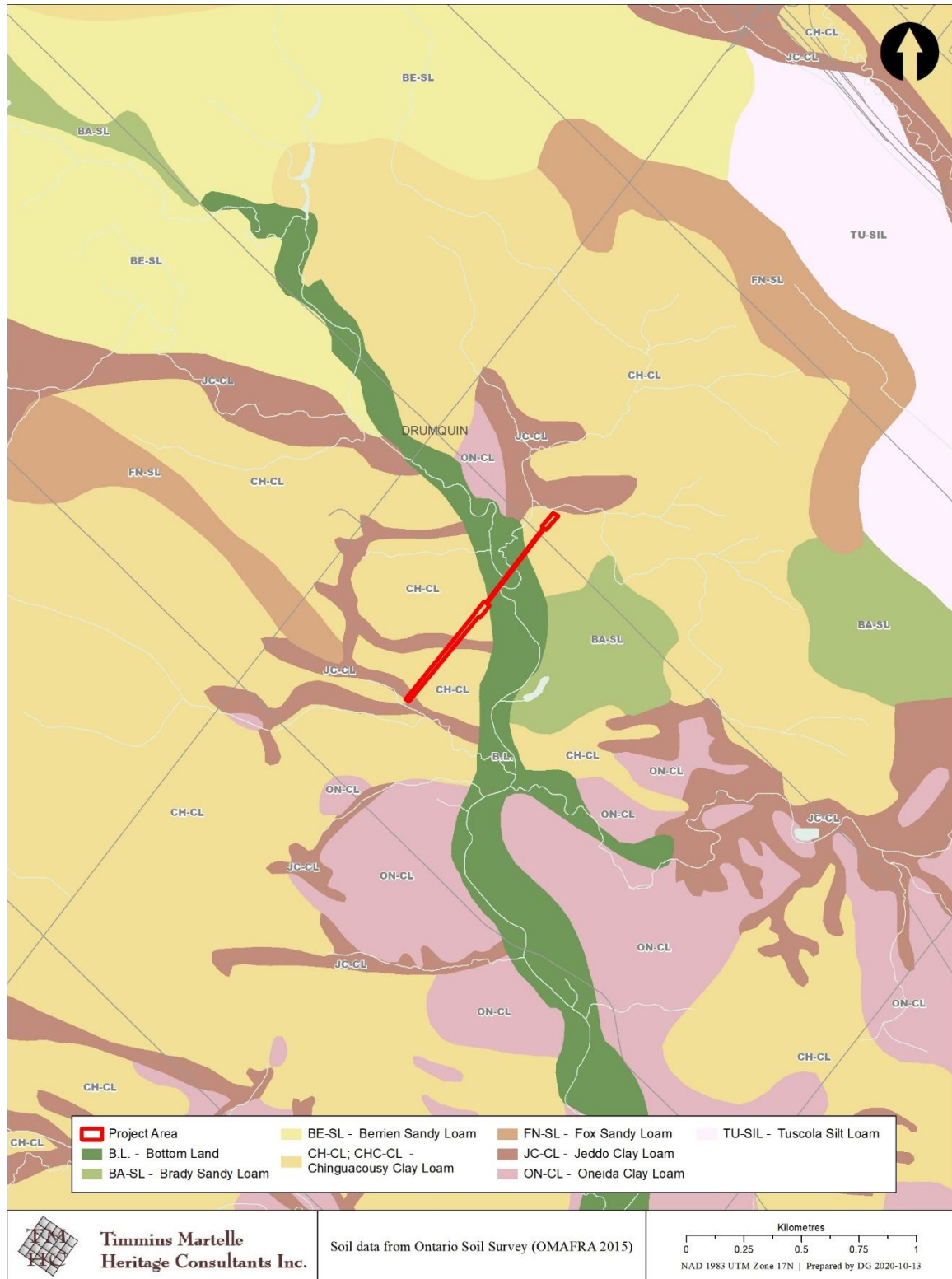






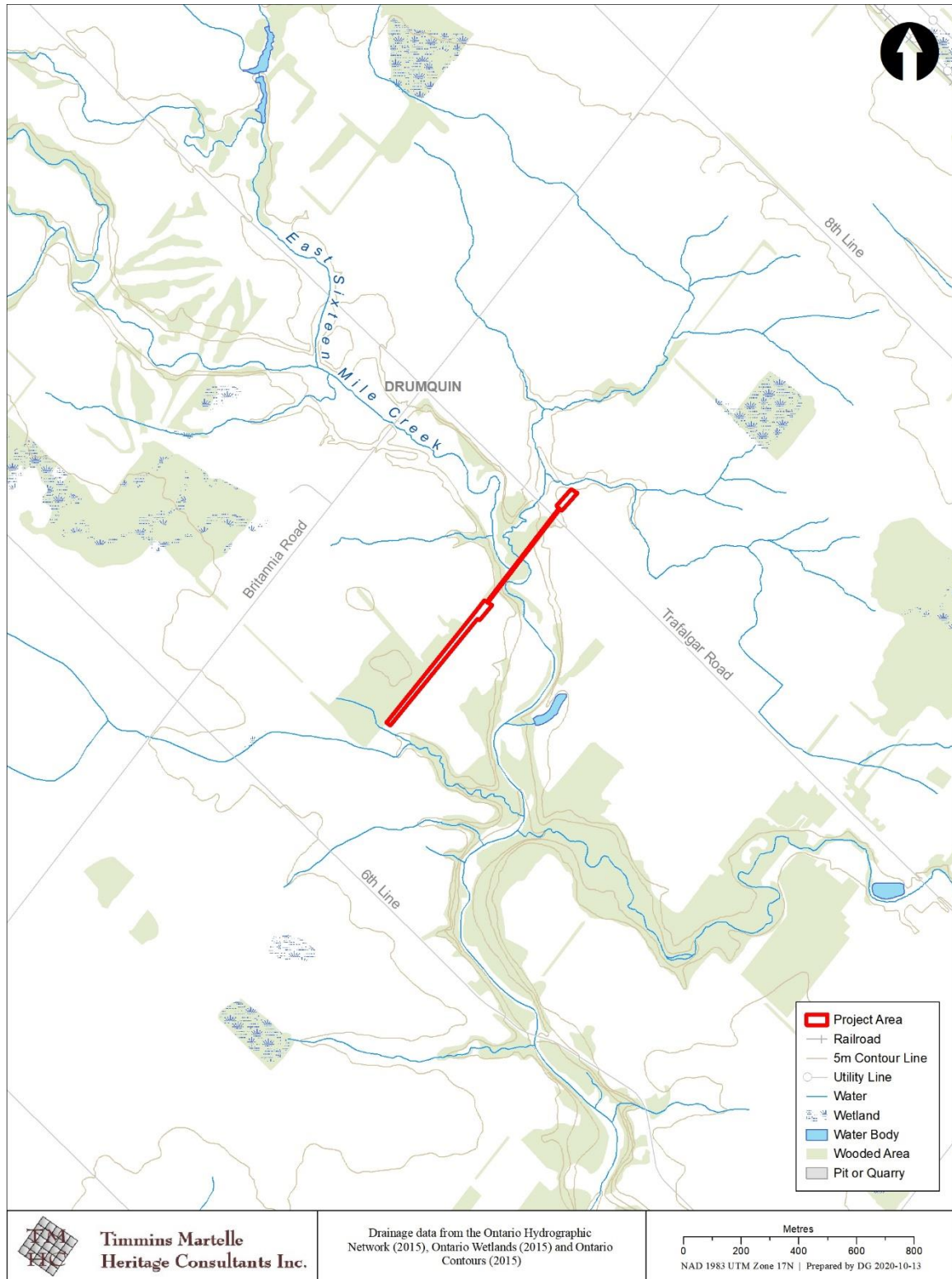
**Map 3: Physiography Within the Vicinity of the Project Area**



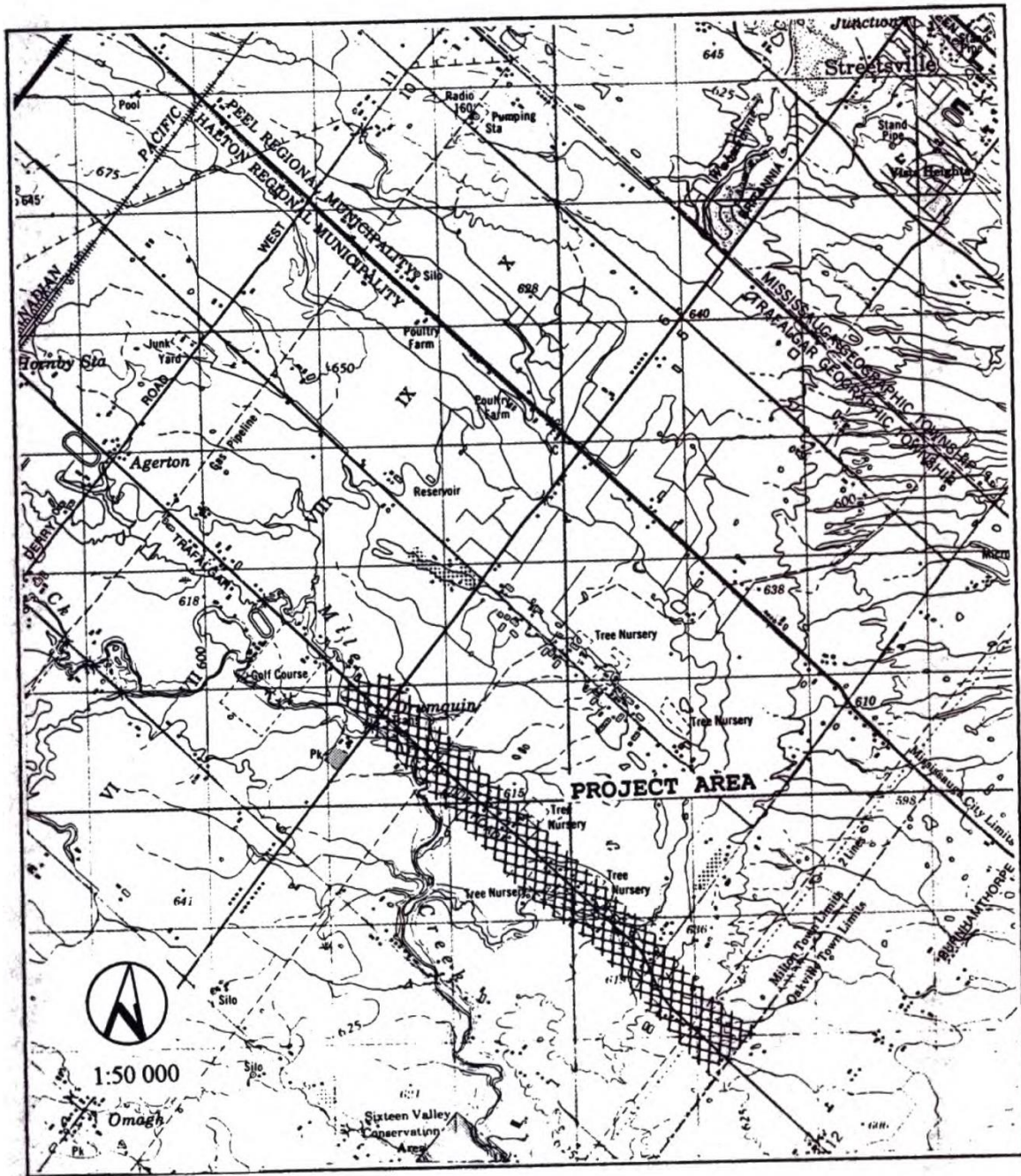


**Map 4: Soils Within the Vicinity of the Project Area**





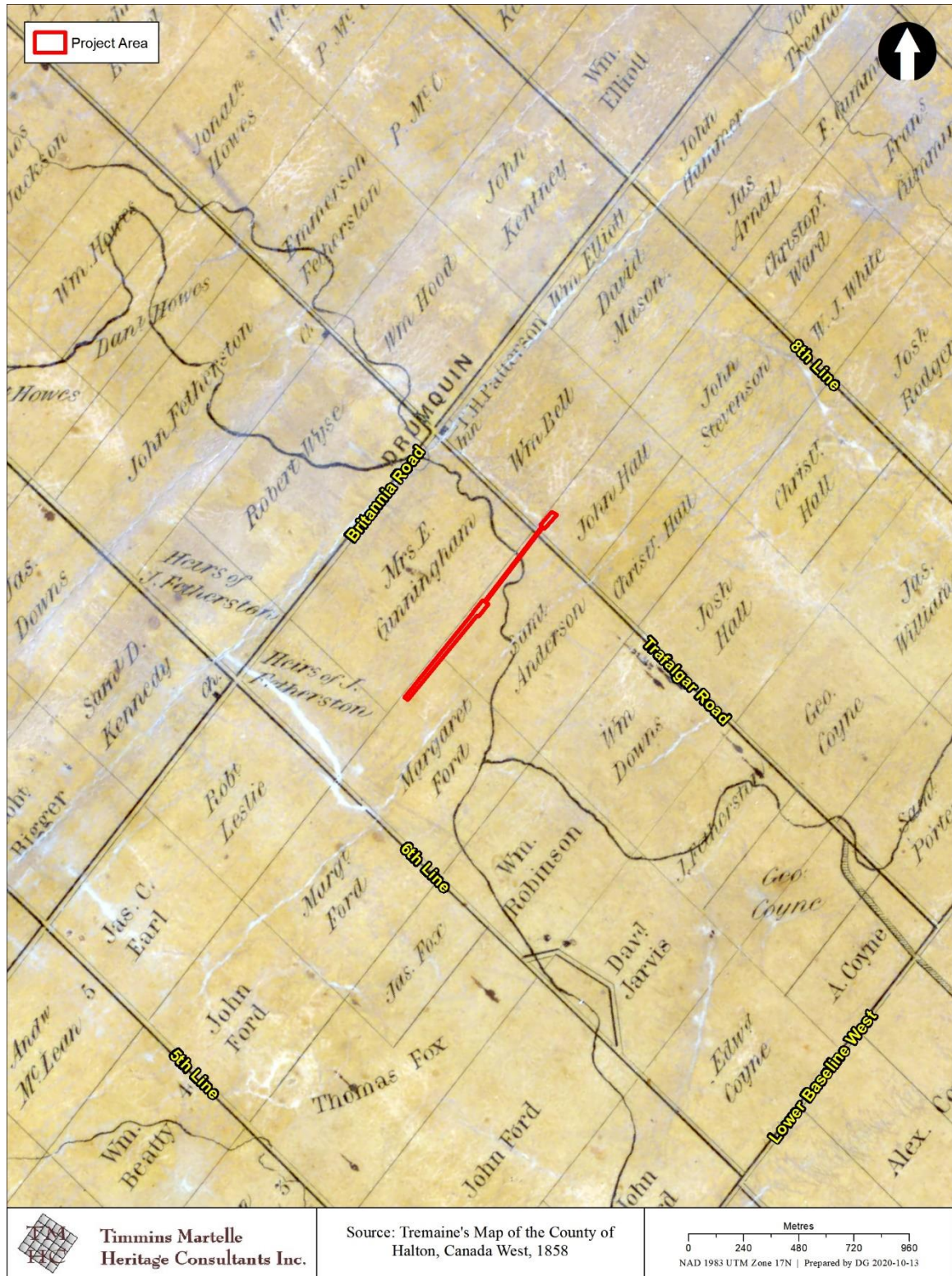
**Map 5: Drainage Within the Vicinity of the Project Area**



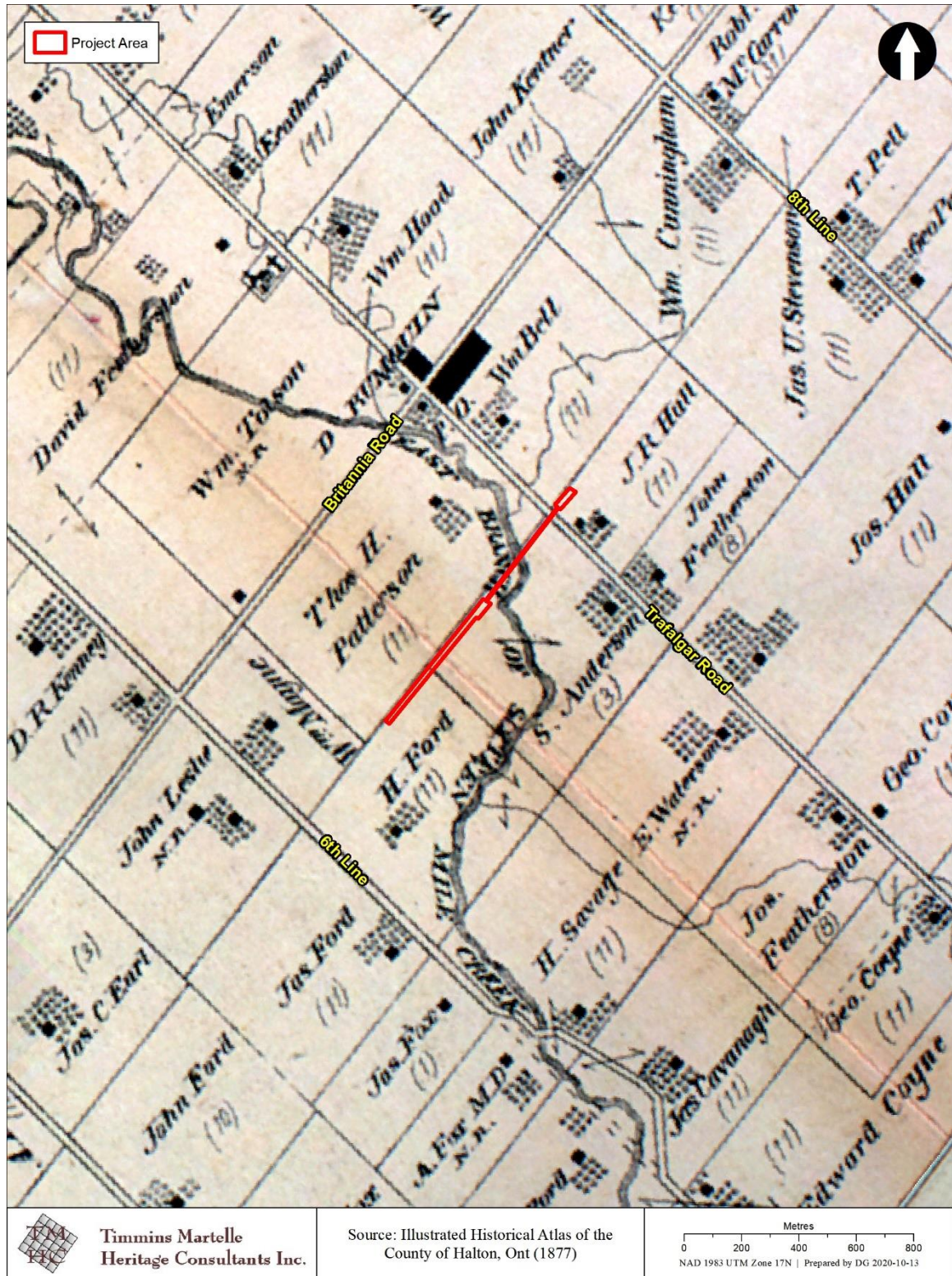
Map 6: Leslie Currie and Associates (1996) Stage 2 Project Area



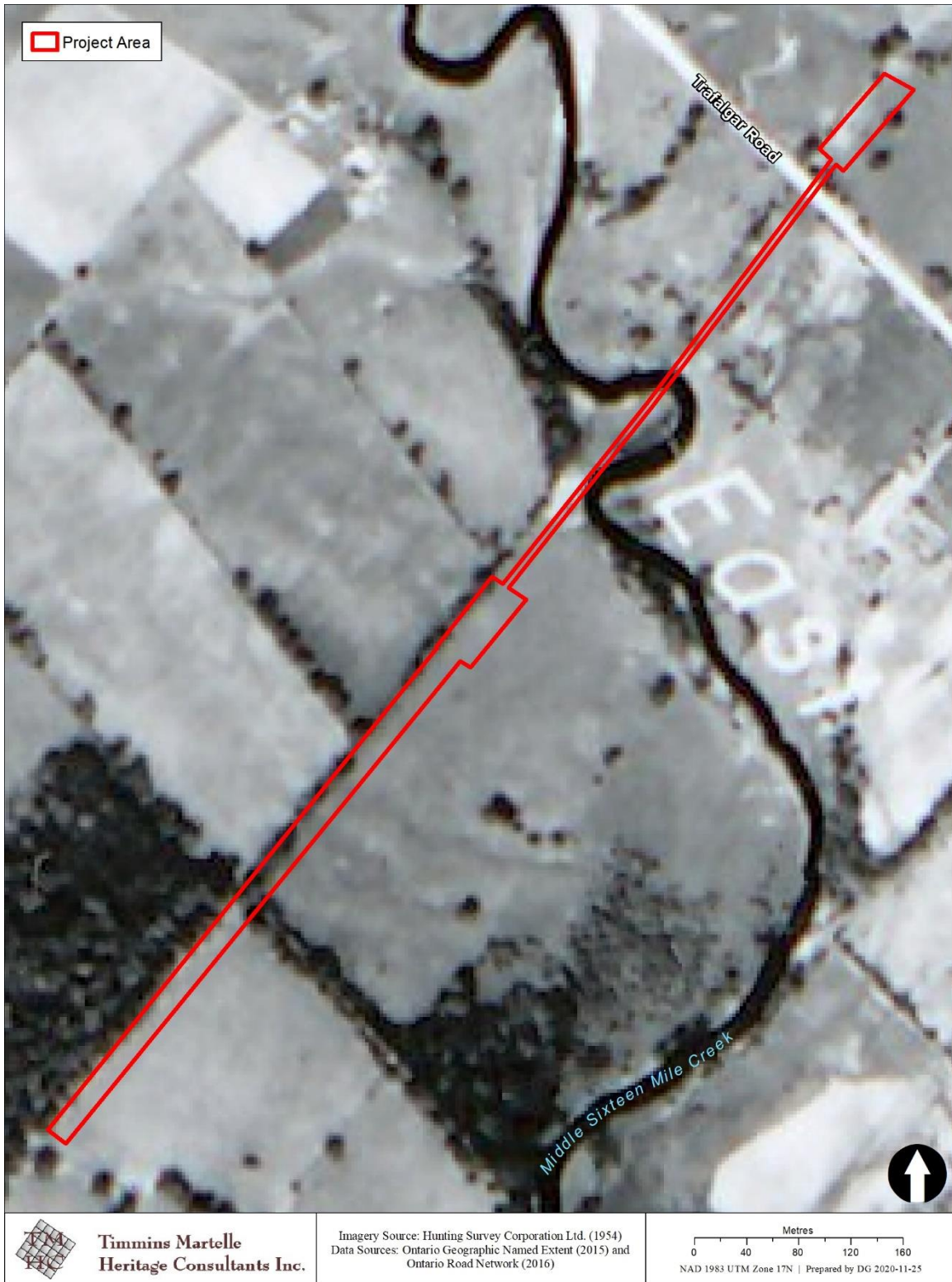








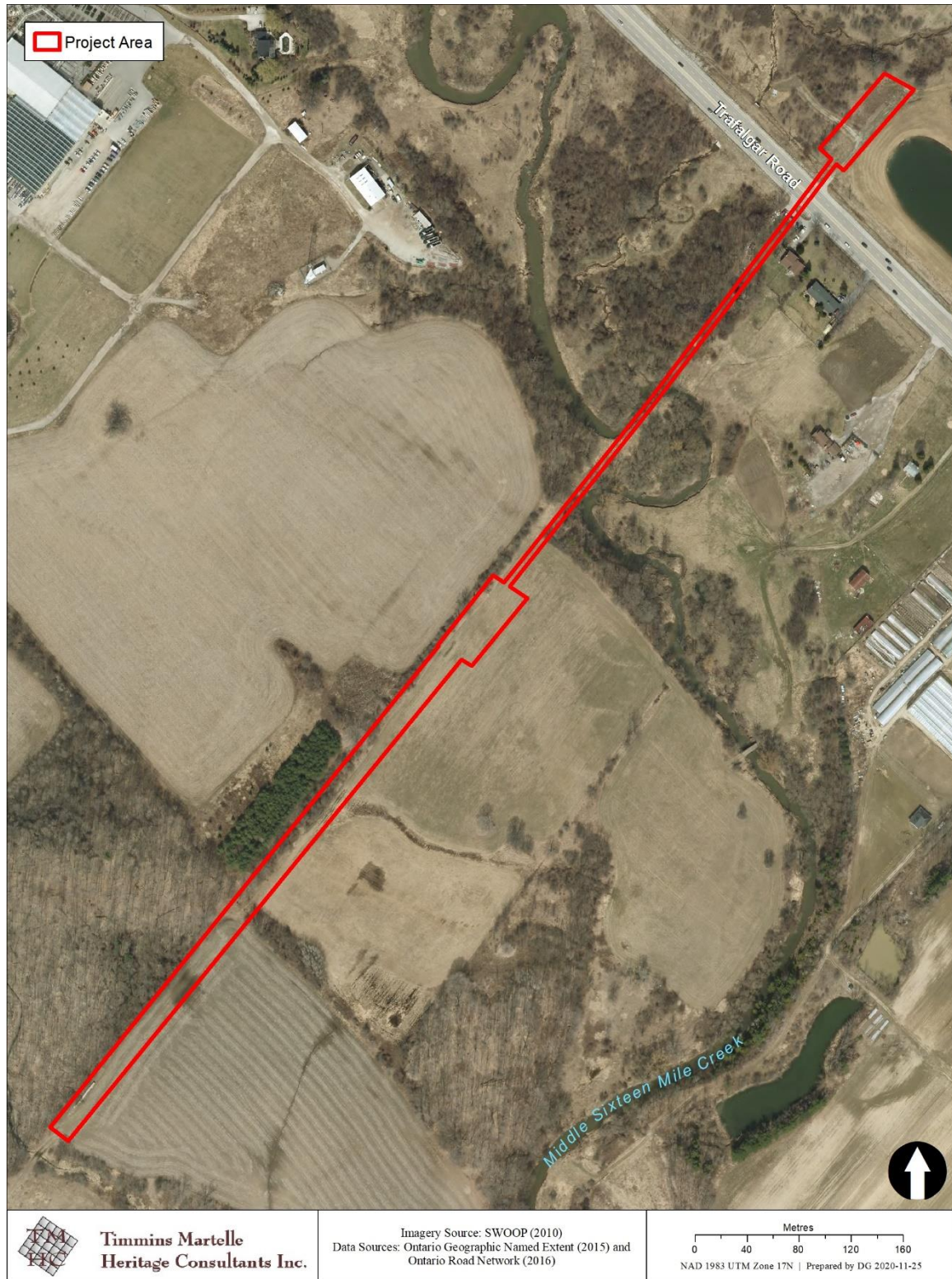




**Map 9: Location of the Project Area Shown on a 1954 Aerial Photograph**



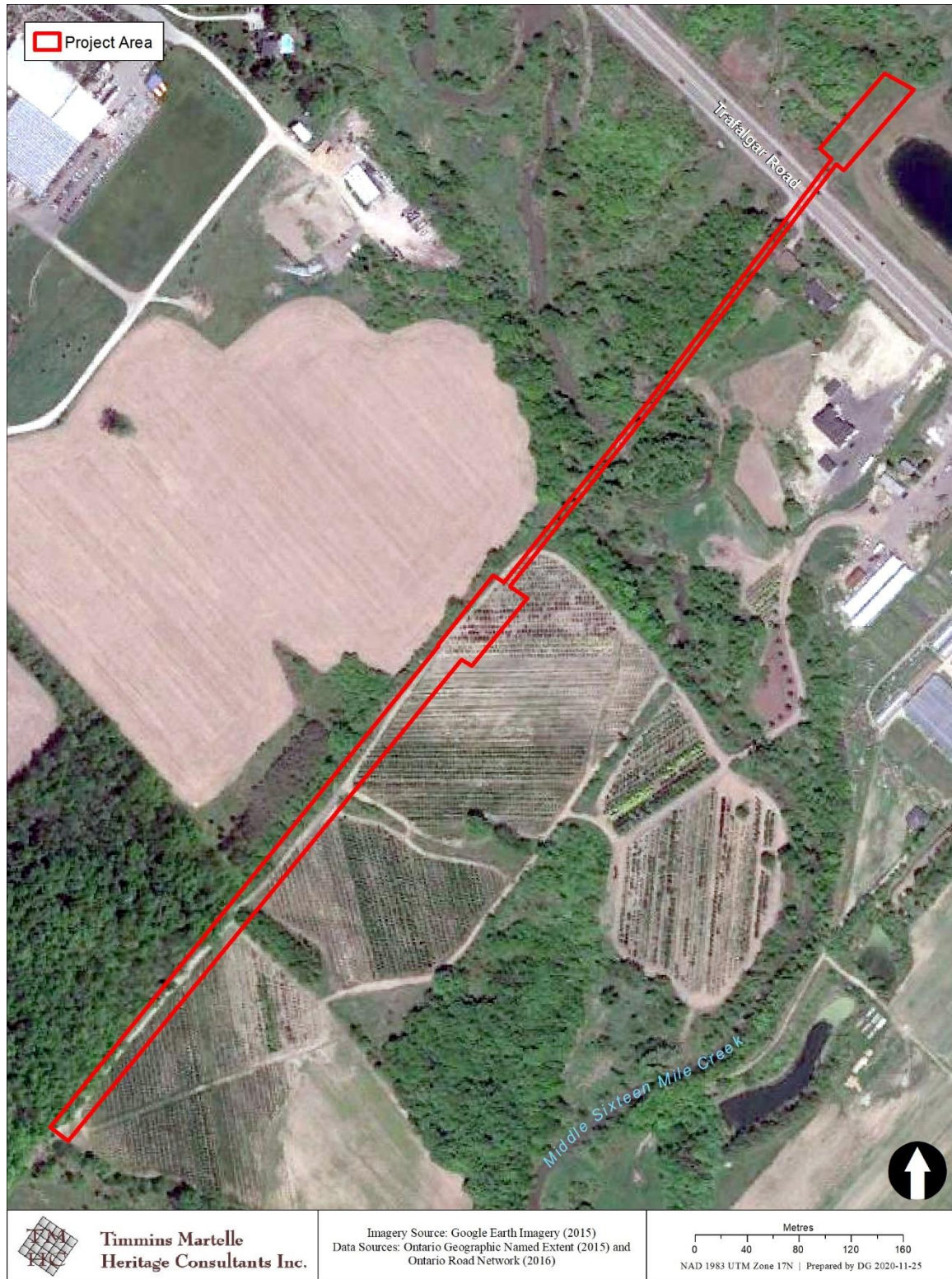




**Map 10: Location of the Project Area Shown on a 2010 Aerial Photograph**



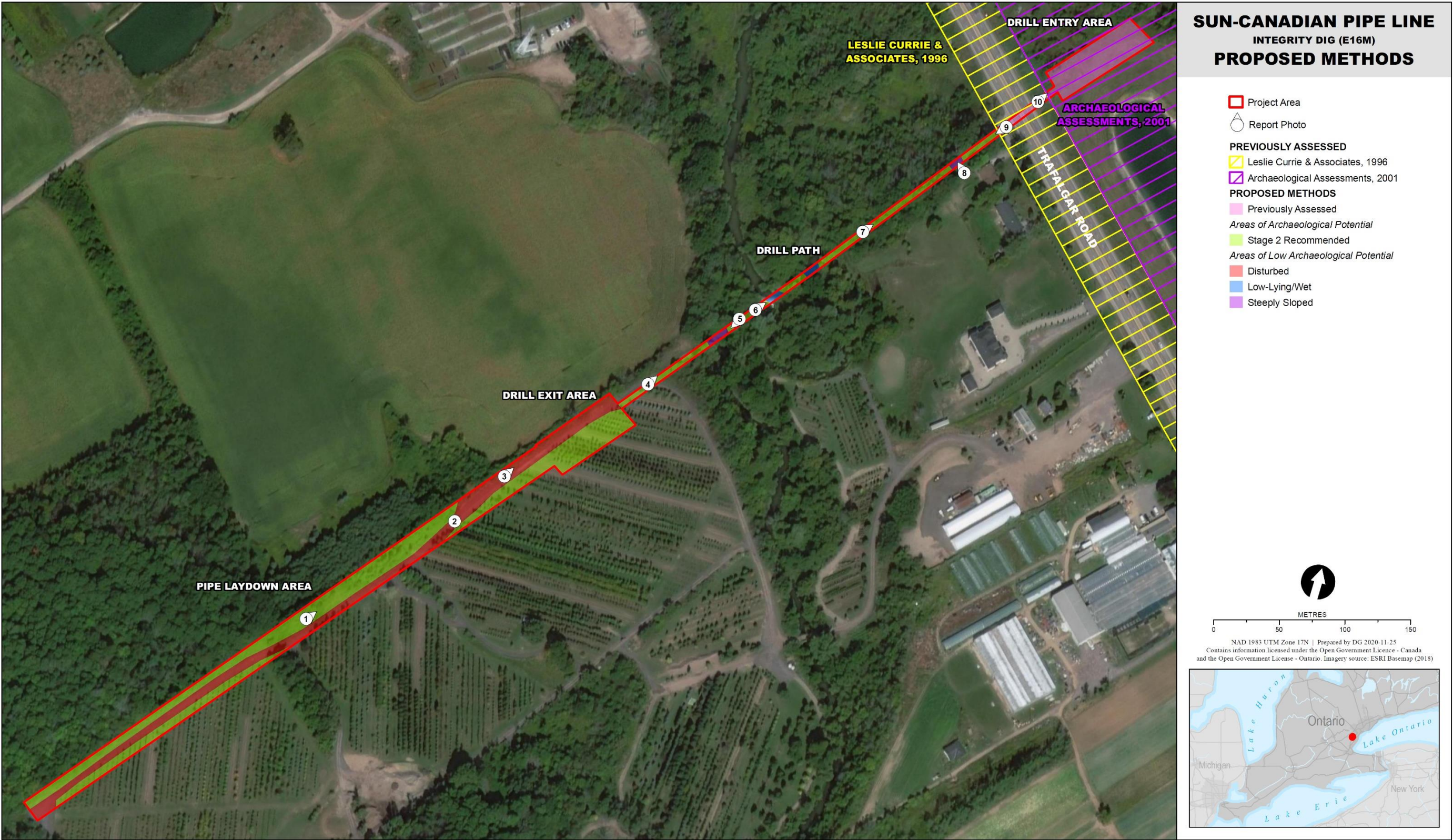




**Map 11: Location of the Project Area Shown on a 2015 Aerial Photograph**









**NPS 12 EAST SIXTEEN MILE CREEK PIPELINE REPLACEMENT PROJECT:  
ENVIRONMENTAL REPORT**

**Stage 2 Archaeological Assessment**



**Stage 2 Archaeological Assessment  
Sun-Canadian Pipe Line  
NPS12 Pipeline Replacement (EI6M)  
Part of Lot 4, Concessions 7 and 8 New Survey  
Geographic Township of Trafalgar (North)  
Now the Town of Milton  
Regional Municipality of Halton, Ontario**

**Original Report**

**Submitted to:**  
Ministry of Heritage, Sport, Tourism and Culture Industries

**Prepared for:**  
Sun-Canadian Pipe Line  
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PIF No: P324-0576-2020  
Project No: 2020-206  
Dated: July 13, 2021



## EXECUTIVE SUMMARY

Sun-Canadian Pipe Line Company Limited (SPCL) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton. SCPL is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way (ROW) within a new alignment to account for the installation of the pipe by a horizontal directional drill (HDD). Construction of the replacement pipeline could begin as early as Summer 2022 and be complete by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

In 2020, Timmins Martelle Heritage Consultants Inc. (TMHC) was contracted to carry out a Stage 1 archaeological assessment of lands with potential for impact by proposed pipeline maintenance in the Town of Milton. The project area is roughly 1.52 ha in size and falls within Lot 4, Concessions 7 and 8 New Survey, Geographic Township of Trafalgar (North), now Regional Municipality of Halton, Ontario. The Stage 1 archaeological assessment was undertaken as part of SCPL's submission of the OEB. The Stage 1 assessment determined that the project area retains archaeological potential and therefore will require Stage 2 archaeological assessment.

In 2021, TMHC was contracted to carry out the Stage 2 archaeological assessment. The project area consists of the Drill Entry and Drill Exit Areas point on either side of Trafalgar Road, a linear Pipe Laydown Area west of Trafalgar Road, and the Drill Path beneath Trafalgar Road, East Sixteen Mile Creek and its unnamed tributary. The purpose of the assessment was to determine whether there were archaeological resources present within the project area.

The project area consists of non-ploughable lands; these were subject to Stage 2 assessment via standard test pit survey at a 5 m transect interval (62.5%; 0.95 ha), in keeping with provincial standards. A portion of the project area was determined in the field to have witnessed prior disturbance due to extensive landscaping, and test pits were found to contain disturbed soils. For these areas, the test pit interval was extended to 10 m, with the focus being to confirm the presence of disturbance and establish its spatial extent (0.02 ha; 1.3%). The remainder of the project area consists of gravel roadways that were previously disturbed (0.02 ha; 1.3%), as well as low-lying and wet zones (2.6%; 0.04 ha;) and steeply sloped lands (1.3%; 0.02 ha), deemed of low archaeological potential and photo-documented. Lastly, 15.1% (0.23 ha) of the project area was previously assessed.

The Stage 2 field assessment resulted in the discovery of one archaeological location. Our recommendations with respect to each of this location is presented below.

- 1) *Location 1* is an isolated Indigenous findspot consisting of three pieces of chipping detritus for which a more specific cultural or temporal affiliation cannot be assigned. This findspot does not meet provincial criteria for Stage 3 assessment and no further work is recommended as it is considered fully documented.

Our recommendations are subject to the conditions laid out in Section 4.0 of this report and to the MHSTCI' review and acceptance of this report into the provincial registry.



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## PROJECT PERSONNEL

Project Manager	Matthew Beaudoin, Ph.D. (P324)
Project Administrator	Kellie Theaker
Health and Safety Coordinator	Amanda DiLoreto-Bendek, M.A. (R317)
Fieldwork Coordination	Johnathan Freeman, M.A. (P274)
Field Director	Matthew Severn, B.A. (R1093)
Field Technician	Mallory Atell, M.Sc. Lara Curasev, B.A. Daniel Amacker Paton Manzara
Lab Technician	Rachelle Carter, B.A.
Artifact Analysis	Matthew Beaudoin, Ph.D. (P324)
GIS Mapping	David Gostick, B.A.
Report Writer	Katelyn Mather, M.A. (R443)
Senior Review	Matthew Beaudoin, Ph.D. (P324)



## INDIGENOUS PARTICIPANTS

### *Six Nations of the Grand River Elected Council (SNGREC)*

Coordinator Tanya Hill-Montour

Fieldwork Monitor Travis Porter

### *Haudenosaunee Development Institute (HDI)*

Coordinator Wayne Hill

Fieldwork Monitors Phil Henry

### *Mississaugas of the Credit First Nation (MCFN)*

Coordinator Megan DeVries

### *Huron-Wendat Nation (HWN)*

Coordinator Valérie Janssen

Fieldwork Monitor Vincent Dion



## ABOUT TMHC

Established in 2003, with a head office in London, Ontario, TMHC provides a broad range of archaeological assessment heritage planning and consultation services throughout the Province of Ontario, founded on over forty years of progressive and responsible experience. We provide consulting services for Indigenous communities, municipal heritage planning and training, public outreach and educational programs, and have established specialties in community engagement, cemetery investigations, faunal analysis and ground penetrating radar surveys. Since TMHC's inception, we have evolved with the needs of our clients, the demands of the regulatory environment, and the growth in the industry.

Since 2004, TMHC has held retainers with Infrastructure Ontario (formerly the Ontario Realty Corporation), Hydro One, the Ministry of Transportation and the City of Hamilton. Presently, TMHC was successfully added to the Infrastructure Ontario, Ministry of Transportation, Hydro One, Metrolinx, and Niagara Parks retainers. In addition, TMHC has successfully managed a wider variety of highly sensitive, large, and complicated projects and have a proven track record in successfully managing and navigating them to completion. In 2013, TMHC earned the Ontario Archaeological Society's award for Excellence in Cultural Resource Management.

## KEY STAFF BIOS

Matthew Beaudoin, PhD., Principal, Manager – Archaeological Assessments

Matthew Beaudoin received a Ph.D. in Anthropology from Western University in 2013 and became a Principal at TMHC in 2019. During his archaeological career, Matthew has conducted extensive field research and artifact analysis on Indigenous and Settler sites from Labrador and Ontario. In addition, Matthew has also conducted ethnographic projects in Labrador. Since joining TMHC in 2008, Matthew has been involved with several notable projects, such as the Imperial Oil's Waterdown to Finch Project, the Camp Ipperwash Project, and the Scugog Island Natural Gas Pipeline Project.

Matthew is an active member of the Canadian Archaeological Association, the Ontario Archaeological Association, the Ontario Historical Society, the World Archaeology Congress, the Council for Northeastern Historical Archaeology, the Society for American Archaeology, and the Society for Historical Archaeology.



## STATEMENT OF QUALIFICATIONS AND LIMITATIONS

The attached Report (the “Report”) has been prepared by Timmins Martelle Heritage Consultants Inc. (TMHC) for the benefit of the Client (the “Client”) in accordance with the agreement between TMHC and the Client, including the scope of work detailed therein (the “Agreement”).

The information, data, recommendations and conclusions contained in the Report (collectively, the “Information”):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the “Limitations”);
- represents TMHC’s professional judgment in light of the Limitation and industry standards for the preparation of similar reports;
- may be based on information provided to TMHC which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and section thereof should not be read out of such context; and
- was prepared for the specific purposes described in the Report and the Agreement.

TMHC shall be entitled to rely upon the accuracy and completeness of information that was provided to it and has no obligation to update such information. TMHC accepts no responsibility for any events or circumstances that may have occurred since the date on which the Report was prepared and, in the case of subsurface, environmental or geotechnical conditions, is not responsible for any variability in such conditions, geographically or over time.

TMHC agrees that the Report represents its professional judgement as described above and that the Information has been prepared for the specific purpose and use described in the Report and the Agreement, but TMHC makes no other representations, or any guarantees or warranties whatsoever, whether express or implied, with respect to the Report, the Information or any part thereof.

Except (1) as agreed to in writing by TMHC and Client; (2) as required by-law; or (3) to the extent used by governmental reviewing agencies for the purpose of obtaining permits or approvals, the Report and the Information may be used and relied upon only by Client.

TMHC accepts no responsibility, and denies any liability whatsoever, to parties other than Client who may obtain access to the Report or the Information for any injury, loss or damage suffered by such parties arising from their use of, reliance upon, or decisions or actions based on the Report or any of the Information (“improper use of the Report”), except to the extent those parties have obtained the prior written consent of TMHC to use and rely upon the Report and the Information. Any injury, loss or damages arising from improper use of the Report shall be borne by the party making such use.

This Statement of Qualifications and Limitations is attached to, and forms part of the Report and any use of the Report is subject to the terms hereof.



## QUALITY INFORMATION

Report prepared by:

A handwritten signature in black ink, appearing to read 'K Mather'.

---

Katelyn Mather, M.A. (R443)

Report Writer/Staff Archaeologist

Report reviewed by:

A handwritten signature in black ink, appearing to read 'Matthew Beaudoin'.

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Matthew Beaudoin, Ph.D. (P324)

Principal/Manager of Archaeological Assessment



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## I PROJECT CONTEXT

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### I.1 Development Context

#### I.1.1 Introduction

Sun-Canadian Pipe Line Company Limited (SCPL) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton. SCPL is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way (ROW) within a new alignment to account for the installation of the pipe by a horizontal directional drill (HDD). Construction of the replacement pipeline could begin as early as Summer 2022 and be complete by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

In 2020, Timmins Martelle Heritage Consultants Inc. (TMHC) was contracted to carry out a Stage 1 archaeological assessment of lands with potential for impact by proposed pipeline maintenance in the Town of Milton. The project area is roughly 1.52 ha in size and falls within Lot 4, Concessions 7 and 8 New Survey, Geographic Township of Trafalgar (North), now Regional Municipality of Halton, Ontario. The Stage 1 archaeological assessment was undertaken as part of SCPL's submission of the OEB. The Stage 1 assessment determined that the project area retains archaeological potential and therefore will require Stage 2 archaeological assessment.

In 2021, TMHC was contracted to carry out the Stage 2 archaeological assessment. The project area consists of the Drill Entry and Drill Exit Areas point on either side of Trafalgar Road, a linear Pipe Laydown Area west of Trafalgar Road, and the Drill Path beneath Trafalgar Road, East Sixteen Mile Creek and its unnamed tributary. The purpose of the assessment was to determine whether there were archaeological resources present within the project area.

All archaeological assessment activities were performed under the professional archaeological license of Matthew Beaudoin, Ph.D. (P324) and in accordance with the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011, "Standards and Guidelines"). Legal permission to enter and conduct all necessary fieldwork activities within the assessed lands, including collecting artifacts when found, was obtained by SCPL.

#### I.1.2 Purpose and Legislative Context

The Stage 1 archaeological assessment work was conducted in accordance with Section 4.3.4 Cultural Heritage Resources in the Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (OEB 2016). The purpose of a Stage 1 background study is to determine if there are known cultural resources within the proposed areas of impact or potential for such resources to exist. Subsequently, it can act as a planning tool by identifying areas of concern that, where possible, could be avoided to minimize environmental impact. It is also used to determine the need for a Stage 2 field assessment involving the search for archaeological sites. If significant sites are found, a strategy (usually avoidance, preservation or excavation) must be put forth for their mitigation.

The Regional Municipality of Halton's Master Plan of Archaeological Resources is a planning tool developed to implement these requirements by identifying areas where there is potential for archaeological sites to exist. If



properties are deemed to have potential for archaeological sites, a Stage 1 and 2 archaeological assessment is required.

## **I.2 Project Context: Archaeological Context**

### ***I.2.1 Project Area: Overview and Physical Setting***

The project area is roughly 1.52 hectares in size and falls within Lot 4, Concessions 7 and 8 New Survey, Geographic Township of Trafalgar (North), Halton County, Ontario. (Map 1 and 2). The project area consists of the Drill Entry and Drill Exit Areas point on either side of Trafalgar Road, a linear Pipe Laydown Area west of Trafalgar Road, and the Drill Path beneath Trafalgar Road and the watercourses.

The project area falls within the Peel Plain physiographic region, as defined by Chapman and Putnam (1984; Map 3). The Peel Plain is a relatively flat tract of clay soils that covers large portions of the Regional Municipalities of York, Peel, and Halton. The plain is dominated by till soils that contain large amounts of shale and limestone. The project area occurs within a sand plain surrounded by bevelled till plains. The extreme southwestern end of the project area falls within the bevelled till plain. The soil types within the project area are Chinguacousy Clay Loam, Jeddo Clay Loam and Bottom Land (Map 4). The most prominent soil type is Chinguacousy Clay Loam, an imperfectly drained calcareous clay loam (Gillespie et al. 1971:27). To the west of Trafalgar Road, small pockets of Jeddo Clay Loam, which is a poorly drained soil, are present. The ravine associated with East Sixteen Mile Creek is identified as Bottom Land.

The project area is located within the East Sixteen Mile Creek watershed (Map 5). East Sixteen Mile Creek is located west of Trafalgar Road between the Drill Entry Area and Drill Exit Area portions of the project area. A tributary of East Sixteen Mile Creek is located approximately 100 m to the west of the western edge of the project area. The Drill Entry Area is adjacent to a ravine which features two small, unnamed tributaries of East Sixteen Mile Creek.

A general reconstruction of 19<sup>th</sup>-century vegetation is made possible through the consultation of mapping which visually depicts the descriptive and anecdotal accounts contained in early surveyors' logbooks. The early 19<sup>th</sup>-century vegetation in both Lot 4, Concessions 7 and 8 have been described as predominantly maple-beech forest with hemlock and basswood (Findlay 1974).

### ***I.2.2 Summary of Registered or Known Archaeological Sites***

According to the MHSTCI' registered site database (accessed November 20<sup>th</sup>, 2020), there are 20 registered archaeological sites within 1 km of the project area.

Of the 20 registered sites, four are 19<sup>th</sup>-century settler homesteads, one is a Late Archaic period Indigenous findspot, one is Late Archaic period Indigenous artifact scatter, one is a Middle Archaic period Indigenous findspot, one is a Late Archaic and Early Woodland period Indigenous artifact scatter, and the remaining 12 are Indigenous findspots or artifact scatters which cannot be dated. A total of five sites are located within 300 m of the project area: AjGw-60, AjGw-264, AjGw-320, AjGw-321 and AjGw-322.

The nearest of these sites is AjGw-264, which is a 19<sup>th</sup>-century homestead located approximately 125 m south of the Drill Entry Area. This site has been fully mitigated and its former location falls within what is now a large artificial pond.





**Table 1: Registered Archaeological Sites within 1 km of the Project Area**

Borden Number	Site Name	Time Period	Affinity	Site Type	Status
AjGw-19	Nielsen	Late Archaic, Early Woodland	Aboriginal	Other - camp/campsite	
AjGw-50	Nursery 1	Pre-Contact	Aboriginal	Scatter	
AjGw-51	Nursery 2	Pre-Contact	Aboriginal	Findspot	
AjGw-52		Pre-Contact	Aboriginal	Scatter	
AjGw-55		Pre-Contact	Aboriginal	Findspot	
AjGw-56		Pre-Contact	Aboriginal	Scatter	
AjGw-57		Pre-Contact	Aboriginal	Findspot	
AjGw-58		Late Archaic	Aboriginal	Unknown	
AjGw-59		Pre-Contact	Aboriginal	Unknown	
AjGw-60	Robert Plant	Post-Contact	Euro-Canadian	Homestead	
AjGw-264	Hall I	Post-Contact	Euro-Canadian	Other - building, outbuilding	
AjGw-320	Hall II	Post-Contact	Euro-Canadian	Other - privy, homestead, midden	
AjGw-321	Gruehl I	Pre-Contact	Aboriginal	Other- camp/campsite	
AjGw-322	Gruehl II	Pre-Contact	Aboriginal	Scatter	
AjGw-323	Gruehl III	Late Archaic	Aboriginal	Findspot	
AjGw-392	York I	Pre-Contact	Aboriginal	Unknown	
AjGw-393	York II	Pre-Contact	Aboriginal	Unknown	
AjGw-566	HI	Post-Contact	Euro-Canadian	Homestead	Further CHVI
AjGw-568		Pre-Contact	Aboriginal	Unknown	Further CHVI
AjGw-569		Middle Archaic	Aboriginal	Findspot	No Further CHVI

### 1.2.3 Summary of Past Archaeological Investigations within 50 m

During the course of this study, records of five archaeological investigations within 50 m of the project area were identified. Each of these investigations involved the assessment of areas that fall within the current project area. However, it should be noted that the MHSTCI currently does not provide an inventory of archaeological assessments to assist in this determination.

#### 1.2.3.1 Stage 1 Archaeological Assessment – Trafalgar Road Widening and Reconstruction

In 1996, Leslie Currie undertook a Stage 1 assessment of the east and west Trafalgar Road right-of-way (ROW) between Highway 403 and a point 500 m north of the intersection of Trafalgar Road and Britannia Road ahead of a proposed widening of Trafalgar Road from two lanes to four. The Stage 1 background research determined that the project area retained archaeological potential and would therefore require a Stage 2 survey. In keeping with provincial standards, any ploughed agricultural lands were recommended for pedestrian survey, using a 5 m transect interval. Any non-ploughable lands are recommended for a test pit survey at a 5 m transect interval. The details of this Stage 1 archaeological assessment were presented in a



report entitled *The Stage 1 Archaeological Assessment, Trafalgar Road (RR3) Widening and Reconstruction, Highway 403 to North of Britannia Road, Regional Municipality of Halton* (Currie 1996; licensee Leslie Currie; PIF 95-073).

#### 1.2.3.2 Stage 2 Archaeological Assessment – Trafalgar Road Widening and Reconstruction (Map 6)

In 1996, Leslie Currie and Associates undertook a Stage 2 assessment of the east and west Trafalgar Road ROW between Highway 403 and a point 500 m north of the intersection of Trafalgar Road and Britannia Road ahead of a proposed widening of Trafalgar Road from two lanes to four. The Stage 2 assessment methodology consisted of a pedestrian survey at a 5 m transect interval of any ploughed agricultural lands and a test pit survey at a 5 m transect interval of any non-ploughable lands. The area assessed included the portions of the Drill Path within the current Trafalgar Road ROW (Maps 6 and 13). The Stage 2 survey resulted in the discovery of three archaeological sites: AjGw-263 (Site 1), AjGw-264 (Site 2), and AjGw-265 (Smith). AjGw-263 and AjGw-264 were both recommended for Stage 3 assessment to evaluate their cultural and archaeological significance as well as to identify the portion of these sites which would be impacted by the road widening. AjGw-265 was recommended for Stage 3 and Stage 4 assessment to evaluate their cultural and archaeological significance as well as to identify the portion of these sites which would be impacted by the road widening. According to MHSTCI's registered site database AjGw-264 is located approximately 125 m south of the Drill Entry Area portion of the current project area. The details of this Stage 2 archaeological assessment were presented in a report entitled: *The Stage 2 Archaeological Assessment, Trafalgar Road (RR3) Widening and Reconstruction, Highway 403 to North of Britannia Road, Regional Municipality of Halton* (Leslie Currie and Associates 1996; licensee Leslie Currie; PIF 96-052).

#### 1.2.3.3 Stage 1-2 Archaeological Assessment – Proposed Trafalgar-Britannia Golf Course (SD Map 1)

In 2001, Archaeological Assessments Ltd. undertook a Stage 1-2 assessment of an 80-ha parcel of land forming part of Lots 4 and 5, Concession 8 New Survey, Geographic Township of Trafalgar (North) prior to the development of the land for use as a golf course (SD Map 1). The Stage 1 background research determined that the property retained archaeological potential and was therefore subject to a Stage 2 survey. The area assessed included the entire Drill Entry Area portion of the current project area as well as the very northeastern end of the Drill Path (Map 13). As the property at that time consisted of three separate agricultural fields it was assessed through a pedestrian survey at 5 m transect intervals. The Stage 2 survey resulted in the identification of 12 archaeological locations including: one 19<sup>th</sup> century homestead (AjGw-320, Featherstone/Hall 2); two Indigenous campsites of unknown age (AjGw-321, Greuhl I; AjGw-321, Greuhl II); one Late Archaic findspot (AgGw-323); and eight non-diagnostic Indigenous findspots. The survey also resulted in the relocation of AjGw-64 (Hall); a 19<sup>th</sup> century homestead site previously identified in 1996. AjGw-64 (Hall), AjGw-320 (Featherstone/Hall 2), AjGw-321 (Greuhl I) and AjGw-321 (Greuhl II) were recommended for further investigation. The details of this Stage 1-2 archaeological assessment were presented in a report entitled *The Stage 1-2 Archaeological Assessment of the Proposed Trafalgar-Britannia Golf Course, Part of Lots 4 & 5, Concession 8, Town of Milton, Halton Region* (Archaeological Assessments Ltd. 2001; licensee Richard Sutton; CIF 2001-035-010).

#### 1.2.3.4 The Stage 4 Excavation – the Hall Site (AjGw-264) and the Featherston Site (AjGw-320)

In 2005, Archaeological Assessments Ltd. completed the Stage 4 excavations of AjGw-264 and AjGw-320 that they previously identified within the Britannia Links Golf Course. This work consisted of the mechanical topsoil removal and feature documentation at both 19<sup>th</sup>-century sites. Both sites were entirely excavated and were of no further archaeological concern. The details of this Stage 4 archaeological assessment were presented in a report entitled *The Stage 4 Excavation of the Hall Site (AjGw-264) and the Featherston Site (AjGw-*



320), *Britannia Golf Course, Town File LOPA-01/00 and Z-03/00 Revised, Town of Milton, Halton Region* (Archaeological Assessments Ltd. 2007; licensee Richard Sutton; CIF P013-147).

#### 1.2.3.5 Stage 1 Archaeological Assessment – Sun-Canadian Pipe Line NPS12 Pipeline Replacement (E16M)

In 2020, TMHC conducted a Stage 1 archaeological assessment of lands with potential for impact by proposed pipeline maintenance in the Town of Milton. The Stage 1 archaeological assessment was undertaken as part of SCPL's emerging Indigenous relations program in advance of the proposed maintenance. Background research indicated that the project area was in proximity to features signaling archaeological potential and a Stage 1 property inspection was undertaken. The Stage 1 property inspection visually confirmed that the areas of woodlot, the planted tree farm area and the ravine within the Pipe Laydown Area, the Drill Exit Area and the Drill Path have archaeological potential and require Stage 2 archaeological assessment. The remaining areas within the project Area were found to be sloped, low-lying and wet, previously disturbed, or previously assessed. The results of this assessment are presented in a report entitled *Stage 1 Archaeological Assessment, Sun-Canadian Pipe Line, NPS12 Pipeline Replacement (E16M), Part of Lot 4, Concessions 7 and 8 New Survey, Geographic Township of Trafalgar (North), Now the Town of Milton, Regional Municipality of Halton, Ontario* (TMHC 2021; Licensee, Matthew Beaudoin; PIF P324-0571-2020).

#### 1.2.4 Dates of Archaeological Fieldwork

The Stage 2 fieldwork was conducted on May 31 and June 3 and 4, 2021. Table 2 lists the weather conditions and field directors on those days.

**Table 2: Dates of Fieldwork, Weather Conditions and Field Director**

Dates of Fieldwork	Weather Conditions	Field Director
May 31, 2021	Sunny and warm	M. Severn, B.A. (R1093)
June 3, 2021	Overcast and hot	M. Severn, B.A. (R1093)
June 4, 2021	Sunny and hot	M. Severn, B.A. (R1093)



## 1.3 Project Context: Historical Context

### 1.3.1 First Peoples Settlement in Milton

The previous Stage 1 assessment report (TMHC 2021) provided detailed summaries of past Indigenous settlement in the general vicinity of the project area. As such, the same information is not repeated here. A summary of the themes and temporal periods of Indigenous settlement is provided in Table 3.

**Table 3: Chronology of Indigenous Settlement in Milton**

Period	Time Range	Diagnostic Features	Archaeological Complexes
Early Paleo	9000-8400 BCE	fluted projectile points	Gainey, Barnes, Crowfield
Late Pale	8400-8000 BCE	non-fluted and lanceolate points	Holcombe, Hi-Lo, Lanceolate
Early Archaic	8000-6000 BCE	serrated, notched, bifurcate base points	Nettling, Bifurcate Base Horizon
Middle Archaic	6000-2500 BCE	stemmed, side & corner notched points	Brewerton, Otter Creek, Stanly/Neville
Late Archaic	2000-1800 BCE	narrow points	Lamoka
Late Archaic	1800-1500 BCE	broad points	Genesee, Adder Orchard, Perkiomen
Late Archaic	1500-1100 BCE	small points	Crawford Knoll
Terminal Archaic	1100-950 BCE	first true cemeteries	Hind
Early Woodland	950-400 BCE	expanding stemmed points, Vinette pottery	Meadowood
Middle Woodland	400 BCE-500 CE	dentate, pseudo-scallop pottery	Saugeen
Transitional Woodland	500-900 CE	first corn, cord-wrapped stick pottery	Princess Point
Late Woodland	900-1300 CE	first villages, corn horticulture, longhouses	
Late Woodland	1300-1400 CE	large villages and houses	
Late Woodland	1400-1650 CE	tribal emergence, territoriality	
Contact Period - Indigenous	1700 CE-present	treaties, mixture of Indigenous & European items	
Contact Period - Settler	1796 CE-present	industrial goods, homesteads	pioneer life, municipal settlement



### ***1.3.2 Treaty History***

The treaty history of the for this area is complicated and contested. The earliest association of the project area is the far-reaching Five Nations' Beaver Hunting Grounds of the 1701 Fort Albany/Nanfan Treaty between the Haudenosaunee Confederacy and the British Crown (Six Nations of the Grand River n.d.).

The project area is encompassed by the Head of the Lake Purchase (Treaty #14). The Mississaugas of the Credit reached a provisional agreement with the Crown on August 2, 1805, to cede 70,784 acres of land bounded to the north by a boundary that ran six miles back from the shoreline of Lake Ontario; to the east by the lands within Toronto Purchase of 1787; and to the west by the Brant Tract (Duric 2017a). The Mississaugas were to receive £1000 of trade goods, the sole right of fisheries at the 12 Mile and 16 Mile Creeks, along with the ownership of each creek's flats, the sole right of fishing at the Credit River, and a 1-mile strip of land on either side of the river. Treaty 14 was signed September 5, 1806, which includes the modern cities of Oakville, Mississauga, and parts of Burlington.

### ***1.3.3 Nineteenth-Century and Municipal Settlement***

The previous Stage 1 assessment report (TMHC 2021) provided a detailed summary of 18<sup>th</sup> through 19<sup>th</sup> century settlement and municipal formation; therefore, only brief mention is provided here as a means of contextualizing former and current land use. The project area falls within Lot 4, Concessions 7 and 8 New Survey, Geographic Township of Trafalgar (North), now Regional Municipality of Halton, Ontario.

According to the 1860 Tremaine Map (Map 7), the northeastern half of Lot 4, Concession 7 is owned by Sam Anderson. The southwestern half of Lot 4, Concession 7 is owned by Margaret Ford. The southwestern ¼ of Lot 4, Concession 8 is owned by John Hall. No structures are depicted on either property or within the vicinity of the project area. Trafalgar Road is shown as open at this time. The East Branch of Sixteen Mile Creek is shown within the Drill Path portion of the project area. The community of Drumquin is shown approximately 600 m northwest of the project area. The only structure depicted in the community is an inn is at the eastern corner of the intersection of Trafalgar Road and Britannia Road.

According to the 1877 Illustrated Historical Atlas Map (Map 8), the northeastern half of Lot 4, Concession 7 is owned by Sam Anderson. Anderson's home and orchard are shown immediately to the southwest of Trafalgar Road near to the centre of his portion of the lot. The southwestern half of Lot 4, Concession 7 is owned by Hamilton Ford. Ford's home and orchard are shown near to the centre of his portion of the lot, set back a distance from 6th Line. The southwestern ¼ of Lot 4, Concession 8 is owned by John R. Hall. Hall's home, a secondary structure and orchard are shown to the northeast of Trafalgar Road near to the centre of his portion of the lot. Anderson and Hall's structures are both within 300 m of the project area. There are no additional structures depicted within 300 m of the project area on adjacent lots. An unnamed tributary of the East Branch of Sixteen Mile Creek is shown approximately 65 m northwest of the Drill Entry Area portion of the project area. The community of Drumquin is shown approximately 600 m northwest of the project area. The community has grown since the drafting of the 1860 Tremaine Map (Map 7), now a post office and structures are depicted at all four corners of the intersection of Trafalgar Road and Britannia Road.

Several historical aerial photographs of the project area were also reviewed. The 1954 aerial photograph (Map 9) depicts the area currently occupied by the tree farm as a ploughed agricultural field. The project area runs along the northern edge of the field. The East Sixteen Mile Creek ravine area appears largely as it does today. It is difficult to determine the land use of the area between East Sixteen Mile Creek and Trafalgar Road



however beyond the area immediately to the northeast of the creek it appears to be a ploughed agricultural field bounded by a tree line. At this time, the dwelling at 5636 Trafalgar Road has not yet been built. The area to the northeast of Trafalgar Road appears to be a ploughed agricultural field. Trafalgar Road at this time is a two-lane roadway. The 2010 aerial photograph (Map 10) depicts the reforestation of the area between East Sixteen Mile Creek and Trafalgar Road as well as the dwelling at 5636 Trafalgar Road. The deposition of a large amount of soil in the Drill Entry Area to the northeast of Trafalgar Road is apparent. The 2015 aerial photograph (Map 11) depicts the conversion of the ploughed agricultural field in the southwestern half of the project area to a tree farm. A roadway is shown running along the northern edge of the former agricultural field.

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## 2 STAGE 2 ARCHAEOLOGICAL ASSESSMENT

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### 2.1 Field Methods

All fieldwork was undertaken in good weather and lighting conditions. No conditions were encountered that would hinder the identification or recovery of artifacts. The property boundaries were determined in the field based on proponent mapping, landscape features, aerial mapping, and GPS co-ordinates.

The project area is comprised of non-ploughable lands (woodlot, manicured grass, grassed areas between rows of tree farm). As such, the project area was subject to a standard test pit assessment, employing a 5 m transect interval (62.5%; 0.95 ha; Images 1 to 3). Each test pit measured at least 30 cm (shovel-width) in diameter and was excavated into the first 5 cm of subsoil. The soil from each test pit was passed through 6 mm hardware cloth in an effort to retain any artifacts that may be present. Once screening was finished, the stratigraphy in the test pits was examined and then the pits were backfilled as best as possible, tamped down by foot and shovel and re-capped with sod. Test pitting extended up to 1 m from all standing features, including trees.

In the eastern portion of the project area the test pits contained roughly 30-40 cm of brown clay loam soil over tan-light brown clay loam subsoil (Image 4). In the western portion of the project area the test pits contained roughly 30-40 cm of brown sandy loam over tan-light brown sandy loam subsoil (Image 5). The soils changed near the creek, to a brown silt loam, and test pits were deeper, at 60-70 cm in depth (Image 6). Subsoil was a light brown-orange silt clay.

When cultural material was found during test pit survey, the survey interval was intensified (reduced to 2.5 metres) to determine the cultural significance and size of the site (Images 7 to 9). If an insufficient sample was recovered from the intensification a 1 m test unit was hand excavated atop of the original positive test pit.

A portion of the project area was determined in the field to have witnessed prior disturbance due to extensive landscaping, and test pits were found to contain disturbed soils. For these areas, the test pit interval was extended to 10 m, with the focus being to confirm the presence of disturbance and establish its spatial extent (0.02 ha; 1.3%; Image 10). These test pits contained 10-15 cm of tan clay over 15 cm of brown gravel fill, over 10 cm of brown sand over light brown silt clay subsoil (Image 11).

As per Section 2.1, Standard 2 of the *Standards and Guidelines* (MTC 2011:28-29), certain physical features and deep land alterations are considered as having low archaeological potential and are thus exempt from the standard test pit survey. Approximately 17.2% (0.26 ha) of the project area was visually assessed as disturbed during the Stage 1 property inspection, consisting of a gravel roadway.

Other low potential areas included low-lying and wet zones (approximately 2.6%; 0.04 ha; Images 12 – 13) and steeply sloped lands (approximately 1.3%, 0.02 ha; Images 14 – 15). All of these low potential areas were photo-documented but eliminated from survey, in keeping Section 2.1, Standard 2 of the *Standards and Guidelines* (MTC 2011:28-29). Lastly, 15.1% (0.23 ha) of the project area was previously assessed.

Maps 12 and 13 illustrate the Stage 2 field conditions and assessment methods; the location and orientation of all photographs appearing in this report are also shown on this map. Due to the fact that the proponent map was supplied in a GIS data format (shapefile), no separate map of Stage 2 assessment methods overlaid on the proponent map is provided.





## 2.2 Record of Finds

One archaeological site was discovered during the Stage 2 assessment. This has been designated Location 1. A general description of our findings at the site is provided below and more specific site location details appear in the Supplementary Documentation portion this report. Table 4 provides an inventory of the documentary records generated during this project.

All artifacts and files are currently being stored at the TMHC corporate office located at 1108 Dundas Street East, Unit 105

London, ON N5W 3A7. Artifacts are bagged individually with paper labels, sorted into a larger bag according to context, and organized by catalogue number.

This bag is located within the “Various Small Projects Completed in 2021” banker’s box, along with other small projects.

**Table 4: Documentary Records**

Date	Field Notes	Field Maps	Digital Images
May 31, 2021	Digital and hard copies	Digital and hard copies	27 Images
June 3, 2021	Digital and hard copies	Digital and hard copies	20 Images
June 4, 2021	Digital and hard copies	Digital and hard copies	29 Images

### 2.2.1 Location 1 (no Borden number assigned)

Location 1 is an Indigenous findspot identified during test pit survey of the western portion of the project area. It consisted of two positive test pits, each yielding a single flake (Test Pits 1 and 2). As not enough artifacts were recovered from the test pit excavation to determine if a Stage 3 archaeological assessment would be required, a Stage 2 test unit was excavated to collect further information, which yielded one additional flake. The soils within the unit consisted of 25 cm of brown clay loam over tan clay loam mottled with orange clay loam subsoil. All artifacts were collected according to their associated test pit or test unit.

A total of three flakes were collected at Location 1 (Table 5; Image 16) including two flake fragments on Onondaga chert, and one flake fragment on Kettle Point chert.

**Table 5: Location 1 Stage 2 Artifact Catalogue**

Cat.	Context	Layer/Depth	Artifact	n	Comments
1	Test Pit 1	ts, 0-30cm	chipping detritus	1	Kettle Point; fragmentary
2	Test Pit 2	ts, 0-30cm	chipping detritus	1	Onondaga; fragmentary
3	Test Unit	ts, 0-30cm	chipping detritus	1	Onondaga; fragmentary
			<b>Total</b>	<b>3</b>	





## 2.3 Analysis and Conclusions

A Stage 2 field assessment was carried out in keeping with the MHSTCI' *Standards and Guidelines* (MTC 2011). The Stage 2 field assessment resulted in the discovery of one archaeological location. Section 2.2 of the *Standards and Guidelines* establishes criteria whereby the cultural heritage value of archaeological finds can be evaluated and the need for follow up Stage 3 assessment and/or Stage 4 mitigation of construction impacts established. The archaeological location is evaluated below.

*Location 1* is an Indigenous site identified by three flakes from two test pits and a test unit. As none of the artifacts were diagnostic, no specific cultural or temporal affiliation can be assigned to the site at this time. As fewer than five non-diagnostic artifacts within a 10 m by 10 m test pit area (MTC 2011:40; Section 2.2, Standard 1a.ii.2), *Location 1* does not have further cultural heritage value or interest (CHVI) under the provincial framework, and no further work is recommended.

## 2.4 Recommendations

A Stage 2 archaeological assessment was conducted for a roughly 1.52 ha project area, falling within Lot 4, Concessions 7 and 8 New Survey, Geographic Township of Trafalgar (North), now Regional Municipality of Halton, Ontario. All work met provincial standards and one archaeological location was identified during the Stage 2 assessment. Our recommendations with respect to each of this location is presented below.

- 1) *Location 1* is an isolated Indigenous findspot consisting of three pieces of chipping detritus for which a more specific cultural or temporal affiliation cannot be assigned. This findspot does not meet provincial criteria for Stage 3 assessment and no further work is recommended as it is considered fully documented.

Our recommendations are subject to the conditions laid out in Section 4.0 of this report and to the MHSTCI' review and acceptance of this report into the provincial registry.



### **3 SUMMARY**

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A Stage 2 archaeological assessment was conducted for a proposed pipeline maintenance in the Town of Milton. The project area is roughly 1.52 ha in size and falls within Lot 4, Concessions 7 and 8 New Survey, Geographic Township of Trafalgar (North), now Regional Municipality of Halton, Ontario. The Stage 2 assessment (test pit assessment at a 5 m and 10 m intervals) resulted in the identification of one archaeological location. The findspot does not meet provincial criteria for Stage 3 assessment and no further work is recommended as it is considered fully documented. As such, the project area should be considered free of archaeological concern and no further archaeological assessment is recommended.



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## 4 ADVICE ON COMPLIANCE WITH LEGISLATION

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This report is submitted to the MHSTCI as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 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 fieldwork and report recommendations ensure the conservation, protection and preservation 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 MHSTCI, 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 fieldwork 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 (i.e., unknown or deeply buried) 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 Section 48(1) of the *Ontario Heritage Act*.

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the police or coroner and Crystal Forrest, A/Registrar of Burial Sites, Ontario Ministry of Government and Consumer Services. Her telephone number is 416-212-7499 and e-mail address is [Crystal.Forrest@ontario.ca](mailto:Crystal.Forrest@ontario.ca).

Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and may Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and not be altered, or have artifacts removed from them, except by a person holding an archaeological licence.



## 5 BIBLIOGRAPHY

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### Archaeological Assessments Ltd.

- 2001 *The Stage 1-2 Archaeological Assessment of the Proposed Trafalgar-Britannia Golf Course, Part of Lots 4 & 5, Concession 8, Town of Milton, Halton Region.* Licensee, Richard Sutton; 2001-035-010. Report on file with the MHSTCI.
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### Archaeological Services Inc. (ASI)

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## 6 IMAGES

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**Image 1: Test Pit Survey in Progress**

Looking Northeast



**Image 2: Test Pit Survey in Progress**

Looking Southeast





**Image 3: Test Pit Survey in Progress**

Looking Northeast



**Image 4: Typical Test Pit, Eastern Portion**





**Image 5: Typical Test Pit, Western Portion**



**Image 6: Typical Test Pit Near Creek**





**Image 7: Location I Test Pit Intensification**

Looking Northwest



**Image 8: Location I Unit Excavation in Progress**

Looking Southwest





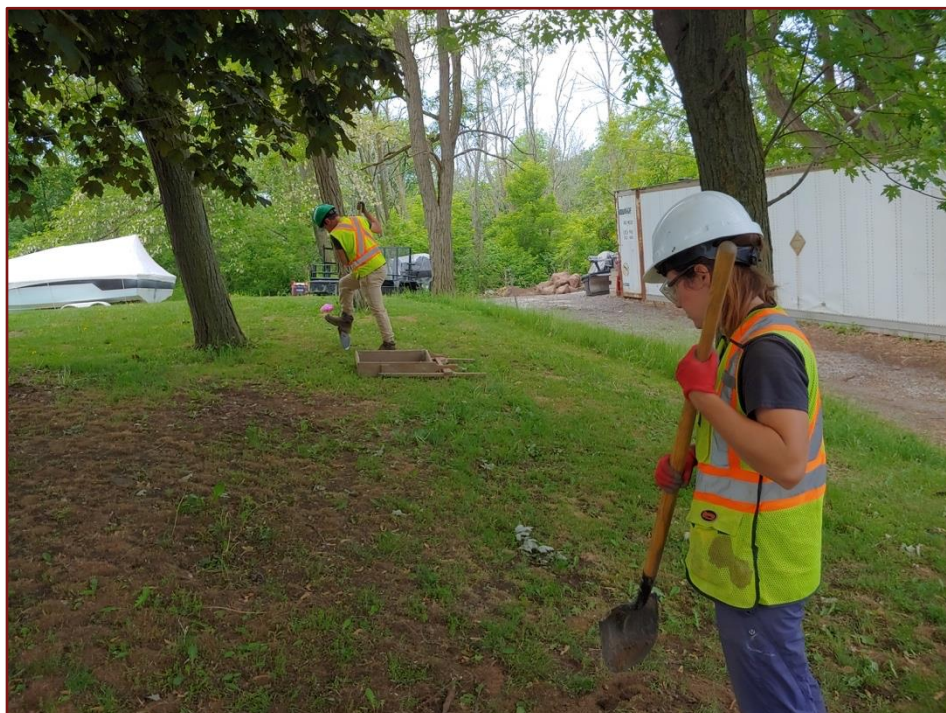
**Image 9: Location I Test Unit**

Looking Northwest



**Image 10: Test Pit Survey at 10 m Intervals**

Looking Southwest





**Image 11: Typical Disturbed Test Pit**



**Image 12: Creek Within Project Area**

Looking Northeast





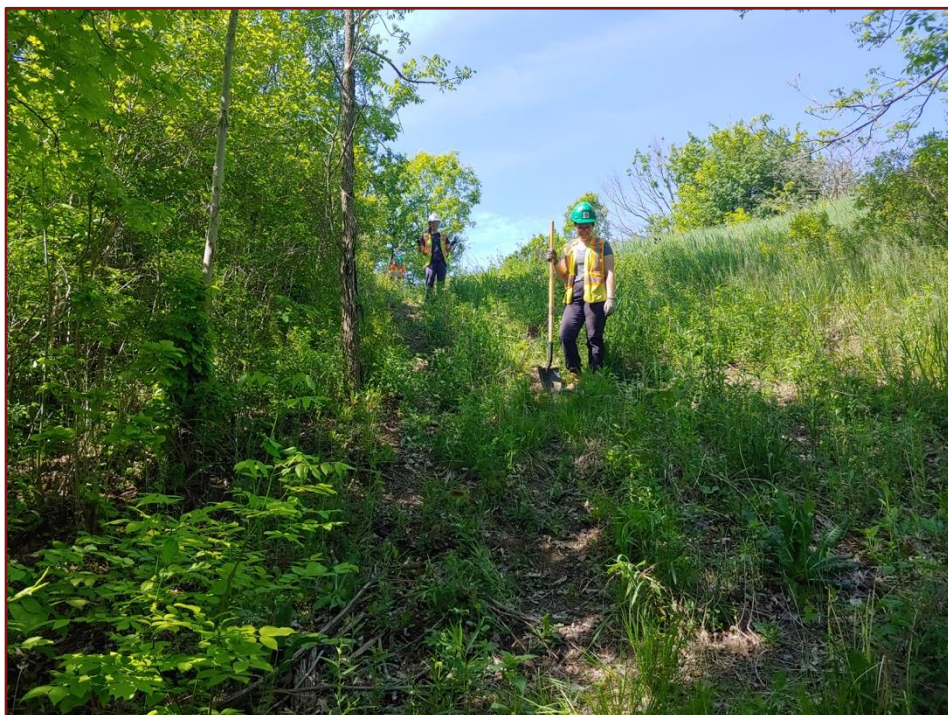
**Image I3: Pond Within Project Area**

Looking South



**Image I4: Area of Slope Within Project Area**

Looking Southwest





### Image 15: Area of Slope Within Project Area

Looking Southwest



### Image 16: Location 1 Stage 2 Artifacts



A) flake fragment, Kettle Point chert, cat.1; B) flake fragment, Onondaga chert, cat.2; C) flake fragment, Onondaga chert, cat.3

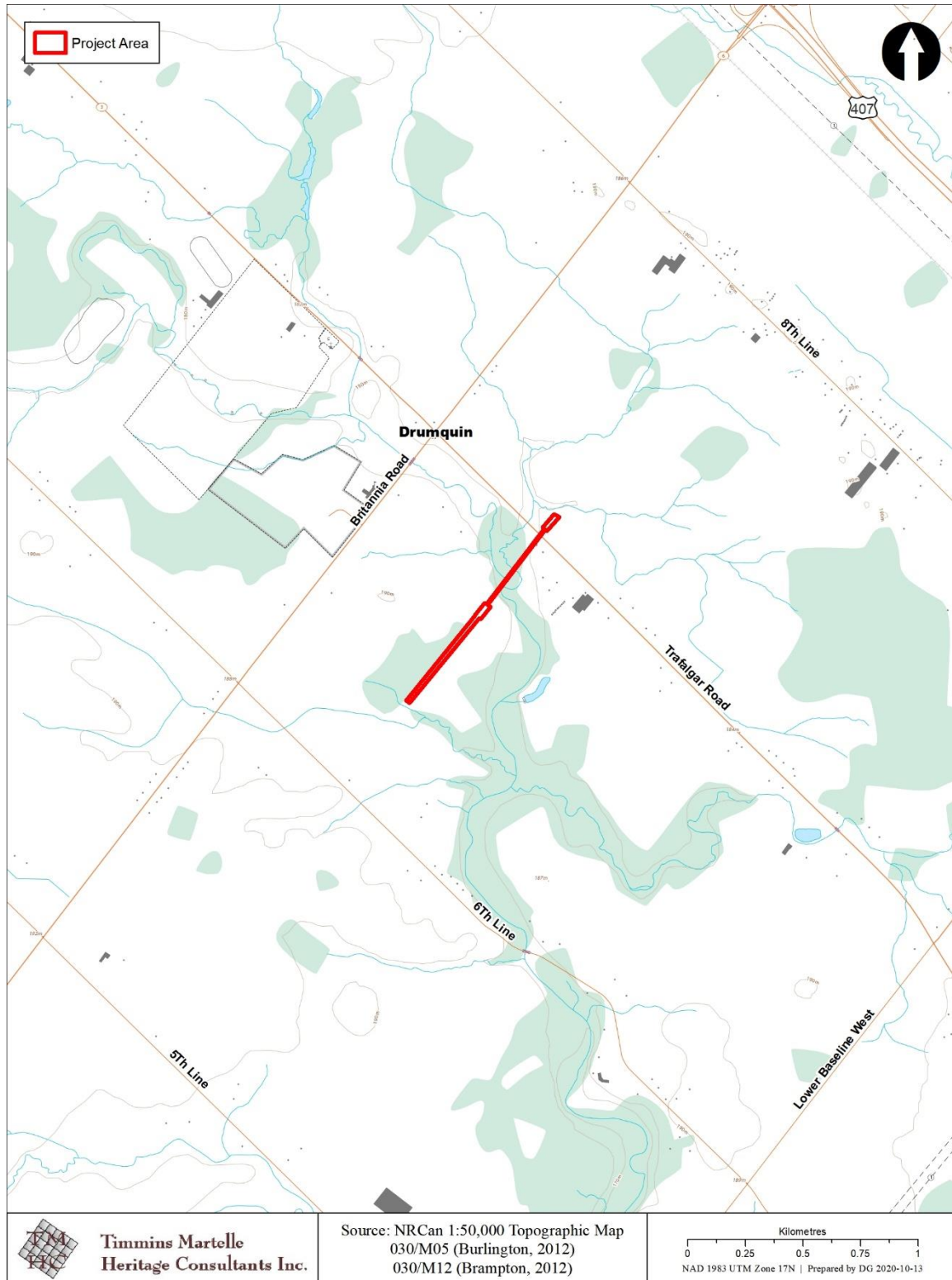


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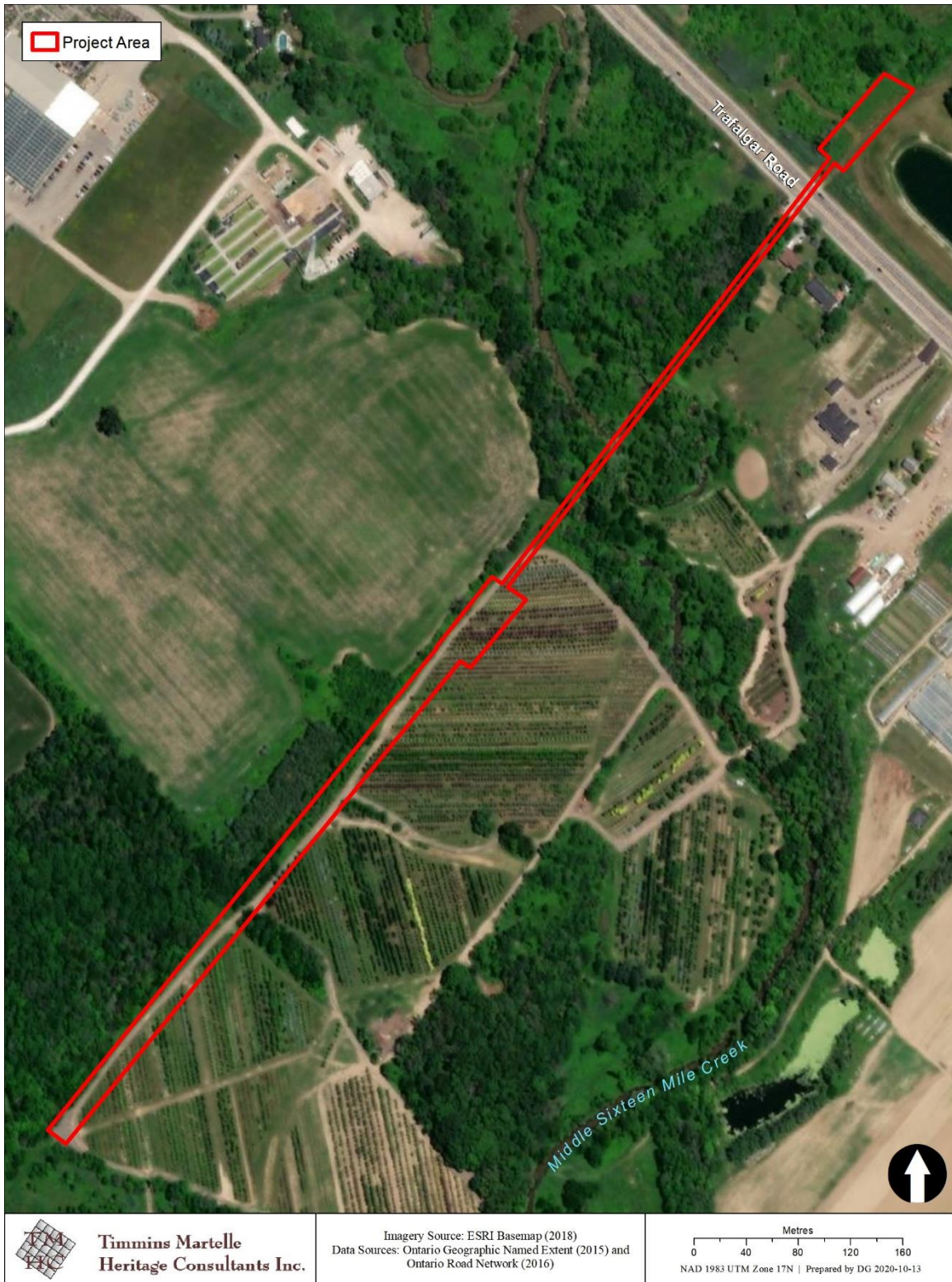
## 7 MAPS

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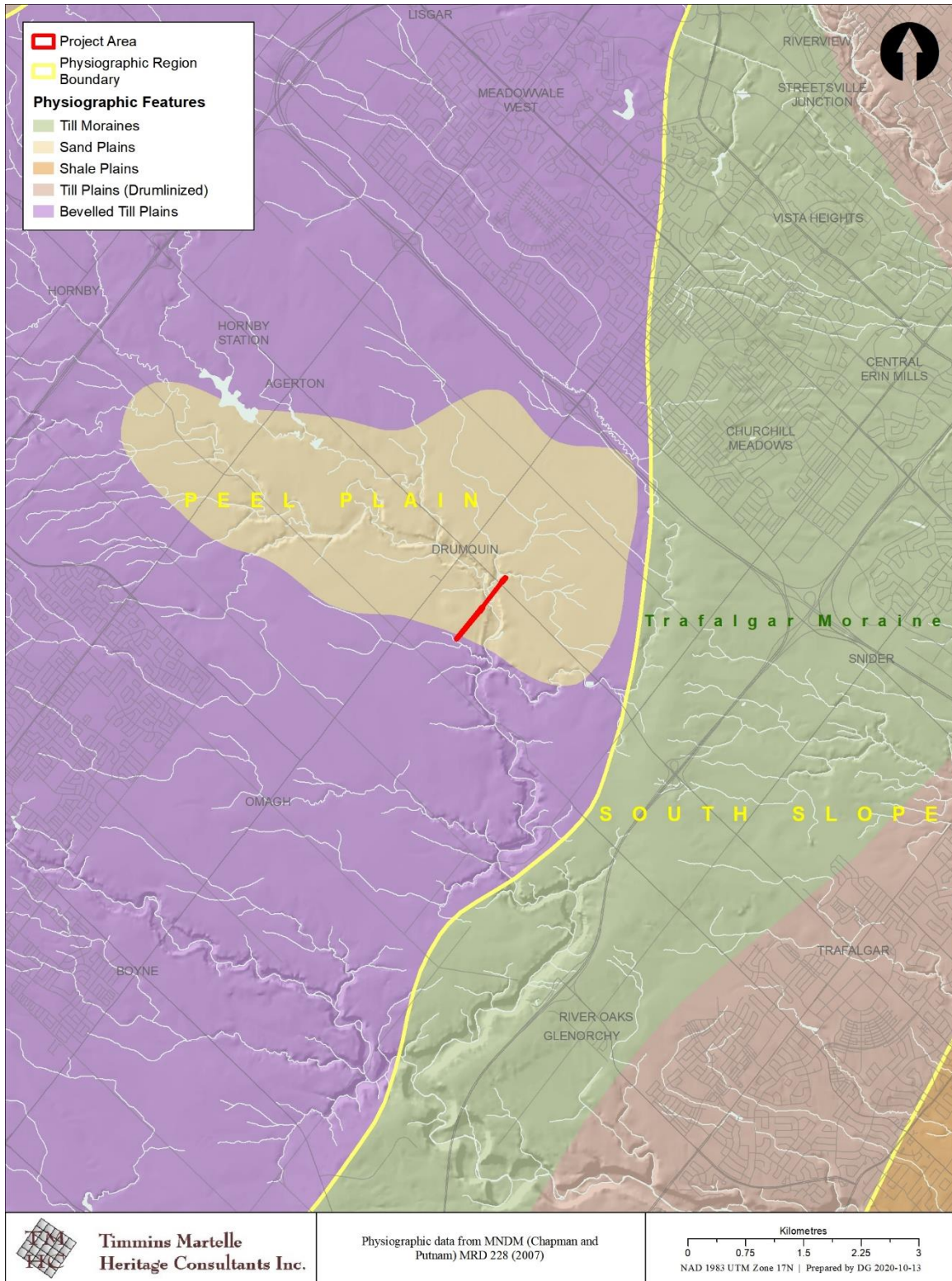


**Map 1: Location of the Project Area in Milton, ON**

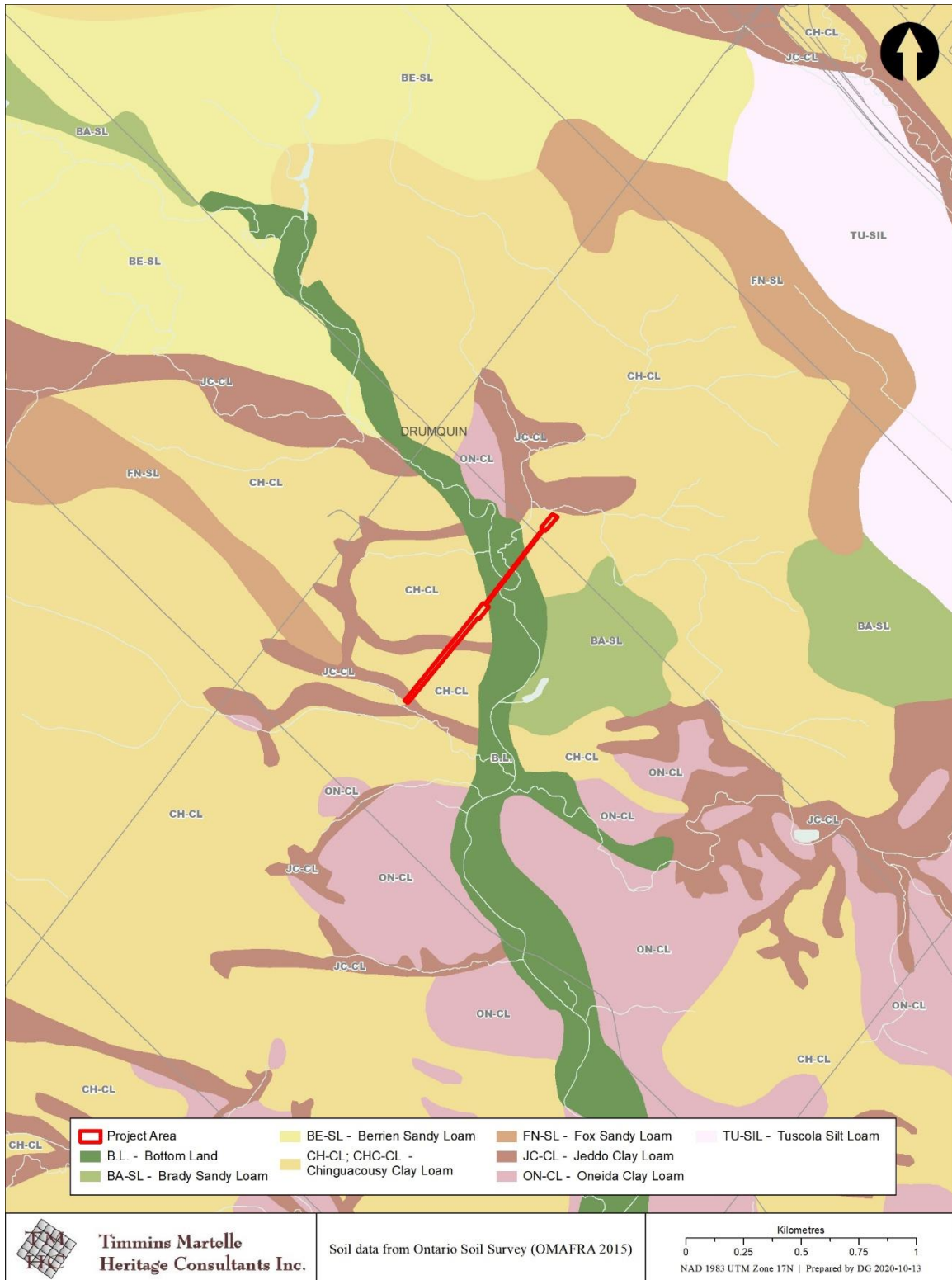


**Map 2: Aerial Photograph Showing the Location of the Project Area**



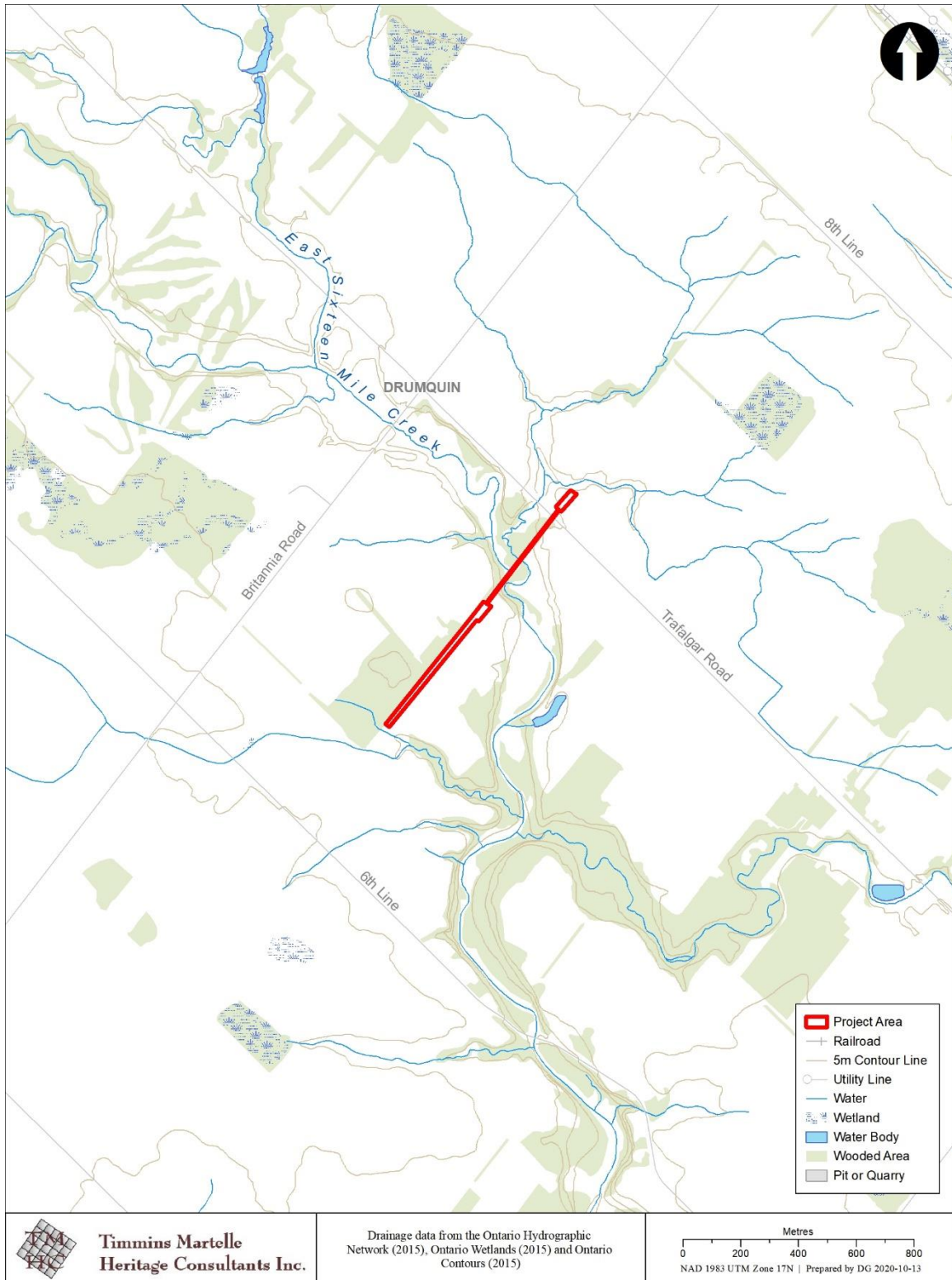


**Map 3: Physiography Within the Vicinity of the Project Area**



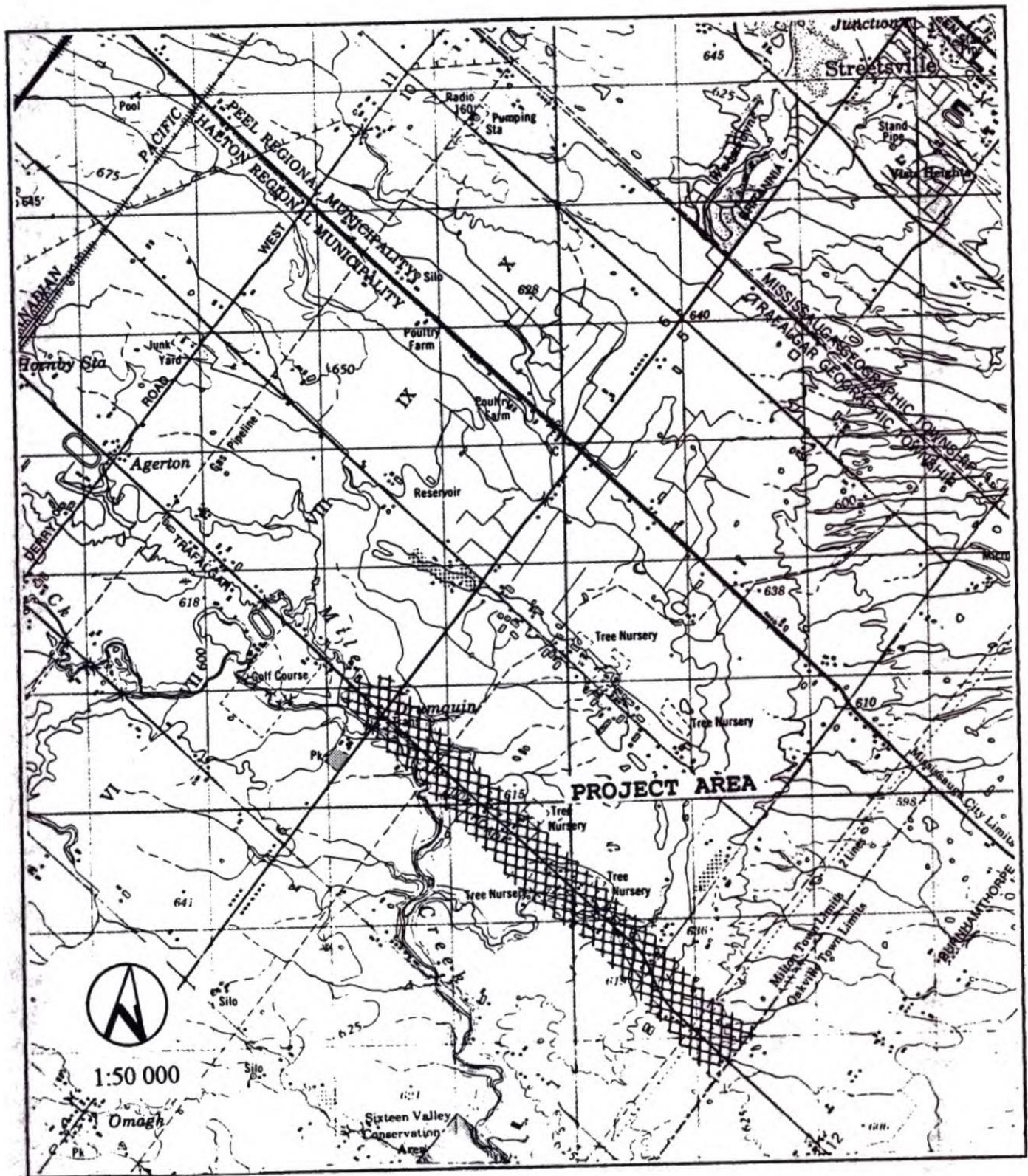
**Map 4: Soils Within the Vicinity of the Project Area**





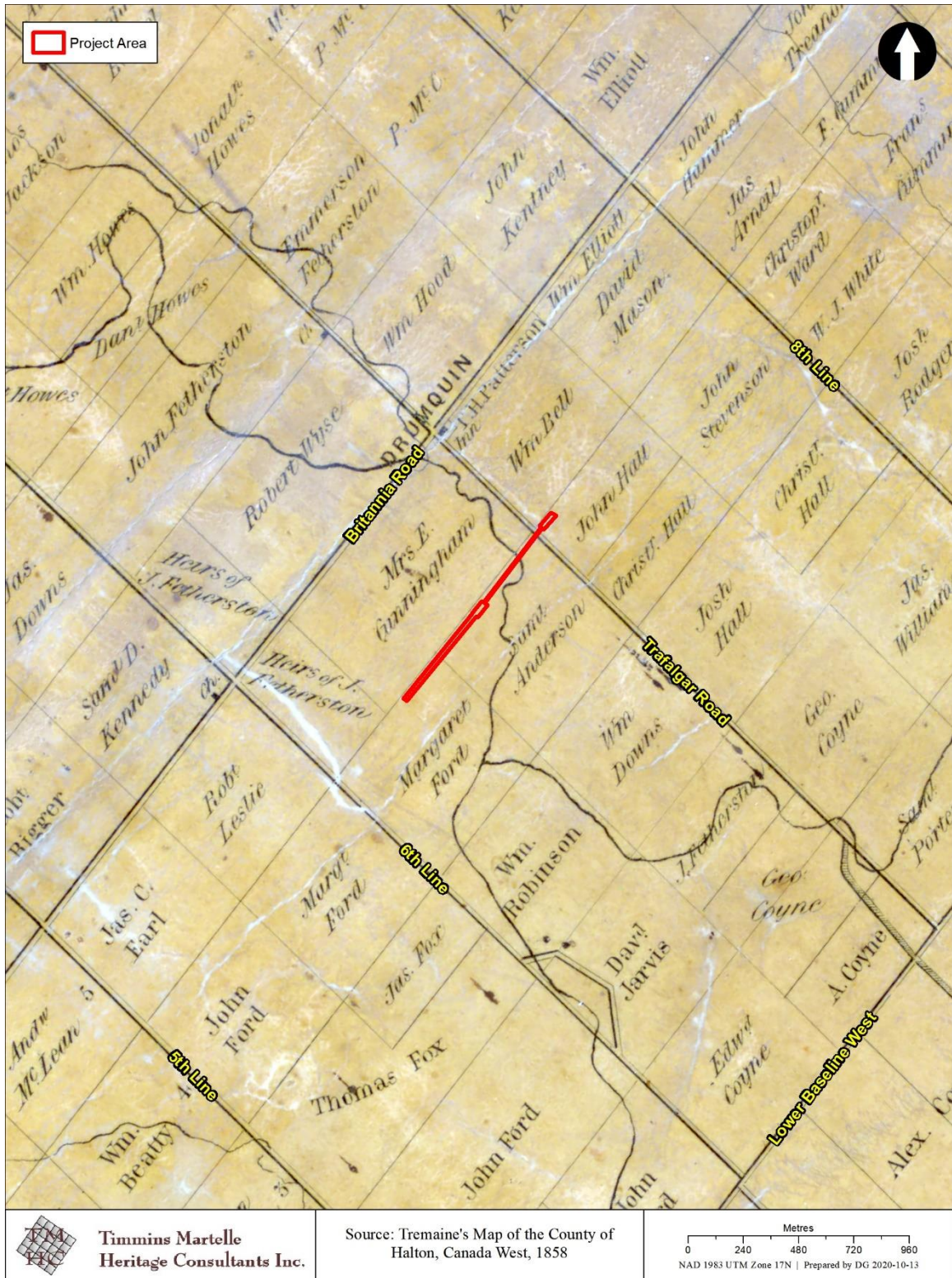
**Map 5: Drainage Within the Vicinity of the Project Area**





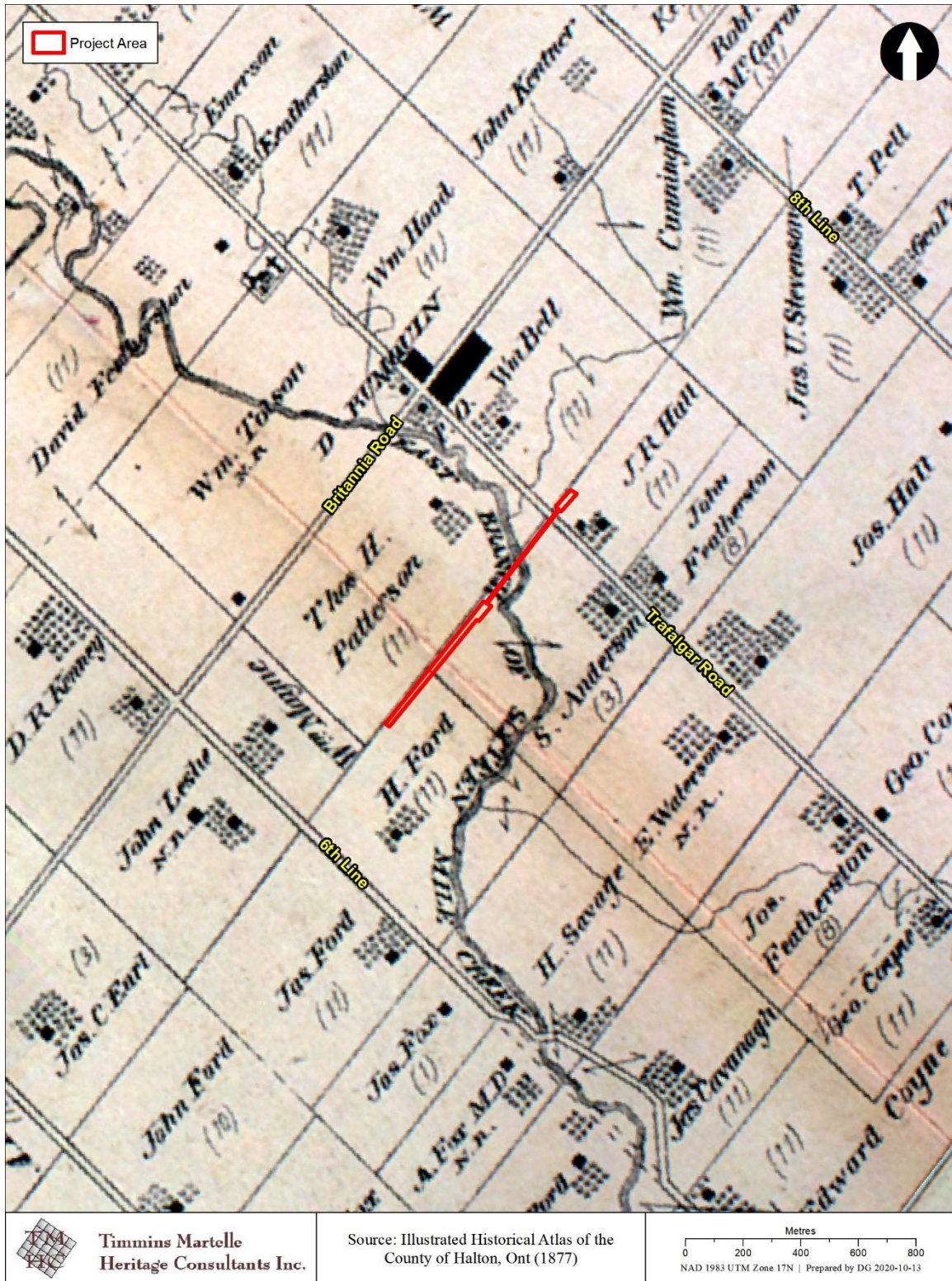
**Map 6: Leslie Currie and Associates (1996) Stage 2 Project Area**





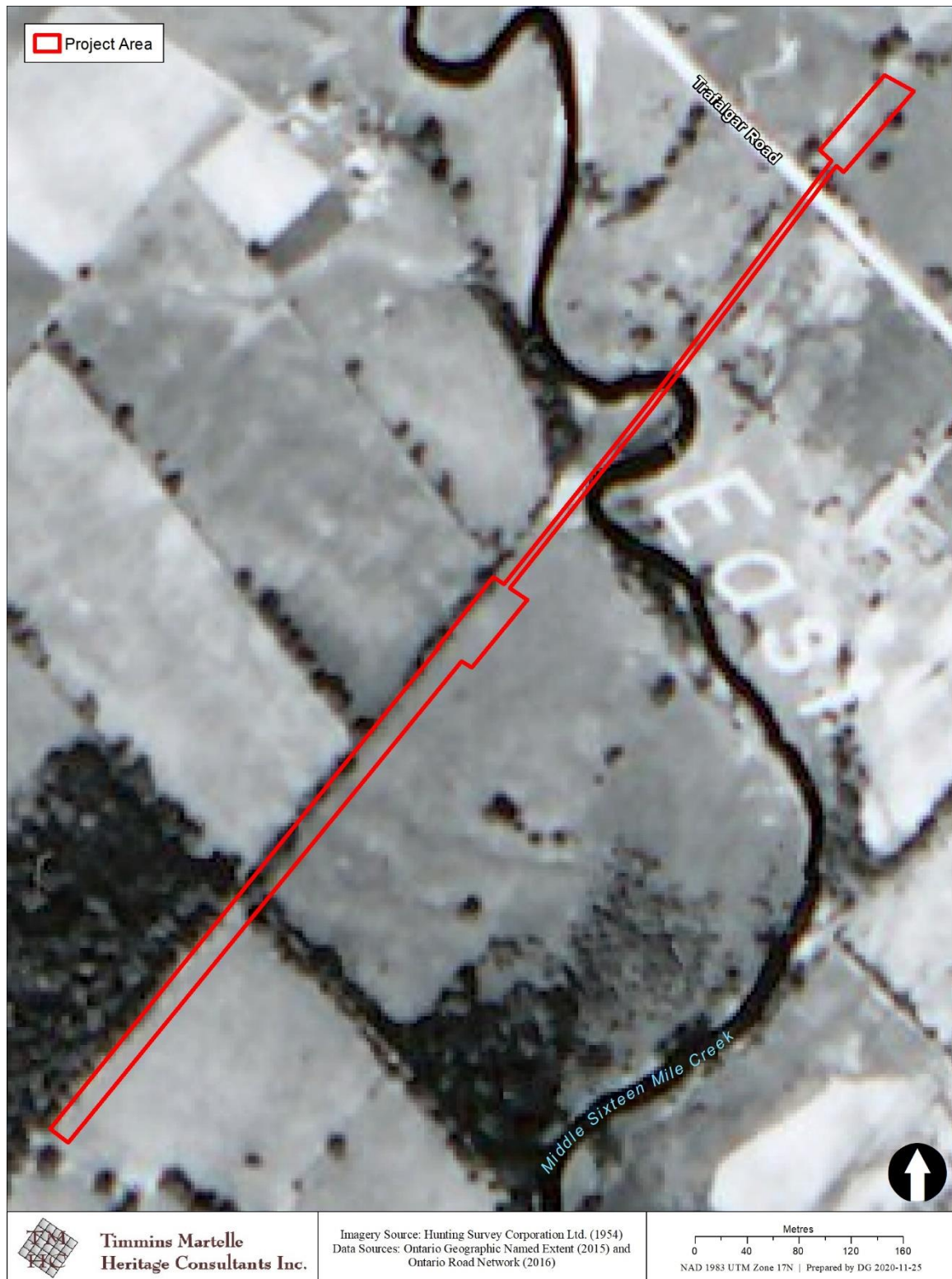
**Map 7: Project Area Shown on an 1858 Map of Halton County, ON**





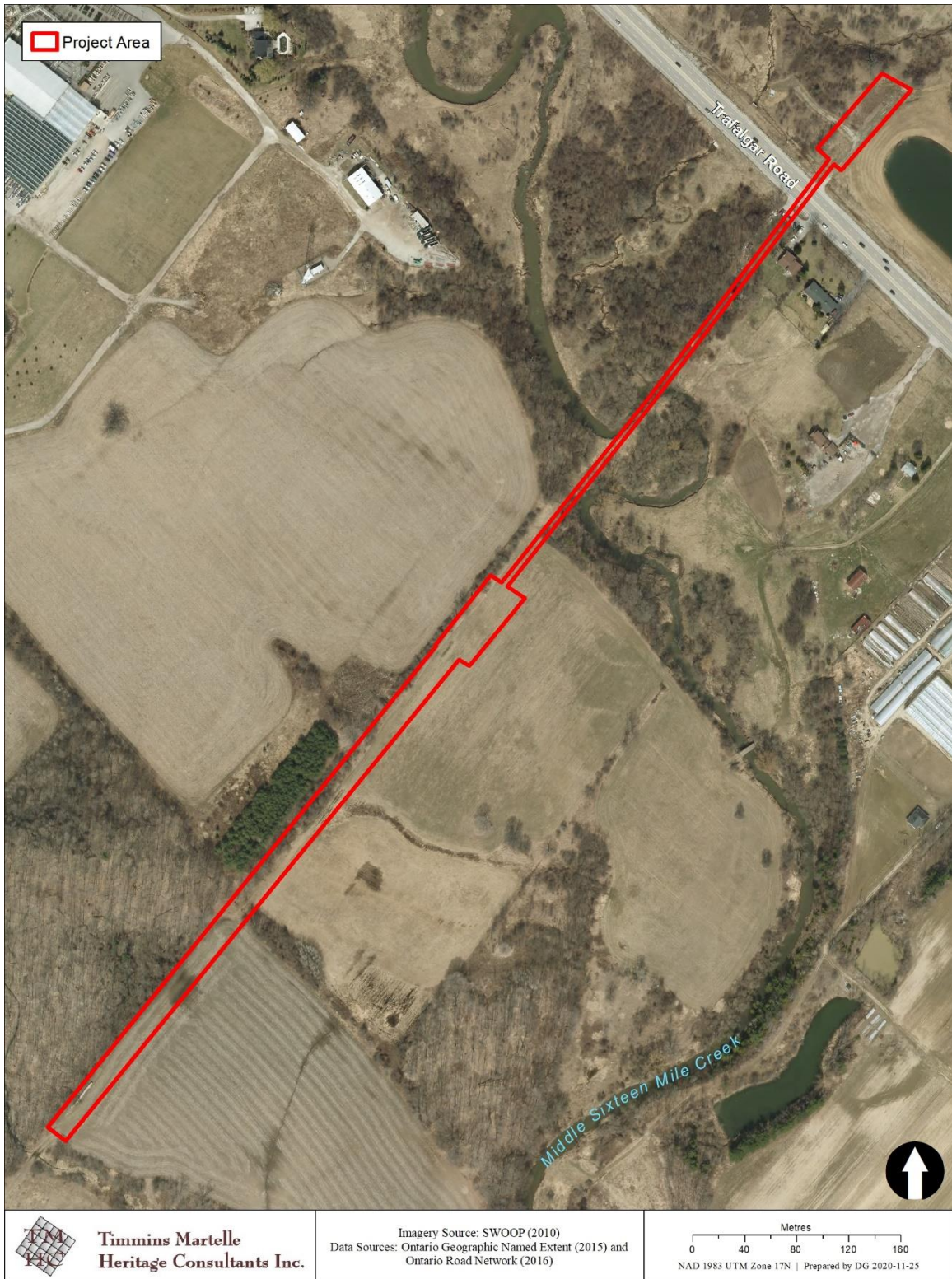
**Map 8: Project Area Shown on an 1877 Map of Halton County, ON**





**Map 9: Location of the Project Area Shown on a 1954 Aerial Photograph**





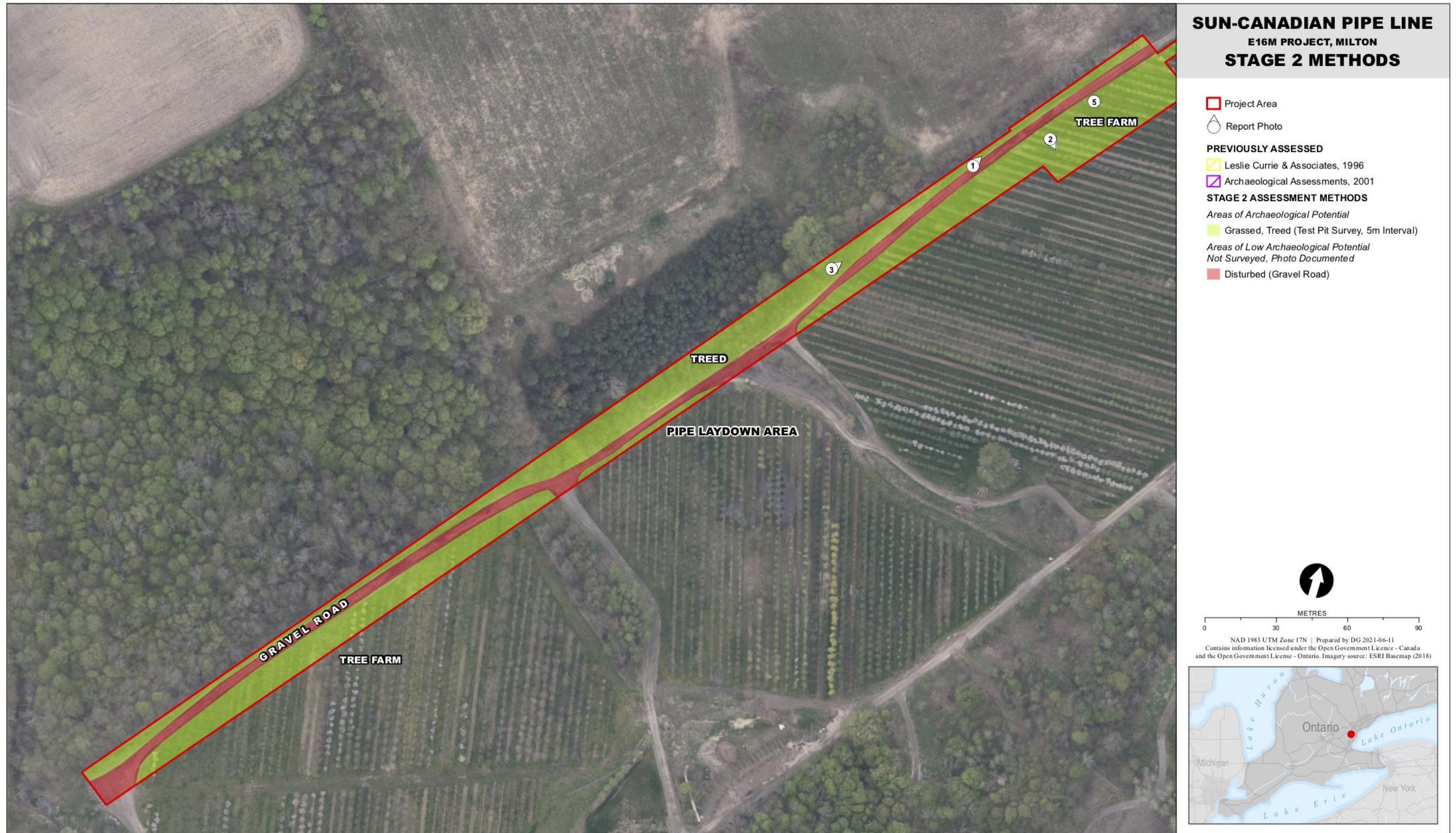
**Map 10: Location of the Project Area Shown on a 2010 Aerial Photograph**





**Map 11: Location of the Project Area Shown on a 2015 Aerial Photograph**





Map 12: Stage 2 Field Conditions and Assessment Methods (1 of 2)





Map 13: Stage 2 Field Conditions and Assessment Methods (2 of 2)



## **APPENDIX F: CULTURAL HERITAGE CHECKLIST**





# Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes

## A Checklist for the Non-Specialist

The **purpose of the checklist** is to determine:

- if a property(ies) or project area:
  - is a recognized heritage property
  - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including – but not limited to:
  - the main project area
  - temporary storage
  - staging and working areas
  - temporary roads and detours

**Processes covered** under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

### Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

### Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – [separate checklist](#)
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Property Name

Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project

Project or Property Location (upper and lower or single tier municipality)

Town of Milton, Region of Halton

Proponent Name

Sun-Canadian Pipe Line Company Limited

Proponent Contact Information

Peter Martens pmartens@sun-canadian.com

### Screening Questions

	Yes	No
1. Is there a pre-approved screening checklist, methodology or process in place?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

### Part A: Screening for known (or recognized) Cultural Heritage Value

	Yes	No
2. Has the property (or project area) been evaluated before and found <b>not</b> to be of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

	Yes	No
3. Is the property (or project area):		
a. identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. a National Historic Site (or part of)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. designated under the <i>Heritage Railway Stations Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. designated under the <i>Heritage Lighthouse Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

## Part B: Screening for Potential Cultural Heritage Value

	Yes	No
4. Does the property (or project area) contain a parcel of land that:		
a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. has or is adjacent to a known burial site and/or cemetery?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. is in a Canadian Heritage River watershed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. contains buildings or structures that are 40 or more years old?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Part C: Other Considerations

	Yes	No
5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):		
a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. has a special association with a community, person or historical event?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. contains or is part of a cultural heritage landscape?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**If Yes** to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

**If No** to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act*, *Planning Act* processes
- maintained by the property owner, proponent or approval authority

## Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
  - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's [Ontario Heritage Toolkit](#) or [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

In this context, the following definitions apply:

- **qualified person(s)** means individuals – professional engineers, architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

### 1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's [Standards & Guidelines for Conservation of Provincial Heritage Properties](#) [s.B.2.]

## Part A: Screening for known (or recognized) Cultural Heritage Value

### 2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) - or equivalent - has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

**Note:** Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

### 3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

- i. designated under the *Ontario Heritage Act*
  - individual designation (Part IV)
  - part of a heritage conservation district (Part V)



## Individual Designation – Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the *Ontario Heritage Act*]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note:** To date, no properties have been designated by the Minister.

## Heritage Conservation District – Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
  - [Ontario Heritage Trust](#)
  - local land registry office (for a title search)
- 

ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the *Ontario Heritage Act*

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- [Ontario Heritage Trust](#) - for an agreement, covenant or easement [clause 10 (1) (c) of the *Ontario Heritage Act*]
  - municipal clerk – for a property that is the subject of an easement or a covenant [s.37 of the *Ontario Heritage Act*]
  - local land registry office (for a title search)
- 

iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the *Ontario Heritage Act* (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
  - municipal heritage planning staff
  - municipal heritage committee
- 

iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the *Ontario Heritage Act*)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the *Ontario Heritage Act*
- section 34.6 of the *Ontario Heritage Act*. **Note:** To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk – for a property that is the subject of notice of intention [s. 29 and s. 40.1]
  - [Ontario Heritage Trust](#)
-

- v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at [registrar@ontario.ca](mailto:registrar@ontario.ca).

### **3b. Is the property (or project area) a National Historic Site (or part of)?**

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the [National Historic Sites website](#).

### **3c. Is the property (or project area) designated under the *Heritage Railway Stations Protection Act*?**

The *Heritage Railway Stations Protection Act* protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the [Directory of Designated Heritage Railway Stations](#).

### **3d. Is the property (or project area) designated under the *Heritage Lighthouse Protection Act*?**

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the [Heritage Lighthouses of Canada](#) website.

### **3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?**

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the [Federal Heritage Buildings Review Office](#).

See a [directory of all federal heritage designations](#).

### **3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?**

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – [World Heritage Site website](#).

## **Part B: Screening for potential Cultural Heritage Value**

### **4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?**

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations



For more information, contact:

- [municipal heritage committees](#) or local heritage organizations – for information on the location of plaques in their community
- Ontario Historical Society's [Heritage directory](#) – for a list of historical societies and heritage organizations
- Ontario Heritage Trust – for a [list of plaques](#) commemorating Ontario's history
- Historic Sites and Monuments Board of Canada – for a [list of plaques](#) commemorating Canada's history

**4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?**

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services – for a [database of registered cemeteries](#)
- Ontario Genealogical Society (OGS) – to [locate records of Ontario cemeteries](#), both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to [locate early cemeteries](#)

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

**4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?**

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the [Canadian Heritage River System](#).

If you have questions regarding the boundaries of a watershed, please contact:

- your conservation authority
- municipal staff

**4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?**

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

**Note:** 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide [Heritage Property Evaluation](#).

## Part C: Other Considerations

### **5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?**

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

### **5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?**

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

### **5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?**

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- [municipal heritage committees](#) or local heritage organizations
- Ontario Historical Society's "[Heritage Directory](#)" - for a list of historical societies and heritage organizations in the province

An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through [Ontario Trails](#).

## **APPENDIX 2 – INDIGENOUS CONSULTATION RECORDS AND SUPPORTING DOCUMENTATION**



June 6, 2020

**VIA EMAIL – dan.delaquis@ontario.ca**

Ministry of Energy, Northern Development and Mines  
Mr. Dan Delaquis - Manager, Indigenous Energy Policy  
77 Grenville Street, 6th floor Toronto ON M7A 2C1

Dear Mr. Delaquis,

**RE: SCPL East Sixteen Mile Crossing Replacement**

The purpose of this letter is to inform the Ministry of Energy, Northern Development and Mines that Sun Canadian Pipe Line Limited has identified the need to replace a segment of an existing pipeline near Trafalgar Road and south of Britannia Road in the Town of Milton. Accordingly, we will be submitting an application to the Ontario Energy Board and following the *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7th Edition 2016*.

Attachment 1 provides project description details for your review and aid in commentating on the obligations of the Crown's duty to consult for intra-provincial pipelines.

This important project is required for maintaining the integrity of the pipeline. We would appreciate expediting review and comment as soon as possible. Please do not hesitate to contact me with any questions.

Regards,

Susan J. Jackson  
Manager Environment, Health & Safety

## **Attachment 1: East Sixteen Mile Crossing Replacement Project**

### **Project Summary**

Sun-Canadian Pipe Line (SCPL) has identified the need to replace approximately 500m segment of an existing 12 inch diameter pipeline (TRL system) near Trafalgar Road and south of Britannia Road in the Town of Milton. The existing pipeline segment crosses under East Sixteen Mile creek and has become exposed in several locations in the watercourse due to ongoing erosion and creek meander. This project intends to install a new segment of 12 inch diameter pipe via horizontal directional drilling at a greater depth to eliminate the environmental risks of the current pipe exposure.

### **Project Information**

SCPL's TRL system supplies finished petroleum products including gasoline, jet fuel, and diesel fuels to terminals in Southern Ontario. The TRL system originates in Sarnia and has connections to distribution terminals in London, Pearson Airport, and Toronto. This system is critical to ensuring adequate supply of fuels products throughout the Greater Toronto Area.

The current segment of the TRL system that requires replacement is located in the Town of Milton. Drill entry is located on Piper's Heath golf course in Town of Milton. Drill exit is located on PAO Tree Nursery in Town of Milton. See Figure 1 below for existing and proposed pipeline routing as well as coordinates of the two temporary work locations. The drill entry and drill exit sites are both located on previously disturbed lands. Both sites will be accessed by existing roads. Temporary matting will be used at both work locations to minimize disturbance.

### **Indigenous Engagement**

Earlier this month, we reached out to the Mississauga of the Credit and Six Nations of the Grand River by phone and by email to briefly introduce the project. While most administrations remain temporarily closed for the COVID-19 outbreak, we did receive a positive acknowledgement from the Mississauga of the Credit First Nation to participate in project discussions of the project in the near future.

### **Authorizations and Recommendations Required**

This project is being planned in accordance with OEB regulations and will request a "Leave to Construct" under subsection 90 from the OEB. An environmental assessment will be completed as part of that process. Engagement with landowners, Indigenous communities, Conservation Halton, and the municipality will also be enacted. Other authorization, notification, permits, and/or approvals may be required and identified as part of this process.

### **Project Activities**

Design of the new pipe segment will be done to ensure safe and reliable long-term operation of the pipeline system as well as compliance with Technical Standards and Safety Authority (TSSA) regulations and Canadian Standards Association (CSA) Z662 standard. Design of the horizontal directional drill plan

will be done to prevent drill fluid losses and ensure proper control of the drill path. Major phases of this project include engineering design, environmental assessment, landowner/Indigenous engagement, approvals, contractor selection, and construction/decommissioning.

Public consultation will be undertaken as part of the Leave to Construct process. Landowners impacted by this proposed work will be engaged and access agreements and/or easement agreements will be put in place. Identified landowners and tenants impacted by this work include:

- York Trafalgar Golf Corp
- [REDACTED]
- [REDACTED]
- [REDACTED]
- Terra Greenhouses
- PAO Nursery

Construction will require temporary work sites at the drill entry and exit points. Both work sites have existing road access. Brush clearing and temporary matting will be needed to ensure a safe work space. The new pipe segment will be assembled, hydrotested, and installed from the drill exit location. The TRL pipeline system will then be shut down and drained, and the new pipe segment will be tied in at the drill entry and exit locations. The existing pipe removed from service will be cleaned, capped, and filled with grout. All work locations will then be backfilled and returned to their original condition.

### **Potential Environmental Effects and Mitigation Measures**

The Environmental Assessment will assess physical, natural and socio-economical features potentially impacted by construction activities (such as minor brushing and ground disturbance at the drill entry and exit). Mitigation measures will be recommended as part of the screening to minimize potential adverse effects to the environment. The mitigation recommendations, together with SCPL project management processes, should effectively serve to protect environmental features within the proposed work locations.

It is anticipated that the majority of adverse and/or socio-economic effects will be construction-related temporary and transitory, and likely avoided by locating the drill sites outside of the creek valley and on previously disturbed areas.

### **Project Benefits**

This project will eliminate the environmental risk due to exposed pipe in the East Sixteen Mile Creek watershed. It will ensure continued reliable operation of the TRL system to allow fuel supply to be maintained to the Greater Toronto Area.

### **Contact Information**

Regulatory Affairs, Indigenous Relations and Environment Matters:  
 Susan Jackson  
[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)  
 647-465-8159



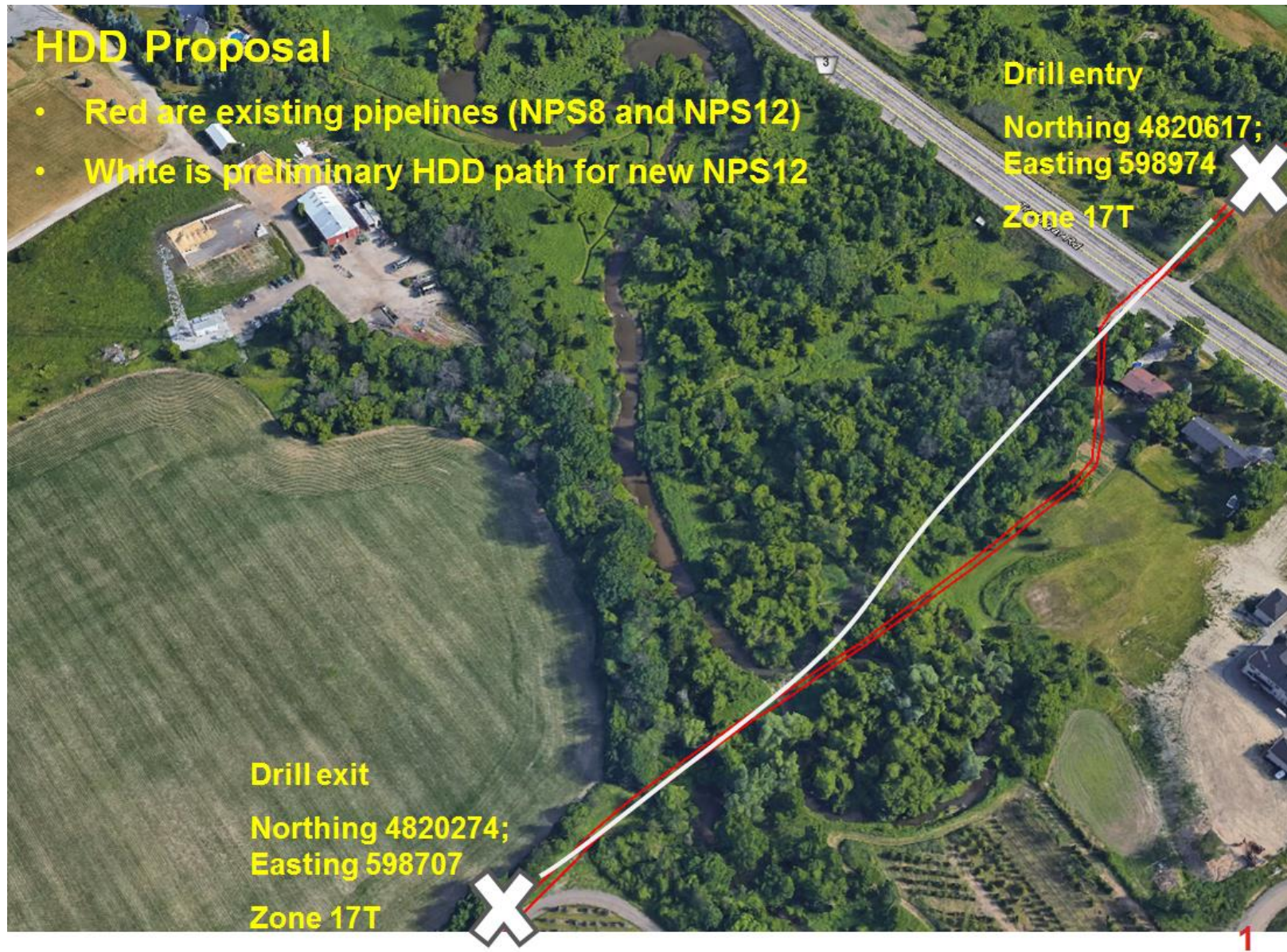
Technical Contact:

Peter Martens

[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)

289-230-4350

Figure 1: Map of HDD proposal



**From:** [Susan Jackson](#)  
**To:** [Mark LaFrampe](#)  
**Subject:** East 16 Mile Creek - MCFN  
**Attachments:** [image001.png](#)

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Mark;

As discussed briefly by phone, Sun-Canadian Pipe Line (SCPL) has identified the need to replace approximately 500m segment of an existing pipeline near Trafalgar Road and south of Britannia Road in the Town of Milton. The existing pipeline segment crosses under East Sixteen Mile creek needs to be protected from the watercourse due to ongoing erosion and creek meander. This project intends to install a new segment of pipe by horizontal directional drilling at a greater depth to eliminate the environmental risks.

The purpose of this email to introduce this initiative with the Mississauga's of the Credit and to let you know that we will be reaching out to consult with MCFN (via the Department of Consultation and Accommodation) on this project. Also, we intend on applying to the Ontario Energy Board for this work which involves notification to the Ministry of Energy, Northern Development and Mines for their determination of Duty to Consult. We anticipate this Ministry will also be notifying MCFN of our application.

We look forward to working with MCFN on this project. Please do not hesitate to contact me if you have any questions at this time.

Regards,  
Susan Jackson  
Manager EHS  
Sun Canadian Pipe Line  
647-465-8159



**From:** [Susan Jackson](#)  
**To:** [hdi2@bellnet.ca](mailto:hdi2@bellnet.ca); [traceghdi@gmail.com](mailto:traceghdi@gmail.com)  
**Subject:** East 16 Mile Creek - HCC  
**Attachments:** [image001.png](#)

---

Good Morning Tracey;

Sun-Canadian Pipe Line (SCPL) has identified the need to replace approximately 500m segment of an existing pipeline near Trafalgar Road and south of Britannia Road in the Town of Milton. The existing pipeline segment crosses under East Sixteen Mile creek needs to be protected from the watercourse due to ongoing erosion and creek meander. This project intends to install a new segment of pipe by horizontal directional drilling at a greater depth to eliminate the environmental risks.

The purpose of this email to introduce this initiative with the Haudenosaunee Confederacy Council (HCC) and to let you know that we will be reaching out to consult with HCC via the Haudenosaunee Development Institute on this project. Also, we intend on applying to the Ontario Energy Board for this work which involves notification to the Ministry of Energy, Northern Development and Mines for their determination of Duty to Consult. We anticipate this Ministry will also be notifying HDI of our application.

Please do not hesitate to contact me if you have any questions at this time.

Regards,  
Susan Jackson  
Manager EHS  
Sun Canadian Pipe Line  
647-465-8159



VIA EMAIL

July 28, 2020

Susan Jackson  
Manager Environment, Health & Safety  
Sun-Canadian Pipe Line  
150 – 6th Avenue S.W.  
Calgary, Alberta T2P 3E3

**Re: SCPL East Sixteen Mile Crossing Replacement**

Dear Susan Jackson:

Thank you for your email dated June 11, 2020 notifying the Ministry of Energy, Northern Development and Mines (ENDM) of Sun-Canadian Pipe Line's intention to apply to the Ontario Energy Board (OEB) for Leave to Construct for the SCPL East Sixteen Mile Crossing Replacement (the Project).

I understand that Sun-Canadian Pipe Line is has identified the need to replace approximately 500m segment of an existing 12-inch diameter pipeline (TRL system) near Trafalgar Road and south of Britannia Road in the Town of Milton. The existing pipeline segment crosses under East Sixteen Mile creek and has become exposed in several locations in the watercourse due to ongoing erosion and creek meander. This project intends to install a new segment of 12-inch diameter pipe via horizontal directional drilling at a greater depth to eliminate the environmental risks of the current pipe exposure.

On behalf of the Government of Ontario (the Crown), ENDM has reviewed the information provided by Sun-Canadian Pipe Line with respect to the Project and assessed it against the Crown's current understanding of the interests and rights of Aboriginal communities who hold or claim Aboriginal or treaty rights protected under Section 35 of Canada's Constitution Act 1982 (Indigenous Communities) in the area. In doing so, ENDM has determined that the Project may have the potential to affect such Indigenous communities.

The Crown has a constitutional duty to consult and, where appropriate, accommodate Indigenous communities when the Crown contemplates conduct that might adversely impact established or asserted Aboriginal or Treaty rights. These consultations are in addition to consultation imposed by statute.

While the legal responsibility to meet the duty to consult lies with the Crown, the Crown may delegate the day-to-day, procedural aspects of consultation to project Proponents. Such a delegation by the Crown to Proponents is routine practice for ENDM.

I am writing to advise you that on behalf of the Crown, ENDM is delegating the procedural aspects of consultation in respect of the Project to Sun-Canadian Pipe Line (Proponent) through this letter. ENDM expects that the Proponent will undertake the procedural aspects of consultation with respect to any regulated requirements for the proposed Project. The Crown will fulfill the substantive aspects of consultation and retain oversight over all aspects of the process for fulfilling the Crown's duty.

Please see the appendix for information on the roles and responsibilities of both the Crown and the Proponent.

Based on the Crown's assessment of First Nation and Métis community rights and potential project impacts, the following Indigenous communities should be consulted on the basis that they have or may have constitutionally protected Aboriginal or Treaty rights that may be adversely affected by the Project.

<b>Community</b>	<b>Mailing Address</b>
Mississaugas of the New Credit First Nation	2789 Mississauga Road R.R. #6 Hagersville, ON N0A 1H0
Six Nations of the Grand River *	Six Nations of the Grand River Elected Council PO Box 5000 Ohsweken, Ontario N0A 1M0  Haudenosaunee Confederacy Chiefs Council P.O Box 714 Ohsweken, ON N0A 1M0
Huron Wendat**	255, place Chef Michel Laveau Wendake, QC G0A 4V0

*\*Please note, proponents are required to consult with both, Six Nations Elected Council and Haudenosaunee Confederacy Chiefs Council (HCCC). Please copy Haudenosaunee Development Institute (HDI) on all correspondence to Haudenosaunee Confederacy Chiefs Council (HCCC).*

*\*\*interests are specific to archeological resources*

This rights-based consultation list is based on information that is subject to change. Consultation is ongoing throughout the duration of the project, including project development and design, consultation, approvals, construction, operation and decommissioning. First Nation and Métis communities may make new rights assertions



at any time, and further project related developments can occur that may require additional First Nation and/or Métis communities to be notified and/or consulted. If you become aware of potential rights impacts on Indigenous communities that are not listed above at any stage of project, please bring this to the attention of ENDM with any supporting information regarding the claim at your earliest convenience.

ENDM is assuming a coordinating role within government in relation to rights-based Aboriginal consultation on the Project. We recommend contacting the following ministry representatives if you have any questions or concerns relating to a specific ministry's mandate:

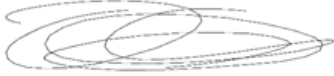
<b>Ministry/Contact</b>	<b>Phone/Email</b>
<b>Ministry of Energy, Northern Development and Mines</b>  Kristen Bromfield – Policy Advisor, Indigenous Energy Policy Unit	(416) 735-3297 <a href="mailto:kristen.bromfield@ontario.ca">kristen.bromfield@ontario.ca</a>
<b>Ministry of Environment, Conservation and Parks</b>  Peter Brown – Consultation Advisor, Environmental Assessment and Permissions Division	(416) 314-0149 <a href="mailto:peter.brown@ontario.ca">peter.brown@ontario.ca</a>
<b>Ministry of Transportation</b>  Donna Bigelow - Team Lead, Indigenous Relations Branch	(647) 537-9423 <a href="mailto:donna.bigelow@ontario.ca">donna.bigelow@ontario.ca</a>
<b>Ministry of Government and Consumer Services</b>  Uyen Ha – Senior Policy Advisor, Infrastructure Projects - Realty	(437) 994-8446 <a href="mailto:Uyen.ha@ontario.ca">Uyen.ha@ontario.ca</a>
<b>Ministry of Heritage, Sport, Tourism and Culture Industries</b>  Karla Barboza - Team Lead, Heritage, Tourism and Culture Division	(416) 314-7120 <a href="mailto:karla.barboza@ontario.ca">karla.barboza@ontario.ca</a>

### **Acknowledgement**

By accepting this letter, the Proponent acknowledges this Crown delegation and the procedural consultation responsibilities enumerated in the appendix. If you have any questions about this request, you may contact Kristen Bromfield (see above).

I trust that this information provides clarity and direction regarding the respective roles of the Crown and Sun-Canadian Pipe Line. If you have any questions about this letter or require any additional information, please contact me directly.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dan Delaquis', with a stylized, overlapping loop structure.

Dan Delaquis  
Manager, Indigenous Energy Policy

C: Ontario Pipeline Coordinating Committee (OPCC)

## **APPENDIX: PROCEDURAL CONSULTATION**

### **Roles and Responsibilities Delegated to the Proponent**

On behalf of the Crown, please be advised that your responsibilities as Project Proponent for this Project include:

- providing notice and information about the Project to Indigenous communities, with sufficient detail and at a stage in the process that allows the communities to prepare their views on the Project and, if appropriate, for changes to be made to the Project. This can include:
  - accurate, complete and plain language information including a detailed description of the nature and scope of the Project and translations into Aboriginal languages where appropriate;
  - maps of the Project location and any other affected area(s);
  - information about the potential negative effects of the Project on the environment, including their severity, geographic scope and likely duration. This can include, but is not limited to, effects on ecologically sensitive areas, water bodies, wetlands, forests or the habitat of species at risk and habitat corridors;
  - a description of other provincial or federal approvals that may be required for the Project to proceed;
  - whether the Project is on privately owned or Crown controlled land;
  - any information the Proponent may have on the potential effects of the Project, including particularly any likely adverse impacts on established or asserted Aboriginal or treaty rights;
  - a written request asking the Indigenous community to provide in writing or through a face-to-face meeting:
    - any information available to them that should be considered when preparing the Project documentation;
    - any information the community may have about any potential adverse impacts on their Aboriginal or treaty rights; and
    - any suggested measures for avoiding, minimizing or mitigating potential adverse impacts;
    - information about how information provided by the Indigenous community as part of the consultation process will be collected, stored, used, and shared for their approval;
  - identification of any mechanisms that will be applied to avoid, minimize or mitigate potential adverse impacts;
  - identification of a requested timeline for response from the community and the anticipated timeline for meeting Project milestones following each notification;

- an indication of the Proponent's availability to discuss the process and provide further information about the Project;
- the Proponent's contact information; and
- any additional information that might be helpful to the community;
- following up, as necessary, with Indigenous communities to ensure they received Project notices and information and are aware of the opportunity to comment, raise questions or concerns and identify potential adverse impacts on their established or asserted rights;
- gathering information about how the Project may adversely affect Aboriginal or treaty rights;
- bearing the reasonable costs associated with the procedural aspects of consultation (paying for meeting costs, making technical support available, etc.) and considering reasonable requests by communities for capacity funding to assist in participating in the consultation process;
- considering and responding to comments and concerns raised by Indigenous communities and answering questions about the Project and its potential impacts on Aboriginal or treaty rights;
- as appropriate, discussing and implementing changes to the Project in response to concerns raised by Indigenous communities. This could include modifying the Project to avoid or minimize an impact on an Aboriginal or treaty right (e.g. altering the season when construction will occur to avoid interference with mating or migratory patterns of wildlife); and
- informing Indigenous communities about how their concerns were taken into consideration and whether the Project proposal was altered in response. It is considered a best practice to provide the Indigenous community with a copy of the consultation record as part of this step for verification.

If you are unclear about the nature of a concern raised by an Indigenous community, you should seek clarification and further details from the community, provide opportunities to listen to community concerns and discuss options, and clarify any issues that fall outside the scope of the consultation process. These steps should be taken to ensure that the consultation process is meaningful and that concerns are heard and, where possible, addressed.

You can also seek guidance from the Crown at any time. It is recommended that you contact the Crown if you are unsure about how to deal with a concern raised by an Indigenous community, particularly if the concern relates to a potential adverse impact on established or asserted Aboriginal or treaty rights.

The consultation process must maintain sufficient flexibility to respond to new information, and we request that you make all reasonable efforts to build positive relationships with all Indigenous communities potentially affected by the Project. If a community is unresponsive to efforts to notify and consult, you should nonetheless make attempts to update the community on the progress of the Project, the environmental assessment (if applicable) and other regulatory approvals.

If you reach a business arrangement with an Indigenous community that may affect or relate to the Crown's duty to consult, we ask that that Crown be advised of those aspects of such an arrangement that may relate to or affect the Crown's consultation obligations, and that the community itself be apprised of the Proponent's intent to so-appraise the Crown. Whether or not any such business arrangements may be reached with any community, the Crown expects the Proponent to fulfill all of its delegated procedural consultation responsibilities to the satisfaction of the Crown.

If the Crown considers that there are outstanding issues related to consultation, the Crown may directly undertake additional consultation with Indigenous communities, which could result in delays to the Project. The Crown reserves the right to provide further instructions or add communities throughout the consultation process.

### **Roles and responsibilities assumed directly by the Crown**

The role of the Crown in fulfilling any duty to consult and accommodate in relation to this Project includes:

- identifying for the Proponent, and updating as appropriate, the Indigenous communities to consult for the purposes of fulfillment of the Crown duty;
- carrying out, from time to time, any necessary assessment of the extent of consultation or, where appropriate, accommodation, required for the project to proceed;
- supervising the aspects of the consultation process delegated to the Proponent;
- determining in the course of Project approvals whether the consultation of Indigenous communities was sufficient;
- determining in the course of Project approvals whether accommodation of Indigenous communities, if required, is appropriate and sufficient.

### **Consultation Record**

It is important to ensure that all consultation activities undertaken with Indigenous communities are fully documented. This includes all attempts to notify or consult the community, all interactions with and feedback from the community, and all efforts to respond to community concerns. Crown regulators

require a complete consultation record in order to assess whether Aboriginal consultation and any necessary accommodation is sufficient for the Project to receive Ontario government approvals. The consultation record should include, but not be limited to, the following:

- a list of the identified Indigenous communities that were contacted;
- evidence that notices and Project information were distributed to, and received by, the Indigenous communities (via courier slips, follow up phone calls, etc.). Where a community has been non-responsive to multiple efforts to contact the community, a record of such multiple attempts and the responses or lack thereof.
- a written summary of consultations with Indigenous communities and appended documentation such as copies of notices, any meeting summaries or notes including where the meeting took place and who attended, and any other correspondence (e.g., letters and electronic communications sent and received, dates and records of all phone calls);
- responses and information provided by Indigenous communities during the consultation process. This includes information on Aboriginal or treaty rights, traditional lands, claims, or cultural heritage features and information on potential adverse impacts on such Aboriginal or treaty rights and measures for avoiding, minimizing or mitigating potential adverse impacts to those rights; and
- a summary of the rights/concerns, and potential adverse impacts on Aboriginal or treaty rights or on sites of cultural significance (e.g. burial grounds, archaeological sites), identified by Indigenous communities; how comments or concerns were considered or addressed; and any changes to the Project as a result of consultation, such as:
  - changing the Project scope or design;
  - changing the timing of proposed activities;
  - minimizing or altering the site footprint or location of the proposed activity;
  - avoiding impacts to the Aboriginal interest;
  - environmental monitoring; and
  - other mitigation strategies.

As part of its oversight role, the Crown may, at any time during the consultation and approvals stage of the Project, request records from the Proponent relating to consultations with Indigenous communities. Any records provided to the Crown will be subject to the *Freedom of Information and Protection of Privacy Act*, however may be exempted from disclosure under section 15.1 (Relations with



Aboriginal communities) of the Act. Additionally, please note that the information provided to the Crown may also be subject to disclosure where required under any other applicable laws.

The contents of what will make up the consultation record should be shared at the onset with the Indigenous communities consulted with and their permission should be obtained. It is considered a best practice to share the record with the Indigenous community prior to finalizing it to ensure it is a robust and accurate record of the consultation process.



August 12, 2020

Haudenosaunee Confederacy Chiefs Council  
c/o Haudenosaunee Development Institute  
P.O. Box 714  
Ohsweken, ON N0A 1M0  
HaudenosauneeConfederacy.ca

SENT VIA EMAIL

Haudenosaunee Confederacy Council,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mail outs, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

The Haudenosaunee Confederacy Council is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun-Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line

**Attachment:** Map of Proposed Pipeline Route



c. Tracey General, Haudenosaunee Development Institute  
Todd Williams, Haudenosaunee Development Institute  
Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line



August 12, 2020

Maxime Picard  
Huron-Wendat  
255 place chef Michel Laveau  
Wendake, QC G0A 4V0  
administration@cnhw.qc.ca

SENT VIA EMAIL

Dear Mr. Picard,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mail outs, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

The Huron-Wendat First Nation is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun-Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line

**Attachment:** Map of Proposed Pipeline Route



c. Administration, Huron-Wendat First Nation  
Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line



August 12, 2020

Mark LaForme  
Mississauga of the Credit First Nation  
2789 Mississauga Road, R. R. #6  
Hagersville ON N0A 1H0  
mark.laforme@mcfn.ca

SENT VIA EMAIL

Dear Mr. LaForme,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mail outs, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Mississauga of the Credit First Nation is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun-Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line





**Attachment:** Map of Proposed Pipeline Route

c. Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line



August 12, 2020

Lonny Bomberry  
Six Nations Lands & Resources  
Six Nations of the Grand River Elected Council  
PO Box 5000  
Oshweken, ON  
lonnybomberry@sixnations.ca

SENT VIA EMAIL

Dear Mr. Bomberry,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mail outs, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Six Nations of the Grand River First Nation is invited to provide comments regarding the proposed project. Specifically, Stantec and Sun Canadian are seeking any information available from your community that should be considered when preparing the Project documentation, information about any potential adverse impacts that the proposed project may have on constitutionally protected aboriginal or treaty rights and any measures for avoiding, minimizing or mitigating those potential adverse impacts. Stantec and Sun-Canadian are also seeking background environmental and socio- economic information that may be useful in compiling an inventory.

We would be pleased to hold a virtual meeting (during these COVID-19 times) with you to introduce the project and discuss the topics outlined above. Please let us know if you are interested in meeting this September and if so, provide potential meeting dates that accommodate your schedule.

Regards,

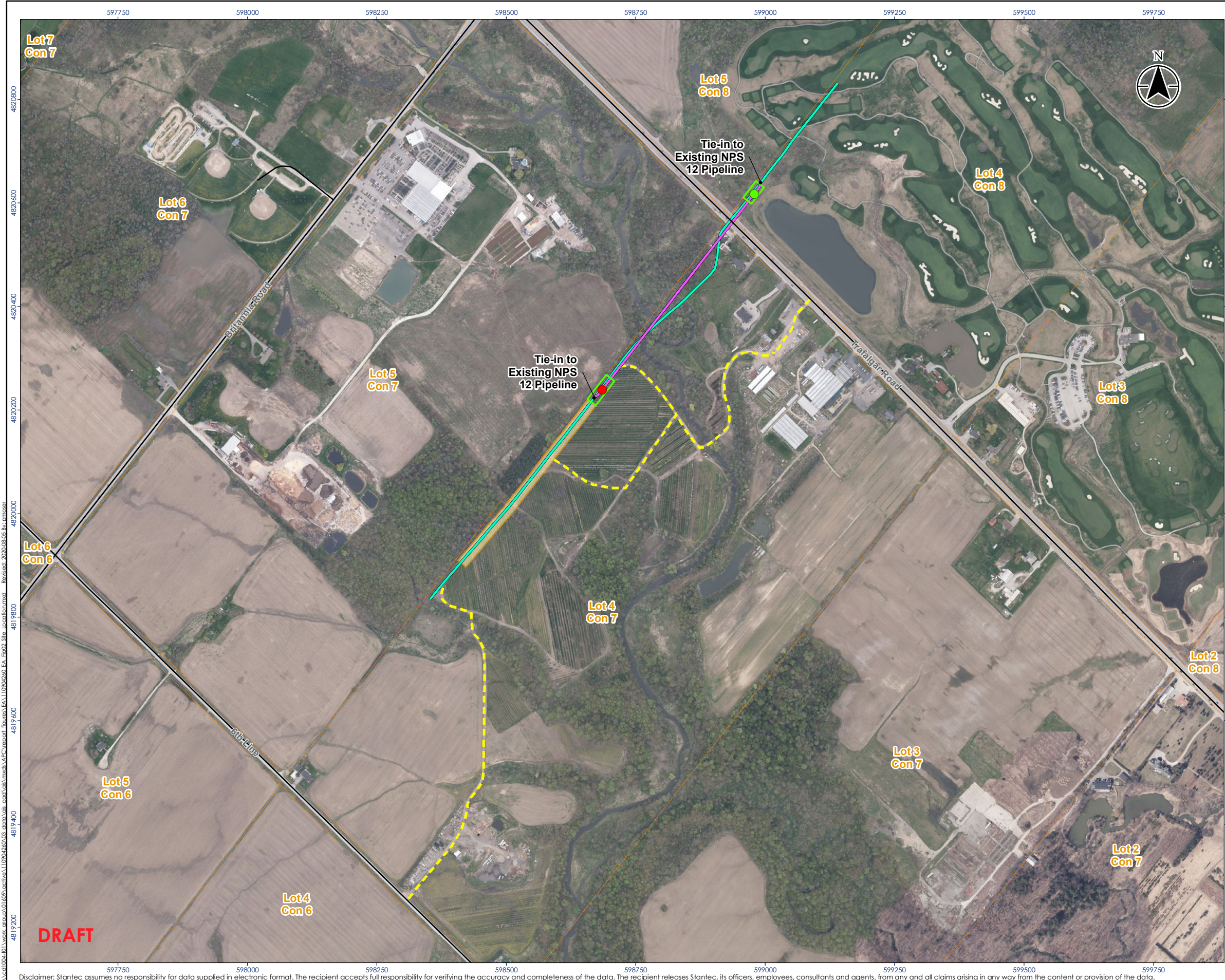
S. Jackson  
Manager, Environment Health and Safety  
Sun-Canadian Pipe Line



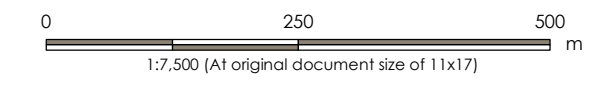
**Attachment:** Map of Proposed Pipeline Route

c. Dawn LaForme, Six Nations of the Grand River First Nation  
Peter Martens, Pipeline Engineer, Sun Canadian Pipe Line





- Legend
- HDD Entry Point
  - HDD Exit Point
  - Existing Sun Canadian Pipeline (NPS 12)
  - Proposed NPS 12 Replacement
  - Existing Access
  - Road
  - Drill Pad (Entry & Exit)
  - Pipe Laydown Area
  - Lot Boundary



- Notes
- Coordinate System: NAD 1983 UTM Zone 17N
  - Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2020.
  - Orthoimagery © First Base Solutions, 2020. Imagery Date, 2019.



Project Location: Town of Milton  
110904260 REVA  
Prepared by PRM on 2020-08-05  
Technical Review by MC on 2020-08-05

Client/Project:  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No. **2**  
Title **Site Location**  
**DRAFT**



# SUN-CANADIAN PIPE LINE COMPANY LIMITED

NPS 12 E16M CREEK PIPELINE REPLACEMENT  
PROJECT

# INTRODUCTION



- The purpose of the meeting is for Sun-Canadian Pipe Line Limited to introduce and share information regarding the proposed Project and to hear from the Huron-Wendat Nation as to how they wish to participate in the Project.



# AGENDA



- Introductions – Sun-Canadian Pipe Line Limited, Huron-Wendat Nation
- Project Overview – Sun-Canadian Pipe Line Limited
- Project Input – Huron-Wendat Nation
  - Any information available, including background environmental and socio-economic information, from Huron-Wendat Nation that should be considered when preparing project documentation.
  - Any information the Huron-Wendat Nation may have about potential adverse impacts on your Aboriginal or treaty rights.
  - Any measures the Huron-Wendat Nation has for avoiding, minimizing or mitigating those potential adverse impacts.
  - How the Huron-Wendat Nation would like to be involved in the Project.
  - Any information provided will be stored on secure servers and will be included in the Environmental Report which forms part of the application for the Project.

# SUN-CANADIAN PIPE LINE COMPANY LIMITED



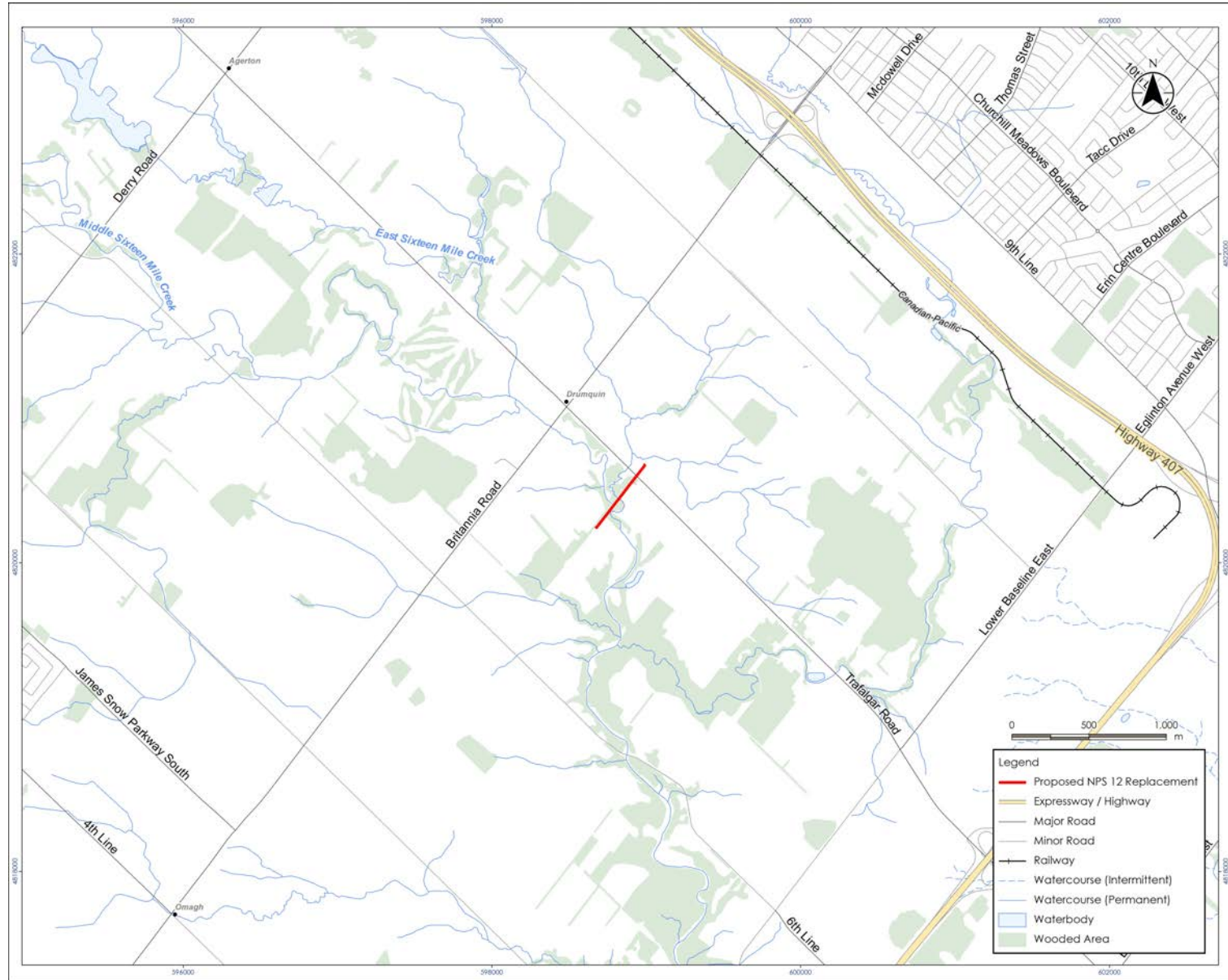
- Sun-Canadian Pipe Line was founded in 1953 to safely transport refined petroleum products for its owners from refineries in the Sarnia area to marketing plants in London, Hamilton, and the Toronto area in an environmentally sound and efficient manner.

# PROJECT OVERVIEW



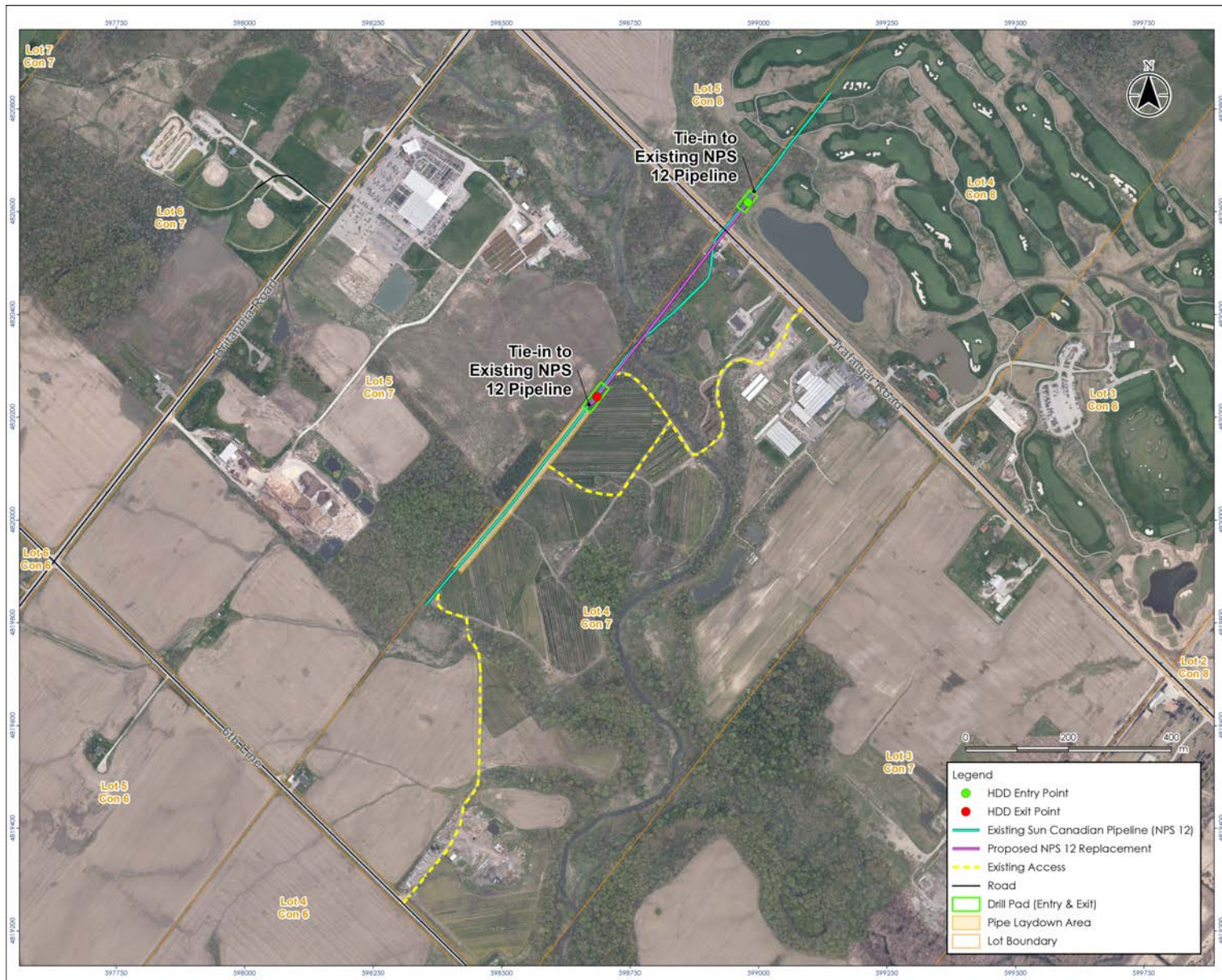
- Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline, which crosses East Sixteen Mile Creek in Milton, ON.
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- A section of the replaced pipe will be constructed outside the existing right-of-way (RoW); to be installed using Horizontal Directional Drilling (HDD).
- If approved by the Ontario Energy Board (OEB), construction of the replaced pipeline could begin as early as Summer 2021 and be complete by the end of 2021.

# PROJECT AREA OVERVIEW





# PROJECT LOCATION



# ONTARIO ENERGY BOARD PROCESS

**The Ontario Energy Board (OEB) is the body that regulates hydrocarbon projects in Ontario, in the public interest. The application to the OEB will include information on the Project including:**

- The need for the Project
- Environmental Report and mitigation measures
- Pipeline design and construction
- Land requirements
- Consultation with Indigenous Communities
- Consultation with various stakeholders including landowners and government agencies

**The OEB will then hold a public hearing to review the Project.**

**If the OEB determines that the Project is in the public interest it will approve construction of the Project.**

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# ENVIRONMENTAL STUDY PROCESS

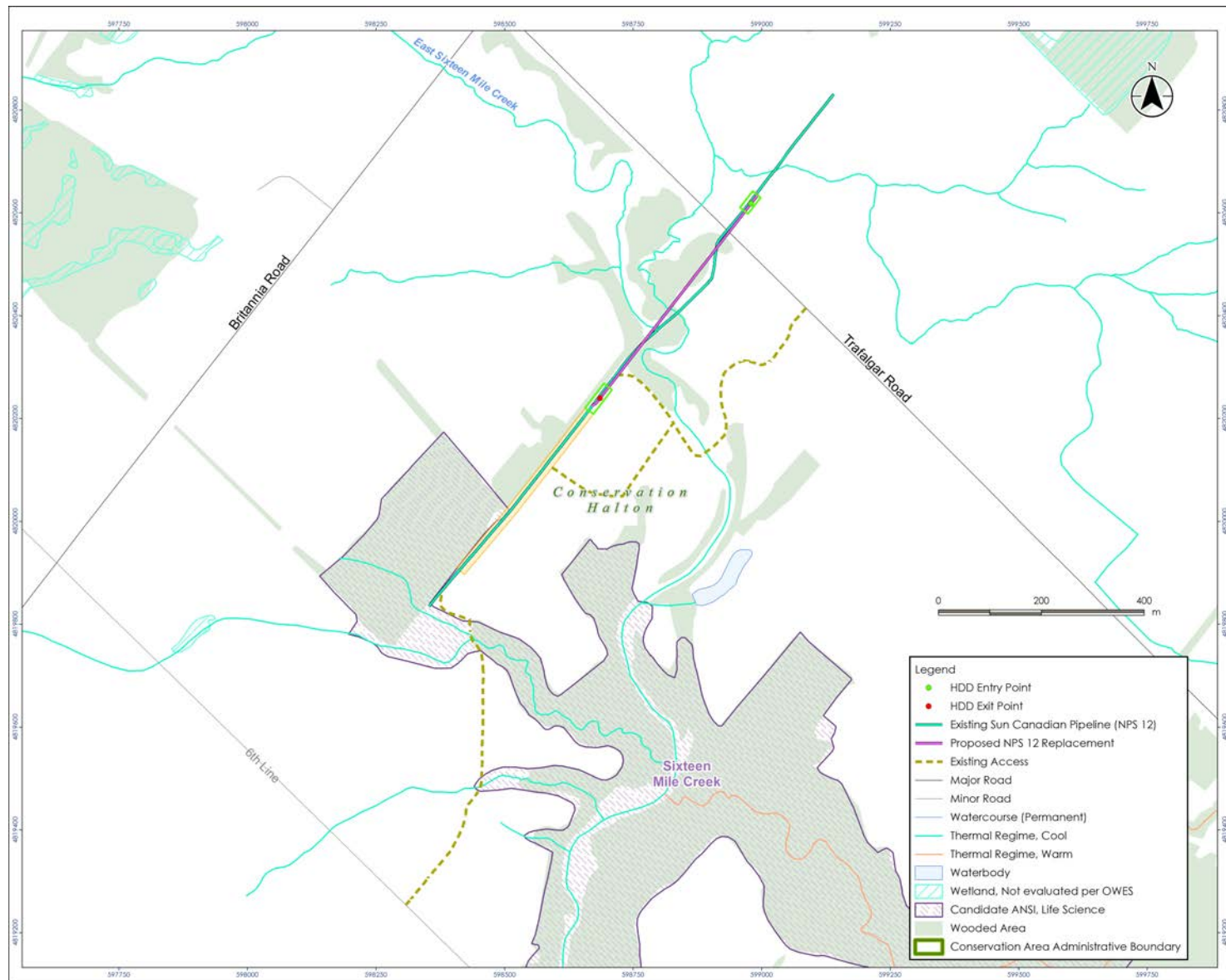


**The environmental study and Environmental Report will be completed as per the OEB's "*Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*."**

## **The study will:**

- Consult and engage with Indigenous communities to understand interests and potential impacts.
- Undertake consultation with landowners, municipalities and agencies to understand the views of interested and potentially affected parties.
- Identify potential impacts of the Project
- Develop environmental mitigation and protective measures to avoid or reduce potential impacts.
- Develop appropriate environmental inspection, monitoring and follow-up programs, as necessary.

# NATURAL FEATURES



# AQUATIC RESOURCES

Sun-Canadian recognizes the importance of protecting aquatic resources during construction and will implement recognized mitigation measures to reduce possible environmental effects.

- The Study Area contains two (2) watercourses – Sixteen Mile Creek and East Sixteen Mile Creek.
- The pipeline will only cross East Sixteen Mile Creek and will be crossed using the HDD method.
- Silver Shiner, an aquatic Species at Risk (SAR) under the Endangered Species Act (ESA) has been identified through background data review in East Sixteen Mile Creek.
- Standard erosion and sediment control measures will be used during construction to reduce potential impacts to fish and fish habitat.
- Monitoring will be in place for inadvertent returns of drilling mud during HDD installation process.

# TERRESTRIAL RESOURCES

Preliminary field studies conducted by a terrestrial biologist identified the following features:

- **Species at Risk:** one (1) Butternut was identified at the southwest end of the Pipe Laydown Area.
- **Significant Wildlife Habitat:** large diameter trees observed in the Pipe Laydown Area and adjacent to the HDD Entry Pit Location (potential to provide candidate bat maternity roost habitat). Potential habitat for turtles in East Sixteen Mile Creek, however no potential turtle nesting habitat was observed.
- **Migratory Bird Nesting Habitat:** potential for migratory birds to nest throughout the Study Area.
- **Natural Vegetation Communities:** mid-aged to mature sugar maple forest (edge of the forest, overlaps with the Pipe Laydown Area) and small coniferous plantation (Scot's Pine) adjacent to the south end of the Pipe Laydown Area were identified. These vegetation communities are common in the province.
- **Designated Natural Heritage Features:** no designated natural heritage features identified in the Study Area.

Mitigation measures will be implemented to protect terrestrial resources and further developed through consultation with regulatory authorities during the permitting process.

# ARCHAEOLOGY



- A Stage 1 and Stage 2 Archaeological Assessment (AA) will be conducted.
- Sun-Canadian invites your community to participate in the Stage 2 AA (further details to be provided when available).

# PROJECT SCHEDULE

## 2020

### Summer

- Start the environmental planning process
- Initiation of environmental field studies

### Fall

- Stage 1 and 2 Archaeological Assessment
- Complete Environmental Report
- Circulate Environmental Report to your community for comments
- Complete OEB filing application

## 2021

### Spring

- Receive OEB approval, complete permitting, pipeline design and construction plan

### Summer

- Begin construction

### Fall

- Conclude construction
- Site cleanup and restoration
- Pipeline in service

## 2022

- Post-construction monitoring





## MEETING MINUTES

### E16 Mile Creek Pipeline Segment Replacement Project - Meeting #1

Wednesday September 9, 2020 - VIA MS Teams

#### Attendees:

##### Huron-Wendat:

M. Picard – Project Coordinator

##### Sun-Canadian Pipe Line (SCPL):

S. Jackson – Manager Environment, Health and Safety

P. Martens – Pipeline Engineer

#### Regrets:

M. Vincent – Project Coordinator, Huron Wendat

## SUMMARY NOTES OF MEETING

### PRESENTATION BY SCPL :

- Purpose: The purpose of the meeting is for Sun-Canadian Pipe Line Limited to introduce and share information regarding the proposed Project and to hear from the Huron-Wendat as to how they wish to participate in the Project.
- Presentation (power point): “NPS 12 E16M Creek Pipeline Segment Replacement Project” with project details, and mapping.

### QUESTION & ANSWER:

- Q-HW: What is the overall length of the pipeline system, the length of the pipe segment and access routes to the drill sites?
  - A-SCPL: Overall length of pipeline system: NPS12 is approximately 300 kms long; NPS 8 is approximately 240 km long; proposed pipe (NPS 12) segment replacement length is approximately 500 m long; access roads are along existing drives (shown in slide 7) with the exception of approximately 100 m which will be matted.
- Q-HW: Does SCPL have a policy for archaeological sites and protecting cultural resources?
  - A-SCPL: SCPL aims to meet or exceed regulatory standards for archaeological sites which includes the protection of cultural resources. SCPL has worked successfully with the Huron-Wendat on archaeology for another project just recently in the summer and fall of 2019.

### SUMMARY OF COMMENTS:

- Huron-Wendat:
  - The Huron-Wendat expect the project design to preserve cultural resources as necessary. This may include additional measures resulting from any Stage 3 or beyond findings.
  - The Huron-Wendat confirms its interests in this project remain with archaeology only. Accordingly, the Huron-Wendat will participate in all archaeology associated with this project – SCPL to ensure its archaeological consultant works with Huron-Wendat.

- There are no further questions or comments from the Huron-Wendat at this time

# **SUN-CANADIAN PIPE LINE COMPANY LIMITED**

## **NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT**

# INTRODUCTION



- The purpose of the meeting is for Sun-Canadian Pipe Line Limited to introduce and share information regarding the proposed Project and to hear from the Six Nations of the Grand River as to how they wish to participate in the Project.

# AGENDA

- Introductions – Sun-Canadian Pipe Line Limited, Six Nations
- Project Overview – Sun-Canadian Pipe Line Limited
- Project Input – Six Nations
  - Any information available, including background environmental and socio-economic information, from Six Nations that should be considered when preparing project documentation.
  - Any information the Six Nations may have about potential adverse impacts on your Aboriginal or treaty rights.
  - Any measures the Six Nations has for avoiding, minimizing or mitigating those potential adverse impacts.
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# SUN-CANADIAN PIPE LINE COMPANY LIMITED



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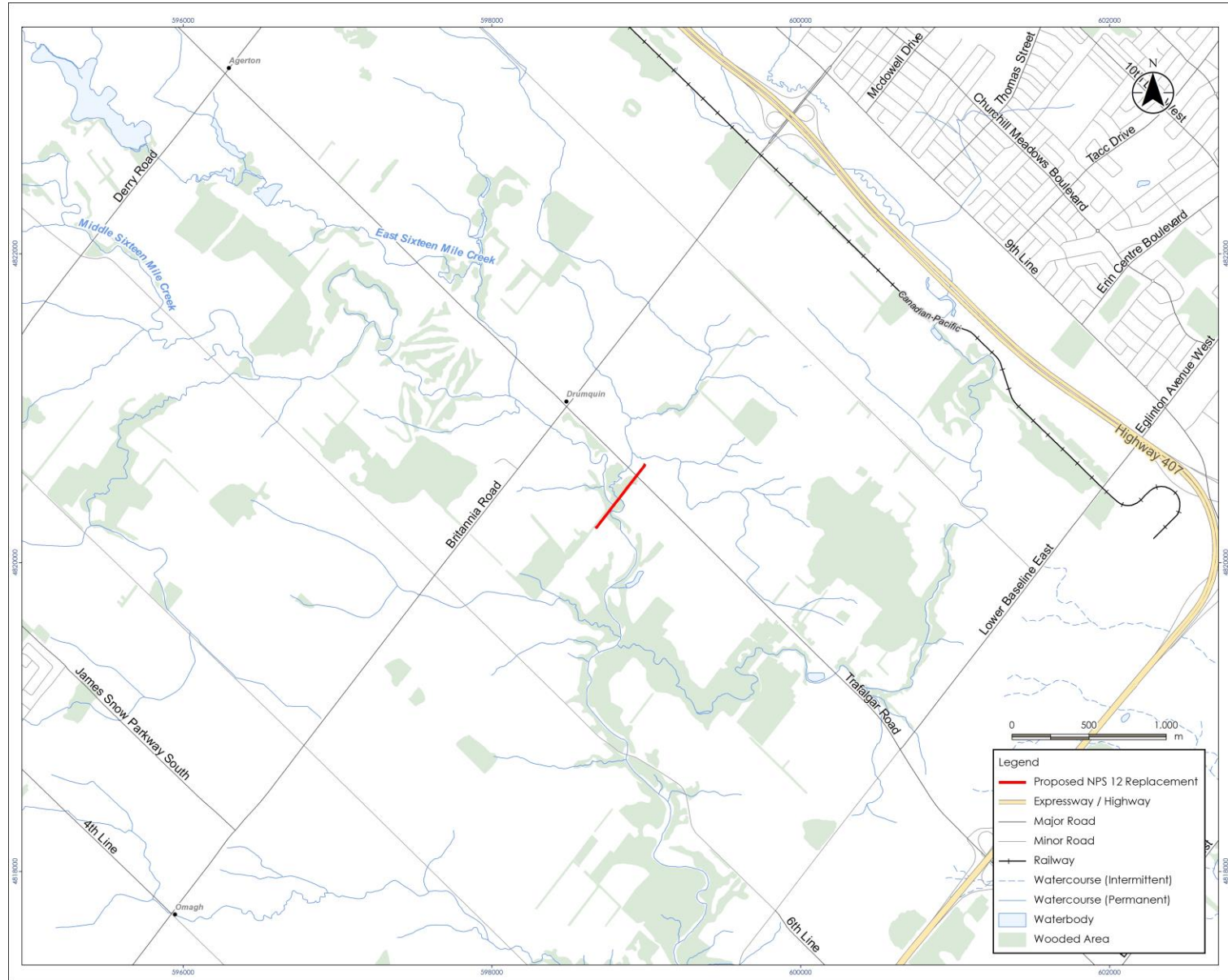


# PROJECT OVERVIEW



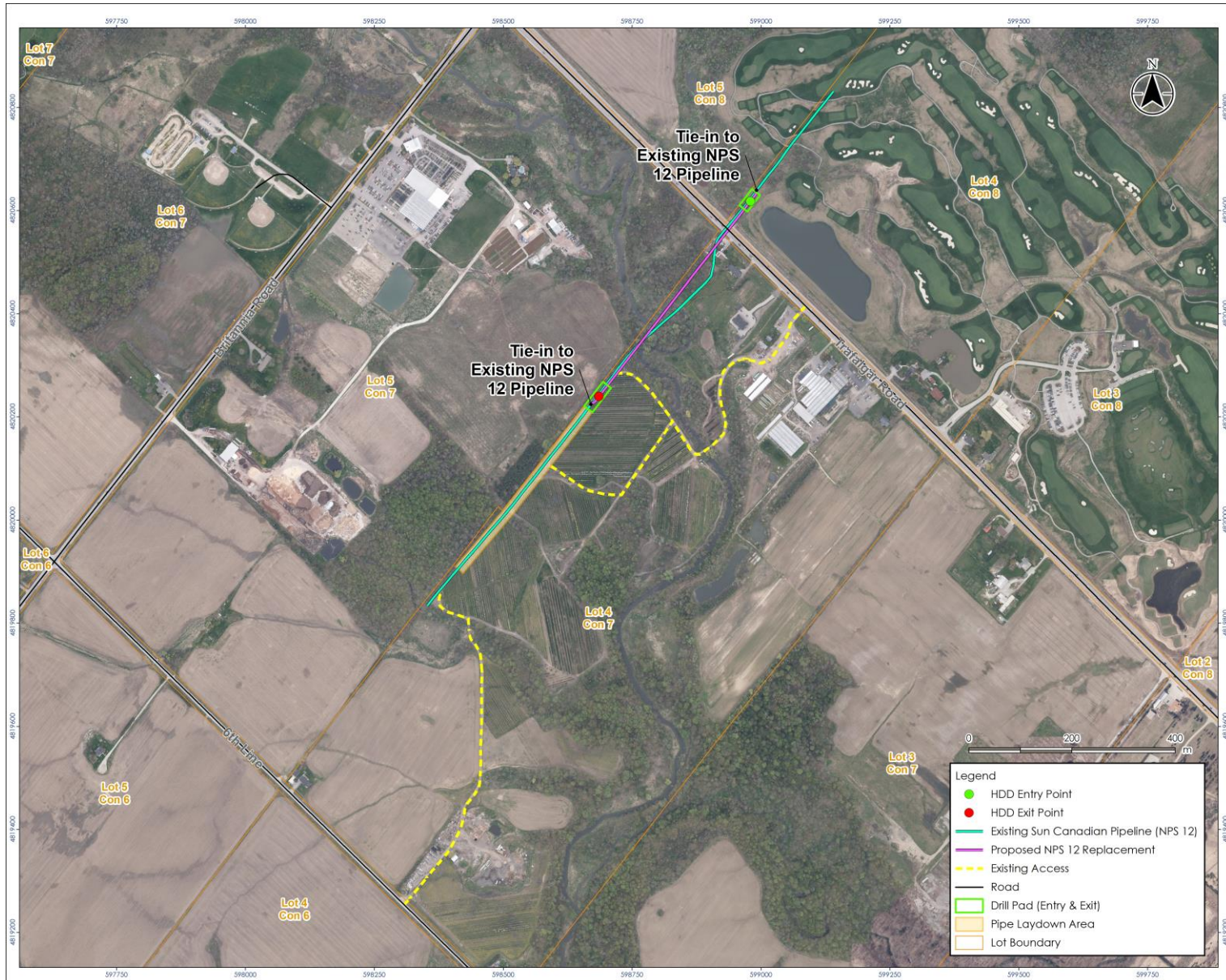
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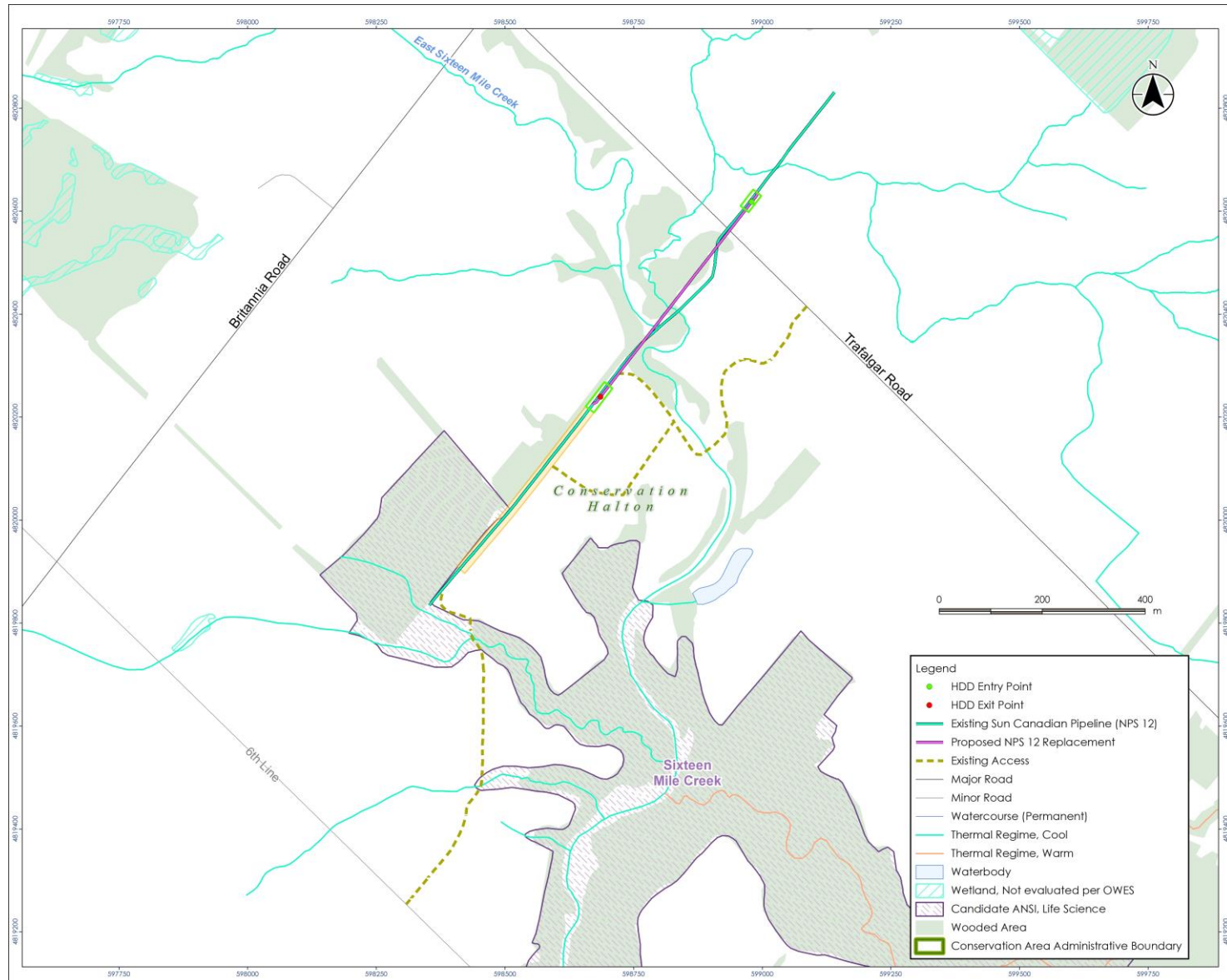
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# NATURAL FEATURES





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Mitigation measures will be implemented to protect terrestrial resources and further developed through consultation with regulatory authorities during the permitting process.

# ARCHAEOLOGY



- A Stage 1 and Stage 2 Archaeological Assessment (AA) will be conducted.
- Sun-Canadian invites your community to participate in the Stage 2 AA (our aim is to complete field work this year).

# PROJECT SCHEDULE

## 2020

### Summer

- Start the environmental planning process
- Initiation of environmental field studies

### Fall

- Stage 1 and 2 Archaeological Assessment
- Complete Environmental Report
- Circulate Environmental Report to your community for comments
- Complete OEB filing application

## 2021

### Spring

- Receive OEB approval, complete permitting, pipeline design and construction plan

### Summer

- Begin construction

### Fall

- Conclude construction
- Site cleanup and restoration
- Pipeline in service

## 2022

- Post-construction monitoring

# QUESTIONS AND/OR COMMENTS

Such as:

- Any information available, including background environmental and socio-economic information, from Six Nations that should be considered when preparing project documentation.
- Any information the Six Nations may have about potential adverse impacts on your Aboriginal or treaty rights.
- Any measures the Six Nations has for avoiding, minimizing or mitigating those potential adverse impacts.
- How the Six Nations would like to be involved in the Project.



23 September 2020

Re: Sun-Canadian Pipe Line Company Limited: NPS 12 E16M Creek Pipeline Replacement Project

Sge:noh, Sekon, Hello:

Six Nations of the Grand River territory is the largest First Nation in Canada with a population of over 27,000 people. Since European contact, significant treaties were made between the Haudenosaunee (People of the Six Nations) and settlers and the Crown, which are recognized and affirmed in Section 35 of the *Canadian Constitution Act, 1982*.

These treaties which were all conducted on a Nation to Nation basis, include but are not limited to:

- Guswenta or Two Row Wampum Treaty, 1613: Outlines the relationship that settlers are to have with the Haudenosaunee people while they reside (or develop) on Haudenosaunee territory;
- Fort Albany Treaty also known as Nanfan Treaty, 1701: Sets out the borders of the Beaver Hunting Grounds for the purposes of hunting, fishing and gathering and harvesting medicines and food, in which the Haudenosaunee people are to thrive on and enjoy forever.
- Treaty of Niagara, 1764: Includes at least 24 signatory Nations, including the Haudenosaunee and the Crown. This treaty is the result of and can be taken into consideration with the Royal Proclamation of 1763. It was understood and mutually agreed on that although the Crown assumed sovereignty of what is known today as Canada, the land was to stay in the possession of its rightful titleholders, Indigenous people.
- Haldimand Proclamation Treaty, 1784: A tract of land granted to the Haudenosaunee people, six miles on either side of the Grand River, in Southern Ontario, from its mouth to its source and consisting of roughly 950,000 acres.
- Jay Treaty, 1794: Made between Great Britain and the United States and stipulates that Indigenous people may travel freely across international boundaries.

Six Nations of the Grand Rivers' "Aboriginal" and Treaty Rights throughout Southern Ontario are well documented through archaeological findings, historical facts and written Treaty



Agreements. The Haldimand Treaty and the 1701 Fort Albany/Nanfan Treaty have been recognized in past court proceedings and are presented as factual evidence in the ongoing litigation between Six Nations of the Grand River and Crowns Canada and Ontario.

Due to loss of land through questionable means, the people of the Six Nations were forced onto a smaller parcel of land which is known today as Six Nations of the Grand River Territory, Reserve No. 40, consisting of roughly 46, 000 acres and is located within the boundaries of the Haldimand Tract. To address loss of land, Six Nations filed litigation against both Crown Canada and Crown Ontario in 1995. These land claims continue to be stalled in the courts, by both governments while Six Nations continues to be subjected to encroachment on their lands by extensive development.

### Stewardship

According to Indigenous ways of knowing, developers and their associates, including municipalities, need to be held to the highest standard when it comes to land stewardship. They have a responsibility to take care of the land for as long as that development and project exists. When we refer to “land” we also include: waters and wetlands; air; resources; wildlife; birds and other winged species; and, aquatic life.

In order to live a more sustainable lifestyle we must minimize our adverse impacts in regards to waters, land, resources and air. We cannot keep pushing animals to the brink of extinction, particularly by continually destroying their natural habitat. This also means that any development, construction, or associated activity related to the proposed project should not be conducted during mating, nesting or hibernating seasons of any species that lives within the project development area.

Indigenous lives are governed by the laws of respect for Mother Earth and we as Haudenosaunee people must remain adamant that any person or group that develops within our treaty territories, must respect and adhere to these same laws.

All of this goes far beyond an environmental stance, it is traditional Indigenous knowledge, culture and ways of knowing to ensure everyone who resides on and engages in development and/or construction on Haudenosaunee Treaty lands is held to the same and highest standard. This, in essence, makes developers, agencies and/or governments “co-stewards” of the natural environment on which these project(s) reside.

### Environment

In terms of adverse impacts to the environment, Six Nations of the Grand River feels that a replacement/mitigation ratio of 10:1 is well within the parameters of conscious environmental stewardship. For instance, for every one fish that may not survive the construction process, ten fish should be the replacement ratio. For every one tree that needs to be removed, regardless of the current state of health of that tree, ten healthy trees should be planted to mitigate that loss and if a specific habitat whether it is bird, reptilian, fish, or wildlife is destroyed, the potential for more habitats of the same kind should replace it.

Kayanase is an ecological restoration and native plant and seed business based out of Six Nations of the Grand River Territory. Please refer to their website for recommendations on Indigenous plant species (<https://kayanasegreenhouse.weebly.com/>).

### Wildlife

Part of the role of the Wildlife Manager of the Six Nations of the Grand River is to review hunting and fishing licenses for Six Nations community members. Every year thousands of Six Nations community members exercise their right to hunt, trap, fish, and gather medicines within both the Haldimand Tract and Nanfan/Fort Albany Treaty areas. This is both a right and a practice that would have been exercised throughout the year, each year since time immemorial.

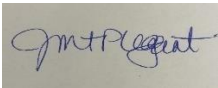
Today, hunters, trappers, anglers, spear fishers and medicine gatherers do not tend to share the exact locations of their hunting/fishing/medicine gathering areas for cultural reasons. Six Nations may not be able to provide specific frequency or duration associated with harvesting traditional activities in the vicinity of the Project area but these practices would have been a part of their day-to-day lives. It also important to note that Haudenosaunee people have always practiced responsible and sustainable hunting, fishing and medicine gathering practices. That is, there are times of the year when hunting was allowed of certain species. There were certain types of fish that would not be harvested, ie pregnant and spawning fish. There are also traditional Haudenosaunee guidelines as to what types of animals should not be killed, including but not limited to: those that are pregnant, babies and pack elders.

### Conclusion

We encourage all levels of government, developers and their affiliates to act honourably when engaging with the Six Nations of the Grand River and to familiarize yourselves with the culture and history of our people and to do so utilizing appropriate sources of knowledge and information that is respectful and truthful.

Thank you for taking our concerns into consideration.

Sincerely,



Jen MtPleasant  
Consultation Point Person  
Consultation & Accommodation Process Team  
Lands & Resources Department  
Six Nations of the Grand River Elected Council

# **SUN-CANADIAN PIPE LINE COMPANY LIMITED**

## **NPS 12 E16M CREEK PIPELINE SEGMENT REPLACEMENT PROJECT**

# INTRODUCTION



- The purpose of the meeting is for Sun-Canadian Pipe Line Limited to introduce and share information regarding the proposed Project and to hear from the Mississauga's of the Credit First Nation of the Grand River as to how they wish to participate in the Project.

# AGENDA

- Introductions – Sun-Canadian Pipe Line Limited, MCFN
- Project Overview – Sun-Canadian Pipe Line Limited
- Project Input – MCFN
  - Any information available, including background environmental and socio-economic information, from MCFN that should be considered when preparing project documentation.
  - Any information the MCFN may have about potential adverse impacts on your Aboriginal or treaty rights.
  - Any measures the MCFN has for avoiding, minimizing or mitigating those potential adverse impacts.
  - How the MCFN would like to be involved in the Project.

# SUN-CANADIAN PIPE LINE COMPANY LIMITED



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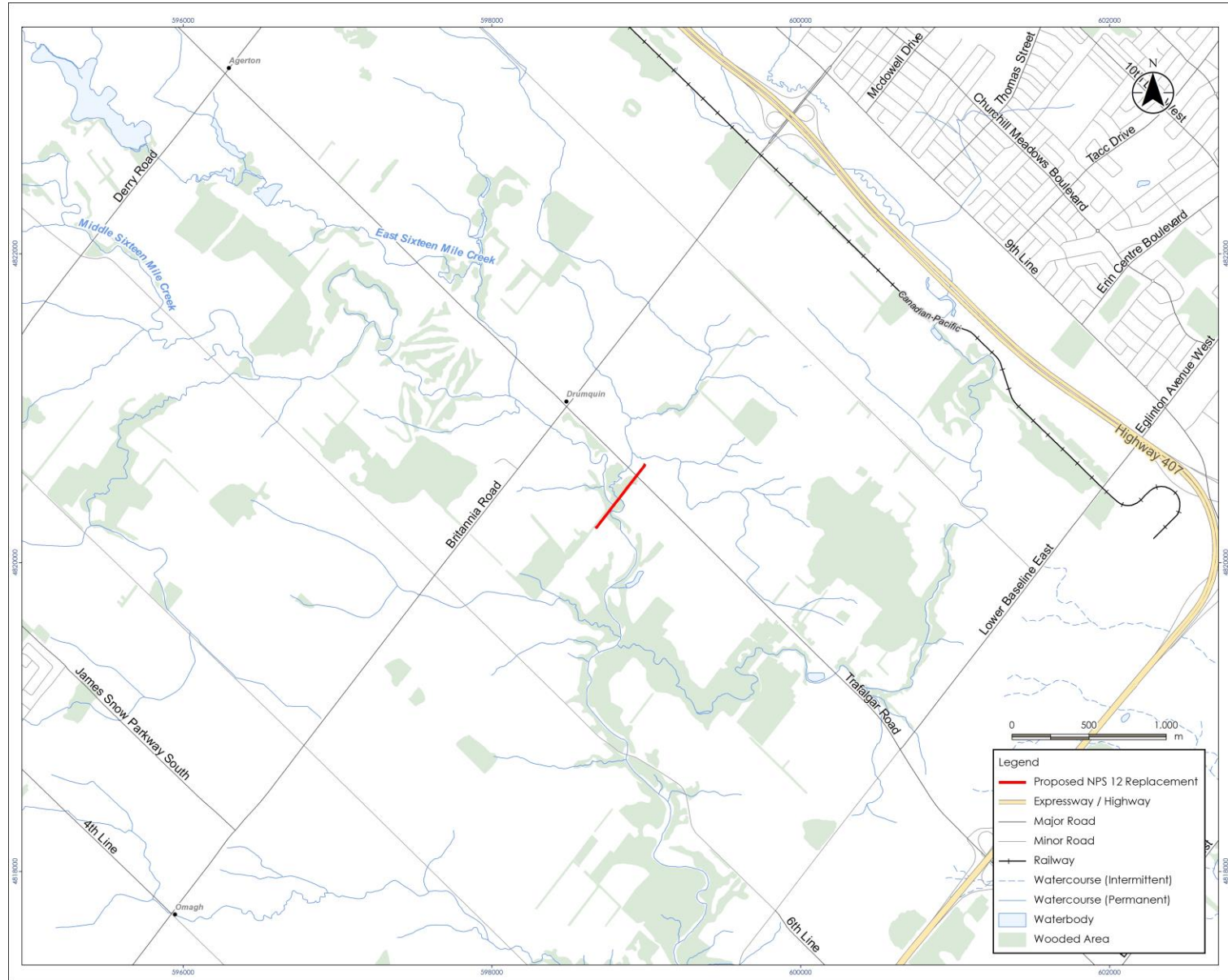


# PROJECT OVERVIEW



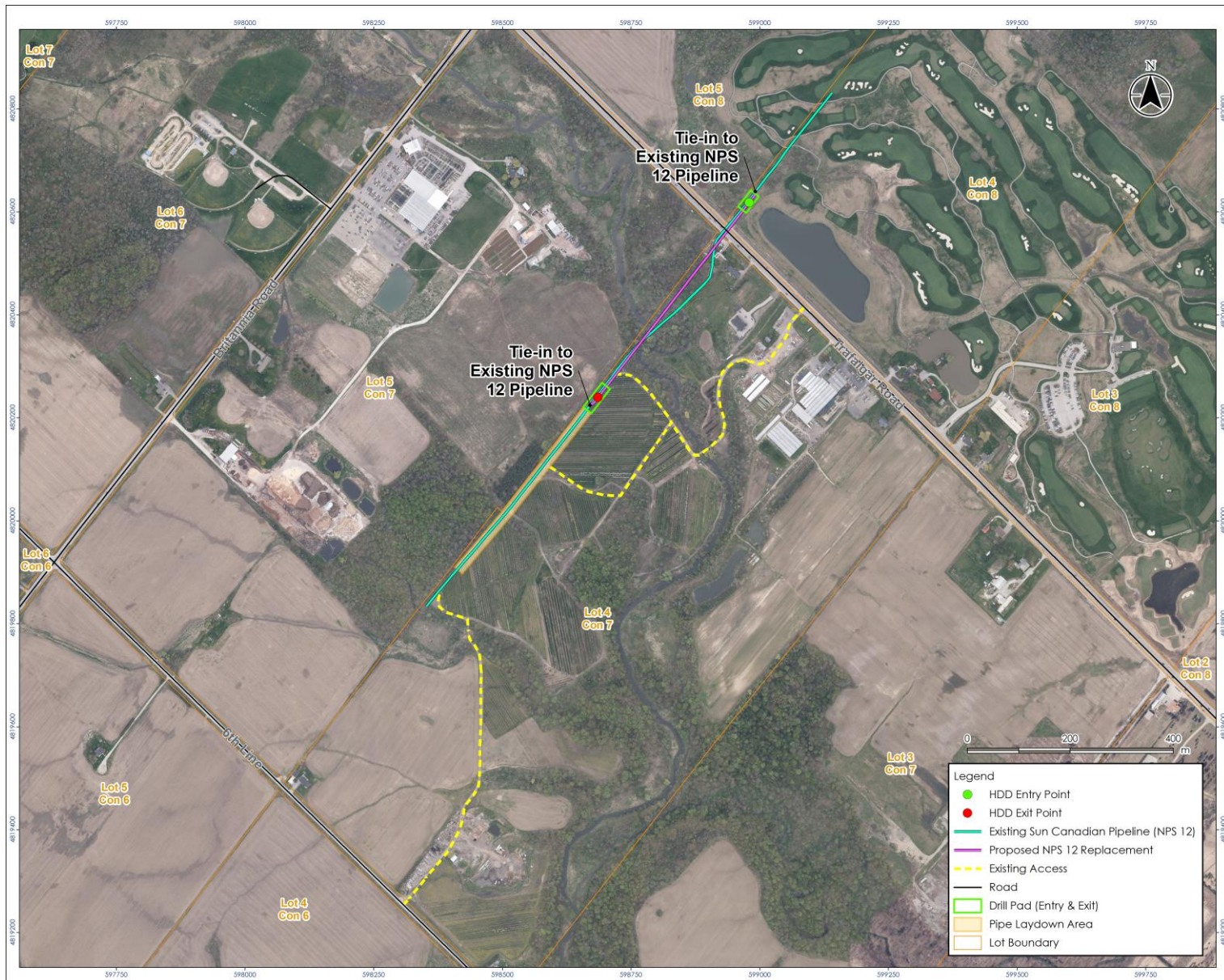
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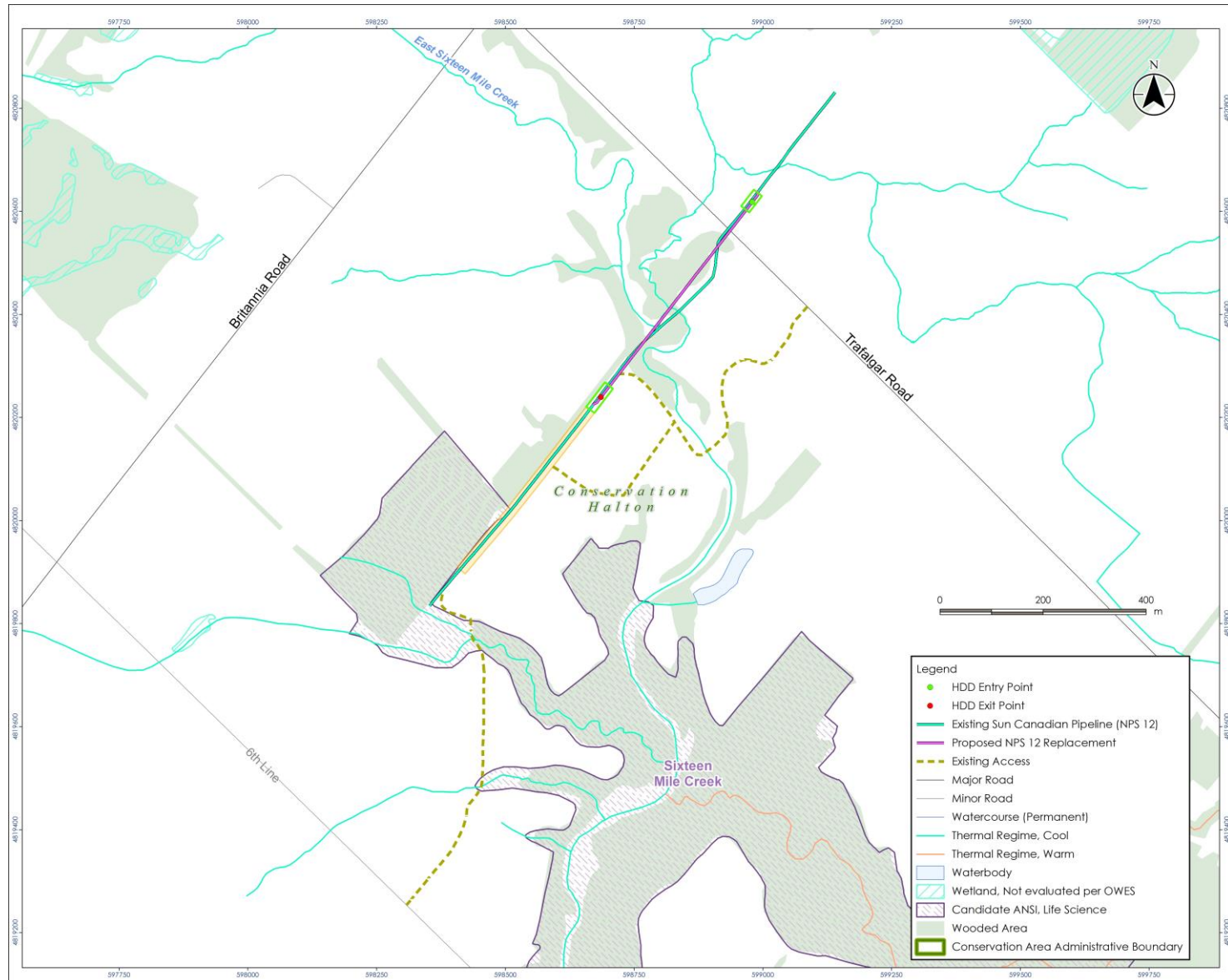
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- Pipeline in service

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# QUESTIONS AND/OR COMMENTS

Such as:

- Any information available, including background environmental and socio-economic information, from MCFN that should be considered when preparing project documentation.
- Any information the MCFN may have about potential adverse impacts on your Aboriginal or treaty rights.
- Any measures the MCFN has for avoiding, minimizing or mitigating those potential adverse impacts.
- How the MCFN would like to be involved in the Project.

**From:** [Susan Jackson](#)  
**To:** ["Mark LaForme"](#); ["Fawn Sault"](#); ["Megan DeVries"](#)  
**Subject:** E16M - Initial Consultation Meeting Minutes - MCFN  
**Attachments:** [E16M Meeting Minutes MCFN October 5 2020.pdf](#)  
[110904260\\_MCFN.pdf](#)

---

Hi Mark;

Thank you're your time yesterday to hear about SCPL's pipeline segment replacement project. Please find attached for your review minutes from that meeting plus the presentation. Please let me know if there is any further comment or questions at this time.

Next steps that MCFN will be invited to participate in include: Stage 1 & 2 archaeology (hopefully before this November) and review of the draft Environmental Report from Stantec.

Again, if at any time during this process there are questions or concerns, please do not hesitate to reach out to me.

Regards,

Susan

647-465-8159





## MEETING MINUTES

### E16 Mile Creek Pipeline Segment Replacement Project - Meeting #1

Monday October 5, 2020 - VIA MS Teams

#### Attendees:

##### Mississauga's of Credit River:

M. LaForme – Director, DOCA

F. Sault – Consultation Manager

M. DeVries – Archaeological Coordinator

##### Sun-Canadian Pipe Line (SCPL):

S. Jackson – Manager Environment, Health and Safety

## SUMMARY NOTES OF MEETING

### PRESENTATION BY SCPL :

- Purpose: The purpose of the meeting is for Sun-Canadian Pipe Line Limited to introduce and share information regarding the proposed Project and to hear from the Mississauga's of the Credit First Nation of the Grand River as to how they wish to participate in the Project.
- Presentation (power point): "NPS 12 E16M Creek Pipeline Segment Replacement Project" with project details, and mapping.

### QUESTION & ANSWER:

- Q-MCFN: What is the name of the golf course at the drill entry location?
  - A-SCPL: Piper's Health Golf Club <http://pipersheath.com/>
- Q-MCFN: When did the environmental survey take place? When will the report from this survey be available?
  - A-SCPL: The survey was on July 28. The survey report is complete and will be included in the Environmental Report.

### SUMMARY OF COMMENTS:

- MCFN:
  - requests participation in all environmental studies and monitoring
  - will participate in the planned Stage 1&2 archaeology (under current monitor agreement)
  - has no further questions or comments at this time



**From:** [Susan Jackson](#)  
**To:** [Lonny Bomberry](#)  
**Cc:** "[Robin Linn](#)"; [Jen Mtpleasant \(jenmtpleasant@sixnations.ca\)](mailto:jenmtpleasant@sixnations.ca); [Dawn LaForme](#); [Tanya Hill-Montour](#)  
**Subject:** East 16 Mile Creek - Six Nations - Meeting Minutes  
**Attachments:** [E16M Meeting Minutes SNGR Sept22 2020.pdf](#)  
[110904260 SixNations 20200921.pdf](#)

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Hi Lonny;

Thank you to you and your staff for taking the time to meet with me on September 22 to discuss SCPL's East 16M creek proposed project. Attached for your review are minutes of this initial meeting. Also attached is the presentation.

Please note that next steps include involving Six Nations in the Stage 1 and 2 archaeological assessment (estimated to take place early November) and providing Six Nations with the Environmental Assessment for your review and comment.

Please do not hesitate to reach out to me at any time to discuss this project.

Regards,

Susan Jackson

Manager, Environment Health and Safety

Sun-Canadian Pipe Line Ltd.



## MEETING MINUTES

### E16 Mile Creek Pipeline Segment Replacement Project - Meeting #1

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Tuesday September 22, 2020 - VIA MS Teams

#### Attendees:

##### Six Nations of the Grand River (SNGR):

L. Bomberry – Director, Lands & Resources  
Robbin Vanstone – Land Use Officer  
Jen Mt. Pleasant – Consultation Point Person  
Dawn LaForme – Secretary/Receptionist  
Tanya Hill-Mountour – Archaeological Coordinator

##### Sun-Canadian Pipe Line (SCPL):

S. Jackson – Manager Environment, Health and Safety

#### Regrets:

H. Hill – Chief, SNGR  
N. Wright - Councilor  
W. Bomberry – Wildlife Manager  
P. Monture – Lands and Treaty Rights Consultant

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## SUMMARY

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#### **PRESENTATION BY SCPL:**

- Purpose: The purpose of the meeting is for Sun-Canadian Pipe Line Limited to introduce and share information regarding the proposed Project and to hear from the SNGR as to how they wish to participate in the Project.
- Presentation (power point): “NPS 12 E16M Creek Pipeline Segment Replacement Project” with project details, and mapping.

#### **QUESTION & ANSWER:**

- Q-SNGR: We have been hearing news in Sarnia about First Nations objective to refineries, how is SCPL handling those issues?
  - A-SCPL: Sun Canadian does not control, operate or own a refinery, we are distribution ('shippers') only. This project is located solely in the Town of Milton, Ontario.
- Q-SNGR: What are the refined petroleum products?
  - A-SCPL: Jet, gasoline and diesel fuels.

- Q-SNGR: Is the access a road or not?
  - A-SCPL: All access to drill exit location is with existing roads. Access to drill entry will be via public road except for final ~100m to drill site, which will be matted. The existing access to the drill exit pit is shown with dashed yellow lines on the Project Location figure in the presentation and labelled as “Existing Access”.
- Q-SNGR: what is the name of the golf course that the entrance point is on?
  - A-SCPL: Piper’s Health Golf Course
- Q-SNGR: what specific measures will Sun Canadian take to protect the Silver Shiner?
  - A-SCPL: Both work sites will have appropriate erosion and sediment controls in place around them. A drilling fluid release contingency plan will be prepared and kept on-site to effectively address inadvertent releases of sediment through frac-outs, or other releases of sediment laden water from the project site. Spills containment and clean-up procedures will be implemented immediately in the unlikely event of a spill. If a sediment spill occurs within the watercourse, adequate isolation of the release will be provided to contain the sediment. Additional measures will include having a supply of materials readily available that can be used to isolate an inadvertent release during drilling operations (i.e sand bags, straw bales, silt fencing)
- Q-SNGR: What will be the impact of this project to the Silver Shiner?
  - A-SCPL: There is no expected impact on Silver Shiner due to depth of bore under East Sixteen Mile Creek. One of the primary reasons for selecting horizontal directional drilling installation is to avoid disruption to the creek system. The points of entry and exit for horizontal directional drilling will be outside the limits of the East Sixteen Mile Creek valley. Therefore, there will be no disturbance in the active channel of the watercourse, nearshore habitats, or floodplain and riparian areas. No areas considered to be fish habitat or habitat for Silver Shiner will be disturbed.
- Q-SNGR: is SCPL working with Conservation Halton on this project?
  - A-SCPL: Conservation Halton is part of the OEB review process and will be sent a copy of the Environmental Report for review and comment, if requested. Additionally SCPL will be working with Conservation Halton during the permitting process. All conditions of permit approval will be implemented.
- Q-SNGR: Can you provide information on the drilling fluids, how they will be managed and where/how they will be disposed of?
  - A-SCPL: Bentonite and polymers shall be the only approved lubricants permitted for horizontal directional drilling. Any additives used shall be chemically inert, biodegradable and non-toxic. No petroleum-based additives shall be permitted. No fluid will be approved or utilized that does not comply with permit requirements and environmental regulations. As previously mentioned a drilling fluid release contingency plan will be prepared and kept on-site. If inadvertent surface releases of drilling fluids occur, they shall be immediately contained with hand placed barriers (i.e. straw bales, sand bags, silt fencing, etc.) and collected using pumps as practical. If the amount of the surface return is not great enough to allow practical collection, the affected area shall be diluted with fresh water and the fluid will be allowed to dry and dissipate naturally. If the amount of the surface return exceeds what can be contained with hand placed barriers, then small collection sumps (less than 3 cubic metres) may be used. If the amount of the surface return exceeds that which can be contained and collected using small sumps, horizontal directional drilling operations shall be suspended until surface return volumes can be brought under control.

- Q-SNGR: when will the detailed mitigation efforts be available? We want to input into these prior.
  - A-SCPL: Detailed mitigation measures will be available in the draft Environmental Report that will be circulated for review and comment. Mitigation measures may be refined and built upon during the permitting process based on consultation and feedback from regulatory agencies and other stakeholders.
- Q-SNGR: How many trees will be taken down? How many will be put back up?
  - A-SCPL: We are targeting and expect to achieve minimum tree removal aside from tree nursery trees. All tree removal will be occurring on private property and replacement details will be determined through consultation with those individuals.
- Q-SNGR: how will SCPL identify a leak in the pipe if it is 20 metres underground?
  - A-SCPL: SCPL maintains a leak detection system at all times during pipeline operation. Depth of pipe has no impact on the operation of our leak detection. In addition, the new pipe run is fully pressure tested prior to installation and again once it is in place underground.
- Q-SNGR: How far below the surface will the new segment of pipe be?
  - A-SCPL: approximately 20 metres deep average for the straight portion of the pipe. However the pipe could be as deep as approximately 25 metres and as shallow as 16.4 metres through this stretch. At the drill entry and exit locations, the pipe will be more than 5 metres deep after approximately 20 metres of horizontal distance.

#### **DISCUSSION:**

- SNGR commends SCPL for reaching out to the Six Nations early on in the project and are looking forward to working with SCPL on this project
- SNGR would like to participate in this project:
  - via construction monitoring during the construction phase of this project
  - archaeology



**From:** [Susan Jackson](#)  
**To:** ["Tracey General"](#); ["Janice Bomberry"](#)  
**Cc:** ["hdi2@bellnet.ca"](#)  
**Subject:** E16M - Invitation for on site attendance to participate in Bat Study - December 7th

---

Greetings;

I hope you are well. Our consultant (Stantec) has coordinated a site visit for December 7<sup>th</sup> to survey the areas of potential bat maternity roosting habitat now that the leaves are off the trees. Could you please confirm if you would like to have a representative attend the site or would like a copy of the consultants findings?

Thank you,

Susan Jackson

Sun-Canadian Pipe Line

647-465-8159

**From:** [Maxime Picard](#)  
**To:** [Susan Jackson](#)  
**Subject:** Re: E16M - Invitation for On site visit for Bat Study - December 7th  
**Date:** Tuesday, December 1, 2020 11:00:12 AM

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Absolutely Susan.



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**De:** "Susan Jackson"  
**À:** "Maxime Picard"  
**Envoyé:** Mardi 1 Décembre 2020 10:52:24  
**Objet:** RE: E16M - Invitation for On site visit for Bat Study - December 7th

Hi Maxime – are you okay if we proceed?

Thank you for the quick reply.

Susan

---

**From:** Maxime Picard  
**Sent:** Tuesday, December 01, 2020 10:51 AM  
**To:** Jackson, Susan  
**Subject:** Re: E16M - Invitation for On site visit for Bat Study - December 7th

Good morning Susan,  
Unfortunately we will not be able to participate on field for those project studies.  
Many thanks for the offer.  
Regards,  
Maxime



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**De:** "Susan Jackson" <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**À:** "Maxime Picard" <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Envoyé:** Mardi 1 Décembre 2020 10:47:42

**Objet:** E16M - Invitation for On site visit for Bat Study - December 7th

Hi Maxime;

I hope you are well. Our consultant (Stantec) has coordinated a site visit for December 7<sup>th</sup> to survey the areas of potential bat maternity roosting habitat now that the leaves are off the trees. Could you please confirm if you would like to have a representative attend the site or would like a copy of the consultants findings?

Thank you,

Susan

647-465-8159

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**From:** Maxime Picard <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Sent:** Tuesday, November 03, 2020 7:28 AM

**To:** Jackson, Susan <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**Subject:** Re: East 16 Mile Creek - Ontario - HW Letter of Commencement

That sounds fair Susan.

Thanks for the update.

Stay safe,

Maxime



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**De:** "Susan Jackson" <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**À:** "Maxime Picard" <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Envoyé:** Mardi 3 Novembre 2020 06:56:39

**Objet:** RE: East 16 Mile Creek - Ontario - HW Letter of Commencement

Good Morning Maxime – we are currently working through all the various stakeholders (including land owners). As this part of the process continues, it does not look good for getting the archaeology done this season (depending on weather here for the next while). The archaeology will not be scheduled without ensuring Huron-Wendat have been invited. I am sorry I can provide more concrete timing but for sure I (or TMHC) will contact you as soon as we have a date that we can get on site.

Thank you for reaching out and thank you for your patience.

Regards,

Susan

647-465-8159

---

**From:** Maxime Picard <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Sent:** Thursday, October 29, 2020 3:09 PM

**To:** Jackson, Susan <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**Subject:** Re: East 16 Mile Creek - Ontario - HW Letter of Commencement

Good afternoon Susan,

We haven't heard from Timmins Martelle yet.

Is that normal ?

Thanks and stay safe,

Maxime

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**De:** "Susan Jackson" <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**À:** "Maxime Picard" <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Envoyé:** Vendredi 2 Octobre 2020 11:16:59

**Objet:** Re: East 16 Mile Creek - Ontario - HW Letter of Commencement

Hi Maxime, here is an update:

- archaeology stage 1 & 2 will be done by Timmins Martelle. They will be reaching out to you very shortly to schedule the monitor. They aim for onsite work beginning of November but possibly before. SCPL has agreed to test pit in between borehole entry and exit

Please do not hesitate to contact me with any questions.

Thank you

Susan

647-465-8159

On Oct 1, 2020, at 2:12 AM, Maxime Picard  
<[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)> wrote:

Hi Susan,

Thanks for the quick reply.

I will unfortunately be away from the office for the next few days.

An email update would be appreciated.

Best,

Maxime

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**De:** "Susan Jackson" <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**À:** "Maxime Picard" <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Envoyé:** Mercredi 30 Septembre 2020 08:32:46

**Objet:** RE: East 16 Mile Creek - Ontario - HW Letter of Commencement

Good Morning Maxime;

We are continuing to have introductory project meetings with other Nations. In anticipation of completing those meetings we are hoping to kick off on-site archaeology. Is there a phone number I can reach you at to provide you with more details? Alternatively, please call me at 647-465-8159

Thank you,

Susan

---

**From:** Maxime Picard <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Sent:** Tuesday, September 29, 2020 2:30 PM

**To:** Jackson, Susan <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**Subject:** Re: East 16 Mile Creek - Ontario - HW Letter of Commencement

Good morning Susan,

Hope you are keeping well.

What are the latest news on this project ?

Thanks and best regards,

Maxime



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**De:** "Maxime Picard" <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**À:** "Susan Jackson" <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**Envoyé:** Mardi 1 Septembre 2020 08:11:33

**Objet:** Re: East 16 Mile Creek - Ontario - HW Letter of Commencement

Good morning Susan,

I am available for the most part of the day.

You can join me at : 418-262-1681.

Regards,

Maxime

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**De:** "Susan Jackson" <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**À:** "Maxime Picard" <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Envoyé:** Lundi 31 Août 2020 17:04:31

**Objet:** RE: East 16 Mile Creek - Ontario - HW Letter of Commencement

Good afternoon Maxime; I just have a few questions about the logsitics. Are you available for a quick phone call tomorrow to help me set up this meeting?

Regards,

Susan

647-465-8159

---

**From:** Maxime Picard <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Sent:** Monday, August 31, 2020 1:59 PM

**To:** Jackson, Susan <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**Cc:** melanievincent21 <[melanievincent21@yahoo.ca](mailto:melanievincent21@yahoo.ca)>

**Subject:** Re: East 16 Mile Creek - Ontario - HW Letter of Commencement

Good afternoon Susan,

Any news on a possible date for our meeting ?

Thanks,

Maxime

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**De:** "Maxime Picard" <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**À:** "Susan Jackson" <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**Cc:** "melanievincent21" <[melanievincent21@yahoo.ca](mailto:melanievincent21@yahoo.ca)>

**Envoyé:** Lundi 24 Août 2020 11:02:48

**Objet:** Re: East 16 Mile Creek - Ontario - HW Letter of Commencement

Good morning Susan,

Thanks for following-up.

A conference call will be fine to initiate the discussions.

The week of September 14th is also open for us.

Best,

Maxime

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**De:** "Susan Jackson" <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**À:** "Maxime Picard" <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Cc:** "melanievincent21" <[melanievincent21@yahoo.ca](mailto:melanievincent21@yahoo.ca)>

**Envoyé:** Lundi 17 Août 2020 10:37:51

**Objet:** RE: East 16 Mile Creek - Ontario - HW Letter of Commencement

Greeting's Maxime;

Thank you for this initial date. Before I send out an email invitation, do you prefer to meet virtually through MS Teams or by phone only? For MS Teams, we will need email addresses for anyone who want to attend so they can see the visuals. I will try to set this meeting up for September 7<sup>th</sup> but wondered if you had a second back up date after the 7<sup>th</sup>?

Thank you,

Susan

647-465-8159

---

**From:** Maxime Picard <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Sent:** Thursday, August 13, 2020 11:09 AM

**To:** Jackson, Susan <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**Cc:** Melanie Vincent <[melanievincent21@yahoo.ca](mailto:melanievincent21@yahoo.ca)>

**Subject:** Re: East 16 Mile Creek - Ontario - HW Letter of Commencement

Good morning Susan,

First of all let me thank you for your letter and notification on the East 16 Mile Creek Project.

The Huron-Wendat Nation will be pleased to collaborate with you and SCPL on this project.

Please note that we will effectively request to be part of any archaeological fieldwork and studies initiated as part of this initiative.

Could you please clarify where you are with the archaeological studies at this time ?

We are definitely open to schedule a conference call in September.

What about the week of September 07th ?

Thanks and best regards,

Maxime Picard

Image removed by sender.



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**De:** "Jackson, Susan" <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>

**À:** "Maxime Picard" <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>

**Cc:** "administration" <[administration@cnhw.qc.ca](mailto:administration@cnhw.qc.ca)>

**Envoyé:** Mercredi 12 Août 2020 11:42:52

**Objet:** East 16 Mile Creek - Ontario - HW Letter of Commencement

Good Afternoon Mr. Picard;

The purpose of this email is to introduce this initiative with the Huron-Wendat and notify your Nation that SCPL has applied for Leave to Construct (under the Ontario Energy Board) to the Ministry of Energy, Northern Development and Mines. They have replied to us with a delegation of procedural aspects of the Crown's duty to consult - attached for your information.

The Project: Sun-Canadian Pipe Line (SCPL) has identified the need to replace approximately 500m segment of an existing pipeline near Trafalgar Road and south of Britannia Road in the Town of Milton, Ontario. The existing pipeline segment crosses under East Sixteen Mile creek and needs to be protected from the watercourse due to ongoing erosion and creek meander. This project intends to install a new segment of pipe by horizontal directional drilling at a greater depth to eliminate the environmental risks. Please find attached our project commencement letter to the Huron-Wendat First Nation and map identifying the site location.

While the delegation letter from the Ministry identifies that the Huron-Wendat are to be consulted on interests specific to archaeological resources, Sun-Canadian would like to hear from the Huron-Wendat directly, if and how beyond archaeology, they may

wish to participate in this project. I would invite the Huron-Wendat to a virtual meeting any date convenient to them this September (with the exception of Sept 28-30th) to provide an overview of the project and hear directly from the Huron-Wendat on this matter. Please advise if there is a date in September that is convenient (except Sept. 28-30<sup>th</sup>). Alternatively, please feel free to call me directly to discuss the project at any time.

We are looking forward to working again with the Huron-Wendat.

Regards,

Susan Jackson

Manager, Environment Health and Safety

647-465-8159

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**From:** Jackson, Susan <sjackson@sun-canadian.com>  
**Sent:** Friday, February 05, 2021 1:11 PM  
**To:** hdi2@bellnet.ca; Tracey General <traceyghdi@gmail.com>  
**Cc:** Martens, Peter <pmartens@sun-canadian.com>  
**Subject:** E16M - Environmental Report For Your Comment\_HCCC

February 5, 2021

SENT VIA Email

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. An Environmental Report (ER), summarizing the results of the environmental study is available for your review at: <http://sun-canadian.com/media-releases/>.

Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards

S. Jackson

Manager  
EHS

Sun Canadian Pipeline  
Ltd.

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**From:** [Martens, Peter](#)  
**To:** [Candido, Mike](#)  
**Subject:** FW: E16M - Environmental Report For Your Comment\_HWFN  
**Date:** Friday, February 5, 2021 1:46:13 PM

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**From:** Jackson, Susan <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>  
**Sent:** Friday, February 05, 2021 1:11 PM  
**To:** Maxime Picard <[maxime.picard@cnhw.qc.ca](mailto:maxime.picard@cnhw.qc.ca)>; [administration@cnhw.qc.ca](mailto:administration@cnhw.qc.ca)  
**Cc:** Martens, Peter <[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)>  
**Subject:** E16M - Environmental Report For Your Comment\_HWFN

February 5, 2021

SENT VIA Email

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. An Environmental Report (ER), summarizing the results of the environmental study is available for your review at: <http://sun-canadian.com/media-releases/>.

Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

S. Jackson

Manager EHS

Sun Canadian Pipeline Ltd.

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**From:** [Martens, Peter](#)  
**To:** [Candido, Mike](#)  
**Subject:** FW: E16M - Environmental Report For Your Comment\_MCFN  
**Date:** Friday, February 5, 2021 1:46:21 PM

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**From:** Jackson, Susan <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>  
**Sent:** Friday, February 05, 2021 1:11 PM  
**To:** Mark LaForme <[Mark.LaForme@mncfn.ca](mailto:Mark.LaForme@mncfn.ca)>  
**Cc:** Martens, Peter <[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)>; Fawn Sault <[Fawn.Sault@mncfn.ca](mailto:Fawn.Sault@mncfn.ca)>  
**Subject:** E16M - Environmental Report For Your Comment\_MCFN

February 5, 2021

SENT VIA Email

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

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Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

S. Jackson

Manager EHS

Sun Canadian Pipeline Ltd.

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**From:** [Martens, Peter](#)  
**To:** [Candido, Mike](#)  
**Subject:** FW: E16M - Environmental Report For Your Comment\_SNEC  
**Date:** Friday, February 5, 2021 1:46:25 PM

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**From:** Jackson, Susan <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>  
**Sent:** Friday, February 05, 2021 1:11 PM  
**To:** Lonny Bomberly <[lonnybomberly@sixnations.ca](mailto:lonnybomberly@sixnations.ca)>  
**Cc:** Dawn LaForme <[dlaforme@sixnations.ca](mailto:dlaforme@sixnations.ca)>; Martens, Peter <[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)>  
**Subject:** E16M - Environmental Report For Your Comment\_SNEC

February 5, 2021

SENT VIA Email

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

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Regards,

S. Jackson

Manager EHS

Sun Canadian Pipeline Ltd.

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## LETTER OF PROJECT PARTICIATION

**Date: October 4, 2021**

### **Project: NPS 12 East Sixteen Mile Creek Pipeline Replacement**

To Whom It May Concern,

*The Haudenosaunee Confederacy Chiefs Council (HCCC) has legislated the Haudenosaunee Development Institute (HDI) to represent HCCC interest in development of lands within areas of Haudenosaunee jurisdiction. This includes Haldimand Proclamation (Haldimand Tract Treaty) and 1701 Treaty Area (Nanfan Treaty).*

I the undersigned, confirm on behalf of HDI Environmental Division show interest in the above-mentioned project. The HDI Environmental Division requests to be involved and informed about:

- The progress of this project,
- Natural impact studies e.g., aquatic, terrestrial and botanical surveys
- Species at risk (SARS)
- Archaeological Reports
- Archaeological Field Assessments (Stage 2, 3 & 4)
- Applicable permits
- Environmental management plan (EMP)
- Stormwater management plan (SWMP)
- Erosion and sediment control plan (ESCP)
- Site inspections to ensure these measures are being followed through.

As part of our rights as Haudenosaunee and people of the land, we encourage to have a representee from HDI Environmental Division or Archaeology Division to be involved. We have the ongoing obligations to ensure the protection of our cultural and natural resources for the next faces to come. This is our duty and responsibility of our rights as Haudenosaunee People.

The HDI Environmental Division has worked on numerous projects in the past and have overseen a variety of development within our treaty territory. As part of HDI Environmental Division we provide monitors for any field work and site inspections. Being able to witness and report active field conditions and contingency plans is a key part of HDI quality assurance (QA).



The monitoring provides a way ensuring all guidelines are met throughout the whole process of the project and strengthens the areas most sensitive to the Haudenosaunee people.

HDI Environmental Division asks the Sun-Canada Pipe Line Company to have a meeting to further discuss involving HDI Environmental Division on the project and minimal weekly inspections. We hope we can navigate through these issues towards a relationship of respect, partnership, and mutual benefit. You may contact myself on my cell < 519 – 802 – 9402 > or my email < janicewilliams@hdi.land>.

Nya: weh/Thank-You,

Raechelle Williams  
HDI Environmental Supervisor  
Haudenosaunee Development Institute  
16 Sunrise Court, Suite 600 Ohsweken, ON  
P.O. Box 714  
Ph: 519-445-4222  
(Direct): 519-802-9402  
Email: janicewilliams@hdi.land



**From:** Susan Jackson  
**To:** Candido, Mike; Peter Martens  
**Subject:** FW: East 16 Mile Creek - HCC  
**Date:** Friday, October 22, 2021 12:25:45 PM  
**Attachments:** [image001.png](#)  
[FW\\_ E16M - Environmental Report For Your Comment\\_HCCC.pdf](#)

FYI

**From:** Susan Jackson  
**Sent:** Friday, October 22, 2021 12:21 PM  
**To:** 'Raechelle Williams' <[janicewilliams@hdi.land](mailto:janicewilliams@hdi.land)>  
**Cc:** Todd Williams <[williams.todde@gmail.com](mailto:williams.todde@gmail.com)>; Tracey General <[traceyghdi@gmail.com](mailto:traceyghdi@gmail.com)>; Brian Doolittle <[ganowa@me.com](mailto:ganowa@me.com)>  
**Subject:** RE: East 16 Mile Creek - HCC

Hi Raechelle;

As discussed in our meeting SCPL has previously reached out to HDI to get their input into the E16M project. SCPL welcomes HDI environmental monitors to attend the construction phase. Please forward an agreement for us to review.

Yes, SCPL works with HDI on identifying HDI's interests prior to integrity digs and we have been working closely with Todd for a few years now.

Thank you,  
Susan

**From:** Raechelle Williams <[janicewilliams@hdi.land](mailto:janicewilliams@hdi.land)>  
**Sent:** Friday, October 22, 2021 1:10 PM  
**To:** Susan Jackson <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>  
**Cc:** Todd Williams <[williams.todde@gmail.com](mailto:williams.todde@gmail.com)>; Tracey General <[traceyghdi@gmail.com](mailto:traceyghdi@gmail.com)>; Brian Doolittle <[ganowa@me.com](mailto:ganowa@me.com)>  
**Subject:** Re: East 16 Mile Creek - HCC

Hello Susan,

I spoke with Todd about the agreement that is already placed with HDI. He confirmed and said the agreement is only for Archaeology and we will need to make another one for Environmental.

Also, is the Sun-Canadian Pipe Line involved in any integrity digs?

Raechelle Williams  
HDI Environmental Supervisor  
Haudenosaunee Development Institute  
16 Sunrise Court, Suite 600 Ohsweken, ON  
P.O. Box 714  
Ph: 519-445-4222  
(Direct): 519-802-9402



<<< Effective October 1, 2021, the Haudenosaunee Development Institute offices will be located at 44 Sixth Line Road, Ohsweken, Ontario >>>

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On Mon, Oct 4, 2021 at 2:09 PM Raechelle Williams <[janicewilliams@hdi.land](mailto:janicewilliams@hdi.land)> wrote:

Sge: no/Hello Susan,

My name is Raechelle Williams and I recently left you a voicemail this afternoon. As part of the Haudenosaunee Development Institute (HDI) Environmental Division, I was hoping we could set up a meeting regarding the NPS 12 East Sixteen Mile Creek Pipeline Replacement Project. I have recently been promoted to the HDI Environmental Supervisor position and I was unaware of this project until I came across it on the internet. Reviewing the EA report prepared by Stantech, I noticed HDI was not included during the Indigenous Input. At this time, HDI has high concerns for this project.

Please see attached letter for HDI Environmental Division to be involved.

Nya: weh/Thank-You,

Raechelle Williams  
HDI Environmental Supervisor  
Haudenosaunee Development Institute  
16 Sunrise Court, Suite 600 Ohsweken, ON  
P.O. Box 714  
Ph: 519-445-4222  
(Direct): 519-802-9402



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----- Forwarded message -----

**From:** Todd Williams <[williams.todde@gmail.com](mailto:williams.todde@gmail.com)>  
**Date:** Mon, Oct 4, 2021 at 8:18 AM  
**Subject:** Fwd: East 16 Mile Creek - HCC  
**To:** Janice Williams <[janice.r.n.w23@gmail.com](mailto:janice.r.n.w23@gmail.com)>

fyi

----- Forwarded message -----

**From:** Jackson, Susan <[SUSJACKSON@suncor.com](mailto:SUSJACKSON@suncor.com)>  
**Date:** Fri, Oct 9, 2020 at 7:59 AM  
**Subject:** RE: East 16 Mile Creek - HCC  
**To:** Todd Williams <[williams.todde@gmail.com](mailto:williams.todde@gmail.com)>, Jackson, Susan <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>  
**Cc:** [traceyghdi@gmail.com](mailto:traceyghdi@gmail.com) <[traceyghdi@gmail.com](mailto:traceyghdi@gmail.com)>

Hi Todd; How about Friday Oct 16<sup>th</sup> at 10am? If that works, please send a list of names, titles and emails of who will attend and I will send them a calendar invite and meeting details.

Thank you,  
Susan

**From:** Todd Williams <[williams.todde@gmail.com](mailto:williams.todde@gmail.com)>  
**Sent:** Thursday, October 08, 2020 4:47 PM  
**To:** Jackson, Susan <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)>  
**Cc:** [traceyghdi@gmail.com](mailto:traceyghdi@gmail.com)  
**Subject:** Re: East 16 Mile Creek - HCC

Hi Susan,

Can you suggest a time and date to do a meeting over the internet

Thanks Todd

On Tue, Sep 22, 2020 at 1:53 PM Jackson, Susan <[sjackson@sun-canadian.com](mailto:sjackson@sun-canadian.com)> wrote:

Hi Todd – any chance to look at this yet? The spots are filling up quick. We have already met with other Nations and would very much like to meet with HDI.

Let me know what we can do here.

Thank you,  
Susan

---

**From:** Jackson, Susan  
**Sent:** Wednesday, September 16, 2020 12:53 PM  
**To:** '[williams.todde@gmail.com](mailto:williams.todde@gmail.com)' <[williams.todde@gmail.com](mailto:williams.todde@gmail.com)>  
**Cc:** '[traceyghdi@gmail.com](mailto:traceyghdi@gmail.com)' <[traceyghdi@gmail.com](mailto:traceyghdi@gmail.com)>  
**Subject:** FW: East 16 Mile Creek - HCC

Hi Todd – as discussed today, can we set up a meeting for any day next week Oct 21, 23, 24 or 25 (except Tuesday Oct 22) - to discuss HCCC's interests and input into this project? Alternatively October 2, 5, 6, 7 or 8 would work on our side.

Let me know which is your preferred date and time, plus a list of emails of who will attend so I can send out the invitation to all with some materials.

Thank you,  
Susan  
647-465-8159

---

**From:** Jackson, Susan  
**Sent:** Wednesday, August 12, 2020 11:42 AM  
**To:** '[hdi2@bellnet.ca](mailto:hdi2@bellnet.ca)' <[hdi2@bellnet.ca](mailto:hdi2@bellnet.ca)>; '[traceyghdi@gmail.com](mailto:traceyghdi@gmail.com)' <[traceyghdi@gmail.com](mailto:traceyghdi@gmail.com)>  
**Cc:** '[williams.todde@gmail.com](mailto:williams.todde@gmail.com)' <[williams.todde@gmail.com](mailto:williams.todde@gmail.com)>  
**Subject:** RE: East 16 Mile Creek - HCC

Good Afternoon Tracey;

I would to update you since my last communication (email June 5, 2020) with regards to our project at East 16 Mile Creek:

Firstly, as previously notified, Sun Canadian did proceed with a notice of application for Leave to Construct (under the Ontario Energy Board) to the Ministry of Energy, Northern Development and Mines. They have replied to us with a delegation of procedural aspects of the Crown's duty to consult - which is attached for your information.

Secondly, please find attached our project commencement letter to Haudenosaunee Confederacy Council of the Grand River (HCC) and map identifying the site location. I would like to invite the Haudenosaunee Confederacy Council to a virtual meeting any date this September (with the exception of Sept 28-30th). I will invite a representative from Stantec to present an overview of the project, and will be looking forward to discussing any aspect you may wish to discuss. In this meeting, we would like to hear how HCC would like to participate in this project. Please provide some dates in September and a list of emails of HCC and/or Haudenosaunee Development Institute representatives that would attend this initial meeting. Alternatively, please feel free to call or email me to discuss this project.

We are looking forward to working again with the Haudenosaunee Confederacy Council of the Grand River.

Warm regards,  
Susan Jackson  
Manager, Environment Health and Safety  
647-465-8159

---

**From:** Jackson, Susan  
**Sent:** Friday, June 05, 2020 10:42 AM  
**To:** '[hdi2@bellnet.ca](mailto:hdi2@bellnet.ca)' <[hdi2@bellnet.ca](mailto:hdi2@bellnet.ca)>; '[traceyghdi@gmail.com](mailto:traceyghdi@gmail.com)' <[traceyghdi@gmail.com](mailto:traceyghdi@gmail.com)>  
**Subject:** East 16 Mile Creek - HCC

Good Morning Tracey;

Sun-Canadian Pipe Line (SCPL) has identified the need to replace approximately 500m segment of an existing pipeline near Trafalgar Road and south of Britannia Road in the Town of Milton. The existing pipeline segment crosses under East Sixteen Mile creek needs to be protected from the watercourse due to ongoing erosion and creek meander. This project intends to install a new segment of pipe by horizontal directional drilling at a greater depth to eliminate the environmental risks.

The purpose of this email to introduce this initiative with the Haudenosaunee Confederacy Council (HCC) and to let you know that we will be reaching out to consult with HCC via the Haudenosaunee Development Institute on this project. Also, we intend on applying to the Ontario Energy Board for this work which involves notification to the Ministry of Energy, Northern Development and Mines for their determination of Duty to Consult. We anticipate this Ministry will also be notifying HDI of our application.

Please do not hesitate to contact me if you have any questions at this time.

Regards,  
Susan Jackson  
Manager EHS  
Sun Canadian Pipe Line  
647-465-8159

cid:image001.png@01D66FEE.3A23C290



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## **APPENDIX 3 – RECORD OF CONSULTATION – SUPPORTING DOCUMENTS**

**Ontario Energy Board (OPCC)**  
Supporting Documents





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Zora Crnojacki,  
Ontario Energy Board  
PO Box 2319, 2300 Yonge Street, 26th Floor  
Toronto, ON M4P 1E4  
Zora.Crnojacki@oeb.ca

SENT VIA EMAIL

Dear Zora Crnojacki,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

August 21, 2020

Page 2 of 2

Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).  
Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Helma Geerts, Land Use Policy & Stewardship  
Ministry of Agriculture, Food and Rural Affairs  
1 Stone Road West, 3rd Floor SE  
Guelph, ON N1G 4Y2  
helma.geerts@ontario.ca

SENT VIA EMAIL

Dear Helma Geerts,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

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August 21, 2020

Page 2 of 2

Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).  
Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Dan Minkin, Heritage Planner  
Ministry of Heritage, Sport, Tourism and Culture Industries  
401 Bay Street  
Toronto, ON M7A 0A7  
dan.minkin@ontario.ca

SENT VIA EMAIL

Dear Dan Minkin,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

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Regards,

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Guelph, ON N1G 4P5

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c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Tony Difabio,  
Ministry of Transportation  
301 St. Paul Street, 2nd Floor  
St. Catharines, ON L3R 7R4  
Tony.Difabio@ontario.ca

SENT VIA EMAIL

Dear Tony Difabio,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

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Regards,

**Stantec Consulting Ltd.**

A handwritten signature in black ink, appearing to read 'Michael Candido', with a stylized flourish at the end.

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

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c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Kourosh Manouchehri,  
Technical Standards and Safety Authority  
345 Carlingview Drive  
Toronto, ON M9W 6N9  
kmanouchehri@tssa.org

SENT VIA EMAIL

Dear Kourosh Manouchehri,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

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Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Sally Renwick, Team Lead, Environmental Planning, Land Use and Environmental Planning Section  
Ministry of Natural Resources and Forestry  
300 Water Street  
Peterborough, ON K9J 8M5  
sally.renwick@ontario.ca

SENT VIA EMAIL

Dear Sally Renwick,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

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Regards,

**Stantec Consulting Ltd.**

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**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Scott Oliver, Western Municipal Services Office  
Ministry of Municipal Affairs and Housing  
659 Exeter Rd, 2nd Floor  
London, ON N6E 1L3  
Scott.Oliver@ontario.ca

SENT VIA EMAIL

Dear Scott Oliver,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

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Regards,

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**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Ministry of Environment, Conservation and Parks  
Place Nouveau 9th Flr, 5775 Yonge St  
Toronto, ON M2M 4J1  
environment.toronto@ontario.ca

SENT VIA EMAIL

Dear ,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

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Regards,

**Stantec Consulting Ltd.**

A handwritten signature in black ink, appearing to read 'Michael Candido', is positioned above the printed name.

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

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c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Cory Ostrowka, Environmental Specialist, Environmental Management  
Infrastructure Ontario  
1 Dundas Street West, Suite 2000  
Toronto, ON M5G 2L5  
cory.ostrowka@infrastructureontario.ca

SENT VIA EMAIL

Dear Cory Ostrowka,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

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**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

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c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Jason McCullough, Senior Advisor, Indigenous Energy Policy Unit  
Ministry of Energy, Northern Development and Mines  
6th Floor, 77 Grenville Street  
Toronto, ON M7A 2C1  
jason.mccullough@ontario.ca

SENT VIA EMAIL

Dear Jason McCullough,

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Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

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Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Debbie Scanlon, Manager Approvals Section  
Ministry of Environment, Conservation and Parks  
40 St. Clair Av. W, 14th Floor  
Toronto, ON M4V 1M2  
sourceprotectionscreening@ontario.ca

SENT VIA EMAIL

Dear Debbie Scanlon,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

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**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

**From:** [McCullough, Jason \(ENDM\)](#)  
**To:** [Corr, Jacqueline](#)  
**Cc:** [Candido, Mike](#)  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Thursday, August 20, 2020 2:46:36 PM

---

Hi Jackie,

Am confirming receipt. Thank you.

Jason

Jason McCullough, Senior Advisor  
Indigenous Energy Policy  
Ministry of Energy, Northern Development and Mines  
(416) 526-2963

---

**From:** Corr, Jacqueline <Jacqueline.Corr@stantec.com>  
**Sent:** August 20, 2020 2:39 PM  
**To:** McCullough, Jason (ENDM) <Jason.McCullough@ontario.ca>  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**  
Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8  
Phone: (905) 944-7785  
Cell: (437) 235-2984  
[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)

 Please consider the environment before printing this email.

**From:** [Kourosh Manouchehri](#)  
**To:** [Corr, Jacqueline](#)  
**Cc:** [Candido, Mike](#); [pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Monday, August 24, 2020 2:40:11 PM  
**Attachments:** [image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)

---

Hi Corr,

Thank you for the provided information about this project. An application needs to be filled and submitted for the review of this project by TSSA as part of Ontario Pipeline Coordinating Committee. Please fill [Application for Review of Pipeline Project](#) and send it to the email address provided on the form.

If you have any question, please contact me.

Regards,



**Kourosh Manouchehri, P.Eng., PMP | Engineer**

Fuels Safety

345 Carlingview Drive

Toronto, Ontario M9W 6N9

Tel: +1-416-734-3539 || Fax: +1-416-231-7525 | E-Mail: [kmanouchehri@tssa.org](mailto:kmanouchehri@tssa.org)

[www.tssa.org](http://www.tssa.org)



---

**From:** Corr, Jacqueline <[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)>  
**Sent:** August 21, 2020 09:23  
**To:** Kourosh Manouchehri <[KManouchehri@tssa.org](mailto:KManouchehri@tssa.org)>  
**Cc:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

**[CAUTION]:** This email originated outside the organisation.

Please do not click links or open attachments unless you recognise the source of this email and know the content is safe.

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**

Environmental Consultant  
Assessment and Permitting Team  
Stantec

300W-675 Cochrane Drive, Markham ON L3R 0B8

Phone: (905) 944-7785

Cell: (437) 235-2984

[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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This electronic message and any attached documents are intended only for the named recipients. This communication from the Technical Standards and Safety Authority may contain information that is privileged, confidential or otherwise protected from disclosure and it must not be disclosed, copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately and delete the original message.

**From:** [Harvey, Joseph \(MHSTCI\)](#)  
**To:** [Candido, Mike](#)  
**Cc:** [zora.crnojacki@oeb.ca](mailto:zora.crnojacki@oeb.ca); [Minkin, Dan \(MHSTCI\)](#); [Barboza, Karla \(MHSTCI\)](#); [Corr, Jacqueline](#)  
**Subject:** File 0012763: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Tuesday, September 8, 2020 12:24:54 PM  
**Attachments:** [2020-09-08\\_SunCanadian-MHSTCI-Ltr.pdf](#)

---

Michael Candido,

Please find attached MHSTCI comments on the above referenced project. Please do not hesitate to contact Dan Minkin if you have any questions.

Joseph Harvey

*On behalf of*

Dan Minkin  
Heritage Planner  
Heritage Planning Unit  
[Dan.Minkin@ontario.ca](mailto:Dan.Minkin@ontario.ca)

September 8, 2020

EMAIL ONLY

Michael Candido  
Project Manager  
Stantec Consulting Ltd.  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

**MTCS File # : 0012763**  
**Proponent : Sun-Canadian Pipe Line Company Limited (Sun-Canadian)**  
**Project : NPS 12 E16M Creek Pipeline Replacement Project**  
**Location : Town of Milton**

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Dear Michael Candido:

Thank you for contacting the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) about the above-referenced project, which requires Ontario Energy Board (OEB)'s leave to construction under the Ontario Energy Board Act.

Please note that the OEB issued the [\*Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition\*](#) to assist applicants how to identify, manage and document environmental impacts. The Guidelines encourage applicants to consult with the Ontario Pipeline Coordinating Committee (which MHSTCI is a member) and other agencies. MHSTCI's interest in this process 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.

Among the planning activities outlined in Chapter 2 of the Guidelines, an applicant is advised to:

- describe the rationale for study area delineation (including construction staging, land requirements);
- identify existing baseline environmental conditions;
- identify potential environmental impacts expected to occur during construction and operation of the project, including cumulative impacts;
- describe proposed measures to mitigate potential negative impacts.

This letter provides advice on how to incorporate consideration of cultural heritage in the above-mentioned planning activities and expands on sections 4.3 and 5.3 of the Guidelines by outlining the technical cultural heritage studies and level of detail required to address cultural heritage in pipeline and facilities projects. The outcomes and recommendations of the studies will be reported in the Environmental Report and form the basis for any future commitments.



**Project Summary**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill.

**Identifying Cultural Heritage Resources**

While some cultural heritage resources may have already been formally identified, others may be identified through assessment.

**Archaeological Resources (Land and Marine, if applicable)**

MHSTCI recommends that, as a best practice, a combined Stage 1-2 archaeological assessment (AA) be completed for the entire study area during the planning phase.

At a minimum, a Stage 1 AA will be undertaken for the entire study area during the planning phase. The results of the Stage 1 AA will inform the OEB and will be summarized in the Environmental Report. If the Stage 1 AA recommends further AA(s), then MHSTCI recommends that further stages of AA be completed as early as possible during the design phase of the project, and prior to the completion of detailed design.

Archaeological assessments are required to be undertaken by an archaeologist licenced under the *Ontario Heritage Act*, who is responsible for submitting the report directly to MHSTCI for review.

The Environmental Report must include specific information from the AA report(s). The Executive Summary of each AA report provides a brief summary of the work completed and the recommendations for next steps, whether for further archaeological assessment, in which case the report will include a map that identifies those areas, or for no further assessment. The Environmental Report must also include clear commitments to undertake any further AA stages recommended, and a timeline for their completion.

**Built Heritage Resources and Cultural Heritage Landscapes**

A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment will be undertaken for the entire study area during the planning phase to inform the OEB and will be summarized in the Environmental Report. This study will:

1. Identify existing baseline cultural heritage conditions within the study area.
  - Study Area: The consultants preparing the Cultural Heritage Report will need to define a study area and explain their rationale. The common practice has been to define a study area as including the right-of-way (ROW) and a 50-metre buffer (construction zone) on either side of the ROW.
  - The report will include a historical summary of the study area and will identify all known or potential built heritage resources and cultural heritage landscapes in the study area. MHSTCI has developed screening criteria that may assist with this exercise: [Criteria for Evaluating for Potential Built Heritage Resources and Cultural Heritage Landscapes](#).

2. Identify preliminary potential project-specific impacts on the known and potential built heritage resources and cultural heritage landscapes that have been identified. The report should include a description of the anticipated impact to each known or potential built heritage resource or cultural heritage landscape that has been identified.
3. Recommend measures to avoid or mitigate potential negative impacts to known or potential built heritage resources and cultural heritage landscapes. The proposed mitigation measures are to inform the next steps of project planning and design.

Where a known or potential built heritage resource or cultural heritage landscape may be directly and adversely impacted<sup>1</sup>, and where it has not yet been evaluated for Cultural Heritage Value or Interest (CHVI), completion of a Cultural Heritage Evaluation Report (CHER) is required to fully understand its CHVI and level of significance. The CHER must be completed as part of the Environmental Report. If a potential resource is found to be of CHVI, then a Heritage Impact Assessment (HIA) will be undertaken by a qualified person. The HIA will be completed in consultation with MHSTCI and the proponent as early as possible during detail design, following the OEB's Leave to Construct.

While some cultural heritage landscapes are contained within individual property boundaries, others span across multiple properties. For certain cultural heritage landscapes, it will be more appropriate for the CHER and HIA to include multiple properties, in order to reflect the extent of that cultural heritage landscape in its entirety.

Cultural Heritage Reports will be undertaken by a qualified person who has expertise, recent experience, and knowledge relevant to the type of cultural heritage resources being considered and the nature of the activity being proposed.

Community input should be sought to identify locally recognized and potential cultural heritage resources. Sources include, but are not limited to, municipal heritage committees, historical societies and other local heritage organizations.

Cultural heritage resources are often of critical importance to Indigenous communities. 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 them.

### **Environmental Reporting**

The findings of the above-mentioned studies should be summarized as part of the Environmental Report discussion of existing conditions, impact assessment, mitigation, and future commitments. Commitments for further studies should clearly state what is to be done, who is responsible for implementation, and when. Recommendations from the technical cultural heritage studies described above should be reflected as commitments in the Environmental Report.

MHSTCI welcomes the opportunity to review and comment upon relevant sections of the draft Environmental Report, before the final draft Environmental Report is submitted to the OPCC for review.

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<sup>1</sup> A direct adverse impact would have a permanent and irreversible negative effect on the cultural heritage value or interest of a property or result in the loss of a heritage attribute on all or part of the property. Examples include, but are not limited to: removal or demolition of a heritage attribute, land disturbance, alterations that are not sympathetic to the CHVI of the property, introduction of new elements that diminish the integrity of the property, changing the character of the property, intensification of the property without conservation of heritage attributes.

Thank you for consulting MHSTCI on this project and please continue to do so throughout the OEB process. If you have any questions, require clarification, or would like additional examples to assist with project reporting, do not hesitate to contact Dan Minkin.

Sincerely,

Joseph Harvey

*On behalf of*

Dan Minkin

Heritage Planner

Heritage Planning Unit

[Dan.Minkin@ontario.ca](mailto:Dan.Minkin@ontario.ca)

Copied to: Jackie Corr, Environmental Consultant, Stantec Consulting Ltd  
Zora Crnojacki, Project Advisor, Ontario Energy Board

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. MHSTCI makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MHSTCI be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Please notify MHSTCI if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the *Ontario Heritage Act* and the *Standards and Guidelines for Consultant Archaeologists*.

If human remains are encountered, all activities must cease immediately and the local police as well as the Registrar, Burials of the Ministry of Government and Consumer Services must be contacted. In situations where human remains are associated with archaeological resources, MHSTCI should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.



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1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**Zora Crnojacki,**  
Ontario Energy Board  
PO Box 2319, 2300 Yonge Street, 26th Floor  
Toronto, ON M4P 1E4  
[zora.crnojacki@oeb.ca](mailto:zora.crnojacki@oeb.ca)

SENT VIA EMAIL

Dear Zora Crnojacki,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

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Please forward any comments you may have regarding the ER and project to Ms. Zora Crnojacki, Chairperson, Ontario Pipeline Coordination Committee, Ontario Energy Board, [zora.crnojacki@oeb.ca](mailto:zora.crnojacki@oeb.ca) and the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
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c. Peter Martens, Sun-Canadian Pipe Line Ltd.



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**Helma Geerts, Land Use Policy & Stewardship**

Ministry of Agriculture, Food and Rural Affairs  
1 Stone Road West, 3rd Floor SE  
Guelph, ON N1G 4Y2  
[helma.geerts@ontario.ca](mailto:helma.geerts@ontario.ca)

SENT VIA EMAIL

Dear Helma Geerts,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
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Regards,

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**Michael Candido** B.Sc. (Env.)  
Project Manager  
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c. Peter Martens, Sun-Canadian Pipe Line Ltd.



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**Dan Minkin, Heritage Planner**

Ministry of Heritage, Sport, Tourism and Culture Industries  
401 Bay Street  
Toronto, ON M7A 0A7  
[dan.minkin@ontario.ca](mailto:dan.minkin@ontario.ca)

SENT VIA EMAIL

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**Michael Candido** B.Sc. (Env.)  
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**Tony Difabio,**  
Ministry of Transportation  
301 St. Paul Street, 2nd Floor  
St. Catharines, ON L3R 7R4  
[tony.difabio@ontario.ca](mailto:tony.difabio@ontario.ca)

SENT VIA EMAIL

Dear Tony Difabio,

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Sixteen Mile Creek Pipeline Replacement Project**

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**Kourosh Manouchehri,**  
Technical Standards and Safety Authority  
345 Carlingview Drive  
Toronto, ON M9W 6N9  
[kmanouchehri@tssa.org](mailto:kmanouchehri@tssa.org)

SENT VIA EMAIL

Dear Kourosh Manouchehri,

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**Sally Renwick, Team Lead, Environmental Planning, Land Use and Environmental Planning Section**  
Ministry of Natural Resources and Forestry  
300 Water Street  
Peterborough, ON K9J 8M5  
[sally.renwick@ontario.ca](mailto:sally.renwick@ontario.ca)

SENT VIA EMAIL

Dear Sally Renwick,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
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c. Peter Martens, Sun-Canadian Pipe Line Ltd.



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File: 110904260

**Scott Oliver, Western Municipal Services Office**  
Ministry of Municipal Affairs and Housing  
659 Exeter Rd, 2nd Floor  
London, ON N6E 1L3  
[scott.oliver@ontario.ca](mailto:scott.oliver@ontario.ca)

SENT VIA EMAIL

Dear Scott Oliver,

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c. Peter Martens, Sun-Canadian Pipe Line Ltd.



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Ministry of Environment, Conservation and Parks, Central Region  
Place Nouveau 9th Flr, 5775 Yonge St  
Toronto, ON M2M 4J1  
[eanotification.cregion@ontario.ca](mailto:eanotification.cregion@ontario.ca)

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Dear Ministry of Environment, Conservation and Parks, Central Region

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**Cory Ostrowka, Environmental Specialist, Environmental Management**  
Infrastructure Ontario  
1 Dundas Street West, Suite 2000  
Toronto, ON M5G 2L5  
[cory.ostrowka@infrastructureontario.ca](mailto:cory.ostrowka@infrastructureontario.ca)

SENT VIA EMAIL

Dear Cory Ostrowka,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

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**Jason McCullough, Senior Advisor, Indigenous Energy Policy Unit**  
Ministry of Energy, Northern Development and Mines  
6th Floor, 77 Grenville Street  
Toronto, ON M7A 2C1  
[jason.mccullough@ontario.ca](mailto:jason.mccullough@ontario.ca)

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**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. An Environmental Report (ER), summarizing the results of the environmental study is available for your review at: <http://sun-canadian.com/media-releases/>.

Please forward any comments you may have regarding the ER and project to Ms. Zora Crnojacki, Chairperson, Ontario Pipeline Coordination Committee, Ontario Energy Board, [zora.crnojacki@oeb.ca](mailto:zora.crnojacki@oeb.ca) and the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**Debbie Scanlon, Manager Approvals Section**  
Ministry of Environment, Conservation and Parks  
40 St. Clair Av. W, 14th Floor  
Toronto, ON M4V 1M2  
[sourceprotectionscreening@ontario.ca](mailto:sourceprotectionscreening@ontario.ca)

SENT VIA EMAIL

Dear Debbie Scanlon,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. An Environmental Report (ER), summarizing the results of the environmental study is available for your review at: <http://sun-canadian.com/media-releases/>.

Please forward any comments you may have regarding the ER and project to Ms. Zora Crnojacki, Chairperson, Ontario Pipeline Coordination Committee, Ontario Energy Board, [zora.crnjacki@oeb.ca](mailto:zora.crnjacki@oeb.ca) and the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



**From:** [Candido, Mike](#)  
**To:** [Afrani, Kwame \(MTO\)](#); [Aurini, Shawn \(MTO\)](#); [Hartwig, Emily](#)  
**Cc:** [16 Mile Creek Replacement](#); [Kelly, Kevin \(MTO\)](#)  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project  
**Date:** Tuesday, February 16, 2021 3:57:29 PM

---

Thank you for the confirmation Kwame.

Mike

---

**From:** Afrani, Kwame (MTO) <Kwame.Afrani@ontario.ca>  
**Sent:** Tuesday, February 16, 2021 3:49 PM  
**To:** Aurini, Shawn (MTO) <Shawn.Aurini@ontario.ca>; Candido, Mike <michael.candido@stantec.com>; Hartwig, Emily <Emily.Hartwig@stantec.com>  
**Cc:** 16 Mile Creek Replacement <16milecreekreplacement@stantec.com>; Kelly, Kevin (MTO) <Kevin.Kelly@ontario.ca>  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

Hi All,

Shawn is right, this location is outside permit control area.

Thanks,  
Kwame

---

**From:** Aurini, Shawn (MTO) <[Shawn.Aurini@ontario.ca](mailto:Shawn.Aurini@ontario.ca)>  
**Sent:** February 16, 2021 11:16 AM  
**To:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>; Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>; Afrani, Kwame (MTO) <[Kwame.Afrani@ontario.ca](mailto:Kwame.Afrani@ontario.ca)>  
**Cc:** 16 Mile Creek Replacement <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>; Kelly, Kevin (MTO) <[Kevin.Kelly@ontario.ca](mailto:Kevin.Kelly@ontario.ca)>  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

Thanks Mike,

I'll have staff double check, but I'm sure its far enough away from Highway 407.

Kwame, please double check this location is outside permit control and report back to the group.

Thanks

Shawn

---

**From:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Sent:** February 16, 2021 9:38 AM  
**To:** Aurini, Shawn (MTO) <[Shawn.Aurini@ontario.ca](mailto:Shawn.Aurini@ontario.ca)>; Frazer, Emily (MTO) <[Emily.Frazer@ontario.ca](mailto:Emily.Frazer@ontario.ca)>; Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>  
**Cc:** 16 Mile Creek Replacement <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>; Hewitt, Tom (MTO) <[Tom.Hewitt@ontario.ca](mailto:Tom.Hewitt@ontario.ca)>; Rodek, Amanda (MTO) <[Amanda.Rodek@ontario.ca](mailto:Amanda.Rodek@ontario.ca)>; Routledge, Graham (MTO) <[Graham.Routledge@ontario.ca](mailto:Graham.Routledge@ontario.ca)>; Kelly, Kevin (MTO) <[Kevin.Kelly@ontario.ca](mailto:Kevin.Kelly@ontario.ca)>  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

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Hello Shawn. It appears that your response went to a different Emily.

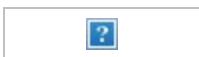
The extent and location of the pipeline replacement is displayed on the figures – an approximately 480m section southeast of the intersection of Britannia Road and Trafalgar Road in Milton. Based on this information can you confirm that this location is not “within existing MTO highway corridors or the GTA West study area”? Thank you.

Mike

**Michael Candido** B.Sc.(Env.), CAN-CISEC  
Project Manager - Assessment and Permitting

Direct: 519 780-8139  
Mobile: 519 829-8159  
Fax: 519 836-2493  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

Stantec  
1-70 Southgate Drive  
Guelph ON N1G 4P5



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**From:** Aurini, Shawn (MTO) <[Shawn.Aurini@ontario.ca](mailto:Shawn.Aurini@ontario.ca)>  
**Sent:** Tuesday, February 16, 2021 8:50 AM  
**To:** Frazer, Emily (MTO) <[Emily.Frazer@ontario.ca](mailto:Emily.Frazer@ontario.ca)>  
**Cc:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>; 16 Mile Creek Replacement <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>; Hewitt, Tom (MTO) <[Tom.Hewitt@ontario.ca](mailto:Tom.Hewitt@ontario.ca)>; Rodek, Amanda (MTO) <[Amanda.Rodek@ontario.ca](mailto:Amanda.Rodek@ontario.ca)>; Routledge, Graham (MTO) <[Graham.Routledge@ontario.ca](mailto:Graham.Routledge@ontario.ca)>; Kelly, Kevin (MTO) <[Kevin.Kelly@ontario.ca](mailto:Kevin.Kelly@ontario.ca)>  
**Subject:** FW: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek

Pipeline Replacement Project

Hi Emily,

Thanks for responding. Based on the map you provided, the new route does not impact MTO highway facilities nor is it within MTO corridor control. Is any of the pipeline being replaced within existing MTO highway corridors or the GTA West study area?

Best regards,

Shawn

---

**From:** Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>

**Sent:** February 16, 2021 8:36 AM

**To:** Aurini, Shawn (MTO) <[Shawn.Aurini@ontario.ca](mailto:Shawn.Aurini@ontario.ca)>

**Cc:** 16 Mile Creek Replacement <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>; Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>

**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

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Good morning Shawn,

The Notice of Commencement and study area map were sent to Tony Di Fabio on August 21, 2020 (attached for your reference).

The Environmental Report is available for review at: <http://sun-canadian.com/media-releases/>

Should you have any further questions or concerns, please let me know.

**Emily Hartwig** B.Sc., EP.

Environmental Consultant, Assessment and Permitting

Direct: 519 780-8186

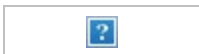
Mobile: 226 979-4457

[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)

Stantec

1-70 Southgate Drive

Guelph ON N1G 4P5



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---

**From:** Aurini, Shawn (MTO) <[Shawn.Aurini@ontario.ca](mailto:Shawn.Aurini@ontario.ca)>

**Sent:** Wednesday, February 10, 2021 4:01 PM

**To:** Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>

**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

Hi Emily,

I work out of MTO's Central Region section and was forwarded this submission for comment. Can you provide me with a location map so staff can comment?

Best regards,

Shawn

---

**From:** Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>

**Sent:** February-05-21 2:42 PM

**To:** Di Fabio, Tony (MTO) <[Tony.DiFabio@ontario.ca](mailto:Tony.DiFabio@ontario.ca)>

**Cc:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>; Martens, Peter <[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)>; 16 Mile Creek Replacement <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>

**Subject:** Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

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Good afternoon,

Please find attached a notice of the Environmental Report for the Sun-Canadian Pipe Line Ltd.: NPS12 East Sixteen Mile Creek Pipeline Replacement Project.

Should you have any questions please contact Michael Candido (Cc'd).

Regards,

**Emily Hartwig** B.Sc., EP.

Environmental Consultant, Assessment and Permitting

Direct: 519 780-8186

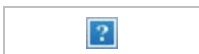
Mobile: 226 979-4457

[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)

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Guelph ON N1G 4P5



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**From:** [Candido, Mike](#)  
**To:** [Candido, Mike](#)  
**Subject:** FW: Application for Review of Pipeline Project: Sun-Canadian Pipe Line East Sixteen Mile Creek Pipeline Replacement  
**Date:** Monday, December 20, 2021 12:08:30 PM  
**Attachments:** [image003.png](#)  
[image004.png](#)  
[image005.png](#)  
[image006.jpg](#)  
[image007.png](#)

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**From:** Kourosh Manouchehri <[KManouchehri@tssa.org](mailto:KManouchehri@tssa.org)>  
**Sent:** April 1, 2021 03:43 PM  
**To:** Martens, Peter <[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)>  
**Cc:** Zora Crnojacki <[Zora.Crnojacki@oeb.ca](mailto:Zora.Crnojacki@oeb.ca)>  
**Subject:** RE: Application for Review of Pipeline Project: Sun-Canadian Pipe Line East Sixteen Mile Creek Pipeline Replacement

Hi Peter,

Reference your new pipeline project application assigned to me on February 19, 2021 as normal.

TSSA reviews and audits pipeline projects submitted to OEB for leave to construct. The review and audit scopes are limited to technical aspect of the project and compliance to [Ontario Regulation 210/01: Oil and Gas Pipeline Systems](#), [Oil and Gas Pipelines CAD](#) and adopted standards including CSA Z662-19. Based on your submitted application and accompanying documentation we would like to bring to your attention the following:

1. I did not find the High Consequence Area (HCA) analysis with the submitted application. If the route is not change comparing to the existing easement and has not affected the HCA, please confirm.
2. I did not find the environmental report with the submitted application. Mainly the new proposed route and how it affects the "identified sites" in HCA are required for review. Please submit the EA report when available.

Regards,



**Kourosh Manouchehri, P.Eng., PMP | Engineer**

Fuels Safety

345 Carlingview Drive

Toronto, Ontario M9W 6N9

Tel: +1-416-734-3539 | Fax: +1-416-231-7525 | E-Mail: [kmanouchehri@tssa.org](mailto:kmanouchehri@tssa.org)

[www.tssa.org](http://www.tssa.org)



---

**From:** Martens, Peter <[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)>

**Sent:** February 17, 2021 12:59

**To:** FS Submissions <[fssubmissions@tssa.org](mailto:fssubmissions@tssa.org)>

**Cc:** Kourosh Manouchehri <[KManouchehri@tssa.org](mailto:KManouchehri@tssa.org)>; Zora Crnojacki <[Zora.Crnojacki@oeb.ca](mailto:Zora.Crnojacki@oeb.ca)>

**Subject:** Application for Review of Pipeline Project: Sun-Canadian Pipe Line East Sixteen Mile Creek Pipeline Replacement

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Replacement Project (email dated Feb. 5<sup>th</sup> 2021), I have provided the requested TSSA application to initiate review.

Submitted as attachments to this email are the following:

1. Completed Application form (SCPL E16M Application-for-review-of-Pipeline-Project)
2. Stress Analysis Report (includes design drawings) for proposed pipe installation (110904260SR-RPT0001)

Note: PDF Application form did not allow for a text box to date the credit card charge information so please use the date stamp of this email.

If you have any questions or concerns, please let me know. Consistent with the original OPCC submission, your comments would be appreciated by April 8, 2021.

Thanks,  
Peter

---

Peter A. Martens, P. Eng  
Sun-Canadian Pipe Line Ltd.  
Tel: (905) 538-9624  
Cell: (289) 230-4350

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**From:** [Hartwig, Emily](#)  
**To:** [Candido, Mike](#)  
**Subject:** Fwd: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project  
**Date:** Tuesday, March 2, 2021 6:26:23 PM

---

Response from IO.

Emily Hartwig, B.Sc.  
Environmental Consultant  
Stantec  
1-70 Southgate  
Guelph ON N1G 4P5  
Direct: (519) 780-8186  
Mobile: (226) 979-4457  
[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)

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**From:** Maskell, Hayley (IO) <[Hayley.Maskell@infrastructureontario.ca](mailto:Hayley.Maskell@infrastructureontario.ca)>  
**Sent:** Tuesday, March 2, 2021 3:12:56 PM  
**To:** Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

Good afternoon Ms. Hartwig,

Thank you for sending us the Notice of Commencement for the Sun-Canadian Pipe Line Replacement Project, in Milton.

While our initial scan indicates that there are no properties owned by the Minister of Government and Consumer Services within your project's study area, it is the proponent's responsibility to verify if any provincial government property is within the study area. Title documents may identify owners of provincial government property as any of the following or variations:

- Her Majesty the Queen
- His Majesty the King
- Hydro One
- Hydro One Networks Inc.
- Management Board Secretariat (MBS)
- Minister of Economic Development, Employment and Infrastructure (MEDEI)
- Minister of Energy and Infrastructure (MEI)
- Minister of Government and Consumer Services (MGCS)
- Minister of Infrastructure (MOI)
- Minister of Natural Resources and Forestry (MNRF)
- Minister of Public Infrastructure Renewal (PIR)
- Minister of Public Works
- Minister of Transportation (MTO)
- Ontario Lands Corporation (OLC)
- Ontario Realty Corporation (ORC)

If the proponent confirms that no provincial government property exists in the project area, please remove Infrastructure Ontario from the contact list.

If provincial government property is in the study area but not required for the project, you should continue to consult IO as a directly affected stakeholder. However, if government property is required for the project, the proponent should contact us so that we can advise about requirements for obtaining government property.

Additionally, please remember to send notices to our dedicated notice email address:  
[noticereview@infrastructureontario.ca](mailto:noticereview@infrastructureontario.ca)

Kind regards,

Hayley Maskell

---

**From:** Hartwig, Emily [<mailto:Emily.Hartwig@stantec.com>]

**Sent:** Friday, February 05, 2021 2:42 PM

**To:** Ostrowka, Cory (IO) <[Cory.Ostrowka@infrastructureontario.ca](mailto:Cory.Ostrowka@infrastructureontario.ca)>

**Cc:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>; Martens, Peter <[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)>; 16 Mile Creek Replacement <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>

**Subject:** Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

Good afternoon,

Please find attached a notice of the Environmental Report for the Sun-Canadian Pipe Line Ltd.: NPS12 East Sixteen Mile Creek Pipeline Replacement Project.

Should you have any questions please contact Michael Candido (Cc'd).

Regards,

**Emily Hartwig** B.Sc., EP.

Environmental Consultant, Assessment and Permitting

Direct: 519 780-8186

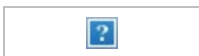
Mobile: 226 979-4457

[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)

Stantec

1-70 Southgate Drive

Guelph ON N1G 4P5



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**From:** [Rodek, Amanda \(MTO\)](#)  
**To:** [Hartwig, Emily](#)  
**Cc:** [Candido, Mike](#)  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project  
**Date:** Wednesday, April 7, 2021 2:11:42 PM

---

Hi Emily,

Stantec's, February 5, 2021 email to Tony Di Fabio regarding the Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project, has been forwarded to my attention for review and response.

Please see the comments below from the Ministry of Transportation for your consideration regarding the proposed pipeline.

- The new route does not impact MTO highway facilities nor is it within MTO corridor control

Have a great day!

Thanks.

Amanda Rodek  
Program Analyst  
Ministry of Transportation  
Corridor Management Office  
301 St. Paul Street  
St. Catharines, ON L2R 7R4  
Tel. (905) 704-2916

---

**From:** Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>  
**Sent:** February-05-21 2:42 PM  
**To:** Di Fabio, Tony (MTO) <[Tony.DiFabio@ontario.ca](mailto:Tony.DiFabio@ontario.ca)>  
**Cc:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>; Martens, Peter <[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)>; 16 Mile Creek Replacement <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>  
**Subject:** Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

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Good afternoon,

Please find attached a notice of the Environmental Report for the Sun-Canadian Pipe Line Ltd.: NPS12 East Sixteen Mile Creek Pipeline Replacement Project.

Should you have any questions please contact Michael Candido (Cc'd).

Regards,

**Emily Hartwig** B.Sc., EP.

Environmental Consultant, Assessment and Permitting

Direct: 519 780-8186

Mobile: 226 979-4457

[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)

Stantec

1-70 Southgate Drive

Guelph ON N1G 4P5



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**From:** [Minkin, Dan \(MHSTCI\)](#)  
**To:** [Hartwig, Emily](#); [Candido, Mike](#)  
**Cc:** [Corr, Jacqueline](#); [zora.crnojacki@oeb.ca](mailto:zora.crnojacki@oeb.ca); [Barboza, Karla \(MHSTCI\)](#)  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project  
**Date:** Thursday, April 8, 2021 6:26:50 PM  
**Attachments:** [2021-04-08\\_E16MC-PipelineReplacement\\_MHSTCIcomments.pdf](#)

---

Good afternoon,  
Please find our comments attached.

### Dan Minkin

Heritage Planner

Ministry of Heritage, Sport, Tourism and Culture Industries

Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit

401 Bay Street, Suite 1700

Toronto, Ontario M7A 0A7

Tel. 416.786.7553 \*NEW\*

---

**From:** Hartwig, Emily <Emily.Hartwig@stantec.com>  
**Sent:** February 5, 2021 2:42 PM  
**To:** Minkin, Dan (MHSTCI) <Dan.Minkin@ontario.ca>  
**Cc:** Candido, Mike <michael.candido@stantec.com>; Martens, Peter <pmartens@sun-canadian.com>; 16 Mile Creek Replacement <16milecreekreplacement@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good afternoon,

Please find attached a notice of the Environmental Report for the Sun-Canadian Pipe Line Ltd.: NPS12 East Sixteen Mile Creek Pipeline Replacement Project.

Should you have any questions please contact Michael Candido (Cc'd).

Regards,

**Emily Hartwig** B.Sc., EP.

Environmental Consultant, Assessment and Permitting

Direct: 519 780-8186

Mobile: 226 979-4457

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**Ministry of Heritage, Sport,  
Tourism and Culture Industries**

Programs and Services Branch  
401 Bay Street, Suite 1700  
Toronto, ON M7A 0A7  
Tel: 416.786.7553

**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: 416.786.7553



April 8, 2021

EMAIL ONLY

Michael Candido  
Project Manager  
Stantec Consulting Ltd.  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

<b>MTCS File #</b>	<b>:</b>	<b>0012763</b>
<b>Proponent</b>	<b>:</b>	<b>Sun-Canadian Pipe Line Company Limited (Sun-Canadian)</b>
<b>Project</b>	<b>:</b>	<b>NPS 12 E16M Creek Pipeline Replacement Project</b>
<b>Location</b>	<b>:</b>	<b>Town of Milton</b>

---

Dear Michael Candido:

Thank you for contacting the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) about the above-referenced project, which requires Ontario Energy Board (OEB)'s leave to construction under the Ontario Energy Board Act. We have reviewed the Draft Environmental Report for this project (dated February 5, 2021, prepared by Stantec) and offer the following comments.

### **Project Summary**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill.

### **Draft Environmental Report Review**

1. Section 4.4.9 notes that the checklist (included in Appendix F) was completed and indicated that a Cultural Heritage Assessment Report (CHAR) would be necessary, and that the CHAR will be undertaken "prior to construction". Our letter of September 8, 2020 advised that a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment should be completed during the planning phase to inform the OEB, and summarised in the Environmental Report. We reiterate our recommendation that this report should be completed before submission of the Environmental Report to the OEB, and the final version of Sections 4.4.9 and 6.1.6 should contain a summary of the Cultural Heritage Report and commitments to carry out its recommendations.
2. The term "cultural heritage resources" includes archaeological resources as well as built heritage resources and cultural heritage landscapes. Accordingly, built heritage resources and cultural heritage landscapes by themselves should be referred to as such, including in the title and text of Sections 4.4.9 and 6.1.6 and the corresponding row of Table 4-9.

3. Given that the Stage 1 Archaeological Assessment report recommended further study, the Environmental Report should commit to a timeline for the completion of the remaining stages of archaeological assessment, based on stages of project design. MHSTCI recommends that further stages of archaeological assessment be completed as early as possible during detailed design.

The Stage 1 Archaeological Assessment report (dated January 7, 2021, prepared by Timmins Martelle under PIF# P324-0571-2020) has been submitted to MHSTCI and is under review.

Please note that archaeological concerns have not been addressed until reports have been entered into the Ontario Public Register of Archaeological Reports where those reports recommend that:

1. the archaeological assessment of the project area is complete and
2. all archaeological sites identified by the assessment are either of no further cultural heritage value or interest (as per Section 48(3) of the Ontario Heritage Act) or that mitigation of impacts has been accomplished through an avoidance and protection strategy.

Approval authorities typically wait to receive the ministry's review letter for an archaeological assessment report before issuing a decision on the application as it can be used, for example, to document that due diligence has been undertaken.

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

Sincerely,

Dan Minkin  
Heritage Planner  
Heritage Planning Unit  
[Dan.Minkin@ontario.ca](mailto:Dan.Minkin@ontario.ca)

Copied to: Jackie Corr, Environmental Consultant, Stantec Consulting Ltd  
Zora Crnojacki, Project Advisor, Ontario Energy Board  
Karla Barboza, (A) Team Lead – Heritage, MHSTCI

**From:** [Candido, Mike](#)  
**To:** [Minkin, Dan \(MHSTCI\)](#)  
**Cc:** [Barboza, Karla \(MHSTCI\)](#)  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project  
**Date:** Thursday, December 9, 2021 12:43:00 PM  
**Attachments:** [let\\_110904260\\_Response\\_MHSTCI\\_File#0012763\\_20211209.pdf](#)

---

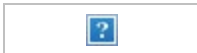
Hello Dan. Please see attached a response to your comments on the Draft Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project.

Mike

**Michael Candido** B.Sc.(Env.), CAN-CISEC  
Project Manager - Assessment and Permitting

Direct: 519 780-8139  
Mobile: 519 829-8159  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

Stantec  
1-70 Southgate Drive  
Guelph ON N1G 4P5



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**From:** Minkin, Dan (MHSTCI) <Dan.Minkin@ontario.ca>  
**Sent:** Thursday, April 8, 2021 6:26 PM  
**To:** Hartwig, Emily <Emily.Hartwig@stantec.com>; Candido, Mike <michael.candido@stantec.com>  
**Cc:** Corr, Jacqueline <Jacqueline.Corr@stantec.com>; zora.crnojacki@oeb.ca; Barboza, Karla (MHSTCI) <Karla.Barboza@ontario.ca>  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

Good afternoon,  
Please find our comments attached.

**Dan Minkin**

Heritage Planner  
Ministry of Heritage, Sport, Tourism and Culture Industries  
Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit  
401 Bay Street, Suite 1700  
Toronto, Ontario M7A 0A7  
Tel. 416.786.7553 \*NEW\*

---

**From:** Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>

**Sent:** February 5, 2021 2:42 PM

**To:** Minkin, Dan (MHSTCI) <[Dan.Minkin@ontario.ca](mailto:Dan.Minkin@ontario.ca)>

**Cc:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>; Martens, Peter <[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)>; 16 Mile Creek Replacement <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>

**Subject:** Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good afternoon,

Please find attached a notice of the Environmental Report for the Sun-Canadian Pipe Line Ltd.: NPS12 East Sixteen Mile Creek Pipeline Replacement Project.

Should you have any questions please contact Michael Candido (Cc'd).

Regards,

**Emily Hartwig** B.Sc., EP.

Environmental Consultant, Assessment and Permitting

Direct: 519 780-8186

Mobile: 226 979-4457

[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)

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Stantec Consulting Ltd.  
100-300 Hagey Boulevard, Waterloo ON N2L 0A4

December 9, 2021  
File: 110904260

**Attention: Dan Minkin, Heritage Planner**

Ministry of Heritage, Sport, Tourism and Culture Industries  
Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit  
401 Bay Street, Suite 1700 838  
Toronto, Ontario M7A 0A7  
Dan.Minkin@ontario.ca

Dear Mr. Minkin,

**Reference: MHSTCI Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project**

Thank you for your comments received by email on April 8, 2021 regarding the NPS 12 East Sixteen Mike Creek Pipeline Replacement Project Environmental Report. Please find responses to your comments below.

The lands to be impacted by construction of the Project, include golf course lands, PAO Horticultural lands and an existing sand and gravel access road that is currently used by PAO Horticultural. Horizontal Directional Drill (HDD) pads to facilitate the crossing of East Sixteen Mile Creek will be located on the golf course lands and PAO Horticultural lands. The drill pad located on PAO Horticultural lands overlaps with the existing sand and gravel access road and land currently used for tree nursery stock. The drill pads are approximately 20 metres by 40 metres in size.

***Comment #1:*** Section 4.4.9 notes that the checklist (included in Appendix F) was completed and indicated that a Cultural Heritage Assessment Report (CHAR) would be necessary, and that the CHAR will be undertaken "prior to construction". Our letter of September 8, 2020 advised that a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment should be completed during the planning phase to inform the OEB, and summarized in the Environmental Report. We reiterate our recommendation that this report should be completed before submission of the Environmental Report to the OEB, and the final version of Sections 4.4.9 and 6.1.6 should contain a summary of the Cultural Heritage Report and commitments to carry out its recommendations.

***Response:*** Stantec will undertake a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment for the Project. No construction work will begin until the report has been reviewed by the MHSTCI and all necessary permitting and approvals are in place.

***Comment #2:*** The term "cultural heritage resources" includes archaeological resources as well as built heritage resources and cultural heritage landscapes. Accordingly, built heritage resources and cultural heritage landscapes by themselves should be referred to as such, including in the title and text of Sections 4.4.9 and 6.1.6 and the corresponding row of Table 4-9.

**Reference:** MHSTCI Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project

**Response:** References to “cultural heritage resources” in Sections 4.4.9, 6.1.6 and the corresponding row of Table 4.9 the Environmental Report will be revised accordingly.

***Comment #3:*** *Given that the Stage 1 Archaeological Assessment report recommended further study, the Environmental Report should commit to a timeline for the completion of the remaining stages of archaeological assessment, based on stages of Project design. MHSTCI recommends that further stages of archaeological assessment be completed as early as possible during detailed design.*

**Response:** A Stage 2 Archaeological Assessment (dated July 13, 2021) was completed and no further work was recommended. The report was entered into the Ontario Public Register of Archaeological Reports on July 16, 2021 – Project Information Form Number P324-0576-2020, MHSTCI File Number 0012270.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido,** B.Sc.(Env.), CAN-CISEC  
Project Manager - Assessment and Permitting

Phone: 519 780 8139  
michael.candido@stantec.com

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

cm \\ca0004-ppfss04\01609\active\other\_pcs\_active\110 - calgary\110904260\02\_correspondence\tracking\post-er\agency\mhstci\et\_110904260\_response\_mhstci\_file#0012763\_20211209.docx



**From:** [Minkin, Dan \(MHSTCI\)](#)  
**To:** [Candido, Mike](#)  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project  
**Date:** Monday, December 20, 2021 3:07:10 PM

---

Hi Mike,

Thank you for your letter of December 9, 2021 responding to our comments on the Draft Environmental Report.

We acknowledge the entry into the Ontario Public Register of Archaeological Reports of the Stage 2 Archaeological Assessment report prepared under PIF # P324-0576-2020 and recommending no further work, as described in your letter.

As to the Cultural Heritage Report, we reiterate our advice that it should be carried out as early in the approvals process as practicable; ideally, the report should be completed and reviewed by MHSTCI in time for it to be used in support of Sun-Canadian's final submission.

Thank you for your ongoing consultation on this project.

All the best,

**Dan Minkin** | Heritage Planner  
Ministry of Heritage, Sport, Tourism and Culture Industries  
Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit  
T. 416. 786.7553 | Email: [dan.minkin@ontario.ca](mailto:dan.minkin@ontario.ca)

---

**From:** Candido, Mike <michael.candido@stantec.com>  
**Sent:** December 9, 2021 12:44 PM  
**To:** Minkin, Dan (MHSTCI) <Dan.Minkin@ontario.ca>  
**Cc:** Barboza, Karla (MHSTCI) <Karla.Barboza@ontario.ca>  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

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Hello Dan. Please see attached a response to your comments on the Draft Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project.

Mike

**Michael Candido** B.Sc.(Env.), CAN-CISEC  
Project Manager - Assessment and Permitting

Direct: 519 780-8139  
Mobile: 519 829-8159  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

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Guelph ON N1G 4P5



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**From:** Minkin, Dan (MHSTCI) <[Dan.Minkin@ontario.ca](mailto:Dan.Minkin@ontario.ca)>  
**Sent:** Thursday, April 8, 2021 6:26 PM  
**To:** Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>; Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Cc:** Corr, Jacqueline <[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)>; [zora.crnojacki@oeb.ca](mailto:zora.crnojacki@oeb.ca); Barboza, Karla (MHSTCI) <[Karla.Barboza@ontario.ca](mailto:Karla.Barboza@ontario.ca)>  
**Subject:** RE: Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

Good afternoon,  
Please find our comments attached.

**Dan Minkin**

Heritage Planner

Ministry of Heritage, Sport, Tourism and Culture Industries

Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit

401 Bay Street, Suite 1700

Toronto, Ontario M7A 0A7

Tel. 416.786.7553 \*NEW\*

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**From:** Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>  
**Sent:** February 5, 2021 2:42 PM  
**To:** Minkin, Dan (MHSTCI) <[Dan.Minkin@ontario.ca](mailto:Dan.Minkin@ontario.ca)>  
**Cc:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>; Martens, Peter <[pmartens@sun-canadian.com](mailto:pmartens@sun-canadian.com)>; 16 Mile Creek Replacement <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>  
**Subject:** Sun-Canadian Pipe Line Ltd. - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

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Good afternoon,

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Should you have any questions please contact Michael Candido (Cc'd).

Regards,

**Emily Hartwig** B.Sc., EP.

Environmental Consultant, Assessment and Permitting

Direct: 519 780-8186

Mobile: 226 979-4457

[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)

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**Provincial Ministries and  
Conservation Authority**  
Supporting Documents



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Michele Doncaster, Manager, Land Use Policy and Stewardship  
Ministry of Agriculture, Food and Rural Affairs  
Ontario Government Bldg 3rd Flr, 1 Stone Rd West  
Guelph, ON N1G 4Y2  
michele.doncaster@ontario.ca

SENT VIA EMAIL

Dear Michele Doncaster,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

August 21, 2020

Page 2 of 2

Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).  
Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**

A handwritten signature in black ink, appearing to read 'Michael Candido', is positioned above the printed name.

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Dave Marriott, Rural Planner, Western Ontario  
Ministry of Agriculture, Food and Rural Affairs  
Ontario Government Bldg 3rd Flr, 1 Stone Rd West  
Guelph, ON N1G 4Y2  
David.Marriott@ontario.ca

SENT VIA EMAIL

Dear Dave Marriott,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

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August 21, 2020

Page 2 of 2

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Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**

A handwritten signature in black ink, appearing to read 'Michael Candido', is positioned above the printed name.

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Jen Turnbull, Senior Policy Advisor  
Ministry of Agriculture, Food and Rural Affairs  
Ontario Government Bldg 3rd Flr, 1 Stone Rd West  
Guelph, ON N1G 4Y2  
jen.turnbull@ontario.ca

SENT VIA EMAIL

Dear Jen Turnbull,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

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August 21, 2020

Page 2 of 2

Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).  
Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Brad Allen, District Manager, Aurora District  
Ministry of Natural Resources and Forestry  
50 Bloomington Rd  
Aurora, ON L4G 0L8  
brad.allan@ontario.ca

SENT VIA EMAIL

Dear Brad Allen,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

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An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

August 21, 2020

Page 2 of 2

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Regards,

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**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

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c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Maria Jawaid, District Planner, Aurora District  
Ministry of Natural Resources and Forestry  
50 Bloomington Rd  
Aurora, ON L4G 0L8  
maria.jawaid@ontario.ca

SENT VIA EMAIL

Dear Maria Jawaid,

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Creek Pipeline Replacement Project**

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Regards,

**Stantec Consulting Ltd.**

A handwritten signature in black ink, appearing to read 'Michael Candido', with a stylized flourish at the end.

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

James Hamilton, Manager, Heritage Planning Unit  
Ministry of Heritage, Sport, Tourism and Culture Industries  
401 Bay Street  
Toronto, ON M7A 0A7  
james.hamilton@ontario.ca

SENT VIA EMAIL

Dear James Hamilton,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

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**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

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Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Ben Davis, Regulations Officer  
Conservation Halton  
2596 Britannia Road West  
Burlington, ON L7P 0G3  
bdavis@hrca.on.ca

SENT VIA EMAIL

Dear Ben Davis,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

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Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

**From:** [Ben Davis](#)  
**To:** [Corr, Jacqueline](#)  
**Cc:** [Candido, Mike](#)  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Thursday, August 20, 2020 3:13:08 PM  
**Attachments:** [image001.jpg](#)

---

Hi Jacqueline,

Thank you for providing the information about the proposed pipeline replacement. Can you please provide me with a map and any other information that you have regarding the proposed works as a permit from Conservation Halton will be required.

Regards,

**Ben Davis, CAN - CISEC**

Regulations Officer

**Conservation Halton**

2596 Britannia Road West, Burlington, ON L7P 0G3

905.336.1158 ext. 2278 | Fax 905.336.6684 | [bdavis@hrca.on.ca](mailto:bdavis@hrca.on.ca)

[conservationhalton.ca](http://conservationhalton.ca)

---

**From:** Corr, Jacqueline <Jacqueline.Corr@stantec.com>

**Sent:** August 20, 2020 2:34 PM

**To:** Ben Davis <bdavis@hrca.on.ca>

**Cc:** Candido, Mike <michael.candido@stantec.com>

**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,

Jackie

**Jackie Corr, HBAsc, MES**

Environmental Consultant

Assessment and Permitting Team

Stantec

300W-675 Cochrane Drive, Markham ON L3R 0B8

Phone: (905) 944-7785

Cell: (437) 235-2984

[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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 Please consider the environment before printing this email.

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

**From:** Boyd, Erick (MMAH)  
**To:** [Corr, Jacqueline](#)  
**Cc:** [Watt, Heather \(MMAH\)](#)  
**Subject:** FW: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Friday, August 21, 2020 9:43:07 AM  
**Attachments:** [let\\_NoC\\_EBoyd\\_20200820.pdf](#)

---

Hi Jackie,

Thanks for your email regarding the Sun-Canadian Pipe Line EA. I am sending this to Heather Watt, my planning manager colleague in our Central Region as this project is within her region.

Erick

**Erick Boyd, RPP, MCIP**

Manager, Community Planning and Development  
Ministry of Municipal Affairs and Housing  
Municipal Services Office - Western  
659 Exeter Road, 2nd Floor  
London, ON N6E 1L3  
Ph.: 226-688-9058  
Fax: 519-873-4018  
Email: [Erick.Boyd@ontario.ca](mailto:Erick.Boyd@ontario.ca)

*Please consider the environment before printing this email.*

---

**From:** Corr, Jacqueline <Jacqueline.Corr@stantec.com>  
**Sent:** August 21, 2020 9:33 AM  
**To:** Boyd, Erick (MMAH) <Erick.Boyd@ontario.ca>  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAAsc, MES**

Environmental Consultant  
Assessment and Permitting Team  
Stantec  
300W-675 Cochrane Drive, Markham ON L3R 0B8

Phone: (905) 944-7785

Cell: (437) 235-2984

[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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 Please consider the environment before printing this email.



**From:** [Eckert, Anneleis \(OMAFRA\)](#)  
**To:** [Candido, Mike](#)  
**Cc:** [Doncaster, Michele \(OMAFRA\)](#); [Marriott, David \(OMAFRA\)](#); [Geerts, Helma \(OMAFRA\)](#); [Turnbull, Jen \(OMAFRA\)](#)  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement  
**Date:** Monday, August 24, 2020 8:44:01 AM

---

Good Morning Michael,  
I am the OMAFRA rural planner that covers Halton. Please add my name to the contact list and remove:

Michele Doncaster, David Marriott, Helma Geerts, and Jen Turnbull.

A list of coverage areas and a map are available through this site:

<http://www.omafra.gov.on.ca/english/landuse/staff.htm>

Let me know if you need additional information.

Thank you,

**Anneleis Eckert** (pronouns she/her)

Rural Planner

Land Use Policy and Stewardship, Policy Division

Ontario Ministry of Agriculture, Food and Rural Affairs

6484 Wellington Road 7, Elora, ON, N0B 1S0

519-827-6040 | [anneleis.eckert@ontario.ca](mailto:anneleis.eckert@ontario.ca)

“Please Note: As part of providing [accessible customer service](#), please let me know if you have any accommodation needs or require communication supports or alternate formats.”

**From:** [Corr, Jacqueline](#)  
**To:** [Hartwig, Emily](#); [Candido, Mike](#)  
**Subject:** FW: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Tuesday, September 1, 2020 9:14:08 AM  
**Attachments:** [image001.png](#)

---

---

**From:** Jawaid, Maria (MNRF) <Maria.Jawaid@ontario.ca>  
**Sent:** Monday, August 31, 2020 5:14 PM  
**To:** Corr, Jacqueline <Jacqueline.Corr@stantec.com>  
**Cc:** Fortini, Natosha (MNRF) <Natosha.Fortini@ontario.ca>  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

Hi Jacqueline,

Thank you for the opportunity to comment on the Sun-Canadian Pipeline Replacement Project occurring in Milton Ontario.

The project includes the replacement of an existing pipeline across the East Sixteen Mile Creek. MNRF has no concerns with this project, however notes that should any in-water works be required, they respect the appropriate timing window. Our records indicate that this reach of the Creek is occupied by Silver Shiner, a Species at Risk under the *Endangered Species Act*. As such, MNRF recommends that the project team contact MECP for a timing window to help inform when in water activities would be appropriate.

Please let me know if you have any questions.

Sincerely,

**Maria Jawaid (she/her)**  
District Planner | Aurora District  
Ministry of Natural Resources and Forestry  
50 Bloomington Road, 3<sup>rd</sup> Floor, Aurora, ON | L4G 0L8  
☎ 905-713-7367 | ✉ [maria.jawaid@ontario.ca](mailto:maria.jawaid@ontario.ca)



---

**From:** Corr, Jacqueline <[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)>  
**Sent:** August-21-20 9:24 AM  
**To:** Jawaid, Maria (MNRF) <[Maria.Jawaid@ontario.ca](mailto:Maria.Jawaid@ontario.ca)>  
**Cc:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good morning,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie

**Jackie Corr, HBAsc, MES**

Environmental Consultant  
Assessment and Permitting Team  
Stantec

300W-675 Cochrane Drive, Markham ON L3R 0B8

Phone: (905) 944-7785

Cell: (437) 235-2984

[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**Brad Allen, District Manager, Aurora District**  
Ministry of Natural Resources and Forestry  
50 Bloomington Rd  
Aurora, ON L4G 0L8  
[brad.allan@ontario.ca](mailto:brad.allan@ontario.ca)

SENT VIA EMAIL

Dear Brad Allen,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

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Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**Maria Jawaid, District Planner, Aurora District**  
Ministry of Natural Resources and Forestry  
50 Bloomington Rd  
Aurora, ON L4G 0L8  
[maria.jawaid@ontario.ca](mailto:maria.jawaid@ontario.ca)

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**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**James Hamilton, Manager, Heritage Planning Unit**  
Ministry of Heritage, Sport, Tourism and Culture Industries  
401 Bay Street  
Toronto, ON M7A 0A7  
[james.hamilton@ontario.ca](mailto:james.hamilton@ontario.ca)

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**Ben Davis, Regulations Officer**  
Conservation Halton  
2596 Britannia Road West  
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[bdavis@hrca.on.ca](mailto:bdavis@hrca.on.ca)

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Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**Anneleis Eckert, Rural Planner**  
Ministry of Agriculture, Food and Rural Affairs  
6484 Wellington Road 7  
Elora, ON N0B 1S0  
[anneleis.eckert@ontario.ca](mailto:anneleis.eckert@ontario.ca)

SENT VIA EMAIL

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**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. An Environmental Report (ER), summarizing the results of the environmental study is available for your review at: <http://sun-canadian.com/media-releases/>.

Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

**From:** [Ben Davis](#)  
**To:** [Candido, Mike](#)  
**Cc:** [Michelle Caissie](#); [Hartwig, Emily](#)  
**Subject:** Conservation Halton Comments RE: Sun Canadian Pipe Line Ltd - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project  
**Date:** Tuesday, April 6, 2021 10:37:35 AM  
**Attachments:** [UPR001-SunCanadianPipelines\(EnvironmentalReport\)-1stSubmission.pdf](#)

---

Hi Michael,

Please find attached Conservation Halton comments with regards to the Draft Environmental Report for the Sun Canadian Pipeline Replacement submission.

Regards,

**Ben Davis, CAN - CISEC**

Regulations Officer

**Conservation Halton**

2596 Britannia Road West, Burlington, ON L7P 0G3

905.336.1158 ext. 2278 | Fax 905.336.6684 | [bdavis@hrca.on.ca](mailto:bdavis@hrca.on.ca)

[conservationhalton.ca](http://conservationhalton.ca)

*Conservation Halton's Administration Office is currently closed to the public due to COVID-19. During this time, we are accessing email and phone messages, responding to messages, and processing planning and permit applications remotely. For more information and updates on Conservation Halton's planning and permitting services, please visit <https://conservationhalton.ca/planning-permits>. We are providing the best service we can during these uncertain times and appreciate your patience and understanding.*

April 1, 2021

Michael Candido  
Stantec  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

**BY EMAIL ONLY (michael.candido@stantec.com)**

Dear Michael Candido:

**Re: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek  
Town of Milton**

---

Conservation Halton (CH) staff have reviewed the Environmental Report titled *DRAFT NPS 12 East Sixteen Mile Creek Pipeline Replacement Project: Environmental Report and associated Appendices*; Stantec; February 5, 2021 (received February 8, 2021) and can provide the following detailed comments.

### **Detailed Comments**

#### **Conservation Authority Regulation 162/06**

Conservation Halton (CH) regulates all watercourses, valleylands, wetlands, Lake Ontario and Hamilton Harbour shoreline and hazardous lands, as well as lands adjacent to these features. Permission is required from Conservation Halton prior to undertaking any development within CH's regulated area and must meet CH's *Policies and Guidelines for the Administration of Ontario Regulation 162/06* (<https://conservationhalton.ca/policies-and-guidelines>). CH staff advise that a permit from CH will be required for the proposed works. Specific permit requirements will be provided after review of the next submission when we have more details about the project.

1. **Section 4.3.2 Designated Natural Areas and Vegetation, page 34:** Please note that CH has identified wetlands within the study area, including in the pipe laydown area. Staff recommend the proponent obtain a CH GIS data request to access wetland limits and to best inform appropriate mitigation measures to help minimize potential impacts to wetland form and function.

#### **General Comments**

- Confirm if the new alignment will require the permanent removal and/or continual maintenance of vegetation in the new right-of-way. It is suggested that a commitment to re-vegetate an equal area on the same watercourse or in the same municipality be made.
- Staff recommend the existing exposed pipeline that will be decommissioned be removed to prevent further ecological impacts to Sixteen Mile Creek.

- At detailed design, staff will provide additional direction on specific permit requirements, required baseline information, mitigation measures and monitoring.

### **Conservation Halton Advisory Comments under MOU**

2. **Section 4.3 Designated Natural Areas and Vegetation, page 34:** Staff recommend referencing municipal natural heritage studies such as the South Milton Phase 4 Subwatershed Study to inform the natural heritage features evaluation. It is staff's understanding that there are several candidate significant wildlife habitats located in the vicinity of the works in addition to those listed in this report.

### **Recommendation**

CH has no concerns with Stantec proceeding to filing of the updated Environmental Report with the above comments addressed. Please submit this report for review and comments prior to finalization. Please do not hesitate to contact me at [bdavis@hrac.on.ca](mailto:bdavis@hrac.on.ca) if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to be 'BD' with a large loop and a horizontal stroke.

Ben Davis, CAN-CISEC  
Regulations Officer

BD/

CC: Peter Martens c/o Sun-Canadian Pipe Line Ltd.

**From:** [Candido, Mike](#)  
**To:** [Ben Davis](#)  
**Cc:** [Michelle Caissie](#)  
**Subject:** RE: Conservation Halton Comments RE: Sun Canadian Pipe Line Ltd - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project  
**Date:** Thursday, December 9, 2021 1:55:00 PM  
**Attachments:** [let\\_110904260\\_Response\\_CH\\_20211209.pdf](#)

---

Hello Ben. Please find attached the response to Conservation Halton comments on the Draft Environmental Report for the Sun Canadian Pipeline Replacement Project.

Mike

**Michael Candido** B.Sc.(Env.), CAN-CISEC  
Project Manager - Assessment and Permitting

Direct: 519 780-8139  
Mobile: 519 829-8159  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

Stantec  
1-70 Southgate Drive  
Guelph ON N1G 4P5



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---

**From:** Ben Davis <[bdavis@hrca.on.ca](mailto:bdavis@hrca.on.ca)>  
**Sent:** Tuesday, April 6, 2021 10:35 AM  
**To:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Cc:** Michelle Caissie <[mcaissie@hrca.on.ca](mailto:mcaissie@hrca.on.ca)>; Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>  
**Subject:** Conservation Halton Comments RE: Sun Canadian Pipe Line Ltd - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

Hi Michael,

Please find attached Conservation Halton comments with regards to the Draft Environmental Report for the Sun Canadian Pipeline Replacement submission.

Regards,

**Ben Davis, CAN - CISEC**  
Regulations Officer  
**Conservation Halton**  
2596 Britannia Road West, Burlington, ON L7P 0G3  
905.336.1158 ext. 2278 | Fax 905.336.6684 | [bdavis@hrca.on.ca](mailto:bdavis@hrca.on.ca)  
[conservationhalton.ca](http://conservationhalton.ca)

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Stantec Consulting Ltd.  
100-300 Hagey Boulevard, Waterloo ON N2L 0A4

December 9, 2021  
File: 110904260

**Attention: Ben Davis, Regulations Officer**  
Conservation Halton  
2596 Britannia Road West  
Burlington, ON L7P 0G3  
bdavis@hrca.on.ca

Dear Mr. Davis,

**Reference: Conservation Halton Comments on the Sun-Canadian Pipe Line Company Ltd.  
Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project**

Thank you for your comments received by email on April 1, 2021 regarding the NPS 12 East Sixteen Mile Creek Pipeline Replacement Project Environmental Report. Please find responses to your comments below.

The lands to be impacted by construction of the Project, include golf course lands, PAO Horticultural lands and an existing sand and gravel access road that is currently used by PAO Horticultural. Horizontal Directional Drill (HDD) pads to facilitate the crossing of East Sixteen Mile Creek will be located on the golf course lands and PAO Horticultural lands. These drill pads are approximately 20 metres by 40 metres in size.

**Comment #1:** CH staff advise that a permit from CH will be required for the proposed works.

**Response:** Acknowledged. Sun-Canadian will work with CH staff to secure a permit for the proposed works.

**Comment #2:** Section 4.3.2 Designated Natural Areas and Vegetation: Conservation Halton (CH) identified wetlands within the study area, including in the pipe laydown area. Staff recommend the proponent obtain a CH GIS data request to access wetland limits and to best inform appropriate mitigation measures to help minimize potential impacts to wetland form and function. Confirm if the new alignment will require the permanent removal and/or continual maintenance of vegetation in the new right-of-way RoW. Staff recommend the existing exposed pipeline that will be decommissioned be removed to prevent further ecological impacts to Sixteen Mile Creek.

**Response:** A CH GIS data request to access wetland limits will be submitted.

The proposed location of the pipe laydown area is on a tree nursery and associated existing sand and gravel access road on PAO Horticultural property. No excavation activities are proposed in the pipe laydown area. However, based on CH's comment the following mitigation measures as outlined in the Environmental Report (ER) will be implemented. Where the pipe laydown area abuts a woodland on one side, detailed design should avoid the feature where possible. Limits of the pipe laydown area will be staked prior to commencement of construction activities. Where there is potential for soil erosion, the need for and location of erosion and sediment control (ESC) measures should be determined by an inspector with



**Reference:** Conservation Halton Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project

appropriate qualifications and installed prior to the commencement of work in the area. The contractor must obtain adequate quantities of materials to control erosion. Additional supplies should be maintained in a readily accessible location for maintenance and contingency purposes. ESC structures should be reviewed to maintain their effectiveness through the life of construction and post-construction rehabilitation

Permanent removal of vegetation is not anticipated during construction of the Project. Permanent removal and/or continual maintenance of vegetation will not be required in the new RoW.

As detailed in the ER a new section of pipeline is being installed at a depth that will eliminate three existing areas of shallow depth of cover. The existing pipeline will be decommissioned and left in place. Decommissioning involves cutting, purging and filling the existing pipeline with grout. Removing the existing pipeline following decommissioning, would result in much greater ecological impacts to Sixteen Mile Creek, the associated species in the creek (that includes aquatic SAR) and surrounding vegetation than decommissioning in place.

***Comment #3:*** Section 4.3 Designated Natural Areas and Vegetation: Staff recommend referencing municipal natural heritage studies such as the South Milton Phase 4 Subwatershed Study to inform the natural heritage features evaluation. It is Staff's understanding that there are several candidate significant wildlife habitats located in the vicinity of the works in addition to those listed in the Report.

**Response:** Physical disturbance of lands will be limited to the 20m by 40m HDD drill pads located on the golf course and on the PAO Horticultural property. Mitigation measures for biophysical features, including wildlife habitat located within a 120m Project buffer are outlined in Section 4.3 of the ER.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido,** B.Sc.(Env.), CAN-CISEC  
Project Manager - Assessment and Permitting

Phone: 519 780 8139  
michael.candido@stantec.com

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

cm \\ca0220-ppfss01101609\active\\_other\\_pcs\\_active\110 - calgary\110904260\02\\_correspondence\tracking\post-er\agency\let\_110904260\\_response\_ch\_20210506.docx

**From:** [Candido, Mike](#)  
**To:** ["Justin McArthur"](#)  
**Cc:** [Charles Priddle](#); [Ben Davis](#)  
**Subject:** RE: Conservation Halton Comments RE: Sun Canadian Pipe Line Ltd - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project  
**Date:** Friday, January 7, 2022 12:10:00 PM  
**Attachments:** [image001.png](#)

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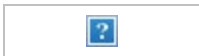
Hi Justin. I anticipate starting the CH permitting process in the near future and will be in contact with you at that time. Thank you.

Mike

**Michael Candido** B.Sc.(Env.), CAN-CISEC  
Project Manager - Assessment and Permitting

Mobile: 519 829-8159  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

Stantec  
1-70 Southgate Drive  
Guelph ON N1G 4P5



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---

**From:** Justin McArthur <jmcarthur@hrca.on.ca>  
**Sent:** Thursday, January 6, 2022 4:24 PM  
**To:** Candido, Mike <michael.candido@stantec.com>  
**Cc:** Charles Priddle <cpriddle@hrca.on.ca>; Ben Davis <bdavis@hrca.on.ca>  
**Subject:** RE: Conservation Halton Comments RE: Sun Canadian Pipe Line Ltd - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

Hi Mike,

My name is Justin McArthur and I have taken over as the Regulations Officer for Milton and Halton Hills files for Ben as he has moved onto a new role at CH.

Thank you for providing CH with the response to the comments. CH has no further comments want to note that it can move forward to permitting.

Please let me know if you have any questions.

Regards,

**Justin McArthur**  
Regulations Officer

**Conservation Halton**  
2596 Britannia Road West, Burlington, ON L7P 0G3



Click [here](#) to learn about Conservation Halton's new strategic plan.

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---

**From:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>

**Sent:** December 9, 2021 1:55 PM

**To:** Ben Davis <[bdavis@hrca.on.ca](mailto:bdavis@hrca.on.ca)>

**Cc:** Michelle Caissie <[mcaissie@hrca.on.ca](mailto:mcaissie@hrca.on.ca)>

**Subject:** RE: Conservation Halton Comments RE: Sun Canadian Pipe Line Ltd - Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project

Hello Ben. Please find attached the response to Conservation Halton comments on the Draft Environmental Report for the Sun Canadian Pipeline Replacement Project.

Mike

**Michael Candido** B.Sc.(Env.), CAN-CISEC

Project Manager - Assessment and Permitting

Direct: 519 780-8139

Mobile: 519 829-8159

[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

Stantec

1-70 Southgate Drive

Guelph ON N1G 4P5



---

**From:** Ben Davis <[bdavis@hrca.on.ca](mailto:bdavis@hrca.on.ca)>  
**Sent:** Tuesday, April 6, 2021 10:35 AM  
**To:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Cc:** Michelle Caissie <[mcaissie@hrca.on.ca](mailto:mcaissie@hrca.on.ca)>; Hartwig, Emily <[Emily.Hartwig@stantec.com](mailto:Emily.Hartwig@stantec.com)>  
**Subject:** Conservation Halton Comments RE: Sun Canadian Pipe Line Ltd - Environmental Report:  
NPS12 East Sixteen Mile Creek Pipeline Replacement Project

Hi Michael,

Please find attached Conservation Halton comments with regards to the Draft Environmental Report for the Sun Canadian Pipeline Replacement submission.

Regards,

**Ben Davis, CAN - CISEC**

Regulations Officer

**Conservation Halton**

2596 Britannia Road West, Burlington, ON L7P 0G3  
905.336.1158 ext. 2278 | Fax 905.336.6684 | [bdavis@hrca.on.ca](mailto:bdavis@hrca.on.ca)  
[conservationhalton.ca](http://conservationhalton.ca)

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**Municipal**  
Supporting Documents



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Barbara Koopmans, Commissioner, Planning & Development  
Town of Milton  
150 Mary Street  
Milton, ON L9T 6Z5  
planning@milton.ca

SENT VIA EMAIL

Dear Barbara Koopmans,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

August 21, 2020

Page 2 of 2

Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).  
Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Troy McHarg, Commissioner, Corporate Services/Town Clerk  
Town of Milton  
150 Mary Street  
Milton, ON L9T 6Z5  
towncler@milton.ca

SENT VIA EMAIL

Dear Troy McHarg,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

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August 21, 2020

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Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Curt Benson, Director, Planning Services and Chief Planning Official  
Halton Region  
1151 Bronte Road  
Oakville, ON L6M 3L1  
Curt.Benson@halton.ca

SENT VIA EMAIL

Dear Curt Benson,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

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August 21, 2020

Page 2 of 2

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Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**

A handwritten signature in black ink, appearing to read 'Michael Candido', with a stylized flourish at the end.

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Graham Milne, Regional Clerk  
Halton Region  
1151 Bronte Road  
Oakville, ON L6M 3L1  
graham.milne@halton.ca

SENT VIA EMAIL

Dear Graham Milne,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

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An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

August 21, 2020

Page 2 of 2

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Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**

A handwritten signature in black ink, appearing to read 'Michael Candido', with a stylized flourish at the end.

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

**From:** [Benson, Curt](#)  
**To:** [Corr, Jacqueline](#)  
**Cc:** [Candido, Mike](#)  
**Subject:** RE: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Thursday, August 20, 2020 2:38:50 PM

---

Thanks for circulating. The attached letter refers to a map that is not included in the.pdf. Further, the weblink referenced in the letter does not contain any information related to this project. Can you please provide information on the project location at your earliest convenience. Thanks, Curt

**Curt Benson, MCIP RPP**

**Director, Planning Services and Chief Planning Official**

Planning Services

Legislative & Planning Services

**Halton Region**

905-825-6000, ext. 7181 | 1-866-442-5866



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---

**From:** Corr, Jacqueline [mailto:Jacqueline.Corr@stantec.com]  
**Sent:** Thursday, August 20, 2020 2:35 PM  
**To:** Benson, Curt <Curt.Benson@halton.ca>  
**Cc:** Candido, Mike <michael.candido@stantec.com>  
**Subject:** Sun-Canadian Pipe Line Replacement Project - Notice of Commencement

**CAUTION:** This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. If you are unsure or need assistance please contact the IT Service Desk.

Good afternoon,

Please see attached the Notice of Commencement regarding the proposed Sun-Canadian Pipe Line Replacement Project.

Should you have any questions, or require additional information regarding the project, please contact Mike Candido (cc'd).

Thank you,  
Jackie



**Jackie Corr, HBAsc, MES**

Environmental Consultant

Assessment and Permitting Team

Stantec

300W-675 Cochrane Drive, Markham ON L3R 0B8

Phone: (905) 944-7785

Cell: (437) 235-2984

[Jacqueline.Corr@stantec.com](mailto:Jacqueline.Corr@stantec.com)



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 Please consider the environment before printing this email.

**From:** [Barb.Koopmans@milton.ca](mailto:Barb.Koopmans@milton.ca)  
**To:** [16 Mile Creek Replacement](#)  
**Subject:** Location of Project  
**Date:** Thursday, August 20, 2020 3:18:14 PM  
**Attachments:** [esig\\_cb7daa72-4770-4979-b68f-eed4c3985ef2.png](#)

---

Good afternoon

Can you please provide a map illustrating the location of the project?

Many thanks



**Barb Koopmans**, MPA, MCIP, RPP, CMO  
Commissioner, Development Services  
150 Mary Street, Milton ON, L9T 6Z5  
905-878-7252 x2301  
[www.milton.ca](http://www.milton.ca)

The Town of Milton is re-opening as it is safe to do so for the community and our staff. We continue to serve you online or by phone for many services.  
For information about our services and continued closures, visit [Milton.ca/coronavirus](http://Milton.ca/coronavirus)

Confidentiality notice: This message and any attachments are intended only for the recipient named above. This message may contain confidential or personal information that may be subject to the Municipal Freedom of Information Act and must not be distributed or disclosed to unauthorized persons. If you received this message in error, please notify the sender immediately. Thank you for your assistance.

**From:** [diana.jiona@milton.ca](mailto:diana.jiona@milton.ca)  
**To:** [16 Mile Creek Replacement](#); [Candido, Mike](#)  
**Cc:** [Shawn.Clewlow@milton.ca](mailto:Shawn.Clewlow@milton.ca)  
**Subject:** re: Sun-Canadian Pipe Line Replacement Project - Notice of Commencement  
**Date:** Friday, August 21, 2020 11:18:39 AM  
**Attachments:** [esiq\\_cb7daa72-4770-4979-b68f-eed4c3985ef2.png](#)  
[let\\_NoC\\_BKoopmans\\_20200820.pdf](#)

---

Hi Michael,

In reference to the letter attached, can you please ensure that any future communication related to this project is sent through to myself at [diana.jiona@milton.ca](mailto:diana.jiona@milton.ca) with a cc to Shawn Clewlow at [shawn.clewlow@milton.ca](mailto:shawn.clewlow@milton.ca)

If any work related to this project is required within the Town of Milton's right of way or within property owned by the Town, the permitting requirements would be identified by our group, and depending on the scope of work, may involve other departments as well.

If you have any plans at this point showing the work proposed in Milton, that would be appreciated.

Thanks in advance,

Diana

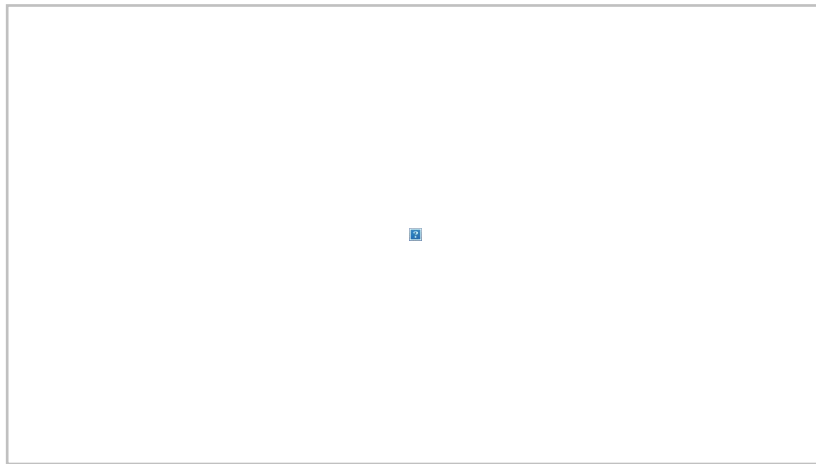


**Diana Jiona**, P.Eng.  
Manager, Infrastructure & Right Of Way  
150 Mary Street, Milton ON, L9T 6Z5  
905-878-7252 x2513  
[www.milton.ca](http://www.milton.ca)

The Town of Milton is re-opening as it is safe to do so for the community and our staff. We continue to serve you online or by phone for many services.  
For information about our services and continued closures, visit [Milton.ca/coronavirus](http://Milton.ca/coronavirus)

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If you can identify in the map below the boundary of your study area, I can help provide that information.



Regards,

---

**From:** [noreply@esolutionsgroup.ca](mailto:noreply@esolutionsgroup.ca) <[noreply@esolutionsgroup.ca](mailto:noreply@esolutionsgroup.ca)>  
**Sent:** Friday, September 11, 2020 12:51 PM  
**To:** [MB.Planning@milton.ca](mailto:MB.Planning@milton.ca) <[Incoming-Planning.Email@milton.ca](mailto:Incoming-Planning.Email@milton.ca)>  
**Subject:** Website feedback - Heritage Milton - Frank Smith Ref #: 2020-09-11-048

Hello Development Services,

Please note the following response to Planning and Development has been submitted at Friday September 11th 2020 12:51 PM with reference number 2020-09-11-048.

- **First Name:**  
Frank
- **Last Name:**  
Smith
- **Street Address:**  
171 Queens Avenue, 600
- **Town:**  
London
- **Postal Code:**  
n6a5j7
- **Email Address:**  
[frank.smith@stantec.com](mailto:frank.smith@stantec.com)
- **Phone number:**  
519 675-6665
- **Category:**  
Heritage Milton
- **Comments:**  
To Whom it May Concern:

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project

Stantec Consulting Ltd. has been retained by Sun-Canadian Pipe Line Company Limited (SCPL) to prepare a Heritage Overview as part of an environmental study for the NPS 12 E16M Pipeline Replacement Project. SCPL is proposing to replace the existing pipeline in the vicinity of the East Sixteen Mile Creek crossing with approximately 480 m of new deeper pipe and eliminate three areas of shallow soil cover. The new pipeline will be installed by horizontal directional drill. The Study Area is located within the following Lots and Concessions in the former Trafalgar Township, now part of the Town of Milton.

- Lots 4-5, Concession 7
- Lots 4-5, Concession 8

Are you aware of any municipal heritage interests within or adjacent to the Study Area?

For the ease of review, mapping has been provided depicting the proposed Study Area. This map appears in draft form and may contain confidential information not yet released to the public. We ask that you maintain confidentiality when responding to this inquiry.

Regards,  
STANTEC CONSULTING LTD.

[This is an automated email notification -- please do not respond]



**esolutionsNoReply - External Contact**

, ON,  
[www.milton.ca](http://www.milton.ca)

**From:** [Candido, Mike](#)  
**To:** [Clackett, Robert](#)  
**Subject:** RE: 16 Mile Creek Replacement - Halton Region Introduction  
**Date:** Tuesday, November 3, 2020 11:57:00 AM  
**Attachments:** [image001.jpg](#)  
[image002.jpg](#)  
[image003.jpg](#)  
[image004.jpg](#)  
[image005.jpg](#)  
[image006.jpg](#)

---

Hi Robert. That is all the information that is available at this time. Once more information is available I will ensure it is sent along for your review. Thanks.

Mike

**Michael Candido** B.Sc. (Env.), CAN-CISEC

Project Manager - Assessment and Permitting

Direct: 519 780-8139

Mobile: 519 829-8159

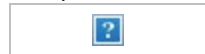
Fax: 519 836-2493

[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

Stantec

1-70 Southgate Drive

Guelph ON N1G 4P5



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**From:** Clackett, Robert <[Robert.Clackett@halton.ca](mailto:Robert.Clackett@halton.ca)>

**Sent:** Monday, October 19, 2020 8:40 PM

**To:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>

**Subject:** RE: 16 Mile Creek Replacement - Halton Region Introduction

Hi Michael ,

Thank you for your email. We are just looking for as much detail as possible at this point to start to complete a fulsome review. If all the material that has been released is all that is available for public review, then that is fine. I just wanted to make sure that I had all that was available.

Yes, moving forward, please replace Curt Benson's name with mine.

Thanks,

Robert

---

**From:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>

**Sent:** Monday, October 5, 2020 4:12 PM

**To:** Clackett, Robert <[Robert.Clackett@halton.ca](mailto:Robert.Clackett@halton.ca)>

**Subject:** RE: 16 Mile Creek Replacement - Halton Region Introduction

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Hello Robert and thank you for your email. Can you specify the details that you are looking for? The environmental report for the project is scheduled to be circulated for review and comment in the upcoming weeks.

For future project communications should I replace Curt Benson (who received the initial project notification) with yourself on the project contact list?

Mike

**Michael Candido** CAN-CISEC

Project Manager - Assessment and Permitting

Direct: 519 780-8139

Mobile: 519 829-8159  
Fax: 519 836-2493  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)  
Stantec  
1-70 Southgate Drive  
Guelph ON N1G 4P5



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**From:** Clackett, Robert <[Robert.Clackett@halton.ca](mailto:Robert.Clackett@halton.ca)>

**Sent:** Wednesday, September 30, 2020 10:55 AM

**To:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>

**Subject:** FW: 16 Mile Creek Replacement - Halton Region Introduction

Good morning Mike,

Please see my introduction/info request below. I had sent it before being provided with your email contact info.

Thanks,  
Robert

**Robert Clackett, MCIP, RPP**

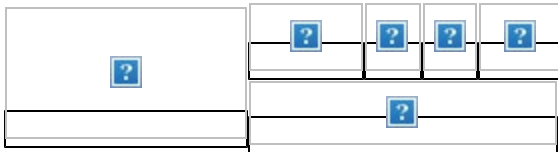
**Senior Planner**

Planning Services

Legislative & Planning Services

**Halton Region**

905-825-6000, ext. 7554 | 1-866-442-5866



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---

**From:** Clackett, Robert

**Sent:** Wednesday, September 30, 2020 10:41 AM

**To:** '16milecreekreplacement@stantec.com' <[16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com)>

**Subject:** 16 Mile Creek Replacement - Halton Region Introduction

Good morning,

I wanted take the time to introduce myself. My name is Robert Clackett and I am the Sr. Planner at Halton Region responsible for matters in the Town of Milton. As such, I will be managing the 16 Mile Creek replacement from the Region's perspective.

I was wondering if you could please provide me with more details with respect to the project.

Additionally, could you also provide the critical deadlines that have been set out? With this information we can provide you with a set of comprehensive comments in a timely manner.

In the meantime, if you have any further questions of the Region please do not hesitate to contact me.

Thank you,





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**Barbara Koopmans, Commissioner, Planning & Development**  
Town of Milton  
150 Mary Street  
Milton, ON L9T 6Z5  
[planning@milton.ca](mailto:planning@milton.ca)

SENT VIA EMAIL

Dear Barbara Koopmans,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. An Environmental Report (ER), summarizing the results of the environmental study is available for your review at: <http://sun-canadian.com/media-releases/>.

Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**Troy McHarg, Commissioner, Corporate Services/Town Clerk**  
Town of Milton  
150 Mary Street  
Milton, ON L9T 6Z5  
[towncler@milton.ca](mailto:towncler@milton.ca)

SENT VIA EMAIL

Dear Troy McHarg,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

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Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**Graham Milne, Regional Clerk**  
Halton Region  
1151 Bronte Road  
Oakville, ON L6M 3L1  
[graham.milne@halton.ca](mailto:graham.milne@halton.ca)

SENT VIA EMAIL

Dear Graham Milne,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. An Environmental Report (ER), summarizing the results of the environmental study is available for your review at: <http://sun-canadian.com/media-releases/>.

Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**Robert Clackett, Senior Planner**  
Halton Region  
1151 Bronte Road  
Oakville, ON L6M 3L1  
[robert.clackett@halton.ca](mailto:robert.clackett@halton.ca)

SENT VIA EMAIL

Dear Robert Clackett,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

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Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**Diana Jiona, Manager, Infrastructure & Right of Way**  
Town of Milton  
150 Mary Street  
Milton, ON L9T 6Z5  
[diana.jiona@milton.ca](mailto:diana.jiona@milton.ca)

SENT VIA EMAIL

Dear Diana Jiona,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. An Environmental Report (ER), summarizing the results of the environmental study is available for your review at: <http://sun-canadian.com/media-releases/>.

Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

**Shawn Clewlow,**  
Town of Milton  
150 Mary Street  
Milton, ON L9T 6Z5  
[shawn.clewlow@milton.ca](mailto:shawn.clewlow@milton.ca)

SENT VIA EMAIL

Dear Shawn Clewlow,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. An Environmental Report (ER), summarizing the results of the environmental study is available for your review at: <http://sun-canadian.com/media-releases/>.

Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

**From:** [Candido, Mike](#)  
**To:** [Clackett, Robert](#)  
**Cc:** [Hartwig, Emily](#)  
**Subject:** RE: 16 Mile Creek Replacement - Halton Region  
**Date:** Thursday, April 29, 2021 1:48:00 PM

---

Hi Robert. Just following up on when you expect to provide comments on the ER.

Mike

---

**From:** Candido, Mike  
**Sent:** Tuesday, April 13, 2021 8:59 AM  
**To:** Clackett, Robert <[Robert.Clackett@halton.ca](mailto:Robert.Clackett@halton.ca)>  
**Subject:** RE: 16 Mile Creek Replacement - Halton Region

Hello Robert. The next step is to finalize the Environmental Report (ER). The ER forms part of the application that is submitted to the Ontario Energy Board (OEB) for the project. It is anticipated that the ER will be submitted to the OEB in approximately 1-1 ½ months. Construction is scheduled for July 2022.

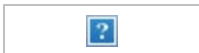
Your comments will feed into the planning process for the project and the project team will work with you to address any comments/concerns you have. I should note that consultation is an on-going process throughout planning, design and construction phases of the project. Please let me know if you have any other questions and looking forward to your comments.

Mike

**Michael Candido** B.Sc.(Env.), CAN-CISEC  
Project Manager - Assessment and Permitting

Direct: 519 780-8139  
Mobile: 519 829-8159  
Fax: 519 836-2493  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

Stantec  
1-70 Southgate Drive  
Guelph ON N1G 4P5



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---

**From:** Clackett, Robert <[Robert.Clackett@halton.ca](mailto:Robert.Clackett@halton.ca)>  
**Sent:** Monday, April 12, 2021 2:29 PM  
**To:** Candido, Mike <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Subject:** RE: 16 Mile Creek Replacement - Halton Region

Good afternoon Mike,

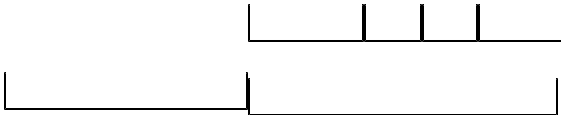


Just following up on my email below. Can you please advise as to what the projected timeline is?

Also, how will our comments on the *Environmental Report* feed into the project? What will happen after our comments are submitted? What are the next steps?

Thank you,  
Robert

**Robert Clackett, MCIP, RPP**  
**Senior Planner**  
Planning Services  
Legislative & Planning Services  
**Halton Region**  
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**From:** Clackett, Robert  
**Sent:** Monday, April 5, 2021 3:53 PM  
**To:** 'Candido, Mike' <[michael.candido@stantec.com](mailto:michael.candido@stantec.com)>  
**Subject:** 16 Mile Creek Replacement - Halton Region

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Thank you,

Robert

**From:** [Clackett, Robert](#)  
**To:** [Candido, Mike](#)  
**Cc:** [Hartwig, Emily](#)  
**Subject:** RE: 16 Mile Creek Replacement - Halton Region  
**Date:** Friday, April 30, 2021 2:44:47 PM  
**Attachments:** [image001.jpg](#)  
[image002.jpg](#)  
[image003.jpg](#)  
[image004.jpg](#)  
[image005.jpg](#)  
[image006.jpg](#)  
[2021\\_04\\_30 - Regional Comment Letter - Sun Canadian.pdf](#)

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Mike

**Michael Candido** B.Sc.(Env.), CAN-CISEC  
Project Manager - Assessment and Permitting

Direct: 519 780-8139  
Mobile: 519 829-8159  
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**Senior Planner**  
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April 30, 2021

Legislative & Planning Services  
Community Planning  
1151 Bronte Road  
Oakville ON L6M 3L1  
Fax: (905) 825-0267

Michael Candido  
Project Manager, Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, Ontario  
N1G 4P5

Dear Mr. Candido:

**RE: Halton Region Comments  
Sun-Canadian Pipe Line Replacement Project – Environmental Report:  
NPS12 East Sixteen Mile Creek Pipeline Replacement Project**

---

The following comments are in response to the Environmental Report: NPS12 East Sixteen Mile Creek Pipeline Replacement Project submitted to Halton Region by Stantec Consulting on February 5, 2021.

The subject lands are located in Milton, within the Regional Municipality of Halton. They are designated as 'Urban Area' and 'Regional Natural Heritage System (RNHS)' within the Regional Official Plan (ROP), 2009. These lands are also subject to several constraints identified in the ROP:

- Greenbelt Natural Heritage System
- NHS Key Features
- Prime Agricultural Lands in NHS Enhancements/Buffers ; and,
- Prime Agricultural Areas.

These lands are located adjacent to and within lands that form part of the Regional Natural Heritage System (RNHS) and the Greenbelt Natural Heritage System (GBNHS).

Infrastructure projects require an Agricultural Impact Assessment (AIA) or equivalent. In this case, agricultural information is included in the Environmental Report. Typically, an AIA would be requested to include a primary study area and 1.5 km area as the secondary study area. As part of the study, identification of all agricultural operations in the primary and secondary study area would take place and type noted.

**Regional Municipality of Halton**

HEAD OFFICE: 1151 Bronte Rd, Oakville, ON L6M 3L1  
905-825-6000 | Toll free: 1-866-442-5866

This information is helpful in order to have a list of all potential agricultural operations that may be impacted especially as it relates to livestock operations, horticultural operations or other types of agricultural businesses that rely on well water. It can also be used for notification purposes. Any disruption in quality or quantity of water particularly for livestock operations could have a catastrophic effect and identification of these operations would make it easier to deal with when the information is collected in advance.

Disruption of soil, such as what will be occurring in this project, greatly impacts soil microbial activity and can impact yields often for years. Given the tight margins that exist in cash crop operations, any impact on crop yield can have a profound effect on farm viability. This points to the importance of knowing what farm operations exist in the area and historic yields so that these measures can be monitored following construction. Soil compaction could also affect crop yields and this assures that farmers would not experience any hardship as a result of the project. Where possible efforts should be put in place to minimize soil compaction. Furthermore, the Region would like clarification on the following questions:

- Are lease agreements in place to compensate farmers for any portions of fields that they may not be able to access?
- Can a general list of agricultural properties, locations, type be provided?

Access to agricultural fields is critical as the project continues. Please confirm if farm fields that will be impacted through this development will still be accessible. If accessibility is going to be affected, then compensation for potential loss of farm income needs to be factored in. Proper information gathering in advance of the project will identify what farm operations or businesses could be affected as well an understanding of timing of when access would be required. Another element that needs to be considered is any narrowing of the road, road closures or delays. Farm equipment is often large, wide and impossible to turn around on roads. Depending on the season, farm combines, hay wagons etc. may be using the roads, which require greater widths for clearance. It is suggested that the Halton Region Federation of Agriculture be added as a stakeholder group that can notify its members (and any farmers that may be potentially moving farm equipment in the area) to minimize any disruption to the agricultural community. Proper notification to all agricultural operations in the area will help to minimize any problems. Notices should also identify a contact that farmers or farm businesses can connect with if they have questions or any issues that arise.

Additional Regional comments related to the Agricultural system can be found in Appendix 'A' to this comment letter.

### Environmental Review:

Given that the proposed pipeline replacement is located adjacent to and within lands that form part of the Regional Natural Heritage System (RNHS) and the Greenbelt Natural Heritage System (GBNHS), an Environmental Impact Assessment (EIA) or the equivalent environmental assessment requirements under the OEB process is triggered in



accordance with Sections 118 (2), 118 (3) & (3.1), and 139.3.7(4) of the Regional Official Plan (ROP).

As per Sections 117.1 (9) and 139.3.7 of the ROP, “essential utility facilities” are permitted within the RNHS and GBNHS, subject to other policies of the ROP and Greenbelt Plan, and applicable Local Official Plan policies and Zoning By-laws. “Essential utility facilities” are those that are deemed necessary to the public interest after all alternatives have been considered and, where applicable, as determined through the Environmental Assessment process.

Regional Planning staff’s comments relate to the potential impacts of the preferred route on the features and ecological functions of the RNHS, the environmental policy analysis, as well as the proposed mitigation measures. Potential impacts on the RNHS are to be avoided or minimized, and the remaining impacts are to be mitigated to every extent possible.

Please ensure that the proposed location for the pipeline project in the vicinity of watercourses, aquatic habitat, wetlands, woodlands and any other identified wildlife habitat, including habitat of threatened or endangered species, will be prepared in consultation with relevant Conservation Authority and Ministry of Environment, Conservation, and Parks (MECP) staff as appropriate. We recommend that consultation with the MECP be undertaken to determine if the regulated habitat of record of an Endangered Species in the area is on the property or if there are any requirements under the Endangered Species Act. Where Species at Risk are found to occur within the study area, delineation of habitat may be required and is to be done in consultation with, or be approved by the MECP, as appropriate.

Section 4.4.7 and the associated row on Land Use in Table 4-9 should discuss Halton Region’s Official Plan (ROP) policy planning context in more detail, including the current land use designations and zoning for the subject property and for the adjacent lands, as well as the environmental legislative, regulatory and policy requirements that may affect the pipeline replacement project. Please include map(s) of the proposed pipeline location and extent of the area to be studied including current zoning/land use.

Please discuss and depict in a figure the Natural Heritage and Natural Hazard Opportunities and Constraints, including an environmental policy analysis confirming how the proposal meets (or does not meet) the applicable policies and legislation.

Halton ROP can be found online here: [https://www.halton.ca/The-Region/Regional-Planning/Regional-Official-Plan-\(ROP\)-\(1\)/Regional-Official-Plan-Viewer](https://www.halton.ca/The-Region/Regional-Planning/Regional-Official-Plan-(ROP)-(1)/Regional-Official-Plan-Viewer). Map 1 of the ROP includes the RNHS) land use designation and GBNHS overlay. Together, these systems form Halton’s Natural Heritage System (NHS). The Report makes no mention of the RNHS. The RNHS and GBNHS should be described in the report as ROP designations and overlays that contain important environmental protection policies which should be considered in relation to impact avoidance and mitigation. Section 115.3 of the

ROP, and Map 1G, describe and map the components of the RNHS land use designation. The components of the RNHS as shown on Map 1G should be identified in Appendix C.

The paragraph on wetlands in Section 4.3.2 states that “A review of MNRF LIO mapping (MNRF, 2019a) and the Natural Heritage Information Centre (NHIC) database (MNRF, 2019b) did not identify any PSWs or unevaluated wetlands within 120 m of the pipeline replacement project” (p. 34-35). However, staff note that the proposed pipeline replacement project is within proximity to an unevaluated wetland regulated by Conservation Halton (CH). Please consult with CH and MNRF to confirm any additional requirements.

Regional staff’s comments below are primarily focused on the proposed mitigation and protection measures for addressing impacts to designated natural areas and vegetation along the route:

- a. The proposed pipeline replacement project is within the RNHS, including candidate significant woodlands. The treed areas on and adjacent to the subject site are considered woodlands and are regulated by the Halton Region Tree By-law No. 121-05. The applicants are advised that any future tree removals within these areas may require prior authorization from the Region. If there will be tree removal associated with the pipeline construction, an Arborist Report and Tree Protection Plan, must be prepared to the satisfaction of Halton Regional staff, municipalities, and relevant agencies, and in accordance with the Halton Region Tree By-law No. 121-05. For any trees or woodlands removed to accommodate the pipeline easement, we also recommend that a Reclamation Plan be developed to show replanting corresponding with appropriate ratios, to enhance ecological functions of the RNHS, as close to the area of removal as possible and either prior to or immediately after removal. Any questions regarding the Tree By-law, Arborist Report, Tree Protection Plan or Reclamation Plan can be directed to Ron Reinholt, Regional Forester, at 905-825-6000 x7279.
- b. In addition to Erosion and Sediment Control measures regarding the watercourse, please ensure that stockpiling of soils and storage equipment are maintained outside of woodland areas. Tree protection hoarding and Erosion and Sediment Control fencing should be installed prior to commencement of construction and must be maintained in place until all disturbed areas are satisfactorily stabilized following construction.
- c. In several instances the Environmental Report mentions that agencies and landowners will be consulted in relation to certain matters. For example, Section 4.3.2 and Table 4-9 mentions that a re-vegetation program should be initiated for all vegetated temporary work areas. Sun-Canadian should consult with landowners and CH to confirm replanting plans. The Region

and other relevant municipalities should be consulted in relation to this matter and other matters where noted, as appropriate.

Conservation Halton (CH) staff provide environmental advisory and technical review services to the Region in relation to the protection of certain natural heritage features and areas and natural hazard management. As such, it is recommended that CH staff concerns relating to these matters be addressed to their satisfaction.

Source Water/Source Protection:

The Environmental Report has identified 24 water supply wells within 500 m of the proposed pipeline route, 14 of which are domestic. Furthermore, Section 4.2.3 of the report proposes a private well survey within 100 m of the project. In the absence of a detailed hydrogeological assessment that justifies limiting the private well survey to those within 100 m of the dewatering areas, the Regions asks the applicant to include all 24 wells within 500 m of the dewatering areas in their survey and construction monitoring program.

The subject lands are located within the jurisdiction of the Halton-Hamilton Source Protection Plan (SPP). The Halton-Hamilton SPP can be accessed online at: <http://www.protectingwater.ca/>. The property is located in an Intake Protection Zone 3 and a Significant Groundwater Recharge Area.

Based on the information provided by Sun-Canadian, this project is not subject to Section 59 under the *Clean Water Act, 2006*. Therefore, this project can proceed from a Source Water Protection perspective and no Section 59 notice will be required.

It should be noted that the proposed project may also subject to Halton-Hamilton SPP policies below:

**L-1-S:** fuel pipeline owners are recommended to conduct inline pipeline integrity testing and visual inspections of pipeline crossings at open water bodies at a frequent timing of every three years.

**L-2-S:** the National Energy Board and the Ontario Energy Board in their consideration of any oil pipeline application where this activity would be a significant drinking water threat are requested to ensure that the applicant has complied with or included appropriate design standards, monitoring, and maintenance practices that when implemented will prevent a pipeline from becoming a significant drinking water threat.

Please confirm that both of the policies described above have been addressed.

**Conclusion**

Should you have any questions in this regard or require any additional information, please do not hesitate to contact me at (905) 825-6000, extension 7554.

Yours truly,

Robert Clackett, MCIP, RPP  
Senior Planner, Community Planning  
[Robert.Clackett@halton.ca](mailto:Robert.Clackett@halton.ca)

**Appendix 'A'**

Page	Issue	Comment
6	Sun-Canadian has committed to on-going consultation with directly affected and interested parties throughout the detailed design and construction phases and will continue to respond to concerns through the life of the project.	Please describe method of consultation. How has Sun-Canadian consulted with the agricultural community?
7	The cumulative effects assessment determined that, provided the mitigation and protective measures outlined in this report are implemented and that concurrent projects implement similar mitigation and protective measures, potential cumulative effects are not anticipated to be significant.	While it is not anticipated to be significant, monitoring following the pipeline construction will confirm to what extent if any of cumulative impacts on the Agricultural System.
11	In addition, the parties listed below are among those considered when developing the initial stakeholder contact lists:	Has the agricultural community through the Halton Region Federation of Agriculture been identified as a stakeholder group? It just states "directly affected and adjacent landowners" were part of the initial stakeholder contact lists.
21	Letters were mailed to landowners and residents within approximately 500 m of the preferred route via Canada Post regular mail on August 21st, 2020.	AIA Guidelines identify that an area of 1.5 km from the primary study area needs to be considered. Infrastructure projects require an AIA or equivalent.
27	Safety fence is installed at the edge of the construction RoW where public safety considerations are required, and aspects of the traffic management plan are implemented (i.e. signs, vehicle access). Silt fence is installed at required locations	Do traffic management plans include consideration for the ability to accommodate farm equipment particularly during planting and harvesting time?

27	Grading and Stripping: The RoW is graded where required to allow for access by construction equipment. At this stage, the topsoil (on agricultural lands) or the duff layer (on natural lands) is stripped by bulldozers and graders then segregated so it will not be mixed with the subsoil later removed from the entry and exit pits. Existing landscaping is also removed, and dewatering undertaken, where necessary.	Stripping of soil, even if separated out, will have an impact on yields in the affected areas. Are multi-year compensation
30	Potential Impacts - Disturbance to the overburden along the proposed pipeline is limited to the entry and exit pit locations and may cause surface soil erosion.	Can any of these areas potential impact directly or indirectly agricultural lands?
31	MECP Water Well Records (WWR) within 500 m of the proposed pipeline signify the presence of approximately 24 water supply wells, 14 of which are domestic.	How many of these wells service livestock operations or agricultural operations that require reliable access to water such as horticultural operations? See Figure 5 Appendix C
32	Heading Hydrostatic Testing and Dewatering/Sand-pointing - An uncontrolled discharge of water could cause downstream flooding, erosion, sedimentation or contamination.	This could negatively impact agricultural productivity and viability and is concerning.
32	Private Water Wells - Depending on the proximity to wells, the depth of the well installation and the groundwater levels encountered during excavation, dewatering has the potential to impact water well quality or quantity at some of the overburden supply wells.	Any impact on water well quality or quantity not only will affect rural residents but this has been particularly troublesome for certain types of agricultural operations including livestock operations as well as horticultural operations.

33	Private Water Wells - A private well survey should take place to assess domestic groundwater use near the proposed pipeline and a private well monitoring program may be recommended for residents within 100 m of HDD activities who rely on overburden groundwater supply for domestic use.	Do we know that 100 m is sufficient to cover off any potential negative impacts on the agricultural system? AIA's normally would identify a key study area and a 1.5 km distance adjacent as a secondary study area. Private well water information would be gathered for the larger geography.
35	Chingacousy Clay loam. While tile drainage is often necessary to improve crop yield, from an agricultural perspective, these soils are regarded as being agriculturally productive as they have only moderate limitation for common field crop.	Table 4.1 shows that approximately 64 percent of the soils mapped on the proposed pipeline are Class 1, the best agricultural soils in Canada. There is an additional 7 percent of soils that are Class 3. Combined 71 percent of soils are prime agricultural soils which are a limited finite resource. Even Class 5 founds which make up the remainder 29 percent can still be very productive lands. The impact of these soils and the agricultural system are tremendously important and have the potential to negatively impact farm viability.
35	Potential Impact Section	There is no mention on how the construction impacts the microbial activity of the soils which is related to crop yields. Agricultural impacts and reduced yields are not uncommon for 2 years to as long as 7 years and have a direct impact on farm revenue and farm viability.
36	Construction activities should be temporarily halted on agricultural lands where excessively wet soil conditions are encountered.	How will soil compaction as a result of the project be handled. Will there be measures introduced to mitigate the effects of soil compaction? If so, what measures? If the compaction permanently affects agricultural production, how will this be dealt with? How will this information be tracked and maintained?



38	Soil Compaction	There are some details shared on how soil compaction will be dealt with described in this section. If there are temporary or permanent impacts on yields, are compensation agreements in place for multi years until production returns to pre-project levels in place with the affected land owners?
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**From:** [Candido, Mike](#)  
**To:** [Clackett, Robert](#)  
**Subject:** RE: 16 Mile Creek Replacement - Halton Region  
**Date:** Friday, December 10, 2021 4:07:00 PM  
**Attachments:** [let\\_110904260\\_Response\\_HaltonRegion\\_20211210.pdf](#)  
[image001.jpg](#)  
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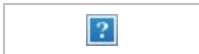
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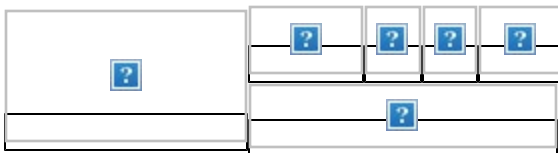
**Senior Planner**

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December 10, 2021  
File: 110904260

**Attention: Robert Clackett, Senior Planner**  
Planning Services  
Legislative & Planning Services  
1151 Bronte Road  
Oakville, ON L6M 3L1  
Robert.Clackett@halton.ca

Dear Mr. Clackett,

**Reference: Halton Region Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project**

Thank you for your comments received by email on April 30, 2021 regarding the NPS 12 East Sixteen Mile Creek Pipeline Replacement Project Environmental Report. Please find responses to your comments below.

The lands to be impacted by construction of the Project, include golf course lands, PAO Horticultural lands and an existing sand and gravel access road that is currently used by PAO Horticultural. Horizontal Directional Drill (HDD) pads to facilitate the crossing of East Sixteen Mile Creek will be located on the golf course lands and PAO Horticultural lands. These drill pads are approximately 20 metres by 40 metres in size.

***Comment #1: Section 4.0 Impact Identification, Assessment and Mitigation: Where possible, efforts should be put in place to minimize soil compaction. Furthermore, the Region would like clarification on the following questions:***

- *Are lease agreements in place to compensate farmers for any portions of fields that they may not be able to access?*
- *Can a general list of agricultural properties, locations, type be provided?*

**Response:** PAO Horticultural, a tree nursery, is the only agricultural property to be directly impacted by construction of the Project. Mitigation measures for soil compaction are outlined in Section 4.2.5 of the Environmental Report (ER). Where soil is compacted by the construction process, an agrologist will determine where decompaction may be necessary. To alleviate soil compaction, it is recommended that farm equipment such as an agricultural subsoiler be used prior to replacing the topsoil. Sub-soiling with an agricultural subsoiler, followed by discing, chisel ploughing and cultivating, to smooth the surface, will be considered on agricultural lands. Where deep compaction persists, additional deep tillage or subsoiling is recommended and may be required on a site-specific basis. To the extent feasible, construction activities should occur during drier times of the year. Lands affected by heavy rainfall events should be monitored for wet soil conditions, to avoid the potential for topsoil and subsoil mixing and loss of structure. Construction activities should be temporarily halted on agricultural lands where excessively wet soil conditions are encountered. Sun-Canadian's on-site inspection team should determine when construction activities may

**Reference:** Halton Region Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project

be resumed. To reduce the level of soil compaction, rig mats are also recommended during the construction process.

Lease agreements and details of compensation are confidential.

**Comment #2:** *Section 4.0 Impact Identification, Assessment and Mitigation: Access to agricultural fields is critical as the Project continues. Please confirm if farm fields that will be impacted through this development will still be accessible. If accessibility is going to be affected, then compensation for potential loss of farm income needs to be factored in.*

**Response:** Construction activity could impede, but will not restrict, property access. The PAO Horticultural property is the only agricultural property that will be directly impacted, and the property will be accessible during construction. Further there is an agreement in place between this landowner and Sun-Canadian for Project works that will be occurring on the property. Potential impacts to access to the surrounding agricultural fields will be limited and of short duration during construction. Access to the surrounding agricultural fields is not anticipated to be restricted at any time during Project construction.

Sun-Canadian will work with affected agricultural landowners to address specific concerns (if any) regarding access and disruption to operation that may arise during construction of the Project. Compensation, if required, will be handled on a case-by-case basis through direct consultation with affected landowners and is confidential.

**Comment #3:** *Section 3 Consultation Program: It is suggested that the Halton Region Federation of Agriculture be added as a stakeholder group that can notify its members (and any farmers that may be potentially moving farm equipment in the area) to minimize any disruption to the agricultural community. Notices should also identify a contact that farmers or farm businesses can connect with if they have questions or any issues that arise.*

**Response:** The Halton Region Federation of Agriculture will be added as a stakeholder group to the Project contact list. All Project notices include the Project Team's contact information.

**Comment #4:** *Executive Summary: Please describe the methods of consultation [with affected and interested parties]. How has Sun-Canadian consulted with the agricultural community?*

**Response:** As outlined in Section 3 of the ER the identification of interested and potentially affected parties was undertaken using a variety of sources, including the Ontario Energy Board (OEB) Ontario Pipeline Coordinating Committee (OPCC) Members List, the Ministry of Environment, Conservation and Parks (MECP) Environmental Assessment Government Review Team Master Distribution List, and the experience of Sun-Canadian and Stantec. Indigenous communities were identified through provision of a Project Summary to the Ministry of Energy, Northern Development and Mines (ENDM) in June 2020. Directly affected and adjacent landowners were identified through use of publicly available mapping. These sources were used to develop the Project's contact list.

Sun-Canadian also undertook direct consultation with directly affected landowners.

Following compilation of the Project's contact list, a Notice of Commencement was published in the Milton Champion. Details on the Project were outlined in the Notice of Commencement newspaper ad as well as in letters that were emailed or mailed out to landowners and parties identified on the Project's contact list.



**Reference:** Halton Region Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project

Landowners, residents, and businesses – which includes members of the agricultural community, within approximately 500 m of the preferred route were sent letters via Canada Post regular mail.

Two Project update letters were hand delivered to landowners and residents within approximately 500 m of the preferred route. The update letters were also mailed via Canada Post to landowners.

A notice of release of the ER for review and comment was also distributed to all parties on the Project's contact list.

Throughout the environmental study, Sun-Canadian provided updates on the Project's webpage. Virtual meetings about the Project occurred between Sun-Canadian and agency staff, key stakeholders, Indigenous communities, and with directly impacted landowners. Consultation with interested and affected parties is an on-going process and will continue as the Project progresses towards detailed design, construction and operation.

**Comment #5:** *Executive Summary: While it is not anticipated to be significant, monitoring following the pipeline construction will confirm to what extent if any of cumulative impacts on the Agricultural System.*

**Response:** As outlined in Section 6 of the ER, Sun Canadian will implement a monitoring program and contingency plans will be implemented as required. The primary objective of compliance and effects monitoring is to observe if mitigation and protective measures are effectively implemented and to measure the impacts of activities associated with construction on environmental and socio-economic features, this includes impacts to the agricultural system.

Any additional monitoring requirements resulting from regulatory/permit approvals and conditions will also be implemented.

**Comment #6:** *Section 3.2 Identifying Interested and Potentially Affected Parties: Has the agricultural community through the Halton Region Federation of Agriculture been identified as a stakeholder group? [The ER only] states [that] "directly affected and adjacent landowners" were part of the initial stakeholder contact lists.*

**Response:** Directly affected and potentially affected parties, which included members of the surrounding agricultural community, were consulted through the Project's consultation program as outlined in Section 3 of the ER. The Halton Region Federation of Agriculture was not directly consulted at the onset of the planning process; however, they will be added to the Project's contact list and will be notified in on-going consultation moving forward.

**Comment #7:** *Section 3.3.2.1 Notice of Commencement: Letters were mailed to landowners and residents within approximately 500 m of the preferred route. Agricultural Impact Assessment (AIA) Guidelines identify that an area of 1.5 km from the primary study area needs to be considered. Infrastructure Projects require an AIA or equivalent.*

**Response:** The draft *Agricultural Impact Assessment (AIA) Guidelines* recommends a 1.5 km radius be used for secondary study area(s) for settlement area boundary expansions. The Project does not fall under this categorization of a settlement area expansion. A 500 m buffer was determined to be an appropriate study area for the Project based on the Project footprint and the experience of the Project team. Study area boundaries were established by considering the potential impacts of the pipeline route on biophysical and

**Reference:** Halton Region Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project

socio-economic factors that may be affected by the Project. Beyond this buffer, direct interactions with the socio-economic and natural environment that could occur are considered to be low

Pipeline projects do not result in taking agricultural land permanently out of production, and any impacts to soil quality are mitigated through proper handling methods during construction and post-construction remediation as outlined in Section 4.2.5 of the ER.

***Comment #8: Section 4.1.1 Construction: Do traffic management plans include consideration for the ability to accommodate farm equipment particularly during planting and harvesting time?***

**Response:** The ER recommends a Traffic Management Plan (TMP) be implemented to reduce effects of Project-related traffic on traffic volumes. At minimum the TMP will outline measures to: Control the movement of materials and personnel to and from the construction site; Post signs to warn oncoming motorists of construction activity; Control traffic at road crossings; Reduce on-road disturbance and land closures; Store equipment as far from the edge of the road as practical; Install construction barricades at road crossings.

Access to agricultural lands and movement of agricultural equipment will not be restricted during any point during construction and disruption is anticipated to be low. Sun-Canadian will use existing access routes to access the tie-in point on the PAO Horticultural property and no new or temporary roads will be constructed across farmland to accommodate construction. By following the existing access, impacts to access to agricultural fields are anticipated to be low.

Sun Canadian has shared details with PAO Horticultural that outline how their lands will be used during construction and discussions on access have occurred. Discussions on construction details and access are on-going.

***Comment #9: Section 4.1.1 Construction: Stripping of soil, even if separated out, will have an impact on yields in the affected areas. Are multi-year compensation \* Please note the Region's comment was incomplete\****

**Response:** Impacts to soil quality are mitigated through proper handling methods during construction and post-construction remediation as outlined in Section 4.2.5 of the ER. PAO Horticultural is the only agricultural operation that will be directly affected by construction. Sun Canadian will work with PAO Horticultural regarding compensation and such discussions are confidential.

***Comment #10: Section 4.2.2 Physiography and Surficial Geology: Disturbance to the overburden along the proposed pipeline is limited to the entry and exit pit locations and may cause surface soil erosion. Can any of these areas potentially impact directly or indirectly agricultural lands?***

The HDD drill pad and exit pit, east of Trafalgar Road is located on a golf course and is not adjacent to agricultural lands. The HDD drill pad and entry pit, west of Trafalgar Road, is located on agricultural lands and an existing sand and gravel access road and is adjacent to agricultural lands. As outlined in Section 4.2.2 of the ER where there is potential for soil erosion, erosion and sediment control (ESC) measures will be installed prior to construction. ESC measures will be regularly inspected and repaired (as required).

**Reference:** Halton Region Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project

***Comment #11:*** Section 4.2.3 Hydrogeology and Figure 5, Appendix C: MECP Water Well Records (WWR) within 500 m of the proposed pipeline signify the presence of approximately 24 water supply wells, 14 of which are domestic. How many of these wells service livestock operations or agricultural operations that require reliable access to water such as horticultural operations?

**Response:** MECP Water Well Records (WWR) within 500 m of the proposed pipeline signify the presence of approximately 24 water supply wells, 2 of which are for livestock, 2 are for irrigation, and 2 are commercial supply wells.

***Comment #12:*** Section 4.2.3 Hydrogeology: During dewatering, discharge water will be released to the environment. An uncontrolled discharge of water could cause downstream flooding, erosion, sedimentation, or contamination. This could negatively impact agricultural productivity and viability and is concerning.

**Response:** Dewatering will be limited to the HDD entry and exit pits. A contractor will be retained by Sun Canadian to control groundwater seepage and facilitate the pipeline construction. Prior to construction, the contractor will provide a formal dewatering plan, based on geotechnical reporting. Where construction activities require dewatering, this activity will be managed by standard construction water management practices, as outlined in Section 4.2.3 of the ER. In addition, Sun Canadian will complete registration on the MECP Environmental Activity Sector Registry (EASR) for any construction dewatering anticipated to be greater than 50,000 L/day but less than 400,000 L/day. During construction, Sun Canadian will follow the conditions and recommended mitigation measures outlined in the Project's ESAR for dewatering and water quality.

As outlined in Section 4.2.3 of the ER, to reduce the potential for erosion and scouring at discharge locations during construction dewatering, energy dissipation techniques should be used. Discharge piping should be free of leaks and should be properly anchored to prevent bouncing or snaking during surging. Protective measures may include dewatering at low velocities, dissipating water energy by discharging into a filter bag or diffuser and utilizing protective riprap or equivalent. If energy dissipation measures are found to be inadequate, the rate of dewatering should be reduced or dewatering discontinued until satisfactory mitigation measures are in place. Discharge should be monitored to make sure that no erosion or flooding occurs.

***Comment #13:*** Section 4.2.3 Hydrogeology: Any impact on water well quality or quantity not only will affect rural residents but this has been particularly troublesome for certain types of agricultural operations including livestock operations as well as horticultural operations.

**Response:** During construction, the primary concern to surface water quality is the potential for a contaminant spill during a large storm event. To address this concern, mitigation measures are proposed, as outlined in Section 4.2.3 of the ER. Refueling of equipment should be undertaken a minimum of 30 m from wetlands and watercourses to reduce potential impacts to surface water and groundwater quality if an accidental spill occurs. Based on the current design of the Project work areas are greater than 30 m from the nearest watercourse and therefore refueling will not occur within the 30 m buffer.

To reduce the impact of potential contaminant spills, the Contractor should implement spill management protocols such as secondary containment of any temporary fuel storage and preparation of a spill response plan.

**Reference:** Halton Region Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project

Work should be limited or stopped during and immediately following significant precipitation events (i.e. 100-year storm event), at the discretion of on-site environmental personnel.

**Comment #14:** *Section 4.2.3 Hydrogeology: A private well survey should take place to assess domestic groundwater use near the proposed pipeline and a private well monitoring program may be recommended for residents within 100 m of HDD activities who rely on overburden groundwater supply for domestic use. Do we know [if] 100 m is sufficient to cover off any potential negative impacts on the agricultural system? AIA's normally would identify a key study area and a 1.5 km distance adjacent as a secondary study area. Private well water information would be gathered for the larger geography.*

**Response:** Generally, it is understood that the Radius of Influence (ROI) for pipelines is less than 100 m – this is the ROI accepted by the MECP. In determining an ROI and recommended well monitoring program for the Project, factors such as the depth of excavation, construction methods, and environmental constraints were considered.

Project construction activities, including excavation to a maximum depth of 2 m for the HDD entry and exit pits and dewatering, will primarily occur in shallow soils and parent materials; therefore, there is limited potential for changes in groundwater quality and quantity. As such, it was determined that 100 m is sufficient to cover any potential negative impacts to the surrounding environment, including the agricultural system.

**Comment #15:** *Section 4.2.5 Soil and Soil Capability, Table 4.1: Table 4.1 shows that approximately 64 percent of the soils mapped on the proposed pipeline are Class 1, the best agricultural soils in Canada. There is an additional 7 percent of soils that are Class 3. Combined 71 percent of soils are prime agricultural soils which are a limited finite resource. Even Class 5 soils which make up the remainder 29 percent can still be very productive lands. The impact of these soils and the agricultural system are tremendously important and have the potential to negatively impact farm viability.*

**Response:** Table 4.1 provides an overview of the soil classes along the proposed pipeline route which includes the drill pads, entry and exit pits and the HDD drill path. Physical soil disturbance during construction will be limited to the HDD drill pads entry and exit pits and the area at each drill pad is approximately 0.08 hectares (ha). No disturbance to surface soils will occur along the HDD drill path. Additionally, the HDD drill pad and pit east of Trafalgar Road is located on a golf course. The HDD drill pad and pit west of Trafalgar Road overlaps with soils and an existing sand and gravel access road.

The Project will not result in permanently taking agricultural land out of production. An area of approximately 0.08 ha of agricultural land on the PAO Horticultural property will be temporarily impacted during construction. Measures outlined in Section 4.2.5 of the ER will be implemented to mitigate potential impacts on agricultural soils.

**Comment #16:** *Section 4.2.5 Soil and Soil Capability: There is no mention on how the construction impacts the microbial activity of the soils which is related to crop yields. Agricultural impacts and reduced yields are not uncommon for 2 years to as long as 7 years and have a direct impact on farm revenue and farm viability.*

**Reference:** Halton Region Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project

**Response:** Impacts to agricultural land will be limited to the HDD drill pad and pit on the PAO Horticultural property. Monitoring of potential residual effects on the PAO Horticulture property will occur during construction and one year following construction by the on-site inspection team as necessary. Should farm revenue and viability be comprised as a result of the Project, Sun-Canadian will work with the landowner to discuss compensation.

***Comment #17:*** Section 4.2.5 Soil and Soil Capability: How will soil compaction as a result of the Project be handled. Will there be measures introduced to mitigate the effects of soil compaction? If so, what measures? If the compaction permanently affects agricultural production, how will this be dealt with? How will this information be tracked and maintained?

**Response:** The potential for soil compaction on agricultural land will be limited to the HDD drill pad on the PAO Horticultural property (approximately 0.08ha). As outlined in Section 4.2.5 of the ER where soil is compacted by the construction process on agricultural lands, an agrologist will determine where decompaction may be necessary. Compaction can be alleviated by using farm equipment such as an agricultural subsoiler prior to replacing the topsoil. Sub-soiling with an agricultural subsoiler, followed by disking, chisel ploughing and cultivating, to smooth the surface, should be considered on agricultural lands. If deep compaction persists, additional deep tillage or subsoiling may be required on a site-specific basis. Soil density and/or penetrometer measurements on and off the easement may be used as a means of assessing the relative degree of soil compaction caused by construction as well as determining that the soils have been sufficiently decompacted. Construction activities should be temporarily halted on agricultural lands where excessively wet soil conditions are encountered. Additionally, rig mats may be utilized during the construction process to aid in reducing the level of soil compaction.

***Comment #18:*** Section 4.2.5 Soil and Soil Capability: The [ER provides] some details on how soil compaction will be dealt with. If there are temporary or permanent impacts on yields, are compensation agreements in place for multi years until production returns to pre-Project levels in place with the affected landowners?

**Response:** With the use of mitigation measures outlined in Section 4.2.5 of the ER, permanent impacts on yields on the PAO Horticultural property are not anticipated. Sun-Canadian will work with the landowner to determine compensation for temporary impacts.

***Comment #19:*** Section 4.4.7 and the associated row on Land Use in Table 4-9 should discuss Halton Region's Official Plan (ROP) policy planning context in more detail, including the current land use designations and zoning for the subject property and for the adjacent lands, as well as the environmental legislative, regulatory and policy requirements that may affect the pipeline replacement Project. Please include map(s) of the proposed pipeline and extent of the area to be studied including current zoning/land use.

**Response:** Section 4.4.7 of the ER discusses the existing land use designations of the Project area. To determine impacts to municipal, regional, and provincial land use designations, a variety of planning documents were consulted, including, but not limited to, the Town of Milton Official Plan, Halton Region Official Plan, Niagara Escapement Plan, Greenbelt Plan, and Provincial Policy Statement. The ER focused the discussion on land use to the Town of Milton Official Plan, Niagara Escarpment Plan, and Greenbelt Plan as these documents were deemed to be the most relevant to the Project. However, to meet the

**Reference:** Halton Region Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project

Region's request to further discuss the Halton Region's Official Plan (ROP) policy planning context in more detail, a discussion on impacts to regional land use has been included as part of this response.

The proposed pipeline route is located in the Region of Halton. The Regional Structure, as shown on Map 1 of the ROP, represents Halton's position on the use of land and natural resources in its planning area and is the framework in which Local Official Plans are prepared. According to Map 1 of the ROP, the proposed pipeline route crosses land shown as the "Regional Natural Heritage System" and "Greenbelt Natural Heritage System". The Regional Natural Heritage System is a system of connected natural areas and open space that is set out to preserve and enhance the biological diversity and ecological functions within Halton. The Greenbelt Natural Heritage System, shown as an overlay on Map 1, is identified to implement policies of the Provincial Greenbelt Plan as they apply to its Natural Heritage System. While the Greenbelt Natural Heritage System and the Regional Natural Heritage System have different sets of planning policies, they are designed to complement one another and together implement Halton's vision of a sustainable natural heritage system that preserves and enhances the biological diversity and ecological functions of Halton.

Section 139.3.7 (1) and Section 139.3.7 (2) of the ROP prohibit development or site alteration on lands adjacent to the Key Features of the Greenbelt Natural Heritage System unless the proponent has evaluated the ecological functions of these lands through an Environmental Impact Assessment in accordance with Section 139.3.7(4). It should be noted that the Project is not a new development. It is maintenance of an existing pipeline by replacing a section of the existing pipeline due to shallow depth of cover with a new section of pipeline. However, the environmental study and associated ER for the Project does assess impacts as outlined in the ROP and serves as the required impact assessment. Moreover, the ER details mitigation measures that will mitigate, to the extent feasible, Project impacts on land use. While Table 4.9 does not explicitly outline mitigations to reduce impacts to regional land uses, mitigations outlined in the table as they relate to biophysical features serve to lessen impacts to the biological diversity and ecological functions of Halton.

***Comment #20:*** Section 4.0 Impact Identification, Assessment and Mitigation: Please discuss and depict in a figure the Natural Heritage and Natural Hazard Opportunities and Constraints, including an environmental policy analysis confirming how the proposal meets (or does not meet) the applicable policies and legislation.

***Response:*** The ER discusses natural hazards and provides details on the mitigation and protective measures. Please refer to Section 4.2.7 and Table 4-9 of the ER. A map of the regulation limits of CH is located on Figure 10, Appendix C. Further Section 2.2 of the ER outlines environmental and socio-economic opportunities and constraints that were taken into account during the route selection process in accordance with the OEB Environmental Guidelines when determining the preferred pipeline route.

***Comment #21:*** Section 4.4 Socio-Economic Environment and Appendix C: The Regional Natural Heritage System (RNHS) and the Greenbelt Natural Heritage System (GBNHS), should be described in the Report as ROP designations and overlays that contain important environmental protection policies which should be considered in relation to impact avoidance and mitigation. Section 115.3 of the ROP, and Map 1G, describe and map the components of the RNHS land use designation. The components of the RNHS as shown on Map 1G should be identified in Appendix C.



**Reference:** Halton Region Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project

The Regional Natural Heritage System (RNHS) and the Greenbelt Natural Heritage System (GBNHS), will be added to Appendix C.

**Comment #22:** *Section 4.3.2 Designated Natural Areas and Vegetation: The paragraph on wetlands in Section 4.3.2 states that “A review of MNRF LIO mapping (MNRF, 2019a) and the Natural Heritage Information Centre (NHIC) database (MNRF, 2019b) did not identify any PSWs or unevaluated wetlands within 120 m of the pipeline replacement Project” (p. 34-35). However, Staff note that the proposed pipeline replacement Project is within proximity to an unevaluated wetland regulated by Conservation Halton (CH). Please consult with CH and MNRF to confirm any additional requirements.*

**Response:** CH and MNRF have been consulted throughout the Project. Any additional requirements as indicated by CH and MNRF will be adhered to.

**Comment #23:** *Section 4.0 Impact Identification, Assessment and Mitigation: The applicants are advised that any future tree removals within [candidate significant woodland] may require prior authorization from the Region. If there will be tree removal associated with the pipeline construction, an Arborist Report and Tree Protection Plan, must be prepared to the satisfaction of Halton Regional staff, municipalities, and relevant agencies, and in accordance with the Halton Region Tree By-law No. 121-05. For any trees or woodlands removed to accommodate the pipeline easement, we also recommend that a Reclamation Plan be developed to show replanting corresponding with appropriate ratios, to enhance ecological functions of the RNHS, as close to the area of removal as possible and either prior to or immediately after removal. Any questions regarding the Tree By-law, Arborist Report, Tree Protection Plan or Reclamation Plan can be directed to Ron Reinholdt, Regional Forester, at 905-825-6000 x7279.*

**Response:** Table 1.1 in the ER outlines the potential environmental permits, approvals, and notifications from federal, provincial, and municipal agencies Sun-Canadian may be required to obtain. The table includes Tree By-Law 121-05. Although tree removals are not anticipated at this time, should tree removal be required, Sun-Canadian will consult with the Region and other relevant agencies as required to determine an appropriate approach for revegetation and restoration of the site. Thank you for passing on the direct contact for questions regarding the Tree By-law.

**Comment #24:** *Section 4.0 Impact Identification, Assessment and Mitigation: In addition to Erosion and Sediment Control measures regarding the watercourse, please ensure that stockpiling of soils and storage equipment are maintained outside of woodland areas. Tree protection hoarding and Erosion and Sediment Control fencing should be installed prior to commencement of construction and must be maintained in place until all disturbed areas are satisfactorily stabilized following construction.*

**Response:** Soil stockpiling and storage of equipment will be maintained outside of woodland areas. ESC measures will be installed prior to construction as noted in Section 4.2.2 of the ER. Section 4.3.2 and Table 4-9 of the ER outline mitigation and protective measures to limit impact to woodlots and vegetation. With the implementation of these measures, no significant impacts to trees, vegetation, and woodlots are anticipated as a result of the Project.



**Reference:** Halton Region Comments on the Sun-Canadian Pipe Line Company Ltd. Environmental Report: NPS 12 East Sixteen Mile Creek Pipeline Replacement Project

***Comment #25:*** Section 4.3.2 Designated Natural Areas and Vegetation, Table 4-9: Sun-Canadian should consult with landowners and CH to confirm replanting plans. The Region and other relevant municipalities should be consulted in relation to this matter and other matters where noted, as appropriate.

Acknowledged.

***Comment #26:*** Section 4.2.3 Hydrology: In the absence of a detailed hydrogeological assessment that justifies limiting the private well survey to those within 100 m of the dewatering areas, the Regions asks the applicant to include all 24 wells within 500 m of the dewatering areas in their survey and construction monitoring program.

***Response:*** The ER has recommended that a private well survey take place to assess domestic groundwater use near the proposed pipeline. The well monitoring program will be a voluntary program offered to residents who rely on overburden groundwater supply for domestic use within 100 m of HDD activities. Please refer to response to comment #14 for the rationale for why a 100 m study and monitoring area was selected.

***Comment #27:*** The proposed Project may also subject to Halton-Hamilton Source Water Protection policies, **L-1-S** and **L-2-S**. Please confirm that both of the policies have been addressed.

***Response:*** The Sun Canadian pipeline crosses a waterbody, therefore the Local Threat Policy L-1-S outlined in section 3.2.2 of the Halton-Region Source Protection Plan could apply to the Project. If this policy applies to the Project, Sun-Canadian will meet the recommendation to conduct inline pipeline integrity testing and visual inspections of the pipeline at watercourse crossings, every three years. It should be noted that Sun-Canadian has procedures in place to inspect and maintain pipelines, including Right of Way inspection. Sun-Canadian's Pipeline Integrity team has extensive technical, operational, and industry knowledge, and whose members remain current with industry practices. Detailed procedures and programs will be modified to include the replacement pipeline and to ensure the operation and maintenance activities for the Project comply with applicable provincial and federal legislation, regulations and guidelines.

Policy L-2-S outlines considerations that should be undertaken by the National Energy Board (NEB) and the OEB. NEB policies do not apply to the Project. Sun-Canadian cannot comment on considerations to be made by the OEB; however, any monitoring requirements outlined in the OEB's conditions of approval for the Project will be implemented.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido**

Project Manager - Assessment and Permitting  
Phone: 519 780 8139  
michael.candido@stantec.com

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

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**Public**  
Supporting Documents

## NOTICE OF COMMENCEMENT

### Sun-Canadian Pipe Line Replacement Project: NPS 12 E16M Creek Pipeline Replacement Project

#### The Project

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

#### The Process

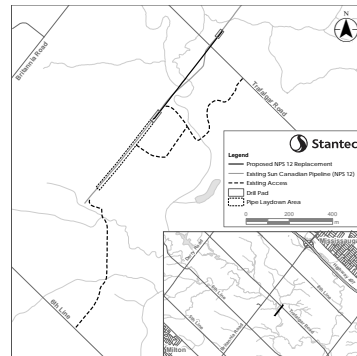
As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Additional project information is available at:  
<http://sun-canadian.com/media-releases/>

If you have any project-related questions or would like to provide input, please contact:

16milecreekreplacement@stantec.com.





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

«Name1»  
«Name2»  
«Address1»  
«Address2\_RR»  
«City», «Prov» «PostalCode»

Dear «Name1» and «Name2»,

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

You are receiving this letter because the Project is located on or in proximity to your property. A map of the proposed pipeline route is attached (the map was inadvertently not included with the previous letter, dated August 20<sup>th</sup>).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

August 21, 2020

Page 2 of 2

Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).  
Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**



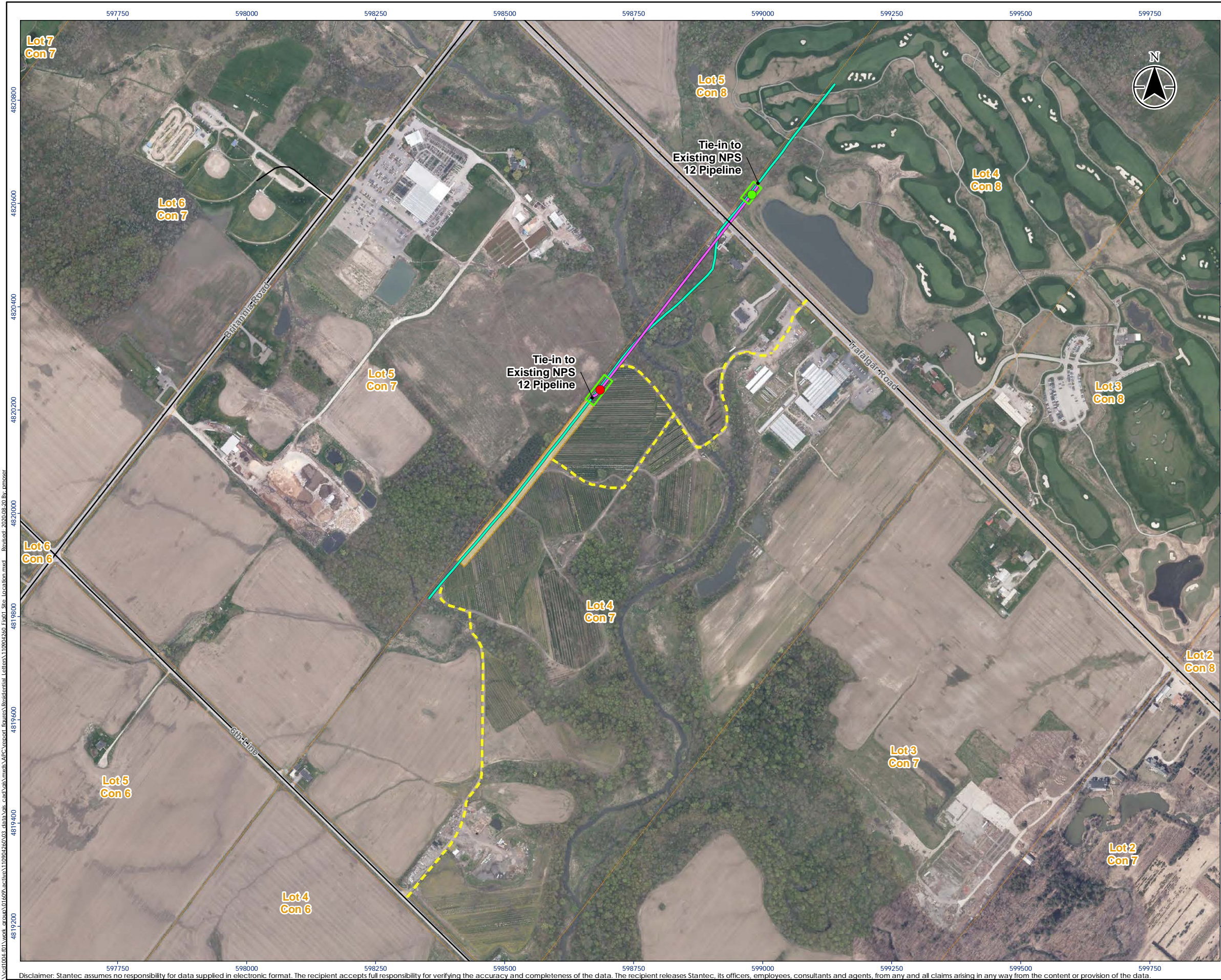
**Michael Candido** CAN-CISEC


Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.







# Stantec

Legend


- HDD Entry Point
- HDD Exit Point
- Existing Sun Canadian Pipeline (NPS 12)
- Proposed NPS 12 Replacement
- Existing Access
- Road
- Drill Pad (Entry & Exit)
- Pipe Laydown Area
- Lot Boundary

0 250 500 m

1:7,500 (At original document size of 11x17)

Notes

- Coordinate System: NAD 1983 UTM Zone 17N
- Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2020.
- Orthoimagery © First Base Solutions, 2020. Imagery Date, 2019.



Project Location  
Town of Milton

110904260 REVA  
Prepared by PRM on 2020-08-20  
Technical Review by MC on 2020-08-20

Client/Project  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.  
1

Title  
Site Location





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

August 21, 2020  
File: 110904260

Dear Landowner / Resident

**Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M  
Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace the existing pipeline in the vicinity of the crossing with new deeper pipe and eliminate three areas of shallow soil cover. Part of the proposed pipeline replacement will be constructed outside of the existing right-of-way within a new alignment to account for the installation of the pipe by a horizontal directional drill. Construction of the replacement pipeline could begin as early as Summer 2021 and be complete by the end of 2021, subject to approval by the Ontario Energy Board.

You are receiving this letter because the Project is located near/adjacent to your property. A map of the proposed pipeline route is attached (the map was inadvertently not included with the previous letter, dated August 20<sup>th</sup>).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (2016). The environmental study process includes consultation and engagement with landowners, municipalities, agencies, Indigenous communities, and other interested parties through notices, mailouts, and meetings.

An Environmental Report, summarizing the results of the environmental study, will accompany Sun Canadian's application to the OEB, whose review and approval is required before the proposed project can proceed. The Environmental Report for the proposed project is anticipated to be completed and submitted to the OEB as early as fall of 2020 as part of the overall project application.

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.



August 21, 2020

Page 2 of 2

Reference: Sun-Canadian Pipe Line Replacement Project – Notice of Commencement: NPS 12 E16M Creek Pipeline Replacement Project

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com).  
Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**

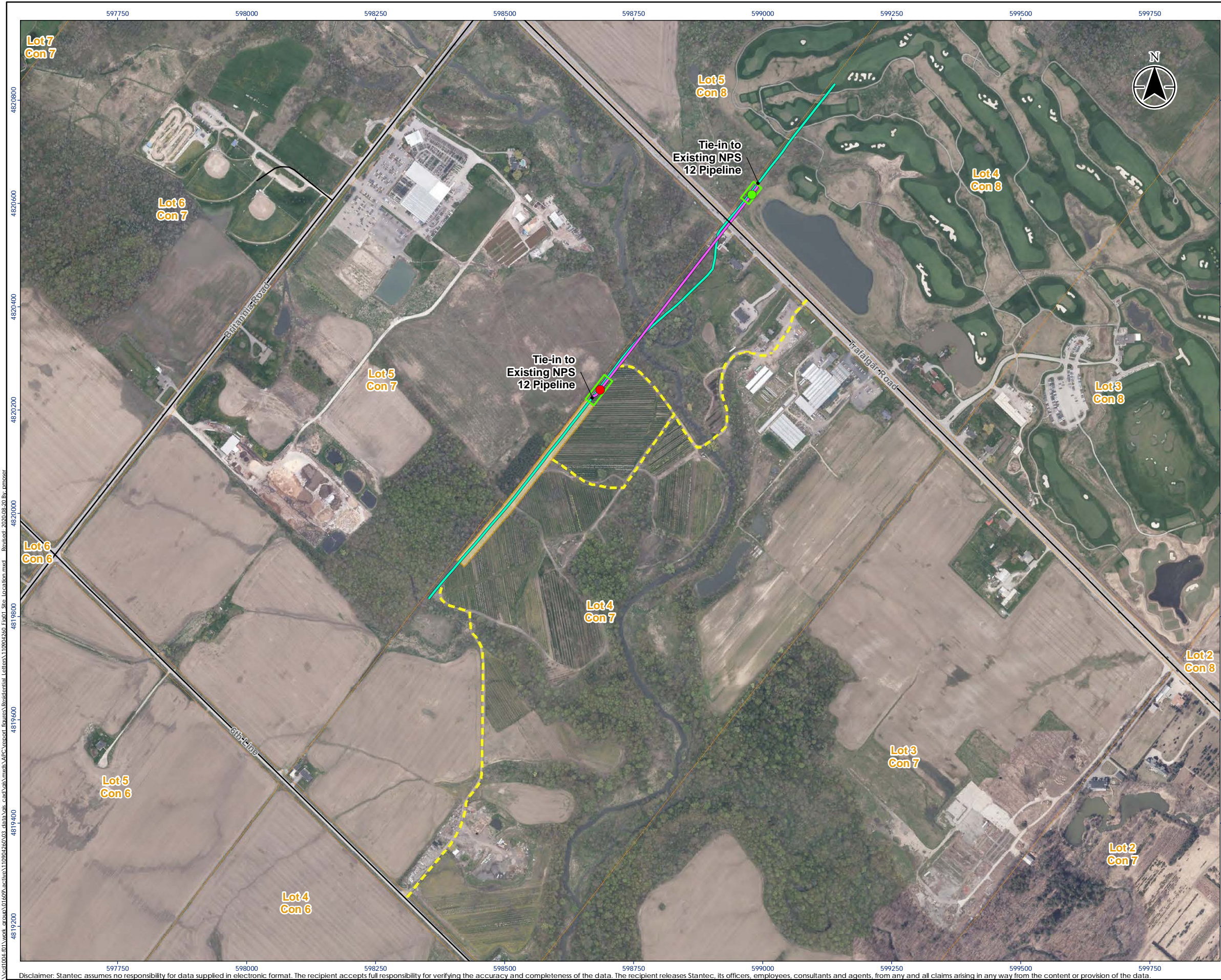
A handwritten signature in black ink, appearing to read 'Michael Candido', is positioned above the printed name.

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

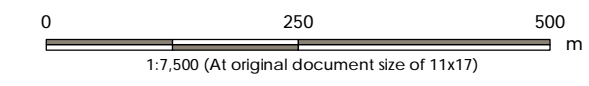
Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.





- Legend
- HDD Entry Point
  - HDD Exit Point
  - Existing Sun Canadian Pipeline (NPS 12)
  - Proposed NPS 12 Replacement
  - Existing Access
  - Road
  - Drill Pad (Entry & Exit)
  - Pipe Laydown Area
  - Lot Boundary



- Notes
- Coordinate System: NAD 1983 UTM Zone 17N
  - Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2020.
  - Orthoimagery © First Base Solutions, 2020. Imagery Date, 2019.



Project Location: Town of Milton  
110904260 REVA  
Prepared by PRM on 2020-08-20  
Technical Review by MC on 2020-08-20

Client/Project:  
SUN-CANADIAN PIPE LINE COMPANY LIMITED  
NPS 12 E16M CREEK PIPELINE REPLACEMENT PROJECT

Figure No.: 1  
Title: Site Location





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

September 24, 2020  
File: 110904260

«First Name» «Last Name»  
«Representing»  
«Address»  
«Town», «Province» «Postal Code»

Dear «First Name» and «Last Name»,

**Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update**

The purpose of this letter is to provide you with an update on Project activities as the Project is located on or in proximity to your property. Sun-Canadian Pipe Line will be contacting you directly to discuss the details and potential impacts to your property. A map of the proposed pipeline route is attached.

## **Project Overview**

- Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline, which crosses East Sixteen Mile Creek in Milton, ON.
- Sun-Canadian is proposing to replace a portion of the existing pipeline with approximately 480 metres of new, deeper pipeline and eliminate three areas of shallow cover in East Sixteen Mile Creek.
- A section of the replaced pipe will be constructed outside the existing right-of-way (RoW); to be installed using Horizontal Directional Drilling (HDD).
- If approved by the Ontario Energy Board (OEB), construction of the replaced pipeline could begin as early as Summer 2021 and be complete by the end of 2021.

## **Environmental Study Process**

The environmental study and Environmental Report will be completed as per the OEB's "Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)."

The study will:

- Undertake consultation with landowners, municipalities and agencies to understand the views of interested and potentially affected parties.
- Consult and engage with Indigenous communities to understand interests and potential impacts.

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

- Identify potential impacts of the Project
- Develop environmental mitigation and protective measures to avoid or reduce potential impacts.
- Develop appropriate environmental inspection, monitoring and follow-up programs, as necessary.

### **Ontario Energy Board Process**

The Ontario Energy Board (OEB) is the body that regulates hydrocarbon projects in Ontario, in the public interest. The application to the OEB will include information on the Project including:

- The need for the Project
- Environmental Report and mitigation measures
- Pipeline design and construction
- Land requirements
- Consultation with Indigenous Communities
- Consultation with various stakeholders including landowners and government agencies

The OEB will then hold a public hearing to review the Project. If the OEB determines that the Project is in the public interest it will approve construction of the Project.

### **Aquatic Resources**

Sun-Canadian recognizes the importance of protecting aquatic resources during construction and will implement recognized mitigation measures to reduce possible environmental effects.

- The Study Area contains two (2) watercourses – Sixteen Mile Creek and East Sixteen Mile Creek.
- The pipeline will only cross East Sixteen Mile Creek and will be crossed using the HDD method.
- Silver Shiner, an aquatic Species at Risk (SAR) under the Endangered Species Act (ESA) has been identified through background data review in East Sixteen Mile Creek.
- Standard erosion and sediment control measures will be used during construction to reduce potential impacts to fish and fish habitat.
- Monitoring will be in place for inadvertent returns of drilling mud during HDD installation process.

### **Terrestrial Resources**

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

Preliminary field studies conducted by a terrestrial biologist identified the following features:

- **Species at Risk:** one (1) Butternut was identified at the southwest end of the Pipe Laydown Area.
- **Significant Wildlife Habitat:** large diameter trees observed in the Pipe Laydown Area and adjacent to the HDD Entry Pit Location (potential to provide candidate bat maternity roost habitat). Potential habitat for turtles in East Sixteen Mile Creek, however no potential turtle nesting habitat was observed.
- **Migratory Bird Nesting Habitat:** potential for migratory birds to nest throughout the Study Area.
- **Natural Vegetation Communities:** mid-aged to mature sugar maple forest (edge of the forest, overlaps with the Pipe Laydown Area) and small coniferous plantation (Scot's Pine) adjacent to the south end of the Pipe Laydown Area were identified. These vegetation communities are common in the province.
- **Designated Natural Heritage Features:** no designated natural heritage features identified in the Study Area.

Mitigation measures will be implemented to protect terrestrial resources and further developed through consultation with regulatory authorities during the permitting process.

## Project Schedule

### 2020

#### Summer

- Start the environmental planning process
- Initiation of environmental field studies

#### Fall

- Stage 1 and 2 Archaeological Assessment
- Complete Environmental Report
- Circulate Environmental Report to agencies, Indigenous communities and landowners for comments
- Complete OEB filing application

September 24, 2020

Page 4 of 4

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

## 2021

### Spring

- Receive OEB approval, complete permitting, pipeline design and construction plan

### Summer

- Begin construction

### Fall

- Conclude construction
- Site cleanup and restoration
- Pipeline in service

## 2022

- Post-construction monitoring

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com). Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

September 24, 2020  
File: 110904260

«Name1» «Name2»  
«Representing»  
«Address1»  
«City», «Prov» «PostalCode»

Dear «Name1» and «Name2»,

**Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update**

The purpose of this letter is to provide you with an update on Project activities as the Project is located on or in proximity to your property. A map of the proposed pipeline route is attached.

## **Project Overview**

- Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline, which crosses East Sixteen Mile Creek in Milton, ON.
- Sun-Canadian is proposing to replace a portion of the existing pipeline with approximately 480 metres of new, deeper pipeline and eliminate three areas of shallow cover in East Sixteen Mile Creek.
- A section of the replaced pipe will be constructed outside the existing right-of-way (RoW); to be installed using Horizontal Directional Drilling (HDD).
- If approved by the Ontario Energy Board (OEB), construction of the replaced pipeline could begin as early as Summer 2021 and be complete by the end of 2021.

## **Environmental Study Process**

The environmental study and Environmental Report will be completed as per the OEB's "Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)."

The study will:

- Undertake consultation with landowners, municipalities and agencies to understand the views of interested and potentially affected parties.
- Consult and engage with Indigenous communities to understand interests and potential impacts.



Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

- Identify potential impacts of the Project
- Develop environmental mitigation and protective measures to avoid or reduce potential impacts.
- Develop appropriate environmental inspection, monitoring and follow-up programs, as necessary.

### **Ontario Energy Board Process**

The Ontario Energy Board (OEB) is the body that regulates hydrocarbon projects in Ontario, in the public interest. The application to the OEB will include information on the Project including:

- The need for the Project
- Environmental Report and mitigation measures
- Pipeline design and construction
- Land requirements
- Consultation with Indigenous Communities
- Consultation with various stakeholders including landowners and government agencies

The OEB will then hold a public hearing to review the Project. If the OEB determines that the Project is in the public interest it will approve construction of the Project.

### **Aquatic Resources**

Sun-Canadian recognizes the importance of protecting aquatic resources during construction and will implement recognized mitigation measures to reduce possible environmental effects.

- The Study Area contains two (2) watercourses – Sixteen Mile Creek and East Sixteen Mile Creek.
- The pipeline will only cross East Sixteen Mile Creek and will be crossed using the HDD method.
- Silver Shiner, an aquatic Species at Risk (SAR) under the Endangered Species Act (ESA) has been identified through background data review in East Sixteen Mile Creek.
- Standard erosion and sediment control measures will be used during construction to reduce potential impacts to fish and fish habitat.
- Monitoring will be in place for inadvertent returns of drilling mud during HDD installation process.

## Terrestrial Resources

Preliminary field studies conducted by a terrestrial biologist identified the following features:

- **Species at Risk:** one (1) Butternut was identified at the southwest end of the Pipe Laydown Area.
- **Significant Wildlife Habitat:** large diameter trees observed in the Pipe Laydown Area and adjacent to the HDD Entry Pit Location (potential to provide candidate bat maternity roost habitat). Potential habitat for turtles in East Sixteen Mile Creek, however no potential turtle nesting habitat was observed.
- **Migratory Bird Nesting Habitat:** potential for migratory birds to nest throughout the Study Area.
- **Natural Vegetation Communities:** mid-aged to mature sugar maple forest (edge of the forest, overlaps with the Pipe Laydown Area) and small coniferous plantation (Scot's Pine) adjacent to the south end of the Pipe Laydown Area were identified. These vegetation communities are common in the province.
- **Designated Natural Heritage Features:** no designated natural heritage features identified in the Study Area.

Mitigation measures will be implemented to protect terrestrial resources and further developed through consultation with regulatory authorities during the permitting process.

## Project Schedule

### 2020

#### Summer

- Start the environmental planning process
- Initiation of environmental field studies

#### Fall

- Stage 1 and 2 Archaeological Assessment
- Complete Environmental Report
- Circulate Environmental Report to agencies, Indigenous communities and landowners for comments
- Complete OEB filing application

September 24, 2020

Page 4 of 4

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

## 2021

### Spring

- Receive OEB approval, complete permitting, pipeline design and construction plan

### Summer

- Begin construction

### Fall

- Conclude construction
- Site cleanup and restoration
- Pipeline in service

## 2022

- Post-construction monitoring

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com). Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

Design with community in mind

September 24, 2020  
File: 110904260

Dear Landowner/Resident,

**Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update**

The purpose of this letter is to provide you with an update on Project activities as the Project is located on or in proximity to your property. A map of the proposed pipeline route is attached.

### **Project Overview**

- Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline, which crosses East Sixteen Mile Creek in Milton, ON.
- Sun-Canadian is proposing to replace a portion of the existing pipeline with approximately 480 metres of new, deeper pipeline and eliminate three areas of shallow cover in East Sixteen Mile Creek.
- A section of the replaced pipe will be constructed outside the existing right-of-way (RoW); to be installed using Horizontal Directional Drilling (HDD).
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- Undertake consultation with landowners, municipalities and agencies to understand the views of interested and potentially affected parties.
- Consult and engage with Indigenous communities to understand interests and potential impacts.
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Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

- **Significant Wildlife Habitat:** large diameter trees observed in the Pipe Laydown Area and adjacent to the HDD Entry Pit Location (potential to provide candidate bat maternity roost habitat). Potential habitat for turtles in East Sixteen Mile Creek, however no potential turtle nesting habitat was observed.
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### 2021

#### Spring

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September 24, 2020

Page 4 of 4

Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Project Update

### **Summer**

- Begin construction

### **Fall**

- Conclude construction
- Site cleanup and restoration
- Pipeline in service

### **2022**

- Post-construction monitoring

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com). Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd.**



**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route

c. Peter Martens, Sun-Canadian Pipe Line Ltd.

Design with community in mind





Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

December 9, 2020  
File: 110904260

«First Name» «Last Name»  
«Representing»  
«Address»  
«Town», «Province» «Postal Code»

Dear «First Name» and «Last Name»,

**Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Second Project Update**

The purpose of this letter is to provide you with an update on Project activities as the Project is located on or in proximity to your property. A map of the proposed pipeline route is attached.

**Update to Project Activities**

- Stage 1 Archaeological Assessment complete
- Stage 2 Archaeological Assessment scheduled for Spring 2021
- Additional natural heritage studies planned for the week of December 7<sup>th</sup>, 2020
- Completion of the Environmental Report anticipated by end of 2020

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

Please direct any questions, comments and/or concerns to the undersigned. If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com). Additional project information is available at: <http://sun-canadian.com/media-releases/>

Regards,

**Stantec Consulting Ltd**

**Michael Candido** CAN-CISEC  
Project Manager - Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route  
c. Peter Martens, Sun-Canadian Pipe Line Ltd



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

December 9, 2020  
File: 110904260

Dear Landowner/Resident,

**Reference: Sun-Canadian Pipe Line Company Limited NPS 12 E16M Creek Pipeline Replacement Project – Second Project Update**

The purpose of this letter is to provide you with an update on Project activities as the Project is located on or in proximity to your property. A map of the proposed pipeline route is attached.

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- Completion of the Environmental Report anticipated by end of 2020

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

Please direct any questions, comments and/or concerns to the undersigned.

If you would like to learn more about the project, please email [16milecreekreplacement@stantec.com](mailto:16milecreekreplacement@stantec.com). Additional project information is available at: <http://sun-canadian.com/media-releases/>.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** CAN-CISEC  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5

Attachment: Map of Proposed Pipeline Route  
c. Peter Martens, Sun-Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

«First\_Name» «Last\_Name», «Title»  
«Representing»  
«Address»  
«Town», «Province» «Postal\_Code»

Dear «First\_Name» «Last\_Name»,

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. An Environmental Report (ER), summarizing the results of the environmental study is available for your review at: <http://sun-canadian.com/media-releases/>.

Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun Canadian Pipe Line Ltd.



Stantec Consulting Ltd.  
1-70 Southgate Drive, Guelph ON N1G 4P5

February 5, 2021  
File: 110904260

Dear Landowner/Resident

**Reference: Sun-Canadian Pipe Line Replacement Project – Environmental Report: NPS12 East  
Sixteen Mile Creek Pipeline Replacement Project**

Sun-Canadian Pipe Line Company Limited (Sun-Canadian) owns and operates the NPS12 pipeline which crosses East Sixteen Mile Creek in Milton, Ontario. Sun-Canadian is proposing to replace approximately 480 metres of the existing pipeline in the vicinity of the creek crossing with a new section of pipe which will be installed at a depth that will eliminate three existing areas of shallow depth of cover. Part of the proposed pipeline replacement will be constructed outside of the existing easement within a new alignment to accommodate the installation of the pipeline by Horizontal Directional Drill. Construction of the replacement pipeline could begin as early as Summer 2022 and be completed by the end of 2022, subject to approval by the Ontario Energy Board (OEB).

As an integral part of this project, Sun-Canadian has hired Stantec Consulting Ltd. to undertake an environmental study of the construction and operation of the proposed pipeline and related facilities. The environmental study will fulfill the requirements of the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (2016)*. An Environmental Report (ER), summarizing the results of the environmental study is available for your review at: <http://sun-canadian.com/media-releases/>

Please forward any comments you may have regarding the ER and project to the undersigned. Your comments would be appreciated by April 8, 2021.

Regards,

**Stantec Consulting Ltd.**

**Michael Candido** B.Sc. (Env.)  
Project Manager  
Assessment and Permitting  
Stantec Consulting  
1-70 Southgate Drive  
Guelph, ON N1G 4P5  
[michael.candido@stantec.com](mailto:michael.candido@stantec.com)

c. Peter Martens, Sun Canadian Pipe Line Ltd.