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**Enbridge Gas Inc.**  
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October 27, 2021

**BY RESS AND EMAIL**

Christine Long  
Registrar  
Ontario Energy Board  
2300 Yonge Street, 27<sup>th</sup> Floor  
Toronto, ON M4P 1E4

Dear Christine Long:

**Re: Enbridge Gas Inc. (Enbridge Gas)  
Ontario Energy Board (OEB) File No.: EB-2021-0078  
2022 Storage Enhancement Project (REDACTED)**

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Enclosed please find the redacted application and evidence for the 2022 Storage Enhancement Project.

In accordance with the OEB's revised Practice Direction on Confidential Filings effective February 17, 2021, all personal information has been redacted from the following exhibits:

- Exhibit G-1-1, Attachment 1 – Affidavit of Title Search
- Exhibit H-1-1, Attachment 6 – Indigenous Consultation Log and associated attachments

The confidential unredacted exhibits will be provided to the OEB under separate cover.

The above noted submission has been filed electronically through the OEB's RESS and will be made available on Enbridge Gas's website at:

<https://www.enbridgegas.com/about-enbridge-gas/regulatory>. (then navigate to the "Other Regulatory Proceedings" tab.

If you have any questions, please contact the undersigned.

Sincerely,

(Original Digitally Signed)

Dave Janisse  
Technical Manager, Leave to Construct Applications

EXHIBIT LIST

A – General

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Contents of Schedule</u>
A	1	1	Exhibit List
		2	Glossary
	2	1	Application

B – Project Need

B	1	1	Project Need
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C – Alternatives & Project Description

C	1	1	<p>Alternatives &amp; Project Description</p> <p>Attachment 1 – Summary of Enbridge Gas Storage Pool Pressure</p> <p>Attachment 2 – Map of Dow Moore Designated Storage Area</p> <p>Attachment 3 –Dow Moore Guelph Structure &amp; Depth to Crest</p> <p>Attachment 4 – Dow Moore Cross-Section</p> <p>Attachment 5 – Map of Payne Designated Storage Area</p> <p>Attachment 6 – Payne Guelph Structure &amp; Depth to Crest</p> <p>Attachment 7 – Payne Cross-Section</p> <p>Attachment 8 – Map of Kimball-Colinville Designated Storage Area</p>
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C – Alternatives & Project Description

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Contents of Schedule</u>
C	1	1	Attachment 9 – South Kimball Guelph Structure & Depth to Crest  Attachment 10 – South Kimball Cross-Section  Attachment 11 – Proposed Well & Lateral Pipeline Location Map  Attachment 12 - Proposed Construction Schedule

D – Project Costs and Economics

D	1	1	Project Costs and Economics
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E – Engineering and Construction

E	1	1	Engineering and Construction  Attachment 1 – TKC69 Well Drilling Application  Attachment 2 – Email to MNDMNRF  Attachment 3 – MNDMNRF Correspondance  Attachment 4 – Executive Summary – Dow Moore Storage Pool  Attachment 5 – Executive Summary – Payne Storage Pool  Attachment 6 – Executive Summary – South Kimball Storage Pool
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F – Environmental Matters

<u>Exhibit</u>	<u>Tab</u>	<u>Schedule</u>	<u>Contents of Schedule</u>
F	1	1	Environmental Matters  Attachment 1 – Environmental Report  Attachment 2 – OPCC Review Summary

G – Land Matters

G	1	1	Land Matters  Attachment 1 – Affidavit – Search of Title (Redacted)
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H – Indigenous Consultation

G	1	1	Indigenous Consultation  Attachment 1 – Project Description for MENDM  Attachment 2 – Delegation Letter  Attachment 3 – Sufficiency Letter  Attachment 4 – Indigenous Peoples Policy  Attachment 5 – ICR Summary Tables  Attachment 6 – ICR Log & Attachments (Redacted)
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<b>GLOSSARY OF ACRONYMS AND DEFINED TERMS</b>	
AA	Archaeological Assessment
Act	The Ontario Energy Board Act, 1998
Applicant	Enbridge Gas Inc.
CSA Z341.1-18	Canadian Standards Association Standard Z341.1-18 – Storage of Hydrocarbons in Underground Formations
CSA Z662	Canadian Standards Association Z662 Standard for Oil and Gas Pipeline Systems (latest edition)
Delegation Letter	Letter indicating delegation of the procedural aspects of Indigenous consultation to Enbridge Gas for the Project
DSA	Designated Storage Area
Enbridge Gas or The Company	Enbridge Gas Inc
ER	Environmental Report
ESD	Emergency Shut Down
Geofirma	Geofirma Engineering Ltd
Guidelines	The OEB's Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario (7 <sup>th</sup> Edition, 2016)
ICR	Indigenous Consultation Report
MENDM	Ministry of Energy, Northern Development and Mines
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
MNDMNRF	Ministry of Northern Development, Mines, Natural Resources and Forestry
MOE	Ministry of Energy
MOP	Maximum Operating Pressure
OEB	The Ontario Energy Board
OGSRA	Ontario Oil, Gas & Salt Resources Act
OPCC	Ontario Pipeline Coordinating Committee
Policy	Enbridge Inc. Indigenous Peoples Policy
Pools	Dow Moore and Payne Storage Pools
Project	The activities associated with the proposed MOP increase impacting the Dow Moore and Payne Storage Pools and the drilling of TKC 69 and construction of the associated gathering pipeline
Regulation	Ontario Regulation 210/01 Oil and Gas Pipeline Systems
South Kimball Storage Pool	The southern portion of the Kimball-Colinville Designated Storage Area
Stantec	Stantec Consulting Ltd.

## **ONTARIO ENERGY BOARD**

**IN THE MATTER OF** the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15, Schedule B; and in particular sections 40(1), 38(1), and 91 thereof;

**AND IN THE MATTER OF** an application by Enbridge Gas Inc. for an order or orders to vary the maximum operating pressure of certain gas storage pools and for a favourable report to the Ministry of Northern Development, Mines, Natural Resources and Forestry to support a licence to drill a gas storage well and for an order or orders granting leave to construct a related gathering pipeline.

### **APPLICATION**

1. Enbridge Gas Inc. (“Enbridge Gas” or the “Company”) is seeking approval from the Ontario Energy Board (“OEB”) to conduct the activities described below as part of its 2022 Storage Enhancement Project (“Project”), specifically:
  - a. pursuant to section 38(1) of the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, Schedule B (the “Act”), leave to vary/increase the maximum operating pressure (“MOP”) of the Dow Moore Storage Pool and the Payne Storage Pool;
  - b. pursuant to section 40(1) of the Act, a favourable report to the Ministry of Northern Development, Mines, Natural Resource and Forestry (“MNDMNR”) for drilling an injection/withdrawal well; and
  - c. pursuant to section 91 of the Act, leave to construct a gathering pipeline connecting the above injection/withdrawal well.

**MOP Increase in Storage Pools**

2. The Project activities associated with the proposed MOP increase impact the Dow Moore and Payne Storage Pools (“Pools”) which are part of Enbridge Gas’s storage operations. Each of the Pools is a designated storage area (“DSA”) as defined in the Act.
3. In the past, the OEB has imposed conditions of approval limiting the MOP on certain storage pools operated by Enbridge Gas.
4. Enbridge Gas is applying for leave to vary the conditions of approval in relation to increasing the MOP of the Dow Moore Storage Pool. The original condition (imposed upon Enbridge Gas’s predecessor) states:  
  
“Tecumseh shall not operate the Dow Moore Pool above a pressure representing a pressure gradient of 0.7 psi per ft. depth (15.9 kPa/m) without the leave of the Board”<sup>1</sup>
5. The Payne Pool does not have conditions of approval limiting the MOP. However, section 23 of the Act permits the OEB, when making an order, to “impose such conditions as it considers proper.”
6. The current and future proposed pressure gradients in the Pools are set out below:

Pool	Current Gradient	Proposed Gradient
Dow Moore	15.83 kPa/m 0.70 psi/ft	16.51 kPa/m 0.73 psi/ft
Payne	16.51 kPa/m 0.73 psi/ft	17.19 kPa/m 0.76 psi/ft

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<sup>1</sup> E.B.O. 147, E.B.L.O. 224 Decision with Reasons, Appendix II.

7. Enbridge Gas wishes to operate the Pools in accordance with the above maximum pressure gradients beginning in the 2022 injection season. The proposed MOP for each pool is permitted under the *Canadian Standards Association Standard Z341.1-18 – Storage of hydrocarbons in underground formations* (“CSA Z341.1-18”). Increasing the MOP of the Pools will allow Enbridge Gas to store additional natural gas. The additional storage capacity and deliverability created by the Project will be sold to third parties as part of the Enbridge Gas unregulated storage portfolio. All costs associated with the Project will be captured in unregulated accounts. Enbridge Gas’s ratepayers will not incur any rate impacts as a result of the Project.
8. The Project will include the installation of new emergency shut-down valves, and performing wellhead upgrades on existing natural gas storage wells within the Dow Moore and Payne Storage Pools in order to increase the MOP of each of these storage pools.
9. Enbridge Gas has the authority to store gas in the Dow Moore Storage Pool pursuant to the E.B.O. 147 and E.B.L.O 224 Decision with Reasons and as designated by Ontario Regulation 313/88. Enbridge Gas has the authority to store gas in the Payne Storage Pool pursuant to the Ontario Fuel Board’s F.B.O. 15 and F.B.O. 15A Orders.
10. Enbridge Gas hereby applies to the OEB pursuant to section 38(1) of the Act for an order or orders granting approval to increase the MOP of the Dow Moore and Payne storage pools.

**Report to MNDMNR for Well Drilling Licence**

11. Enbridge Gas has applied to the MNDMNR to drill a well in the geographical Township of Moore, Township of St. Clair, in the County of Lambton, in the Province

of Ontario - a vertical gas storage well (TKC 69) to be drilled in the southern portion of the Kimball-Colinville Storage Pool to increase deliverability from that pool.

12. Enbridge Gas has the authority to store gas in the Kimball-Colinville Storage Pool pursuant to the OEB's E.B.O. 5 Order.

13. Pursuant to section 40 of the Act, Enbridge Gas seeks a favourable report from the OEB to the MNDMNRF to support the application to drill.

**Leave to Construct Gathering Pipeline**

14. Enbridge Gas is proposing to construct approximately 85 metres of new NPS 10 steel pipeline to connect the proposed TKC 69 well to the existing Kimball-Colinville gathering lines.

15. Enbridge Gas hereby applies to the OEB, pursuant to Section 91 of the Act, for an order granting leave to construct the proposed natural gas pipeline.

16. The Project was identified in Enbridge Gas's 2021/22 Storage Enhancement Project application.<sup>2</sup> With leave of the Board, construction of the Project is planned to commence in April 2022. The Project is proposed to be fully placed into service by September 30, 2022. To meet construction timelines, Enbridge Gas respectfully requests the approval of this application as soon as possible and not later than March 24, 2022. The proposed construction schedule can be found at Exhibit C, Tab 1, Schedule 1, Attachment 12.

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<sup>2</sup> EB-2020-0256, Exhibit I.STAFF.3

17. If the OEB determines that it will conduct a hearing for this application, then Enbridge Gas requests that it proceed by way of written hearing in English.

18. Enbridge Gas requests that copies of all documents filed with the OEB in connection with this proceeding be served on it and on its counsel, as follows:

- (a) The Applicant
- Dave Janisse  
Technical Manager, Leave to Construct Applications
- Address: P. O. Box 2001  
50 Keil Drive N  
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- Telephone: (519) 436-5442
- Email: [EGRegulatoryProceedings@enbridge.com](mailto:EGRegulatoryProceedings@enbridge.com)
- (b) The Applicant's counsel
- Tania Persad  
Senior Legal Counsel  
Enbridge Gas Inc.
- Address for personal service 500 Consumers Road  
Toronto, ON M2J 1P8
- Mailing Address: P. O. Box 650, Scarborough, ON M1K 5E3
- Telephone: 416-495-5891
- Fax: 416-495-5994
- Email: [tania.persad@enbridge.com](mailto:tania.persad@enbridge.com)

DATED at the City of Chatham, Ontario this 27th day of October 2021.

**ENBRIDGE GAS INC.**

(Original Digitally Signed)

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Dave Janisse,  
Technical Manager, Leave to Construct Applications

PROJECT NEED

1. Enbridge Gas is proposing to conduct the activities set out in this Application in order to meet growing market demand for incremental storage space and deliverability. The additional 88,300  $10^3\text{m}^3$  of storage capacity and associated deliverability created by the Project will be sold as part of Enbridge Gas's unregulated storage portfolio.
2. For the current storage year (April 2021 to March 2022), Enbridge Gas is fully contracted and has historically been fully contracted with respect to unregulated storage space and deliverability. Historically, the demand for unregulated storage far exceeds contracts awarded.
3. The Project is part of a larger project to increase deliverability and storage capacity at Enbridge Gas's storage facilities. The larger project involves increasing the MOP of certain pools and drilling new injection/withdrawal wells to provide incremental storage capacity and deliverability. In its EB-2020-0256 interrogatory response at Exhibit I.STAFF.3, Enbridge Gas described the larger project, including the type of work to be completed, pool names and locations and proposed timing of the work to be completed.

## ALTERNATIVES & PROJECT DESCRIPTION

### Alternatives

1. As discussed in Exhibit B, Enbridge Gas is undertaking this Project to increase the capacity of the Dow Moore and Payne Storage Pools and to increase deliverability from the Kimball-Colinville Storage Pool through the drilling of TKC 69.
2. Since underground storage reefs are finite containers with defined boundaries, the only way to physically increase the storage capacity of the reefs is to increase the MOP, allowing more gas to be stored in the reef. Enbridge Gas is unaware of any alternative to increase the capacity (volume) in the reef. Increasing the MOP in the Dow Moore and Payne Storage Pools is anticipated to add approximately 88,300  $10^3\text{m}^3$  of unregulated storage capacity.
3. The Dow Moore and Payne Pools selected for MOP increase were chosen based on their geological similarity to other Enbridge Gas pools that have undergone a pressure increase and have been operated successfully at an elevated pressure gradient of 16.5 kPa/m (0.73 psi/ft) or 17.2 kPa/m (0.76 psi/ft) for many years. Attachment 1 to this Exhibit is a table summarizing the current MOP of the Enbridge Gas pools with pressure gradients of 16.5 kPa/m (0.73 psi/ft) or greater.
4. The drilling of TKC 69 is to add deliverability and is necessary to support the incremental capacity created by this Project. Enbridge Gas is unaware of an alternative for physically increasing deliverability from the reef. Drilling of the TKC 69 well is anticipated to add approximately 945  $10^3\text{m}^3$  per day of design day deliverability from the Kimball-Colinville Storage Pool. However, the exact deliverability increase will not be known until the well has been drilled and tested.

5. Hydraulic modeling was conducted on the Enbridge Gas storage system and it was determined that drilling a well in the southern region of the Kimball-Colinville Storage Pool (the “South Kimball Storage Pool”)<sup>1</sup> would provide the greatest amount of deliverability for the Enbridge Gas unregulated storage portfolio.
  
6. The gathering pipeline to connect TKC 69 will be installed in the most direct and shortest route that allows a 90-degree connection from the proposed well to the existing Kimball-Colinville gathering line on property owned by Enbridge Gas. As a result, no other pipeline routes were considered. Attachment 11 to this Exhibit shows the location of the proposed well and lateral pipeline.

#### Project Description

7. The Project involves the following activities:
  - A. Increasing the MOP of two existing storage pools;
  - B. Drilling one injection/withdrawal well in an existing storage pool; and
  - C. Installation of a natural gas pipeline to connect the new injection/withdrawal well to the main gathering line.

#### ***A) Maximum Operating Pressure Increase***

##### Dow Moore Pool

8. The Dow Moore Pool was discovered in 1977 with the drilling of Dow Moore 3-21-12 and was converted to natural gas storage in 1988. A location map of the Dow Moore Pool is shown in Attachment 2. Currently the pool is operated and monitored using 16 natural gas storage wells, 1 Guelph observation well and 1 A1 Carbonate observation well. The Dow Moore Pool has a total capacity of 951,300 10<sup>3</sup>m<sup>3</sup> and a working capacity of 747,700 10<sup>3</sup>m<sup>3</sup>. The pool currently operates

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<sup>1</sup> The Kimball-Colinville Storage Pool is a single DSA but is functionally operated as two separate pools: the South Kimball Storage Pool and the Mid-Kimball Storage Pool.

between a cushion pressure of 2,512 kPaa and a maximum pressure of 10,110 kPaa.

9. A map showing the Dow Moore DSA, Guelph structure and depth-to-crest can be found in Attachment 3. The geological interpretation was completed using 3D seismic data and well information. The map is contoured in 10-meter intervals and shows the reef reaching approximately 115 meters above the regional Guelph surface. The minimum depth-to-crest is 677.3 meters.
10. A cross section illustrating the reef structure of the Dow Moore Pool can be found in Attachment 4. The cross section illustrates the relationship of the pinnacle reef to the surrounding formations. The A2 Salt, A1 Carbonate and A1 Anhydrite units pinch out against the flank of the reef providing lateral seals. The A2 Anhydrite, A2 Shale, and A2 Carbonate drape over the reef forming an effective caprock seal ranging in thickness from 29.0 to 41.5 meters. The A2 Anhydrite is continuous over the reef and ranges in thickness from 2.0 to 14.1 meters.
11. Enbridge Gas is proposing to operate the Dow Moore Pool at 10,540 kPaa. This equates to a pressure gradient of 16.5 kPa/m (0.73 psi/ft). This will increase the working capacity from 747,700  $10^3\text{m}^3$  to 794,500  $10^3\text{m}^3$ , which is an incremental capacity gain of 46,800  $10^3\text{m}^3$ .
12. To ensure the proposed maximum pressure gradient complies with CSA Z341.1-18, an engineering study was conducted by Geofirma Engineering Ltd. ("Geofirma") for the Dow Moore Pool. This engineering study incorporated data from geomechanical and regional in-situ tests completed on the reservoir and caprock formations. An executive summary of the Geofirma study is located in Exhibit E, Tab 1, Schedule 1, Attachment 4.

Payne Pool

13. The Payne Pool was discovered in 1949 with the drilling of Imperial Oil No. 222 – Payne 1 and was converted to natural gas storage in 1957. A location map of the Payne Pool is shown in Attachment 5. Currently the pool is operated and monitored using 11 natural gas storage wells, 1 Guelph observation well and 1 A1 Carbonate observation well. The Payne Pool has a total capacity of 871,700  $10^3\text{m}^3$  and a working capacity of 700,400  $10^3\text{m}^3$ . The pool currently operates between a cushion pressure of 2,100 kPaa and a maximum pressure of 9,250 kPaa.
14. A map showing the Payne DSA, Guelph structure and depth-to-crest can be found in Attachment 6. The geological interpretation was completed using 3D seismic data and well information. The map is contoured in 10 meter intervals and shows the reef reaching approximately 125 meters above the regional Guelph surface. The minimum depth-to-crest is 589.4 meters.
15. A cross section illustrating the reef structure of the Payne Pool is shown in Attachment 7. The cross section illustrates the relationship of the reef to the surrounding formations. The A2 Salt, A1 Carbonate and A1 Anhydrite units pinch out against the flank of the reef providing lateral seals. The A2 Anhydrite, A2 Shale, and A2 Carbonate drape over the reef forming an effective caprock seal ranging in thickness from 31.7 to 39.3 metres. The A2 Anhydrite is thin but continuous over the reef and ranges in thickness from 4.0 to 10.9 metres.
16. Enbridge Gas is proposing to operate the Payne Pool at 9,630 kPaa. This equates to a pressure gradient of 17.2 kPa/m (0.76 psi/ft). This will increase the working capacity from 700,400  $10^3\text{m}^3$  to 741,900  $10^3\text{m}^3$ , which is an incremental capacity gain of 41,500  $10^3\text{m}^3$ .

17. In order to ensure the proposed maximum pressure gradient complies with CSA Z341.1-18, an engineering study was conducted by Geofirma for the Payne Pool. This engineering study incorporated data from geomechanical and regional in-situ tests completed on the reservoir and caprock formations. An executive summary of the Geofirma study is located at Exhibit E, Tab 1, Schedule 1, Attachment 5.

Associated Project Activities

18. As part of the Project, Enbridge Gas will be performing the following work at the pools:
- Installation of new master valves on 26 wells;
  - Installation of new wellheads on 26 wells; and
  - Installation of emergency shut down (“ESD”) valves on 24 wells.
19. The wellheads are being upgraded to meet CSA Z341.1-18. The ESD valves, while not required by CSA Z341.1-18, are being added to improve the operational safety of the storage injection/withdrawal wells within the pools.
20. Control valves capable of isolating the storage facility from the transmission pipeline are currently in place at the Dow Moore and Payne Storage Pools, with remote operation from Enbridge Gas’s control room, located at the Corunna Compressor Station, in accordance with CSA Z341.1-18, Section 9.3.
21. Enbridge Gas is planning to install ESD valves on all natural gas storage wells within the pools that do not currently have ESDs installed. All ESDs installed on the wells will have the capability to be shut-in remotely from the Enbridge Gas’s control room, either individually or on a per pool basis.

22. All of the wellhead and ESD valve work will take place on previously disturbed lands either owned by Enbridge Gas or for which Enbridge Gas has the right to enter for the purposes of its natural gas storage operations.
23. All above ground piping and pipelines are being reviewed to ensure compliance, with the CSA Z662-19 Standard, as adopted by the Technical Standards & Safety Authority through Ontario Regulation 210/01, at the proposed increased operating pressure. The pools will not be operated at the proposed higher operating pressures until the suitability of the above ground piping and pipelines has been confirmed.
24. Enbridge Gas will review and, if necessary, update operating procedures and emergency response plans prior to operating the pools at the increased pressure levels.

### ***B) Well Drilling***

25. Enbridge Gas is proposing to drill one vertical gas storage well [TKC #69 Moore 3-18-V (TKC 69)] in the South Kimball Storage Pool in the geographic Township of Moore, St. Clair Township, in the County of Lambton, Ontario.

#### South Kimball Storage Pool

26. The South Kimball Pool was discovered in 1947 with the drilling of Imperial Kimball 1 and was converted to natural gas storage in 1962, with injections starting in 1966. A location map of the South Kimball Storage Pool is shown in Attachment 8. Currently the pool is operated and monitored using 10 natural gas storage wells, 1 Guelph observation well and 6 A1 observation wells. The South Kimball Pool has a total capacity of 639,100 10<sup>3</sup>m<sup>3</sup> and a working capacity of 500,200 10<sup>3</sup>m<sup>3</sup>. The

pool currently operates between a cushion pressure of 2,148 kPaa and a maximum pressure of 8,650 kPaa.

27. A geological review of the wells identified that only the southern portion of the Kimball-Colinville Storage Pool would be affected by the drilling of the TKC 69 well. The southern portion of the reef is referred to as South Kimball Storage Pool and the northern portion is referred to as Mid-Kimball Storage Pool. These two areas of the Kimball-Colinville reef are separated by a depression, called a saddle. Mid-Kimball Storage Pool and South Kimball Storage Pool are operated separately but do communicate through the saddle to function as one reef.
  28. A map showing the Kimball-Colinville DSA, Guelph structure and depth-to-crest can be found in Attachment 9. The geological interpretation was completed using 3D seismic data and well information. The map is contoured in 10 meter intervals and shows the reef reaching approximately 115 meters above the regional Guelph surface. The minimum depth-to-crest is 579.1 meters.
  29. A cross section illustrating the reef structure of the South Kimball Pool can be found in Attachment 10. The cross section illustrates the relationship of the pinnacle reef to the surrounding formations. The A2 Salt, A1 Carbonate and A1 Anhydrite units pinch out against the flank of the reef providing lateral seals. The A2 Anhydrite, A2 Shale, and A2 Carbonate drape over the reef forming an effective caprock seal ranging in thickness from 30.8 to 43.3 metres. The A2 Anhydrite is continuous over the reef and ranges in thickness from 1.8 to 12.5 metres.
- TKC 69
30. The drilling of the TKC 69 well is required to increase the deliverability from the South Kimball Storage Pool. The TKC 69 well will be drilled in accordance with the

drilling plan attached to this application in Exhibit E, Tab 1, Schedule 1, Attachment 1.

31. Drilling of the TKC 69 well will occur from April to August 2022 when there will be no injection or withdrawal operations in the South Kimball Storage Pool. The drilling work must be done when the reservoir pressure is less than 3,500kPa. This will allow the well to be safely drilled.
32. The drilling of TKC 69 will not cause any disruption to service from the Kimball-Colinville Storage Pool.
33. The well will be drilled on previously disturbed lands. The TKC 69 well will be drilled on land owned by Enbridge Gas. An all-weather laneway and gravel pad will be installed prior to the commencement of drilling operations. Upon completion of drilling operations, the drill pad will be reduced in size to approximately 11m x 5.5m, a permanent access laneway will remain, and the balance of the land will be restored along with the repair of any drainage tile.

***A) Gathering pipeline***

34. Enbridge Gas is proposing to install approximately 85 metres of NPS 10 inch steel pipeline, with a pressure rating of 9,930 kPa (1,440 psi) to connect the new well (TKC 69) to the Kimball-Colinville gathering pipeline. Attachment 11 to this Exhibit shows the location of the proposed well and lateral pipeline.
35. The pipeline will be installed in Lot 18, Concession 5 in the Township of Moore on previously disturbed lands owned by Enbridge Gas. The pipeline installation will occur upon completion of drilling operations in Summer and Fall of 2022 and will not

cause any disruption of service to the South Kimball Storage Pool. The planned in-service date is September 30, 2022.

### Timing

36. A construction schedule for the Project is set out in Attachment 12.

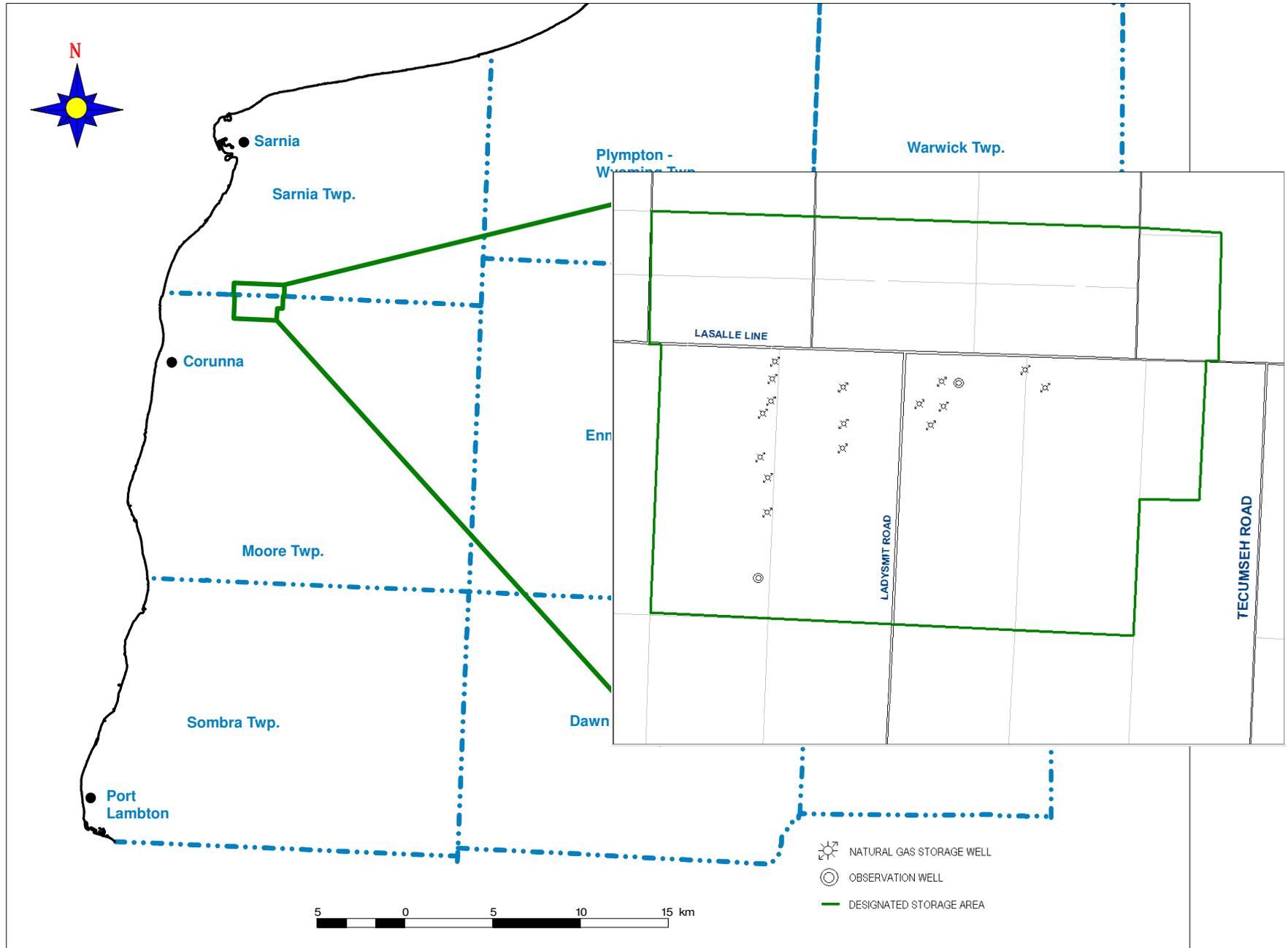
### Risk to Schedule

37. The drilling and well upgrades must take place between April and August 2022 to ensure no disruption to service from the storage pools and to ensure the pool pressure will be suitable to safely complete the drilling of the well and the well upgrade work. The pressure in the reef must remain low and static, so that any gas encountered in the well can be effectively controlled in compliance with the *Oil, Gas & Salt Resources Act* and the CSA Z341 Standard. If the wells cannot be drilled or upgraded prior to August 2022, the work will have to be deferred until 2023 when Winter 2022/23 withdrawal operations have completed.
38. The installation of the TKC 69 lateral pipeline is proposed to occur from June to September of 2022. Construction is proposed to be completed by September 30, 2022, after completion of the proposed drilling operations.
39. The connection of the lateral pipeline connecting TKC 69 to the existing gathering line will require the southern portion of the Kimball-Colinville gathering line to be depressurized and taken out of service.
40. Enbridge Gas has factored these risks into its construction and engineering plans for the Project. See Exhibit E, Tab 1, Schedule 1 for additional information regarding construction and engineering risks and proposed mitigation plans.

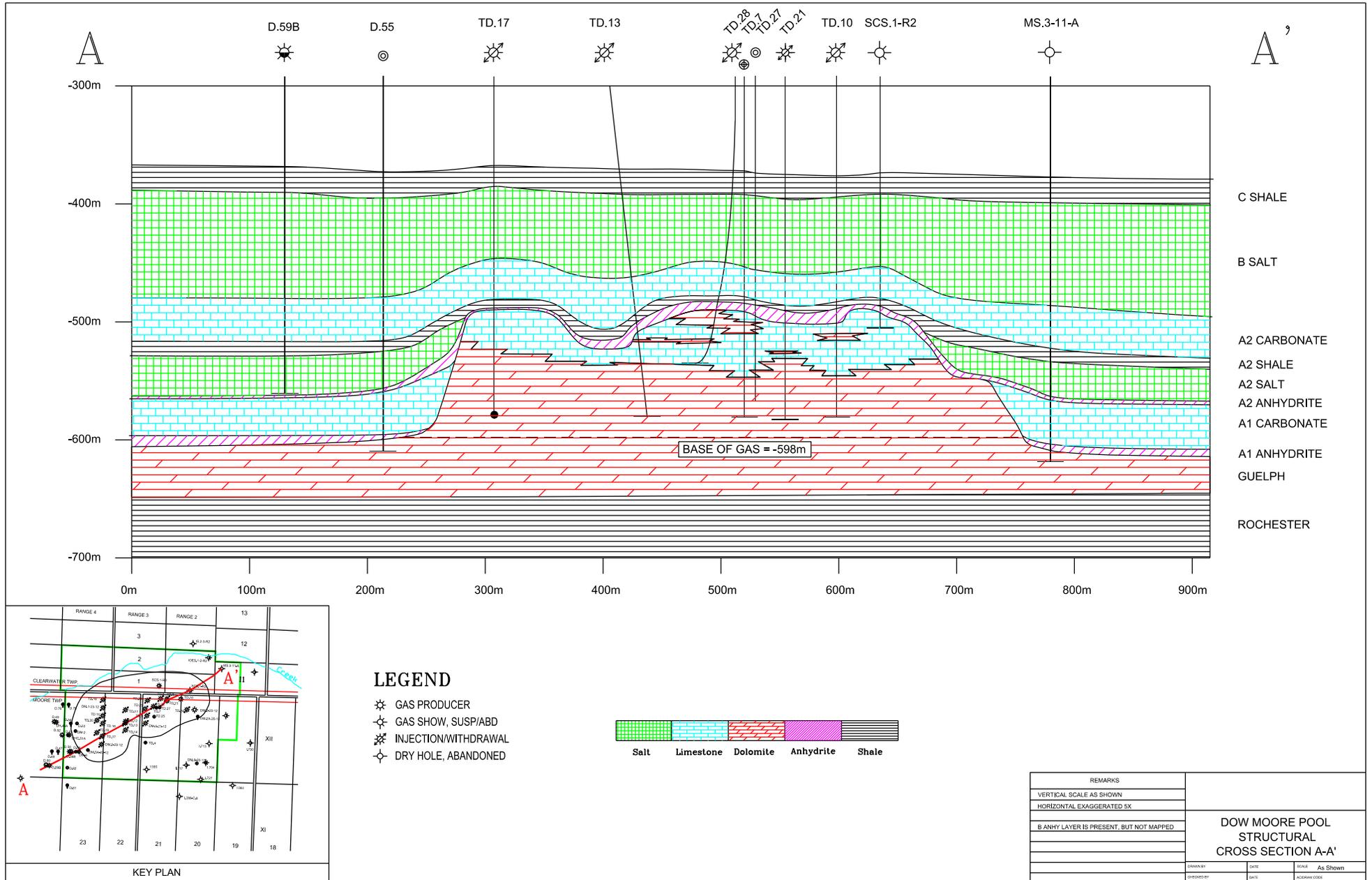
**ENBRIDGE GAS INC. POOLS DELTA PRESSURED AT OR ABOVE 16.5kPa/m (0.73 psi/ft)**

Storage Pool	Current Gradient (kPa/m)	Year Delta Pressured to Current Gradient	Discovery Gradient (kPa/m)	Discovery Pressure (Wellhead) (kPaa)	Maximum Operating Pressure (kPaa) (Wellhead)
Terminus	16.5	2001	13.3	6,310	7,720
Waubuno	16.5	2004	12.4	6,619	8,670
Dow A	16.5	2008	8.8	5,819	10,690
Payne	16.5	2008	10.9	6,247	9,250
Bluewater	16.5	2009	8.8	5,148	9,780
Heritage	16.5	2009	12.2	7,269	10,620
Bentpath	17.2	2013	12.7	6,077	8,200
Rosedale	17.2	2013	13.7	6,661	8,210
Dawn 47-49	17.2	2014	13.1	6,165	7,920
Dawn 167	17.2	2014	14.0	6,461	7,800
Bickford	17.2	2015	12.4	6,801	9,000
Enniskillen 28	17.2	2015	10.2	5,488	9,090
Oil City	17.2	2015	13.8	6,718	8,610
Oil Springs East	17.2	2015	13.1	6,477	8,390
Bentpath East	17.2	2016	13.4	6,098	7,850
Booth Creek	17.2	2016			8,350
Mandaumin	16.5	2016			9,820
Dawn 156	17.2	2017	12.7	6,153	8,290
Airport	17.2	2018	12.7	6,077	11,580
Black Creek	17.2	2020			8,300
Coveny	17.2	2020			8,830
Wilkesport	17.2	2020	12.4	6,619	8,930
Corunna	17.2	2021			10,520
Ladysmith	16.5	2021			9,730
Seckerton	17.2	2021			10,310

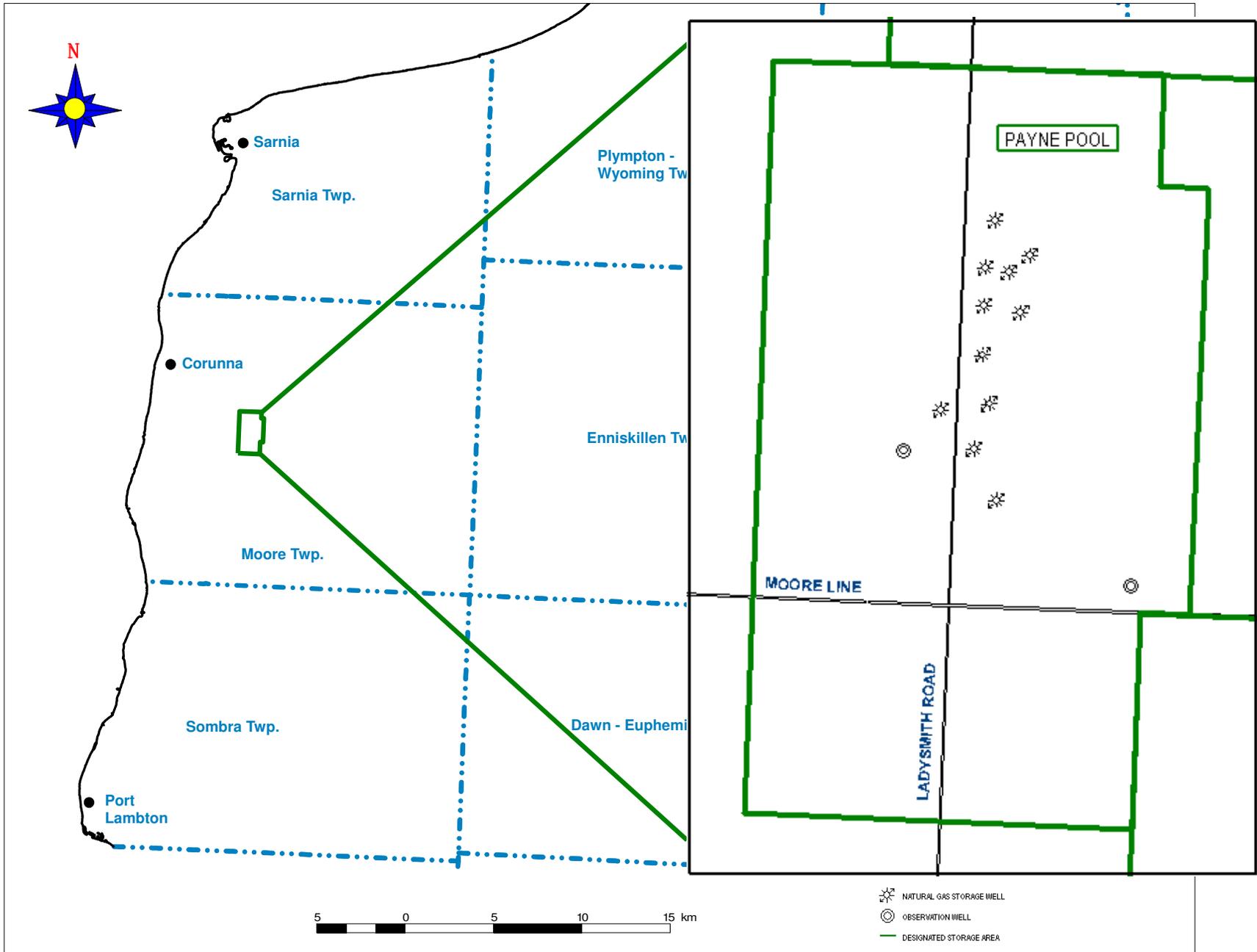
# GEOGRAPHICAL LOCATION OF THE DOW MOORE DESIGNATED STORAGE AREA



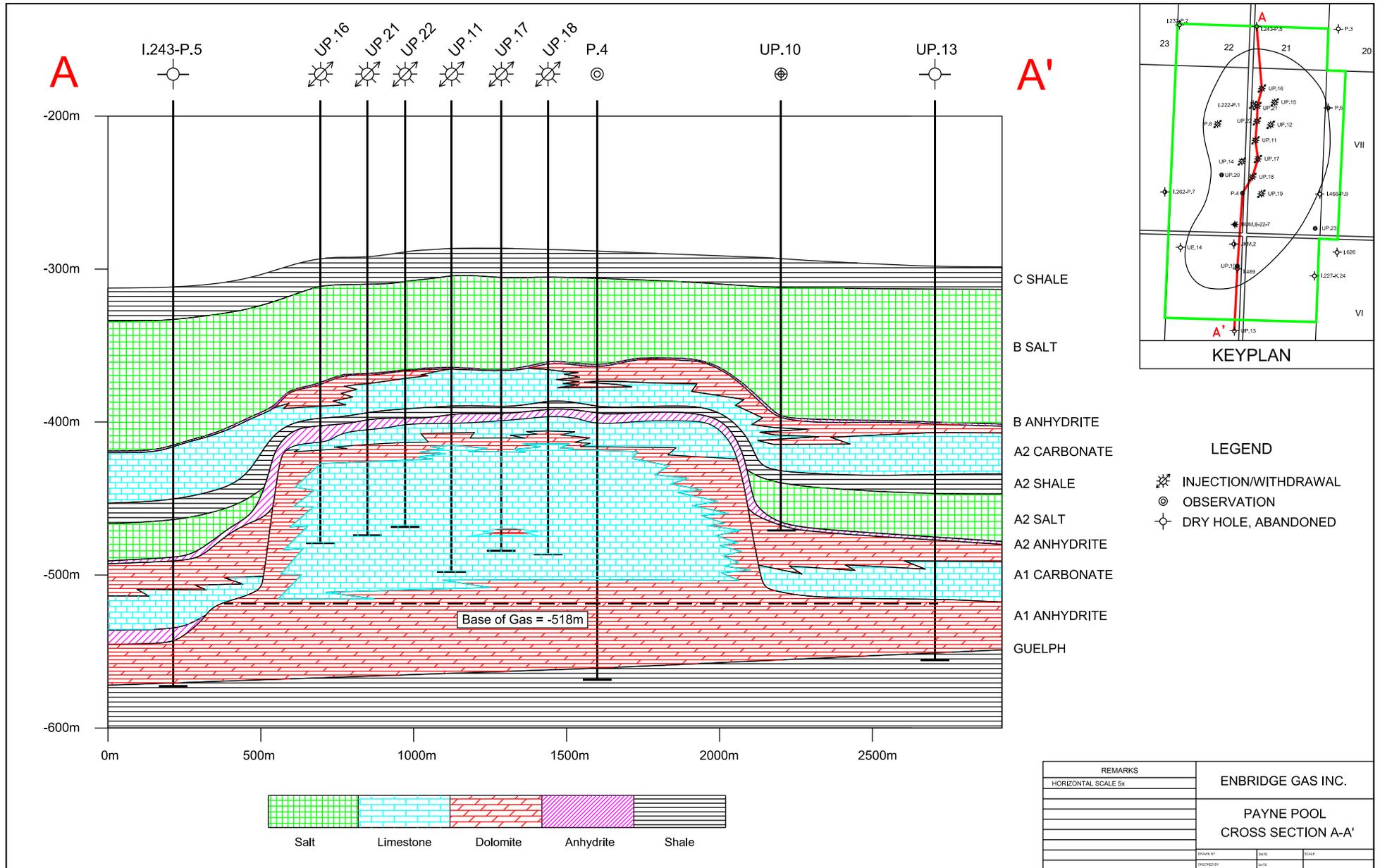




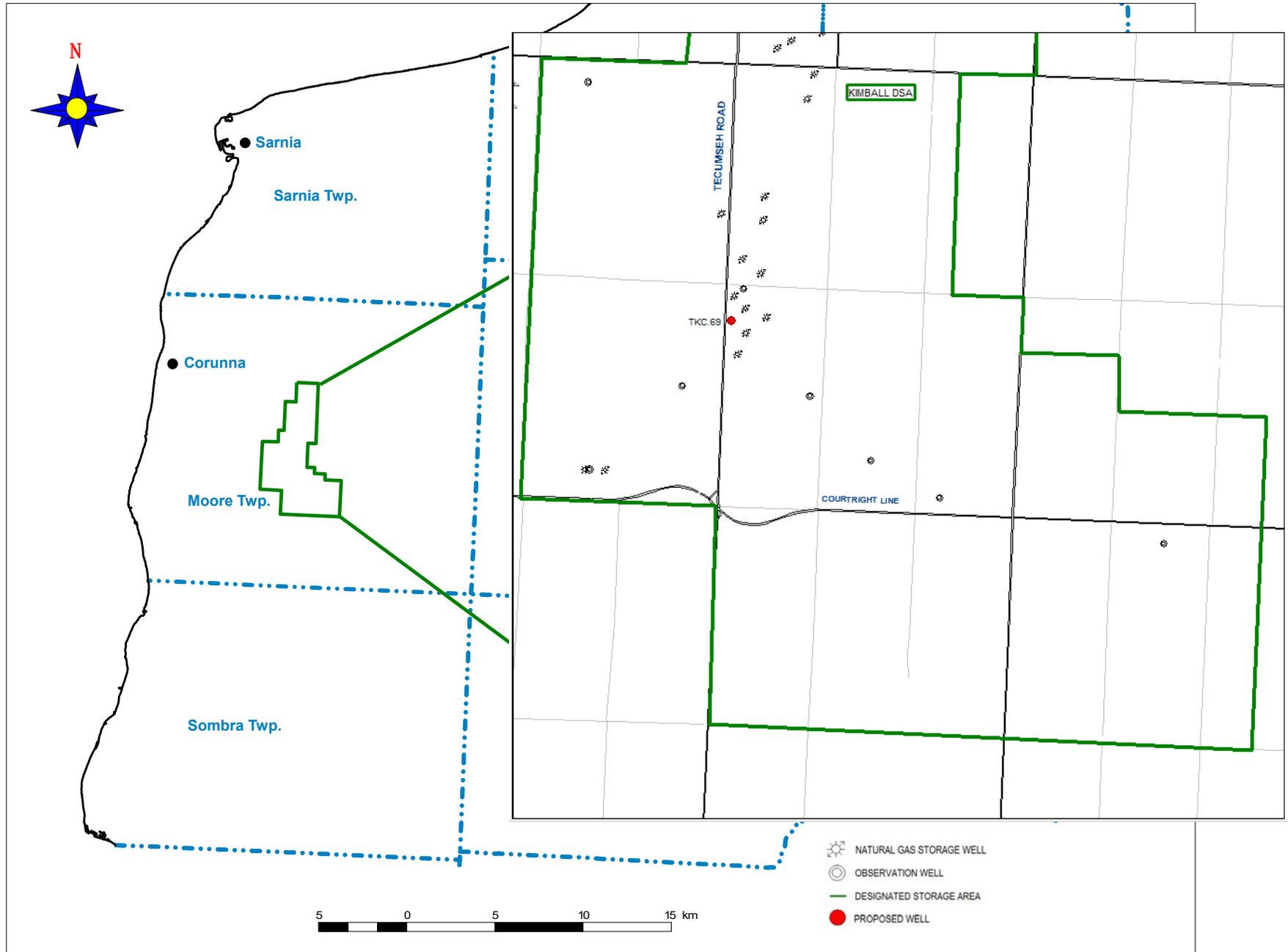
# GEOGRAPHICAL LOCATION OF THE PAYNE DESIGNATED STORAGE AREA

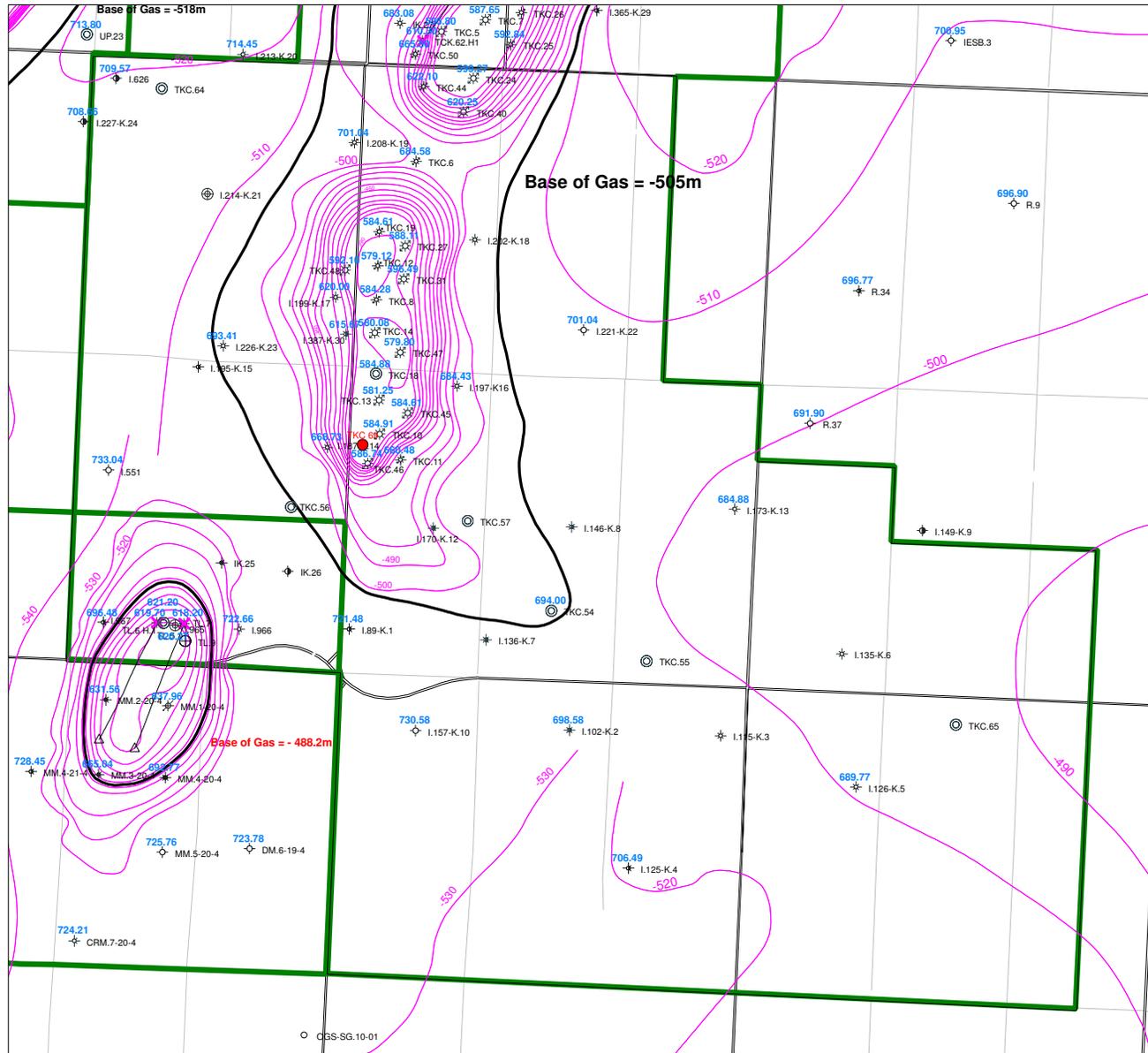






# GEOGRAPHICAL LOCATION OF THE KIMBALL DESIGNATED STORAGE AREA

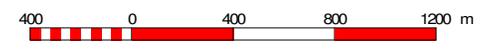




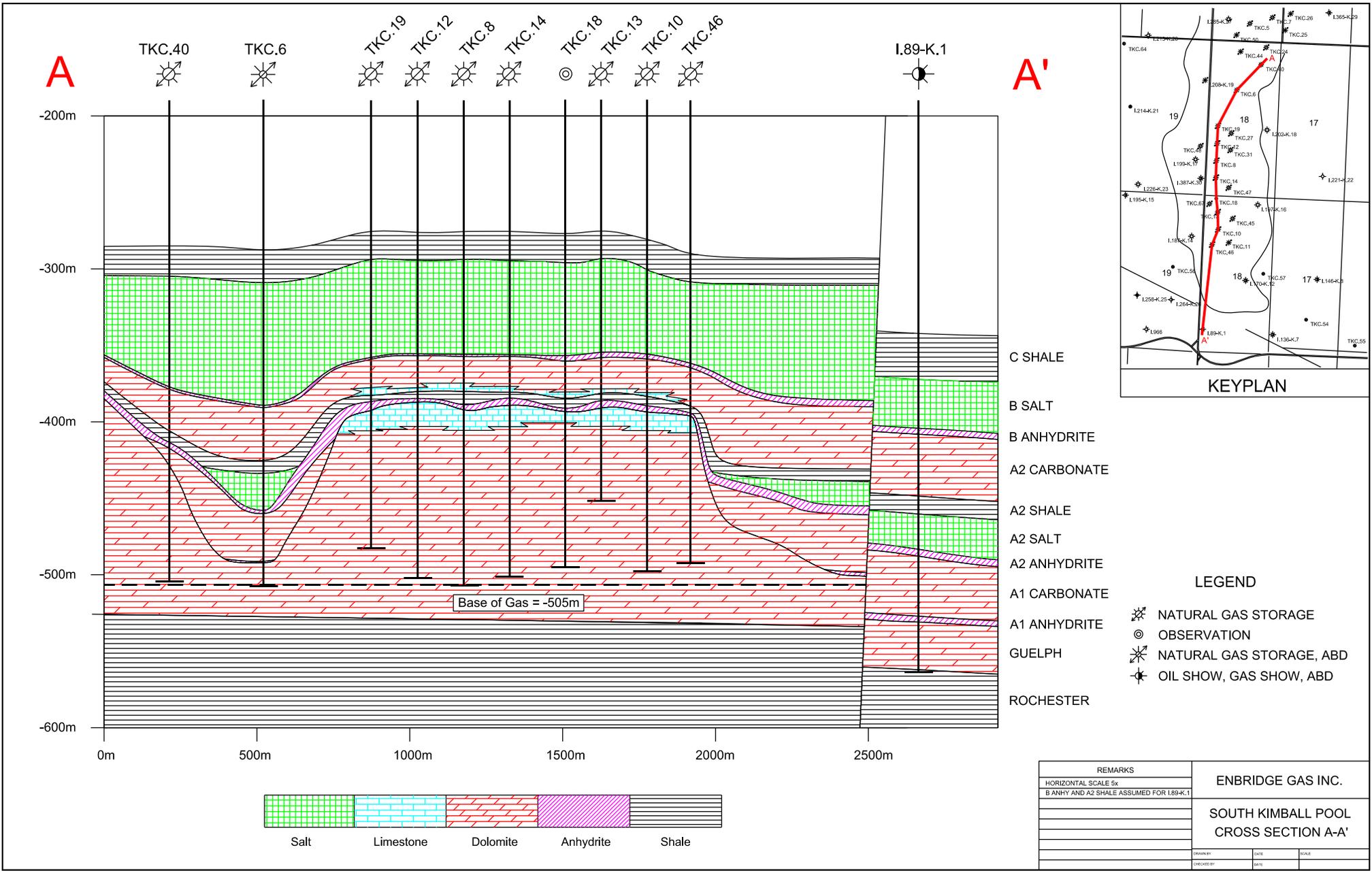
## LEGEND

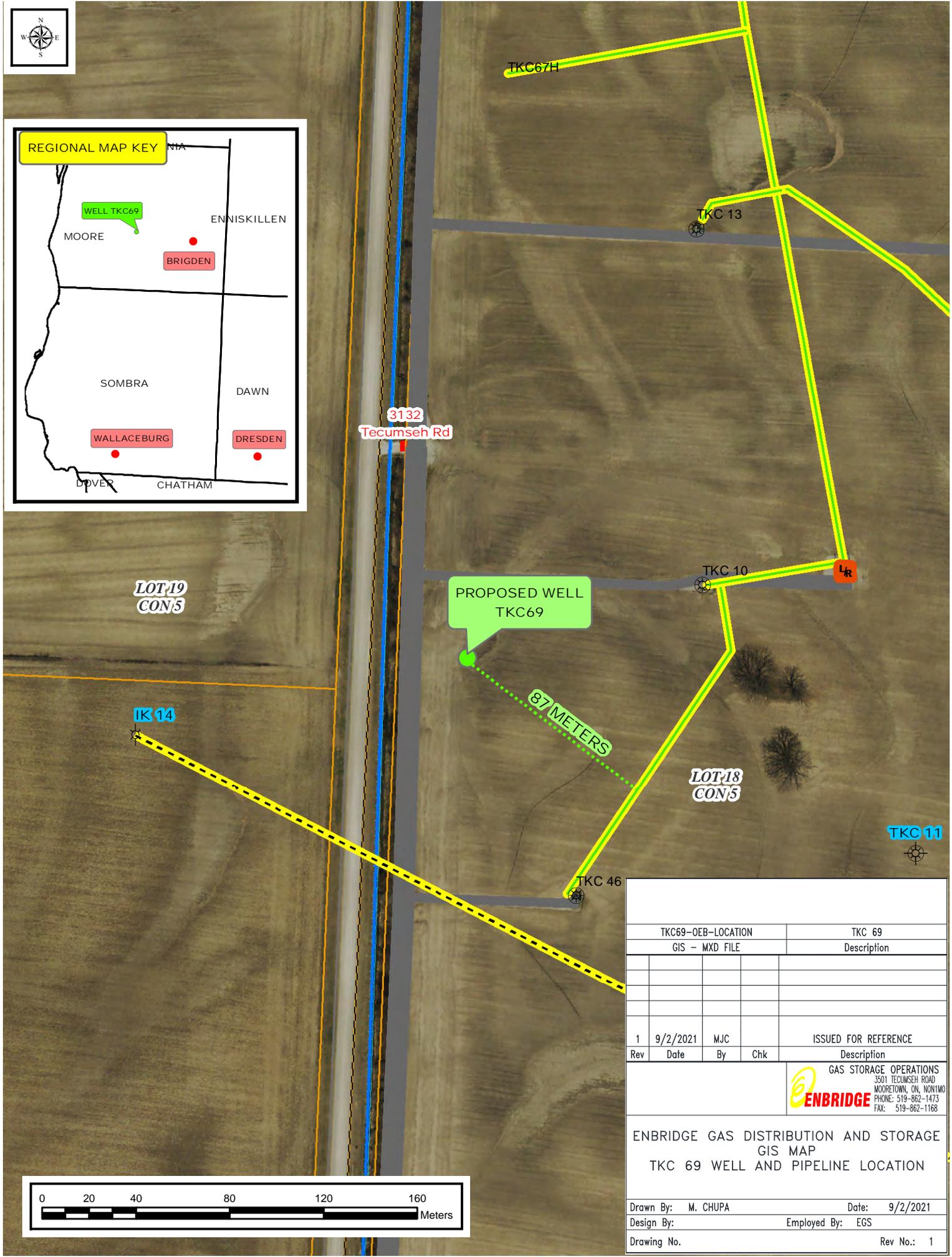
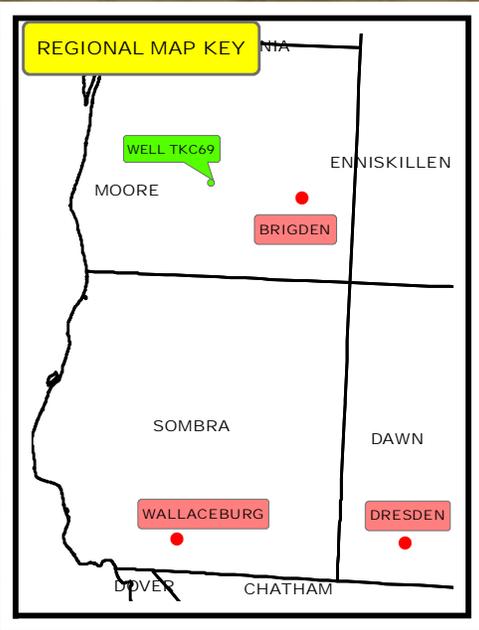
- 386.18** DEPTH TO CREST
- GUELPH CONTOUR
- BASE OF GAS
- DSA - ENBRIDGE GAS INC.
- DRY HOLE, ABANDONED
- NATURAL GAS STORAGE
- OBSERVATION
- OBSERVATION, ABANDONED
- NATURAL GAS STORAGE, ABANDONED
- OIL SHOW, GAS SHOW, ABANDONED
- OIL SHOW, ABANDONED
- GAS PRODUCER, OIL SHOW, ABANDONED
- GAS PRODUCER, ABANDONED
- GAS SHOW, ABANDONED
- OIL PRODUCER, GAS SHOW, ABANDONED
- HORIZONTAL WELL
- PROPOSED WELL

## SCALE



REMARKS	SOUTH KIMBALL POOL		
	GUELPH STRUCTURE AND DEPTH TO CREST		
	DRAWN BY	DATE	SCALE
	DESIGNED BY	DATE	PROJECT CODE



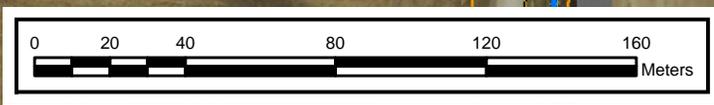


TKC69-OEB-LOCATION		TKC 69	
GIS - MXD FILE		Description	
1	9/2/2021	MJC	ISSUED FOR REFERENCE
Rev	Date	By	Chk

**ENBRIDGE** GAS STORAGE OPERATIONS  
 3501 TECUMSEH ROAD  
 MOORETOWN, ON, N0M1M0  
 PHONE: 519-862-1473  
 FAX: 519-862-1168

ENBRIDGE GAS DISTRIBUTION AND STORAGE  
 GIS MAP  
 TKC 69 WELL AND PIPELINE LOCATION

Drawn By: M. CHUPA Date: 9/2/2021  
 Design By: Employed By: EGS  
 Drawing No. Rev No.: 1





PROJECT COST AND ECONOMICS

1. Consistent with the Company's 2021/2022 Storage Enhancement Project, the Project will be funded entirely by Enbridge Gas's shareholder as an unregulated storage asset forming part of the Company's unregulated storage operations, and thus benefiting the unregulated business.<sup>1</sup> All costs associated with the Project will be captured in unregulated accounts. Enbridge Gas's ratepayers will not incur any rate impacts as a result of the Project. Accordingly, Enbridge Gas is not providing details of Project financial cost and economics.

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<sup>1</sup> EB-2020-0256, Exhibit I.STAFF.1

## ENGINEERING AND CONSTRUCTION

### Well Work and Drilling

1. All design, installation and testing of the proposed wells will be in accordance with the requirements of the *Ontario Oil, Gas & Salt Resources Act* (“OGSRA”), Ontario Regulation 245/97, OGSRA Standards v.2.0, and *Canadian Standards Association Z341 Standard for Storage of Hydrocarbons in Underground Formations* (“CSA Z341.1-18”).
2. Enbridge Gas understands that the OEB will require Enbridge Gas to conform to CSA Z341.1-18 to the satisfaction of the MNDMNRF. The Project design meets or exceeds the requirements of CSA Z341.1-18.
3. The drilling application for well TKC 69 was sent to the MNDMNRF via email and courier on September 1, 2021. MNDMNRF notified Enbridge Gas on October 5, 2021 that the well location needed to be moved at least 7m to the east of the originally proposed location. A revised drilling application was submitted by Enbridge Gas to the MNDMNRF on October 18, 2021. The revised application can be found at Attachment 1 to this Exhibit.
4. Enbridge Gas confirms that it will fulfill, to the satisfaction of the MNDMNRF, all the relevant requirements of CSA Z341.1-18, the OGSRA and related regulations. The following sections outline the requirements and work completed to date related to the aforementioned requirements.
5. Enbridge Gas contacted MNDMNRF via email on August 10, 2021 requesting a meeting with MNDMNRF staff to discuss upcoming Enbridge Gas projects. There

has been no response to date from the MNDMNRF concerning this request. The email can be found as Attachment 2 to this Exhibit.

6. Enbridge Gas contacted the MNDMNRF via email on September 27, 2021 to inform the MNDMNRF of Enbridge Gas's intention to submit an application to the OEB that would contain a request for a favourable report from the OEB for the drilling of a well in the Kimball-Colinville Storage Pool and a request for increasing the maximum operating pressure in the Dow Moore Storage Pool and the Payne Storage Pool.
7. Enbridge Gas also informed the MNDMNRF that the following studies had been conducted in compliance with CSA Z341.1-18 and to support the application:
  - Engineering studies completed by Geofirma confirming that the proposed operating pressure increase does not exceed the maximum safe operating pressure and that the planned pressure increase entails no risk of fracturing the caprock for the Dow Moore and Payne Storage Pools
  - A Neighbouring Assessment for each pool as prescribed by CSA Z341.1-18
  - A Risk Assessment ("What if" analysis of hazards and operability issues) for each pool for the proposed drilling and the proposed maximum operating pressure
8. Enbridge Gas included copies of the executive summaries of each study for each pool and informed the MNDMNRF that the entire studies would be made available to them in the Enbridge Gas office for their review and at their convenience. Enbridge Gas also offered to meet with the MNDMNRF to review the studies and the proposed application.

9. On September 28, 2021, MNDMNRF acknowledged receipt of the Enbridge Gas email and confirmed that they would contact Enbridge Gas if further clarification was required. An update was provided to the MNDMNRF that the filing date would be delayed due to the need to update the Dow Moore Geomechanical study. On October 18, 2021, the updated executive summary for Dow Moore was provided to the MNDMNRF. The communication can be found as Attachment 3 to this Exhibit.
  
10. The executive summaries supplied to the MNDMNRF included the following technical information in support of the proposed drilling operation and the proposed elevation of the maximum operating pressure:
  - Engineering studies completed by Geofirma confirming that the maximum safe operating pressure exceeds 16.5 kPa/m (0.73 psi/ft) for the Dow Moore Storage Pool and 17.2 kPa/m (0.76 psi/ft) for the Payne Storage Pool. The approach used by Geofirma is consistent with previous studies completed for storage pools operated at elevated pressure gradients above 15.9 kPa/m (0.70 psi/ft).
  - An Assessment of Neighbouring Activities for the Dow Moore Storage Pool, the Payne Storage Pool and the South Kimball Storage Pool as prescribed by Clause 5.2 of CSA Z341.1-18, assessing: a) wells within 1 kilometre; b) operations within 5 kilometre; and c) the integrity of all wells penetrating the storage zone
  - “What If” Analysis of hazards and operability for each of the pools
  
11. The Executive Summaries can be found at the following attachments to this Exhibit:
  - Attachment 4 for Dow Moore Storage Pool
  - Attachment 5 for Payne Storage Pool

- Attachment 6 for South Kimball Storage Pool

12. The executive summary for the Dow Moore Storage Pool contains:

- An outline of the parameters of the Engineering Study completed by Geofirma and confirmation that the proposed increase of 16.5 kPa/m (0.73 psi/ft) does not exceed 80% of the fracture gradient in compliance with CSA Z341.1-18 and that the planned pressure increase entails no risk of fracturing the caprock.
- An outline of the considerations employed in the “What If” Analysis of Hazards and Operability Issues sessions and report. A total of 242 “What If” entries were generated from the scope of CSA Z341.1-18 during the sessions and there were no action items generated from the risk ranking sessions. It was concluded that the sessions were a complete study of the hazards and operability issues associated with the proposed operating pressure elevation.
- A synopsis of the methodology and results of the Assessment of Neighbouring Activities for the Dow Moore Storage Pool. The assessment identified 92 wells (both abandoned and active) that have been drilled within 1 kilometre of the base of gas of the Dow Moore Storage Pool, with 32 of the wells (14 abandoned wells and 18 active wells) penetrating the storage zone. For each of the wells within 1 kilometer of the base of gas of the Dow Moore Storage Pool, Enbridge Gas thoroughly reviewed the completions and abandonment methods and the wells were subjected to a qualitative risk ranking evaluation. The review indicated that there will be

no impact on the integrity of the storage zone from the wells (both active and abandoned) located within 1 kilometer and/or existing operations located within 5 kilometers of the base of gas of the Dow Moore Storage Pool.

13. The executive summary for the Payne Storage Pool contains:

- An outline of the parameters of the Engineering Study completed by Geofirma and confirmation that the proposed increase of 17.2 kPa/m (0.76 psi/ft) does not exceed 80% of the fracture gradient in compliance with CSA Z341.1-18 and that the planned pressure increase entails no risk of fracturing the caprock.
- An outline of the considerations employed in the “What If” Analysis of Hazards and Operability Issues sessions and report. A total of 232 “What If” entries were generated from the scope of CSA Z341.1-18 during the sessions and there were no action items generated from the risk ranking sessions. It was concluded that the sessions were a complete study of the hazards and operability issues associated with the proposed operating pressure elevation.
- A synopsis of the methodology and results of the Assessment of Neighbouring Activities for the Payne Storage Pool. The assessment identified 40 wells (both abandoned and active) that have been drilled within 1 kilometre of the base of gas of the Payne Storage Pool, with 16 of the wells (3 abandoned wells and 13 active wells) penetrating the storage zone. For each of the wells identified within 1 kilometer of the base of gas of the Payne Storage Pool, Enbridge Gas thoroughly reviewed the

completions and abandonment methods and the wells were subjected to a qualitative risk ranking evaluation. The review indicated that there will be no impact on the integrity of the storage zone from the wells (both active and abandoned) located within 1 kilometer and/or existing operations located within 5 kilometers of the base of gas of the Payne Storage Pool.

14. The executive summary for the drilling of TKC 69 in the South Kimball Storage Pool contains:

- An outline of the considerations employed in the “What If” Analysis of Hazards and Operability Issues sessions and report. A total of 268 “What If” entries were generated from the scope of CSA Z341.1-18 during the sessions and there were no action items generated from the risk ranking sessions. It was concluded that the sessions were a complete study of the hazards and operability issues associated with the proposed operating pressure elevation.
- A synopsis of the methodology and results of the Assessment of Neighbouring Activities for the South Kimball Storage Pool. The assessment identified 88 wells (both abandoned and active) that have been drilled within 1 kilometre of the base of gas of the South Kimball Storage Pool, with 38 of the wells (21 abandoned wells and 17 active wells) penetrating the storage zone. For each of the wells within 1 kilometre of the base of gas of the South Kimball Storage Pool, Enbridge Gas thoroughly reviewed the completions and abandonment methods and the wells were subjected to a qualitative risk ranking evaluation. The review indicated that there will be no impact on the integrity of the storage

zone from the wells (both active and abandoned) located within 1 kilometer and/or existing operations located within 5 kilometers of the base of gas of the South Kimball Storage Pool.

General Pipeline Installation, Testing and Design Parameters

15. The design specifications for the pipeline component of the Project are provided in Table 1 below. All design, installation and testing of the proposed pipelines will be in accordance with the requirements of Ontario Regulation 210/01 Oil and Gas Pipeline Systems (“Regulation”) under the *Technical Standards and Safety Act, 2000*. This Regulation governs the installation of pipelines in Ontario.

Table 1: Pipeline Design Specifications

NPS 10 (273.1 mm)	Class 2 General Location
Location Factor	0.9
Design Factor	0.8
Maximum Operating Pressure (MOP)	9,930 kPa
Mainline Test Medium	Water
Mainline Minimum Test Pressure	MOP x 1.25 (12,413 kPa)
Grade (minimum)	*
Wall Thickness (minimum)	*
%SMYS	72%
Category	II

\*Grade and wall thickness will be selected to keep %SMYS below 72% in accordance with Location and Design Factor for Class 2

16. The design meets or exceeds the requirements of *Canadian Standards Association Z662 Standard for Oil and Gas Pipeline Systems* (latest edition) (“CSA Z662”) in accordance with the Code Adoption Document under the Regulation.

17. CSA Z662 includes a classification system on land use and population density to determine the appropriate design factors where applicable. A class location unit is defined as the area that extends 200 meters on either side of the centreline of any continuous 1.6 kilometer length of pipeline. As applicable, Class Location Designations will be in accordance with Table 4.1 of CSA Z662.
18. The minimum depth of cover from top of pipe to final grade will be in accordance with Section 4.11 Cover and Clearance in Table 4.9 of the applicable current edition of CSA Z662. Additional depth of cover will be provided to accommodate planned or existing underground facilities, or in specific areas in compliance with applicable regulatory standards.
19. No blasting is anticipated along the proposed pipeline route.
20. The proposed lateral pipeline will be pressure tested hydrostatically with water in the manufacturing shop prior to installation. Testing will adhere to the requirements of CSA Z662 Section 8 at a minimum. The manufacturing contractor will supply and dispose of the hydrostatic test water in accordance with Ministry of Environment, Conservation and Parks requirements.
21. After the test water is removed, the line will be dried. The pipeline will be checked for defects, this may include but will not be limited to, the use of a caliper tool. Cathodic protection will be applied to the completed pipelines.
22. Enbridge Gas anticipates no concerns with obtaining material for the pipeline component of the Project within the proposed timelines. Enbridge Gas also anticipates no concerns with obtaining a contractor to complete construction.

23. Enbridge Gas will construct the proposed pipeline in compliance with engineering design, its current construction procedures and specifications, environmental mitigation identified in the Environmental Report, permit conditions and commitments to regulators and landowners. Enbridge Gas continuously updates and refines its construction procedures and specifications and complies with environmental mitigation recommended to minimize potential impacts to the environment and land.

#### Engineering and Construction Risk Management

24. Well upgrades require the Dow Moore and Payne Storage Pools to be taken out of service and the reservoirs to be below 5,000 kPa. Drilling TKC 69 will require the South Kimball Storage Pool to be taken out of service and the reservoir to be below 3,500 kpa. This will provide a suitable and safe environment to complete the proposed work. The reservoirs must be returned to normal operation by late September 2022 to ensure that there is no disruption to services for storage injections. If Enbridge Gas is not able to complete construction within the allotted window, the Project or portions of the Project will need to be deferred to the following year.
25. Risks to the drilling portion of the project scope and timing have been mitigated through geological interpretations, including reservoir modelling and 3D seismic interpretation, to select the most suitable well location in the Kimball-Colinville Storage Pool (TKC 69). These techniques assess the permeability and porosity to determine areas of potential high deliverability.
26. Risks to the pipeline portion of the project scope and timing have been mitigated through coordination of planned pipeline construction timing with the required drilling and well construction. This will allow the impacted pools to be taken out of

service only once in 2022, as opposed to having multiple outages over several years. If the pipeline construction does not occur as planned in 2022, Enbridge Gas will need to defer construction until the following season, which will require the South Kimball Storage Pool to be taken out of service in 2023.

**Drilling Program**  
***TKC #69, Moore 3-18-V***  
***Kimbal Colinville Pool***

**Enbridge Gas Inc.**  
**Geology and Reservoir Engineering**

**October 18, 2021**



Oil, Gas and Salt Resources Act

# Application for a Well Licence

Form 1

To the Minister of Natural Resources

v.2015-12-15

The undersigned operator applies for a well licence under the Oil, Gas and Salt Resources Act and the Regulations thereunder and submits the following #

1. WELL NAME TKC #69, Moore 3-18-V Target Formation Guelph

Purpose of Proposed Well (Well Type) Natural Gas Storage

2. OPERATOR Enbridge Gas Inc. Tel # 519 436-4600 Fax # 519 436-4560

Street Address 50 Keil Drive North City Chatham Prov. On Postal Code N7M 5M1

Mailing Address \_\_\_\_\_ City \_\_\_\_\_ Prov. \_\_\_\_\_ Postal Code \_\_\_\_\_

Contact Name Mike Learn Contact Tel # 519-436-4600 x5002815

Email [michael.learn@enbridge.com](mailto:michael.learn@enbridge.com)

3. LOCATION County Lambton Township Moore

Tract 3 Lot 18 Concession V Offshore: Block \_\_\_\_\_ Tract \_\_\_\_\_ Licence/Lease No. \_\_\_\_\_

Surface location, metres from 350.2 m North  South  Latitude 42°49'21.442" N Bottom-hole Lat. 42°49'21.442" N

Lot Boundaries 60.2 m East  West  Longitude 82°22'16.772" W Bottom-hole Long. 82°22'16.772" W

Within 1.6 km of Designated Storage Area? Yes  No  Off-target? Yes  No

4. WELL PARTICULARS Vertical  Horizontal  Directional  Deepening  Re-entry  Lateral

Rig Type: Rotary  Cable  Well to be cored? Yes  No  Formation at TD Guelph

Ground Elevation 191.1 Proposed Depth 681.6 Proposed Depth TVD 681.6 Proposed Start Date May-21

5. POOLING

Pooling of the Spacing Unit or unitization of the Unit Area shown on the attached well location plan has been completed (see Ont. Reg. 245/97 definitions for "pooled spacing unit" and "unitize") Yes  No

6. DRILLING CONTRACTOR Predator Drilling Inc. Tel # 403-264-6712

Address 2120, 500 4th Ave S.W. City Calgary Prov. AB Postal Code T2P 2V6

7. PROPOSED CASING AND CEMENTING PROGRAM

Hole Size (mm)	Casing O.D. (mm)	Weight (kg/m)	Grade	New, Used or in-hole	Setting Depth TVD	Setting Formation	CASING SETTING INFORMATION		
							How Set	Cement Type	Cement Top KB / RF
482.6	406.40	96.73	H-40	New	57.1	Kettle Point / Bedrock	Cemented	0:1:0	4
374.4	298.50	69.94	H-40	New	399.6	F Unit Shale	Cemented	0:1:8; 0:1:0	4
269.9	219.10	47.62	K-55	New	587.1	A-2 Anhydrite	Cemented	0:1:0	4

8. BLOW-OUT PREVENTION EQUIPMENT  
Diverter, Annular Preventer; Blind Rams, Pipe Rams

9. WELL SECURITY Name of Trustee 1236596 Ontario Limited Total # Unplugged Wells 368 Current Balance \$70,000  
Harrison Pensa & Associates

10. REMARKS

11. ENCLOSURES Fee  Location Plan  (Land wells only) Drilling Program

12. NOTICE OF COLLECTION

The Ministry of Natural Resources and Forestry is collecting your personal information under the authority of the *Oil, Gas and Salt Resources Act*. Any personal information provided on this application will be used for licensing and law enforcement purposes only and will be protected in accordance with the Freedom of Information and Protection of Privacy Act. If you have questions about use of your personal information, please contact the Policy and Program Officer, Petroleum Operations Section, Ministry of Natural Resources and Forestry, 659 Exeter Road, London N6E1L3, 519-873-4638.

13. AUTHORITY

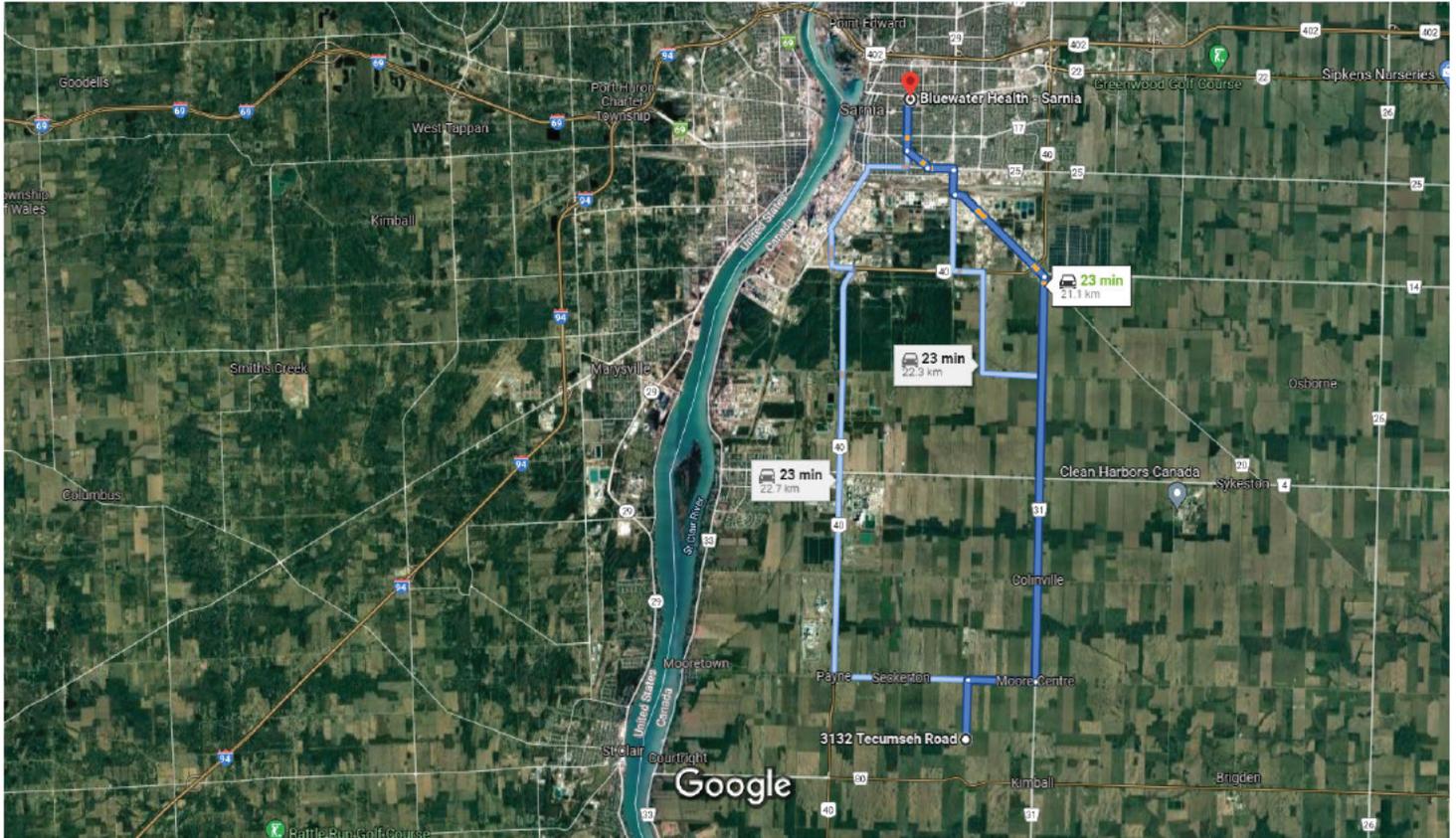
The undersigned certifies that the information provided herein is complete and accurate, the operator has the right to drill or operate a well in the above location, and he/she has authority to bind the operator.

Date (d/m/y)	<u>18-Oct-21</u>	Name	<u>Mike Learn</u>	Signature
		Company	<u>Enbridge Gas Inc.</u>	Title <u>Principal Drilling and Reservoir Engineer</u>



3132 Tecumseh Rd, St. Clair, ON N0N 1H0 to Bluewater Health - Sarnia

Drive 21.1 km, 23 min



Imagery ©2021 TerraMetrics, Map data ©2021 2 km

### 3132 Tecumseh Rd

St. Clair, ON N0N 1H0

#### Take Moore Line to Kimball Rd/Lambton County Rd 31

- 3 min (3.4 km)
- ↑ 1. Head north on Tecumseh Rd toward Moore Line  
1.6 km
- 2. Turn right onto Moore Line  
1.8 km

#### Continue on Kimball Rd/Lambton County Rd 31. Take Plank Rd to Maria St in Sarnia

- 18 min (17.5 km)
- ⬅ 3. Turn left onto Kimball Rd/Lambton County Rd 31  
10.8 km
- ⬅ 4. Turn left onto Plank Rd/County Rd 20  
Continue to follow Plank Rd  
3.3 km
- 5. Turn right onto Indian Rd S/County Rd 29  
650 m
- ⬅ 6. Turn left onto Confederation St/County Rd 25  
750 m

- 7. Turn right onto Ontario St  
750 m
- 8. Turn right onto Russell St S  
1.2 km

**Drive to your destination**

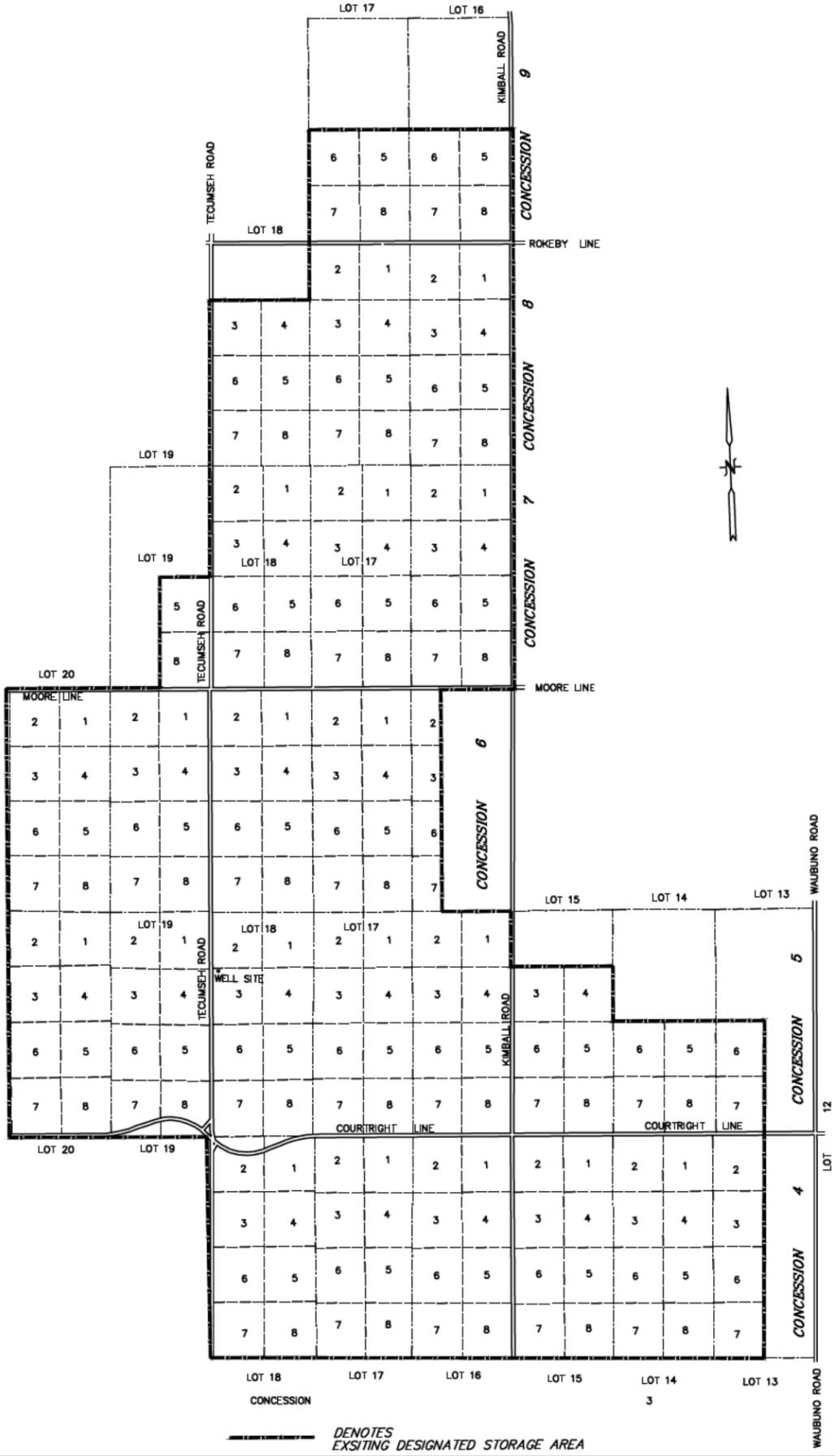
- 2 min (210 m)
- 9. Turn right onto Maria St  
100 m
- ↶ 10. Turn left  
① Destination will be on the right  
110 m

## Bluewater Health - Sarnia

89 Norman St, Sarnia, ON N7T 6S3

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

**KEY PLAN  
NOT TO SCALE**



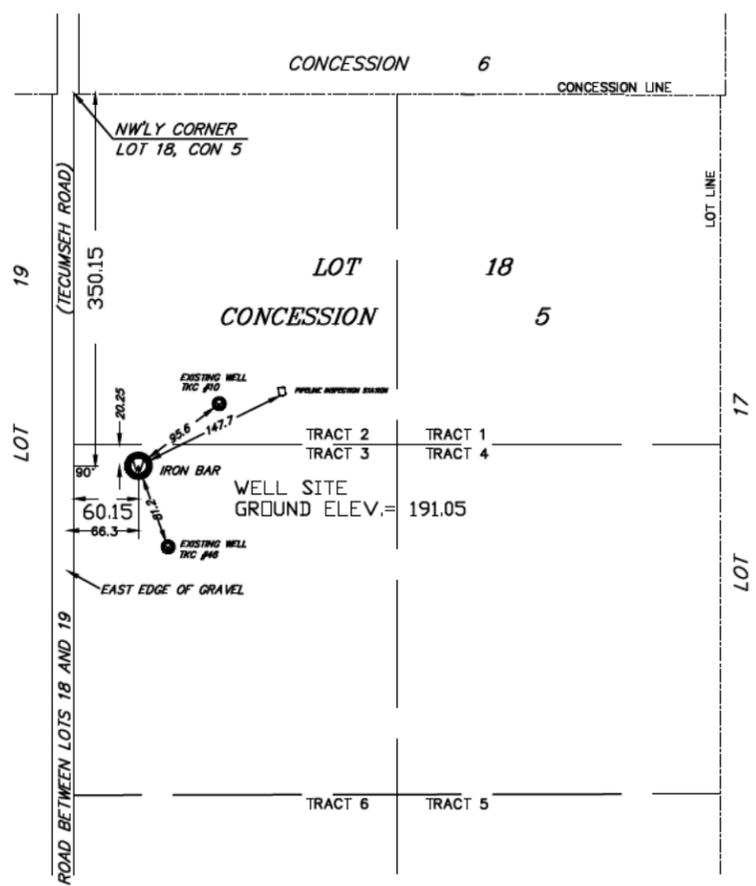
DENOTES EXISTING DESIGNATED STORAGE AREA

**PLAN OF PROPOSED WELL  
LOT 18  
CONCESSION 5  
GEOGRAPHIC TOWNSHIP OF MOORE  
TOWNSHIP OF ST CLAIR  
COUNTY OF LAMBTON**



WELL NAME  
TKC #69 - MOORE - 3 - 18 - 5

NOTE (WELL SITE) CO-ORDINATES  
LATITUDE N. 42°49'21.442" LONGITUDE W. 82°22'16.772"  
U.T.M. N. 4 742 029.6 E. 387 903.7

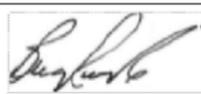


PREPARED BY  
**BRISCO AND O'ROURKE**  
1425331 ONTARIO LIMITED  
SERVING THE PETROLEUM INDUSTRY  
THROUGHOUT ONTARIO  
WELLS, CONSTRUCTION AND TECHNICAL SURVEYING  
DIGITAL MAPPING  
LAND AND LEASE SURVEYS  
OFFICE (519) 351-5073  
CELL (519) 401-0120  
P.O. BOX 327 - N7M-5K4  
CHATHAM, ONTARIO

NOTE METRIC  
DISTANCES SHOWN ON THIS PLAN ARE IN METERS AND  
CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

NOTE GEODETIC HORIZONTAL CONTROL  
U.T.M. CO-ORDINATES ARE GEODETIC  
(DATUM NAD 83 ORIGINAL) AND REFERRED  
TO MONUMENTS NO. 00119683041Z AND 693767

NOTE BENCH MARK  
ELEVATIONS ARE REFERRED TO GEODETIC DATUM AND  
REFERENCE BENCH MARK BEING  
81U138 SARINA  
ELEVATION = 180.512

PREPARED FOR  
**ENBRIDGE GAS INC.**  
FILE NO. 21-5127 PLAN NO. ENB6881.DWG  
  
OCTOBER 15, 2021  
**BRIAN O'ROURKE**  
AUTHORIZED BY THE MINISTER OF NATURAL RESOURCES  
UNDER THE PETROLEUM RESOURCES ACT OF ONTARIO

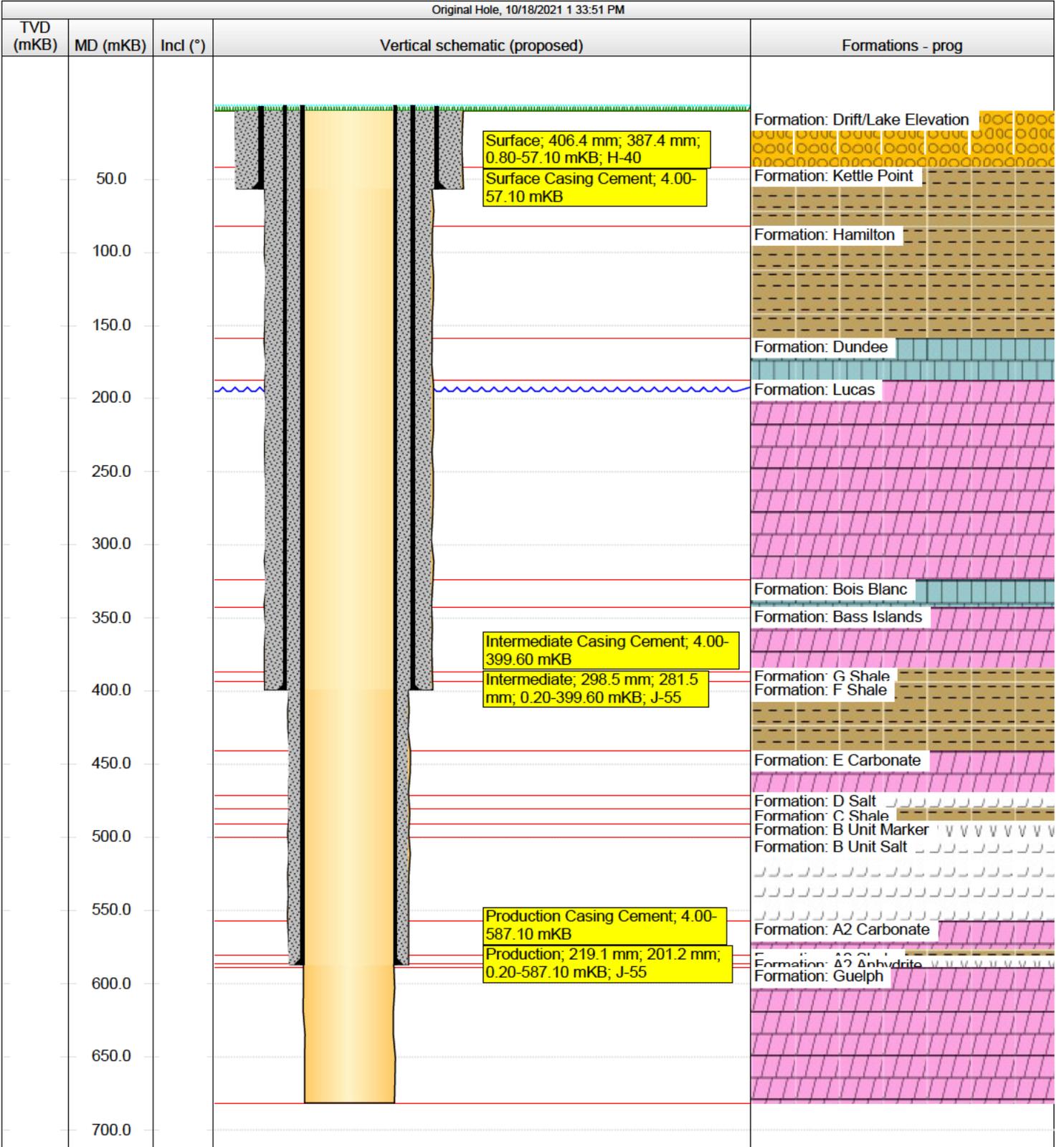
**Well Name: TKC #69, Moore 3-18-V**  
**License Number:**

**Most Recent Job**

Job Category	Primary Job Type	Secondary Job Type	Start Date	End Date

**TD: 681.60**

Original Hole, 10/18/2021 1 33:51 PM



<b>Contacts</b>	
<u>TKC #69, Moore 3-18-V</u>	
<b>Police Fire &amp; Ambulance</b>	<b>911</b>
<b>911 Address</b>	<b>6399 Tecumseh Road, St. Clair Township</b>
<b>Tecumseh Control Room</b>	<b>519-862-6012</b>
<b>M.O.E. Spills Hotline</b>	<b>1-800-268-6060</b>
<b>MNR Contact</b>	<b>519-873-4645</b>
<b>MOL</b>	<b>1-877-202-0008</b>

**ENBRIDGE GAS CONTACTS**

Rob Newport -	Storage Superintendent	519-683-4468 x5102178 519-365-0897	<a href="mailto:Rob.Newport@enbridge.com">Rob.Newport@enbridge.com</a>
Shelie Cascadden	Geologist	519-818-7008	<a href="mailto:Shelie.Cascadden@enbridge.com">Shelie.Cascadden@enbridge.com</a>
Julie Clarke	Geologist	519-436-4600 x5002749 519-360-9265	<a href="mailto:Julie.Clarke@enbridge.com">Julie.Clarke@enbridge.com</a>
Mike Learn	Drilling and reservoir engineer	519-436-4600 x5002815 519-350-5351 519-251-9701	<a href="mailto:michael.learn@enbridge.com">michael.learn@enbridge.com</a>
Kathy McConnell	Technical Manger storage and reservoir	519-862-6032 519-312-2168	<a href="mailto:kathy.mcconnell@enbridge.com">kathy.mcconnell@enbridge.com</a>
Chris Pincombe	Land Agent	519-862-6092 519-381-1408	<a href="mailto:Chris.pincombe@enbridge.com">Chris.pincombe@enbridge.com</a>

**Contractors**

<b>Contractor</b>	<b>Contact</b>	<b>Phone</b>	<b>Email</b>
<b><u>Drilling and Cementing</u></b>			
Predator Drilling	Jon Picray, Tool Push	403-801-1824	<a href="mailto:jpicyay@predatordrilling.com">jpicyay@predatordrilling.com</a>
	Paulo Facca	403-264-6712 403-669-1372	<a href="mailto:PFacca@predatordrilling.com">PFacca@predatordrilling.com</a>
Terry Marsh Well Drilling	Terry Marsh	519-695-6060 519-695-9804	
Black Creek	Ian Veen	519-834-2941 519-383-4645	
<b><u>Wellheads</u></b>			
Wellmaster	Brian DeJaegher	519-688-0500	<a href="mailto:bdejaegher@wellmaster.ca">bdejaegher@wellmaster.ca</a>
Stream-Flo	Karen Derrick	832-647-0710	<a href="mailto:kderrick@streamflo.com">kderrick@streamflo.com</a>
ECAN	Robert Wainwright	519-627-3824 519-468-3922	
<b><u>Drill Bits:</u></b>			
Tom Linehan	Varel Rock Bits Canada Sales Manager	Office: 403-968-9369 Cell: 403-303-2533	<a href="mailto:tlineham@varel.com">tlineham@varel.com</a>
Mike Kellar	Trendon Bit Service Ltd. Director, Sales	Office: 403-990-1299	<a href="mailto:mkellar@trendoninc.com">mkellar@trendoninc.com</a>
<b><u>Wireline Services:</u></b>			
Baker Hughes	Dapo Laniya	Office: 519-332-8030 Cell: 519-339-6783	<a href="mailto:Dapo.Laniya@bakerhughes.com">Dapo.Laniya@bakerhughes.com</a>
Weatherford	Dave Tipping	Office: 519-683-2010 Cell: 519-436-3541	<a href="mailto:dave.tipping@canada.weatherford.com">dave.tipping@canada.weatherford.com</a>
<b><u>Water Hauling:</u></b>			
McKeegan	Melvin McKeegan	519-864-1782	

**Contacts**

**TKC #69, Moore 3-18-V**  
519-332-7676

Harold Marcus Limited	Denis Marcus	Office: 519-695-3735 Cell: 519-380-5238	<a href="mailto:dmarcus@haroldmarcus.com">dmarcus@haroldmarcus.com</a>
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**Rental Equipment:**

Dale Holland	Wheatley Wireline Services Ltd.	Office: 519-825-3680 Fax: 519-825-9348 Cell: 519-322-8015
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Keith Davis	Ecan Energy Services Inc.	Office: 519-627-3824 Fax: 519-627-5306 Cell: 519-437-7038	<a href="mailto:kmecanen@kent.net">kmecanen@kent.net</a>
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Vern Anger	Canfish Services Inc. Fishing Supervisor	Office: 780-955-2600 Cell: 403-845-0012
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Orval Beam	Orval L. Beam Limited Operations Manager Tank Rentals	Office: 519-436-0164 Fax: 519-436-0164 Cell: 519-436-4801
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**Welders:**

St. Clair Mechanical President	John Dawson	Office: 519-864-0927 Cell: 519-330-9672
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**Government & Other Agencies**

MNRF	Petroleum Resources Centre	Office: 519-873-4634 Fax: 519-873-4645	<a href="http://ogsr.mnrf.gov.on.ca">ogsr.mnrf.gov.on.ca</a>
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MOECC	Spill Reporting	1-800-268-6060
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MOL	Health & Safety	1-800-265-1676
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Oil, Gas & Salt Resources Library		Office: 519-686-2772 Fax: 519-686-7225
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**Geological Prognosis of: TKC #69, Moore 3-18-V**

<b>Lot:</b> 18	<b>Township:</b> Moore
<b>Conc:</b> V	<b>County:</b> Lambton
<b>Tract:</b> 3	<b>Objective:</b> Natural gas Storage
<b>Pool:</b> Kimbal Colinville	<b>Coordinates:</b> 350.2 m. <b>South</b> 60.2 m. <b>East</b>
	<b>UTM Coords:</b> 387903.7, 4742029.6

**Geology Contacts:** Shelie Cascadden 436-4600 x5002153 (work) 519-818-7008 (cell)

**Remarks:** Base of Gas -518  
Tops derived from TKC6, TKC10

Contacts	Top (m.)	Elev.(m.)	Thickness	Gas	Oil	H2O	Remarks/Expected Pressure
Rig Floor	0.0	195.1	4.0				
Ground Elevation	4.0	191.1	37.6				
Kettle Point / Bedrock	41.6	153.5	40.5				
Hamilton	82.1	113.0	76.5				
Dundee	158.6	36.5	29.5				
Detroit River	188.1	7.0	136.7			X	Sulphur Water
Bois Blanc	324.8	-129.7	18.3				
Bass Island	343.1	-148.0	44.3				
G Unit	387.4	-192.3	6.7				
F Unit Shale	394.1	-199.0	47.5				
F Salt			0.0				
E Unit Carbonate	441.6	-246.5	29.5				
D Unit Salt	471.1	-276.0	9.7				
C Unit Shale	480.8	-285.7	10.3				
B Unit Marker	491.1	-296.0	9.0				
B Unit			0.0				
B Salt	500.1	-305.0	57.0				
B Anhydrite			0.0				
A-2 Unit Carbonate	557.1	-362.0	24.0	x			
A-2 Shale	581.1	-386.0	5.5				
A-2 Salt			0.0				
A-2 Anhydrite	586.6	-391.5	3.0	x			A2A could be thinner (1.5m)
A-1 Unit Carbonate			0.0				
A-1 Anhydrite			0.0				
Guelph	589.6	-394.5	92.0				Gas - 4100 kPa
Total Depth	681.6	-486.5					

**Sample Requirements:**

One sample shall be collected every 3 meters of formation drilled once the Kettle Point/bedrock is reached

**WELLBORE, CASING AND CEMENTING SUMMARY**

*TKC #69, Moore 3-18-V*

Description	Hole Size (mm)	MD / TVD (mKB)	Drilling Fluids	Casing Size, Grade, Weight kg/m	Formation @ Depth	Depth Into Formation (m)	How Set
Conductor Hole	482.6	42.6	n/a	508	Kettle Point / Bedrock	1	Driven - Cement squeeze if necessary. If a rotary rig is used for the drilling of the well conductor casing will not be run
		42.6		LP			
				n/a			
Surface Hole	482.6	57.1	n/a or water	406.40	Kettle Point / Bedrock	15.5	Cement to surface with 6.28 Class G 0-1-0 cement with 2-3% CaCl <sub>2</sub> . See Cement Program for volumes
		57.1		H-40			
				96.73			
Intermediate Hole	374.4	399.6	Fresh Water	298.50	F Unit Shale	5.5	Cement to Surface with 21.61 Tonne Class G 0-1-8 plus 1-3% CaCl <sub>2</sub> followed by 8.98 Class G with 1-3% CaCl <sub>2</sub> . Depending on hole conditions, consideration may be given to running tixotropic cement or additional loss circulation materials
		399.6		H-40			
				69.94			
Production Hole	269.9	587.6	Brine	219.10	A-2 Anhydrite	1	Cement to surface with 31.15 Tonnes Class G, 0-1-0 with 2% CaCl <sub>2</sub> +10% NaCl. See Cement Program for details
		587.6		K-55			
				47.62			
Main Hole	200	681.6	Fresh Water		Guelph	92	
		681.6					

**All depths referenced to 4.0 mKB**

## **DRILLING PROCEDURE**

**TKC #69, Moore 3-18-V**

### **Pre Spud**

#### **Fresh Water Well samples**

Obtain samples from all fresh water wells located within a minimum radius of 750m of the proposed well. Perform water analysis and keep copies of the results.

#### **Site Preparation**

Prepare drilling location.  
Locate all drainage tiles crossing lease area.  
Strip and stockpile all top soil from lease.  
Construct adequate berms around lease and access road as required.  
Cut, block and divert drainage tile as required.

#### **Government Notification**

Underground Storage to notify M.N.R.F. 48 hours prior to spud and prior to resumption of drilling activities.

#### **Signs**

Install rig sign on access road to lease.

#### **Safety Meeting**

Conduct a pre-spud safety meeting for all crews. Rig Manager and all crew members must be present.  
Additional safety meetings shall be conducted at the Well Site Supervisor's discretion.

## **DRILLING PROCEDURE**

***TKC #69, Moore 3-18-V***

### **CONDUCTOR AND SURFACE HOLE - CABLE TOOL**

1. Move in and rig up cable tool drilling rig.

**Note: All depths referenced to 4.0 mKB**

2. Drill and drive 508 mm conductor pipe 1 m into Kettle Point / Bedrock (42.6 mKB) with a 482.6 mm bit. Ensure that fresh water is shut off before proceeding.

**Note: Record fresh water interval**

3. Record conductor casing OD, weight, grade and set depth.
4. Drill minimum 15.5 m into Kettle Point / Bedrock (57.1 mKB) with a 482.6 mm bit.

**Note: One sample shall be collected every 3 m once Kettle Point / Bedrock is reached.**

5. Hold Safety Meeting
6. Run 406.4 mm surface casing to bottom (57.1 mKB) with centralizers 2m above shoe and at joints 2, 4 and 8. Tack weld guide shoe on bottom. The optimum makeup torque is 5960 N-m (4390 ft-lb) and the maximum makeup torque is 7460 N-m (5490 ft-lb).
7. Record surface casing OD, weight, grade, placement of cementing hardware and set depth.
8. Raise surface casing 0.5 m off bottom and set in slips. Cement 406.4 mm surface casing to surface as per cementing program.
9. Wait on cement (W.O.C.) for 24 hours.
10. Record cement top in casing.
11. Rig out cable tool rig.
12. Rig in rotary rig.

**Measure height of rig floor to ground and adjust drilling program**

### **SURFACE HOLE - ROTARY**

1. Move in and rig up rotary drilling rig.

**Measure height of rig floor to ground and adjust drilling program**

2. Drill minimum 15.5 m into Kettle Point / Bedrock (57.1 mKB) with a 482.6 mm bit.  
**One sample shall be collected every 3 m once A-2 Shale is reached.**
3. Hold Safety Meeting
4. Run 406.4 mm surface casing to bottom (57.1 mKB) with centralizers 2m above shoe and at joints 2, 4 and 8. Tack weld guide shoe on bottom. The optimum makeup torque is 5960 N-m (4390 ft-lb) and the maximum makeup torque is 7460 N-m (5490 ft-lb).
5. Record surface casing OD, weight, grade, placement of cementing hardware and set depth.
6. Raise surface casing 0.5 m off bottom and set in slips. Cement 406.4 mm surface casing to surface as per cementing program.
7. Wait on cement (W.O.C.) for 24 hours.
8. Record cement top in casing.

## DRILLING PROCEDURE

TKC #69, Moore 3-18-V

### INTERMEDIATE HOLE - ROTARY

1. Pressure Test entire BOP system and surface casing to 1225 kPag for 10 minutes and record results in log according to OGSRA Operating Standards v 2.0 sec. 4.5.2.1
  2. Drill out cement with 374.4 mm bit.
  3. Drill 0.5 m of new formation.
  4. Hold safety meeting. Pressure Test surface casing and BOP in accordance with Pressure Test Program - Surface Casing-Pressure Test
  5. Drill until at the top of F Shale formation (394.1 mKB) with 374.4 mm bit, surveying every 30 m.
- Note: Geologist must be on site to verify top of Bass Island**
6. Drill 5.5m into the F Shale formation to 399.6m with 374.4 mm bit or as directed by company personnel
  7. Hold safety meeting. Run the 298.5 mm intermediate casing to (399.6 mKB) with a float collar at top of bottom joint. Centralizers should be placed 2 m above shoe, at joints 2, 4 and 5 and every 5th joint to surface. Cement basket should be placed above Detroit River formation. Threadlock guide shoe on bottom.
  8. The optimum makeup torque is 4170 N-m (3070 ft-lb) and the maximum makeup torque is 5210 N-m (3840 ft-lb). Land casing at proper elevation for thread-on type casing bowl.
  9. Record intermediate casing OD, weight, grade, placement of cementing hardware and set depth.
  10. Prepare to cement 298.5 mm intermediate casing to surface.
  11. Hold safety meeting with all on-site personnel.
  12. Pressure test surface equipment to 15 MPag for 1 minute. Ensure no leaks.
  13. Pump citric acid followed by fresh water pre-flush. Cement to surface as per cementing program. Ensure cement returns to surface. Take a minimum of four cement samples. Record all circulating pressures and volumes.
  14. W.O.C. for 48 hours.
  15. Hold Safety Meeting. Cased Hole Logging. See *LOGGING PROGRAM, Log Run 1*.
  16. Pressure Test Pipe Rams to 1400 kPag for ten minutes. Pressure Test the entire BOP system to 7000 kPag for 10 minutes and record results in log according to OGSRA Operating Standards  
(This pressure test also tests the casing and casing bowl requirement of 5,500 kPag.)

## DRILLING PROCEDURE

*TKC #69, Moore 3-18-V*

### Production Hole

1. Drill a maximum of 0.5 m of new formation with 269.9 mm bit.
  2. Prepare for Pressure Integrity Test (P.I.T.). Using a low volume, high pressure pump, pressure test the formation at a pressure equivalent to a gradient of 18 kPa/m for 10 min using an incompressible fluid.
  3. Drill 0.5 m into the A-2 Anhydrite (587.6m) with 269.9 mm bit. Survey every 30m
- Note: Geologist will be onsite to verify top of A-2 Anhydrite formation.**
4. Run 219.1 mm production casing to 587.1mKB with insert float at top of bottom joint. Centralizers to be placed 2 m above shoe, at joints 2, 3, 4 and 5 and every 4th joint to surface. Tack weld guide shoe on bottom. The optimum makeup torque is 5660 N-m (4170 ft-lb) and the maximum makeup torque is 7080 N-m (5210 ft-lb). Ensure that a collar is not positioned where the wellhead seals need to be installed.
  5. Record production casing OD, weight, grade, placement of cementing hardware and set depth.
  6. Hold safety meeting.
  7. Prepare to cement 219.1 mm production casing to surface.
  8. Pressure test surface equipment to 15 MPag for 1 minute. Ensure no leaks.
  9. Pump citric acid followed by fresh water pre-flush. Cement to surface as per Cementing Program - 219.1 mm PRODUCTION CASING. Displace cement with fresh water. Ensure cement returns to surface or arrange for remedial cementing from surface. Take a minimum of four cement samples to verify setup time and density. Record all circulating pressures and volumes.
  10. Lift BOP and set casing slips.
  11. Set primary seals. Cut off casing to proper height. Install casing spool.
  12. Install master valve and suspend the well in accordance with Section 5 of the OGSRA Operating Standards v.2.0.
  13. Notify MNRF in accordance with Section 13.2 (b)
  13. Rig out rotary drilling rig.

## DRILLING PROCEDURE

TKC #69, Moore 3-18-V

### Main Hole - Cable Tool

**Note:** Reservoir pressure must be below 700p.s.i. before proceeding to next step. Enbridge to notify Contractor when pressure is below 700 p.s.i.

1. Rig in Cable Tool Rig.
2. Hold safety meeting. Cased Hole Logging. See *LOGGING PROGRAM, Log Run 2*.
3. Perform flow check and remove blind flange.
7. Install orbit valve and BOP.
8. Hold Safety meeting. Perform wellhead, production casing and BOP pressure test in accordance with Pressure Test Program- Production Casing - Pressure Test.
9. Drill rat hole when convenient before Guelph formation is reached.
10. Bail hole dry.
11. Drill out cement and shoe
12. Rig up lubricator and tool trap.
13. Drill 0.5m of new formation. Hold safety meeting. Perform Pressure Integrity Test in accordance with the Pressure Test Program - Production Hole - Pressure Integrity Test (PIT)
14. Bail hole dry.
15. Drill under lubricator to 681.6 m with a 200 mm bit
16. Record daily pressure prior to drilling. Record drilling times in Guelph formation.
17. Hold safety meeting. Open Hole Logging See *LOGGING PROGRAM, Log Run #3*.
18. Rig out cable tool drilling rig.
19. Install blind flange on top of master valve.
20. Underground Storage to notify M.N.R.F. within 48 hours of reaching TD.

## DRILLING PROCEDURE

TKC #69, Moore 3-18-V

### Main Hole - Rotary Rig

**Note:** Reservoir pressure must be below 500p.s.i. before proceeding to next step. Enbridge to notify Contractor when pressure is below 500 p.s.i.

1. Rig in Rotary Rig.
2. Hold safety meeting. Cased Hole Logging. See *LOGGING PROGRAM, Log Run 2*.
3. Drill out cement, shoe and 0.5 m of new formation with 200.0 mm bit.
4. Prepare for Pressure Integrity Test (P.I.T.). Using a low volume, high pressure pump, pressure test the formation at a pressure equivalent to a gradient of 18 kPa/m for a duration of ten (10) minutes using an incompressible fluid.
5. Continue open hole section to 681.6 mKB MD  
**One sample shall be collected every 3 m from the production casing to TD.**
6. P.O.O.H. Rig out separator, flare stack and foam unit.
7. Rig in wireline company.
8. Set wireline retrievable release plug in vertical section (~500 mKB MD). Check for gas.
9. Rig out wireline company.
10. Rig out rotary drilling rig.
11. Install master valve.
12. Rig in service contractor and retrieve release plug.
13. Install blind flange on top of master valve.
14. Drilling department to notify M.N.R.F. within 48 hours of reaching TD.

**CASING PROGRAM**

TKC #69, Moore 3-18-V

**CONDUCTOR CASING SUMMARY (Cable Tool: 1.9 m KB-GL) (CABLE TOOL ONLY)**

Description	Metric		Imperial	
	Value	Unit	Value	Unit
Top	0.0	mKB	0.0	ftKB
Bottom	42.6	mKB	139.8	ftKB
Outside Diameter	508.00	mm	20.000	inches
Weight		kg/m	0.0	lb/ft
Drift Diameter		mm	0.000	inches
Inside Diameter	488.95	mm	19.250	inches
Grade	Line pipe		Line pipe	
Thread	N/A		N/A	
Coupling	Welded		Welded	
Burst	N/A		N/A	psi
Collapse	N/A	kPa	N/A	psi
Pipe Body Yield Strength	N/A	daN	N/A	lb-f
Joint Strength	N/A	daN	N/A	lb-f
Torque - Optimum	N/A	N-m	N/A	ft-lb
Torque - Maximum	N/A	N-m	N/A	ft-lb
Condition	New			
Float Equipment	None			
Shoe	Drive			
Threadlock	Tack weld drive shoe on bottom joint of casing			

**SURFACE CASING SUMMARY (Cable Tool: 1.9 m KB-GL)**

Description	Metric		Imperial	
	Value	Unit	Value	Unit
Top	0.0	mKB	0.0	ftKB
Bottom	57.1	mKB	187.3	ftKB
Outside Diameter	406.40	mm	16.000	inches
Weight	96.73	kg/m	65.0	lb/ft
Drift Diameter	382.60	mm	15.063	inches
Inside Diameter	387.40	mm	15.252	inches
Grade	H-40		H-40	
Thread	Welded		Welded,	
Coupling	N/A		N/A	
Burst	11,310	kPa	1,640	psi
Collapse	4,340	kPa	630	psi
Pipe Body Yield Strength	327,400	daN	736,000	lb-f
Joint Strength	195,300	daN	439,000	lb-f
Torque - Optimum	5,960	N-m	4,390	ft-lb
Torque - Maximum	7,460	N-m	5,490	ft-lb
Condition	New			
Float Equipment	None			
Centralizers	Joints 2, 4 and 8			
Shoe	Guide			
Threadlock	Threadlock guide shoe on bottom joint of casing			

**CASING PROGRAM**

TKC #69, Moore 3-18-V

**INTERMEDIATE CASING SUMMARY**

Description	Metric		Imperial	
	Value	Unit	Value	Unit
Top	0.0	mKB	0.0	ftKB
Bottom	399.6	mKB	1311.0	ftKB
Outside Diameter	298.50	mm	11.752	inches
Weight	69.94	kg/m	47.0	lb/ft
Drift Diameter	275.40	mm	10.843	inches
Inside Diameter	279.40	mm	11.000	inches
Grade	H-40		H-40	
Thread	8 Rd.		8 Rd.	
Coupling	ST & C		ST & C	
Burst	13,650	kPa	1,980	psi
Collapse	6,480	kPa	940	psi
Pipe Body Yield Strength	212,600	daN	478,000	lb-f
Joint Strength	149,500	daN	336,000	lb-f
Torque - Optimum	4,170	N-m	3,070	ft-lb
Torque - Maximum	5,210	N-m	3,840	ft-lb
Condition	New			
Float Equipment	Float Collar (Top of 1 <sup>st</sup> joint)			
Centralizers	Joints 2,4 & 5; every 4 <sup>th</sup> joint & 10 m from surface			
Cement Basket	Run above Detroit River formation			
Shoe	Guide			
Threadlock	Threadlock guide shoe on bottom joint of casing			

**PRODUCTION CASING SUMMARY**

Description	Metric		Imperial	
	Value	Unit	Value	Unit
Top	0.0	mKB	0.0	ftKB
Bottom	587.1	mKB	1926.2	ftKB
Outside Diameter	219.10	mm	8.626	inches
Weight	47.62	kg/m	32.0	lb/ft
Drift Diameter	198.00	mm	7.795	inches
Inside Diameter	201.20	mm	7.921	inches
Grade	K-55		K-55	
Thread	8 RD		8 RD	
Coupling	LT & C		LT & C	
Burst	27,100	kPa	3,930	psi
Collapse	17,440	kPa	2,530	psi
Pipe Body Yield Strength	223,700	daN	503,000	lb-f
Joint Strength	201,000	daN	452,000	lb-f
Torque - Optimum	5,660	N-m	4,170	ft-lb
Torque - Maximum	7,080	N-m	5,210	ft-lb
Condition	New			
Float Equipment	Float Collar (Top of 1 <sup>st</sup> joint)			
Centralizers	Joints 2,4 & 5; every 4 <sup>th</sup> joint & 10 m from surface			
Shoe	Guide			
Threadlock	Threadlock guide shoe on bottom joint of casing			

**CEMENTING PROGRAM**

TKC #69, Moore 3-18-V

**406.4 mm SURFACE CASING**

**Equipment**

- Pumping unit
- Cementing head (plug loading type)
- One 406.0 mm wiper plug

**CEMENT SPECIFICATIONS**

Description	Cable Tool		Rotary	
	Value	Unit	Value	Unit
Top	0.0	mKB	0	mKB
Bottom	57.1	mKB	57.1	mKB
Pre-sweep (Fresh Water)	2.00	m <sup>3</sup>	2.00	m <sup>3</sup>
Cement Excess (Openhole)	100%		100%	
Cement Excess (Cased Hole)	30%		30%	
Cement Type	0:1:0		0:1:0	
Mix Water	Fresh		Fresh	
Additives	3% CaCl <sub>2</sub>		3% CaCl <sub>2</sub>	
Density	1901	kg/m <sup>3</sup>	1901	kg/m <sup>3</sup>
Water Requirement	0.440	m <sup>3</sup> /t	0.440	m <sup>3</sup> /t
Yield	0.757	m <sup>3</sup> /t	0.757	m <sup>3</sup> /t
Cement Volume	4.76	m <sup>3</sup>	6.08	m <sup>3</sup>
Cement Yield	6.28	tonnes	8.03	tonnes
Displacement #1 (Fresh Water)	0.50	m <sup>3</sup>	0.50	m <sup>3</sup>
Displacement #2 (Brine)	6.23	m <sup>3</sup>	6.23	m <sup>3</sup>
Displacement Rate	0.6 - 0.8	m <sup>3</sup> /min	0.6 - 0.8	m <sup>3</sup> /min
W.O.C.	24	hrs	24	hrs
24 Hr. Compressive Strength	20,684	kPa	20,684	kPa

**CEMENTING PROCEDURE**

1. Run casing.
2. Pump pre-sweep, pump cement, drop top plug. DO NOT PUMP OUT LINES.
3. Displace plug with water. DO NOT OVERDISPLACE MORE THAN 1/2 SHOE JOINT VOLUME.  
Bump plug 3,500 kPa over pumping pressure.
4. Maintain a constant pump rate throughout the cement job.
5. Catch cement slurry samples while mixing and set aside.
6. Observe setting time and cement quality.
7. If no cement returns to surface, consult with Storage Operations Supervisor regarding re-cementing from top with macaroni string using Class 'G' cement + 3% CaCl<sub>2</sub>.
8. Obtain a 1 litre sample of the dry cement used in the cement job. This will be used for testing if subsequent cement problems occur (i.e. flash setting).

## CEMENTING PROGRAM

TKC #69, Moore 3-18-V

### 298.5 mm INTERMEDIATE CASING

#### Equipment

- Pumping unit
- Cementing head (plug loading type)
- One 298.5 mm wiper plug

#### NOTE:

Lead Cement: Surface to top of Bois Blanc  
 Tail Cement: Top of Bois Blanc to casing shoe

#### CEMENT SPECIFICATIONS

Description	Lead		Tail	
	Value	Unit	Value	Unit
Top	0.0	mKB	324.8	mKB
Bottom	324.8	mKB	399.6	mKB
Pre-sweep #1 (Citric Acid)	3.00	m <sup>3</sup>	N/A	
Pre-sweep #2 (Fresh Water)	1.00	m <sup>3</sup>	N/A	
Cement Excess (Openhole)	100%		100%	
Cement Excess (Cased Hole)	30%		30%	
Cement Type	0:1:8	Class 'G'	0:1:0	Class 'G'
Mix Water	Fresh		Fresh	
Celloflakes	2	bags	N/A	
Prehydrated Gel	2%		N/A	
Additives	0.75% T-10		2% CaCl <sub>2</sub> ; 0.75% T-10	
Density	1604	kg/m <sup>3</sup>	1901	kg/m <sup>3</sup>
Water	0.864	m <sup>3</sup> /t	0.440	m <sup>3</sup> /t
Yield	1.212	m <sup>3</sup> /t	0.757	m <sup>3</sup> /t
Cement Volume	26.19	m <sup>3</sup>	6.80	m <sup>3</sup>
Cement Yield	21.61	tonnes	8.98	tonnes
Pump Rate	0.6 - 0.8	m <sup>3</sup> /min	0.6 - 0.8	m <sup>3</sup> /min
Displacement #1 (Fresh Water)	N/A	m <sup>3</sup>	0.50	m <sup>3</sup>
Displacement #2 (Brine)	N/A	m <sup>3</sup>	23.39	m <sup>3</sup>
W.O.C.	48	hrs	48	hrs
24 Hr. Compressive Strength	1379	kPa	15,858	kPa

#### CEMENTING PROCEDURE

1. Run casing.
2. Pump pre-sweep, pump Lead cement, pump Tail Cement and drop wiper plug. DO NOT PUMP OUT LINES.
3. Displace plug with fresh water and then brine. DO NOT OVERDISPLACE MORE THAN 1/2 SHOE JOINT VOLUME. Bump plug 3,500 kPa over pumping pressure.
4. Maintain a constant pump rate throughout the cement job.
5. Catch cement slurry samples while mixing and set aside.
6. Observe setting time and cement quality.
7. If no cement returns to surface, consult with Storage Operations Supervisor regarding re-cementing from top with macaroni string using Class 'G' cement + 3% CaCl<sub>2</sub>.
8. Obtain a 1 litre sample of the dry cement used in the cement job. This will be used for testing if subsequent cement problems occur (i.e. flash setting).
9. Run a Cement Bond Log (CBL) to evaluate the integrity of the cement bond and to locate the position of the cement top.

**CEMENTING PROGRAM**

TKC #69, Moore 3-18-V

**219.1 mm PRODUCTION CASING**

**Equipment**

- Pumping unit
- Cementing head (plug loading type)
- One 219.1 mm wiper plug

**CEMENT SPECIFICATIONS**

Description	Value	Unit
Top	0.0	mKB
Bottom	587.1	mKB
Pre-sweep (Citric Acid)	3.00	m <sup>3</sup>
Pre-sweep (Fresh Water)	1.00	m <sup>3</sup>
Cement Excess (Openhole)	100%	
Cement Excess (Cased Hole)	30%	
Cement Type	0:1:0	Class 'G'
Mix Water	10%	Salt Water
Fluid loss/Dispersant	0.75%	T-10
Gas Block (if required)	0.4%	D-24
Density	1901	kg/m <sup>3</sup>
Water Requirement	0.440	m <sup>3</sup> /t
Yield	0.772	m <sup>3</sup> /t
Cement Volume	24.05	m <sup>3</sup>
Cement Yield	31.15	tonnes
Pump Rate	0.6 - 0.8	m <sup>3</sup> /min
Displacement (Brine)	0.75	m <sup>3</sup>
W.O.C.	48	hrs
24 Hr. Compressive Strength	6,895	kPa

**NOTE: Cement program may be changed if well integrity conditions dictate**

**CEMENTING PROCEDURE**

1. Run casing and set casing slips.
2. Pump pre-sweep, pump cement, drop top plug. PUMP OUT LINES.
3. Displace plug with brine. DO NOT OVERDISPLACE MORE THAN 1/2 SHOE JOINT VOLUME.  
Bump plug 3,500 kPa over pumping pressure.
4. Maintain a constant pump rate throughout the cement job.
5. Catch cement slurry samples while mixing and set aside.
6. Observe setting time and cement quality.
7. If no cement returns to surface, consult with Storage Operations Supervisor regarding re-cementing from top with macaroni string using Class 'G' cement + 3% CaCl<sub>2</sub>.
8. Obtain a 1 litre sample of the dry cement used in the cement job. This will be used for testing if subsequent cement problems occur (i.e. flash setting).
9. Run a Cement Bond Tool to evaluate the integrity of the cement bond and to locate the position of the cement top.

## **PRESSURE TEST PROGRAM**

TKC #69, Moore 3-18-V

### **SURFACE CASING - PRESSURE TEST**

1. Pressure Test surface casing to 1380 kPag for 10 minutes and pressure test BOP system to a pressure equivalent to one- half its working pressure. Record results in log according to OGSRA Operating Standards v 2.0 sec. 4.5.21.

### **INTERMEDIATE CASING - PRESSURE TEST**

1. Pressure Test Intermediate casing to 1380 kPag for 10 minutes and pressure test annular preventer to a pressure equivalent to one- half its working pressure. Record results in log according to OGSRA Operating Standards v 2.0 sec. 4.5.21.

### **PRODUCTION HOLE - PRESSURE INTEGRITY TEST (PIT)**

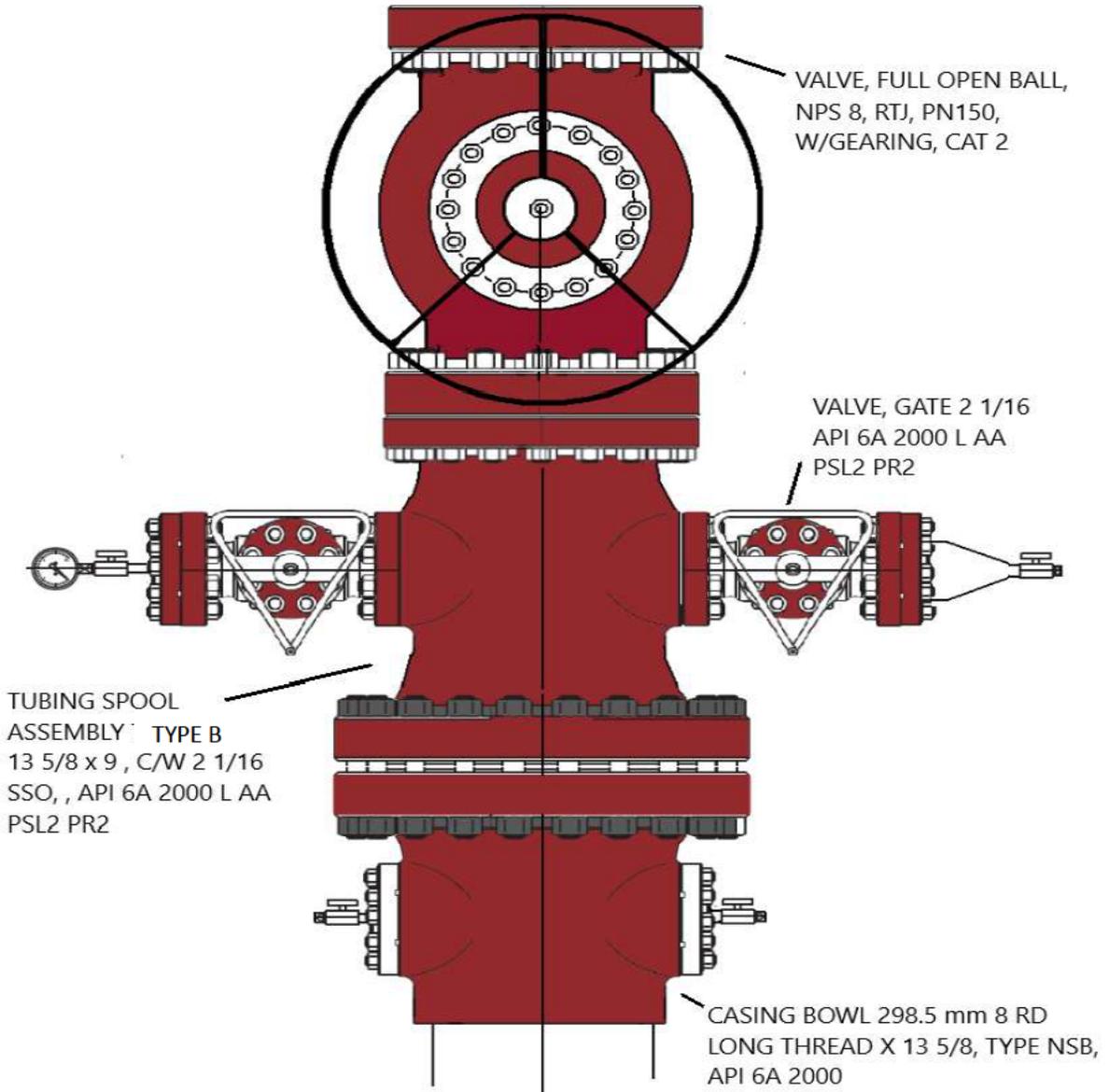
1. Drill 0.5 m of new formation.
2. Using a low volume, high pressure pump, pressure test the formation at a pressure equivalent to a gradient of 18 kPa/m for a duration of ten (10) minutes using an incompressible fluid.

### **PRODUCTION CASING - PRESSURE TEST**

1. Pressure test wellhead and production casing to 13,790 kPa for four (4) hours.
2. Install Wellhead and Master Valve and 177.8 mm BOP. The lubricator and components shall have a minimum pressure rating of 120% of the formation pressure. Pressure test annular preventer to 1380kPa for 10 minutes. Pressure test annular preventer to 7000 kPa for 10 minutes

# WELLHEAD

TKC #69, Moore 3-18-V



**LOGGING PROGRAM**

TKC #69, Moore 3-18-V

Run #	Logging Interval	Hole Condition		Comments
		Fluid Filled	Gas Filled	
1	Intermediate-Surface	Gamma Ray Cement Bond Log		Logs run after 48 hr WOC
2	Production - Surface	Cement Bond Log High Res Vertilog Gamma Ray		Logs run after 48 hr WOC
3	TD-Surface	Gamma Ray Compensated Neutron Z-Density*	Gamma Ray Linear Porosity Neutron* Z-Density*	

**NOTE:** \* open hole section only

## **ABANDONMENT PROGRAM**

### **TKC #69, Moore 3-18-V**

If drilling results prove unsuccessful, the well will be plugged and abandoned as follows:

- 1 Notify MNRF by fax 48 hrs prior to commencing plugging operations
- 2 Run tubing to TD and cement to surface with 23.5 m<sup>3</sup> of 0:1:0 Class 'G' neat cement.
- 3 Pull all tubing from well.
- 4 Wait on cement overnight.
- 5 Ensure cement top is at surface.
- 6 Cut all casing strings off a minimum of 1.0 m below grade and weld on steel plate.
- 7 Restore surface location to original condition.

**From:** [Kathy McConnell](#)  
**To:** [Belanger, Alain \(MNRF\) \(Alain.Belanger@ontario.ca\)](#)  
**Subject:** Request for Meeting  
**Date:** Tuesday, August 10, 2021 4:46:00 PM

---

Hello Alain,

I was hoping that you and your colleagues would be available for a meeting with Enbridge to discuss our upcoming projects. We are available to meet over Teams/Zoom or in person.

Let me know if you would like to discuss.

Regards,

Kathy

**Kathy McConnell** P. Geo., PMP  
Technical Manager Storage & Reservoir

**ENBRIDGE GAS INC.**

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**Safety. Integrity. Respect. Inclusion**

**From:** [Kathy McConnell](#)  
**To:** [Belanger, Alain \(MNR\) \(Alain.Belanger@ontario.ca\)](#)  
**Cc:** [PORecords@ontario.ca](#)  
**Subject:** RE: Storage Enhancement Project  
**Date:** Monday, October 18, 2021 3:05:00 PM  
**Attachments:** [Dow Executive Summaries.pdf](#)

---

Hello Alain,

Please find attached the updated executive summary for the Dow Moore Storage Pool. It is Enbridge Gas Inc.'s intention to file an application to the Ontario Energy Board as soon as possible. If you would like to meet to discuss any of the information forwarded to the Ministry or the application, please let me know.

Regards,

Kathy

**Kathy McConnell** P. Geo.; PMP  
Technical Manager Storage & Reservoir

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---

**From:** Kathy McConnell  
**Sent:** Tuesday, September 28, 2021 1:58 PM  
**To:** Belanger, Alain (NDMNRF) <Alain.Belanger@ontario.ca>  
**Subject:** RE: Storage Enhancement Project

Hello Alain,

Thank-you for your reply, I would like to provide the following update. The executive summary for the Dow Moore Storage Pool, will be updated, specifically the summary provided by Geofirma. The Geomechanical report is being updated by Geofirma and as such, they will be providing an updated executive summary. The filing of the application will be delayed until we have the updated report and executive summary from Geofirma.

Regards,

Kathy

**Kathy McConnell** P. Geo.; PMP  
Technical Manager Storage & Reservoir

**ENBRIDGE GAS INC.**

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**From:** Belanger, Alain (NDMNRF) <[Alain.Belanger@ontario.ca](mailto:Alain.Belanger@ontario.ca)>

**Sent:** Tuesday, September 28, 2021 8:30 AM

**To:** Kathy McConnell <[Kathy.McConnell@enbridge.com](mailto:Kathy.McConnell@enbridge.com)>

**Subject:** [External] RE: Storage Enhancement Project

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Kathy,

Thank you for sharing this information.

We will contact you if we feel that a meeting is needed to discuss the materials provided.

Regards,

Alain

---

**From:** Kathy McConnell <[Kathy.McConnell@enbridge.com](mailto:Kathy.McConnell@enbridge.com)>

**Sent:** September-27-21 3:43 PM

**To:** Petroleum Operations Records (NDMNRF) <[POSRECORDS@ontario.ca](mailto:POSRECORDS@ontario.ca)>

**Cc:** Belanger, Alain (NDMNRF) <[Alain.Belanger@ontario.ca](mailto:Alain.Belanger@ontario.ca)>

**Subject:** Storage Enhancement Project

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good Afternoon,

Enbridge Gas Inc. (Enbridge) will be submitting an application to the Ontario Energy Board (OEB) at the end of September 2021. The application will include a request for a Leave to Vary to increase the maximum operating pressure at the Dow Moore Storage Pool and the Payne Storage Pool. The application will also include a request for a recommendation to drill from the OEB to the Ministry of Northern Development, Mines, Natural Resources & Forestry (MNDMNRF) for the proposed drilling of one well in the Kimball-Colinville Storage Pool – TKC 69, Moore 3-18-V (TKC 69).

In support of this application, Enbridge has completed Risk Assessments for the proposed drilling and maximum operating pressure increase. Enbridge has retained Geofirma Engineering Ltd. to conduct Engineering studies confirming the maximum safe operating pressure for the Dow Moore and Payne Storage Pools. Enbridge has also completed Neighbouring Assessment Studies in compliance with CSA Z341.

Attached to this email are Executive Summaries for the above-noted studies to demonstrate that these studies have been completed. If MNDRMRF wishes to discuss the OEB application and/or to review the studies in their entirety, Enbridge would be pleased to meet with MNDRMRF staff or provide space at an Enbridge office for their review.

Please contact me if you have any questions or concerns.

Regards,

Kathy

**Kathy McConnell** P. Geo., PMP  
Technical Manager Storage & Reservoir

***ENBRIDGE GAS INC.***

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October 15, 2021

Doc. ID.: 21-200-1

## EXECUTIVE SUMMARY

**Title: Enbridge Delta Pressuring Project: Dow Moore Pool Geomechanical Modeling Report**

**Authors: Robert Walsh, P.Eng., Eric Tharumalingam**

This report describes modeling studies assessing the feasibility of increasing the maximum storage pressure in the Dow Moore underground natural gas storage reservoir. This required an assessment of the potential for fluid propagation in the caprock, and the geomechanical response to pressure changes in the storage reservoir. To efficiently solve this problem, the modeling codes TOUGH2 and FLAC3D were combined in series. Two-phase flow models were developed in TOUGH2 and calibrated with operational data collected by Enbridge, reproducing the pool pressure history and thereby validating our flow model. The mechanical response of the caprock to delta pressuring was modeled using FLAC3D, allowing assessment of the induced stresses in formations surrounding the reservoir.

To assess the impact of some key, but uncertain, model parameters, a probabilistic safety assessment (PSA) was undertaken. For a PSA, probability density functions (PDF) are assigned to important input parameters. The execution control software then randomly samples from these PDFs and runs hundreds of realizations of the model. This allows us to generate a probability density function of the model output of interest – in this case, the maximum percent fracture gradient. Conservatively, we have applied very broad ranges to the input parameter probability density functions – representing the broad range of values that have been measured at Enbridge's many gas storage reservoirs. This means that the resulting output PDFs of maximum percent fracture gradient (MPFG) also vary broadly. The tails of the MPFG PDF represent extreme scenarios – for example, the improbable combination of low regional stress, a relatively deformable reservoir, and unusually stiff cap rock will lead to a higher MPFG.

The current CSA criterion assumes deterministic assessments of fracture gradient. These provide only a single numerical estimate of the MPFG without quantification of uncertainty. CSA Z341.1-18 sets a threshold of 80% of the MPFG, acknowledging this unquantified uncertainty, and providing a mitigating buffer. By using geomechanical modeling and a probabilistic framework, we are able to quantify the level of uncertainty in determining MPFG, thereby making explicit the uncertainty which was implied in the original standards. The mean value returned by a probabilistic assessment provides a better representative estimate of the MPFG than the single value returned by a deterministic assessment. To be consistent with the regulatory intent, the mean value returned by PSA – rather than the maximum (or extreme value scenario) – should be compared to the 80% threshold.

For this study, we ran 250 realizations of the model at planned maximum operating pressure (PMOP) gradients of 0.70 (PMOP=10,110 kPa), 0.76 psi/ft (PMOP=10,980 kPa), and 0.78 psi/ft (PMOP=11,270 kPa). These realizations tested the sensitivity of model predictions to changes in mechanical properties of caprock, mechanical properties of storage formations, gas mobility in the caprock, and minimum principal stress. At 0.70 psi/ft, the average MPFG is estimated to be 65.4%. Increasing the maximum pressure gradient to 0.76 psi/ft increases the average MPFG to 74.5%. A further increase to 0.78 psi/ft increases the average MPFG to 78.6%. These scenarios did not result in an MPFG high enough that a real risk of caprock failure was present.

The results showed that a maximum delta pressure of 0.76 psi/ft does not exceed 80% of the fracture gradient, in compliance with CSA Z341.1-18. With ample conservatism built into this probabilistic safety assessment model, we have determined that the planned pressure increase entails no risk of fracturing the caprock.

## Executive Summary

**Title:** Assessment of Neighbouring Activities  
2022 Storage Enhancement Project – The Dow Moore Pool

**Authors:** Enbridge Gas Inc.

The “Assessment of Neighbouring Activities” report has been completed to comply with the requirements of Clause 5.2 of Standard CSA Z341.1-18 – Storage of Hydrocarbons in Underground Formations – Reservoir Storage (“CSA Z341.1-18”) in support of an increase in the delta pressure in the Dow Moore Pool.

Enbridge Gas Inc (Enbridge) proposes to increase pressure in the Dow Moore Pool. The Dow Moore Pool is protected by a Designated Storage Area (DSA) which was approved by Ontario Energy Board in 1988. The DSA is comprised of approximately 544 hectares. Enbridge is confident that the DSA adequately protects the Dow Moore Pool. In addition, the Oil, Gas and Salt Resources Act provides protection for the reservoir with a 1.6 km buffer zone surrounding each DSA.

The report reviews the geology, the existing and abandoned wells within 1 kilometre of the storage zone, subsurface operations within 5 kilometres of the storage zone, and wells penetrating the storage zone.

Well drilling records from the Oil, Gas and Salt Resources Library (OGSRL) indicate that ninety-two wells have been drilled within 1 km of the base of gas of the Dow Moore Pool. Enbridge has conducted a review of these wells and is satisfied that they have not had any “impact on the integrity of the storage facility” as required by CSA Z341.1-18 Clause 5.2(a).

A review of records from the OGSRL for subsurface activities within 5 kilometres of the Dow Moore Pool indicates that there are six subsurface operations, including oil and natural gas production and natural gas storage operations. Enbridge is satisfied that there is no “impact on the integrity of the storage zone” as required by the CSA Z341.1-18 Clause 5.2(b).

In conclusion, the Dow Moore Pool has been safely operated as a natural gas storage pool since 1988 and is protected by an approved DSA. The technical information reviewed, indicates that there is minimal risk regarding the potential migration of natural gas between any known existing or abandoned wells within 1 km, and existing operations within 5 km, of the Dow Moore Pool. All active wells that penetrate the storage zone within the Dow Moore Pool are utilized as part of storage operations.

All the active wells are operated and maintained in accordance with CSA Z341.1-18 Storage of Hydrocarbons in Underground Formations and in accordance with the Oil, Gas and Salt Resources Act, its regulations and Provincial Operating Standards. Enbridge is satisfied that the new operating pressure will not compromise the integrity of the Dow Moore Pool or any associated facilities.

## **Executive Summary**

**Date: August 2021**

### **Title: "What if" Analysis of Hazards and Operability Issues Delta Pressuring Project 2021 - Dow Moore Pool**

**Author: Gordon Cowan, P.Eng., U G M Engineering Ltd.**

U G M Engineering was contracted to prepare a "What if" Analysis for the Dow Moore Pool concerning the Delta Pressuring Project 2021. This assessment refers to the Dow Moore Pool facilities as a whole, in its examination of natural gas storage reservoir risk. The activities examined by "What if" Analysis for the Dow Moore Pool were covered through virtual DP21 sessions held April 27, 28, 29 and May 3, 4, 5, 2021. The sessions were limited to 2 hrs /day in consideration of attendee fatigue. The Dow Moore Pool sessions used similar methodology to previous CSA Z341.1-18 Delta Pressuring Project qualitative risk assessments.

These sessions were attended by the "What if" Leader and up to six technical experts, the number being variable according to project set. The preparation for the sessions, selection of the project scope systems, subsystems, session conduction, and reporting function for the "What if" analysis was performed by U G M Engineering Ltd., using PHA Pro 8.8 software for recording, organizing and reporting functions. Mr. Gordon W. Cowan, P.Eng., of U G M Engineering Ltd. (UGM), was team leader.

The delta pressuring sessions generated a total of 242 "What ifs" from the scope of the CSA Z341.1-18. Relative risk expression, in the form of risk ranking, was performed for each "What if," using the 7+7 Enbridge Standardized Operational Risk Matrix.

The risk matrices provided a qualitative expression made up of the session group's assignment of values for likelihood and severity, which are then multiplied or added to provide an expression of risk.

The operability, and storage aspects of the project were of primary concern for the "What if" examinations. Financial, safety, environmental, public impact, and personnel protection issues were also addressed. For all the systems examined, the group as a whole determined whether the system/question/topic had been covered in adequate depth.

It was concluded that the "What if" sessions records and risk rankings, consideration of the development location, and the review of qualitative aspects of the Dow Moore Pool formed a complete study of the 2021 Dow Moore Pool Delta Pressuring Project, within the scope of the CSA Z341.1-18 regulation. It was agreed that the sessions had examined safety, operability and technical integrity in a responsible and diligent manner.



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July 15, 2021

Doc. ID.: 21-200-1

## EXECUTIVE SUMMARY

**Title: Enbridge Delta Pressuring Project: Payne Pool Geomechanical Modeling Report**

**Authors: Nicola Calder, P.Eng., Robert Walsh, P.Eng., Eric Tharumalingam**

This report describes modeling studies assessing the feasibility of increasing the maximum storage pressure in the Payne underground natural gas storage reservoir. This required an assessment of the potential for fluid propagation in the caprock, and the geomechanical response to pressure changes in the storage reservoir. To efficiently solve this problem, the modeling codes TOUGH2 and FLAC3D were combined in series. Two-phase flow models were developed in TOUGH2 and calibrated with operational data collected by Enbridge, reproducing the pool pressure history and thereby validating our flow model. The mechanical response of the caprock to delta pressuring was modeled using FLAC3D, allowing assessment of the induced stresses in formations surrounding the reservoir.

To assess the impact of some key, but uncertain, model parameters, a probabilistic safety assessment (PSA) was undertaken. For a PSA, probability density functions (PDF) are assigned to important input parameters. The execution control software then randomly samples from these PDFs and runs hundreds of realizations of the model. This allows us to generate a probability density function of the model output of interest – in this case, the maximum percent fracture gradient. Conservatively, we have applied very broad ranges to the input parameter probability density functions – representing the broad range of values that have been measured at Enbridge's many gas storage reservoirs. This means that the resulting output PDFs of maximum percent fracture gradient (MPFG) also vary broadly. The tails of the MPFG PDF represent extreme scenarios – for example, the improbable combination of low regional stress, a relatively deformable reservoir, and unusually stiff cap rock will lead to a higher MPFG.

The current CSA criterion assumes deterministic assessments of fracture gradient. These provide only a single numerical estimate of the MPFG without quantification of uncertainty. CSA Z341.1-18 sets a threshold of 80% of the MPFG, acknowledging this unquantified uncertainty, and providing a mitigating buffer. By using geomechanical modeling and a probabilistic framework, we are able to quantify the level of uncertainty in determining MPFG, thereby making explicit the uncertainty which was implied in the original standards. The mean value returned by a probabilistic assessment provides a better representative estimate of the MPFG than the single value returned by a deterministic assessment. To be consistent with the regulatory intent, the mean value returned by PSA – rather than the maximum (or extreme value scenario) – should be compared to the 80% threshold.

For this study, we ran 250 realizations of the model at planned maximum operating pressure (PMOP) gradients of 0.73, 0.76, and 0.80 psi/ft. These realizations tested the sensitivity of model predictions to changes in mechanical properties of caprock, mechanical properties of storage formations, gas mobility in the caprock, and minimum principal stress. At 0.73 psi/ft, the average MPFG is estimated to be 69.6%. Increasing the maximum operating gradient to 0.76 psi/ft increased the average maximum fracture gradient to 73.9%. A further increase to 0.80 psi/ft increases the average maximum fracture gradient to 79.7%. These scenarios did not result in an MPFG high enough that a real risk of caprock failure was present.

The 2D models used for the PSA are generally representative of the geomechanics of the system, on average over-predicting the 3D models by 3 to 4%. When we corrected the 2D PSA results to better agree with equivalent 3D models, the average MPFG at 0.76 psi/ft drops to 70.8% and the average MPFG at 0.8 psi per foot drops to 75.3%.

Model scenarios were not run to assess the potential for shear failure due to increased delta pressuring, as this is expected to be a very unlikely failure mode based on previous experience.

The results showed that a maximum delta pressure of 0.8 psi/ft does not exceed 80% of the fracture gradient, in compliance with CSA Z341.1-18. With ample conservatism built into this probabilistic safety assessment model, we have determined that the planned pressure increase entails no risk of fracturing the caprock.

## Executive Summary

**Title:** Assessment of Neighbouring Activities  
2022 Storage Enhancement Project – The Payne Pool

**Authors:** Enbridge Gas Inc.

The “Assessment of Neighbouring Activities” report has been completed to comply with the requirements of Clause 5.2 of Standard CSA Z341.1-18 – Storage of Hydrocarbons in Underground Formations – Reservoir Storage (“CSA Z341.1-18”) in support of an increase in the delta pressure in the Payne Pool.

Enbridge Gas Inc (Enbridge) proposes to increase pressure in the Payne Pool. The Payne Pool is protected by a Designated Storage Area (DSA) which was approved by Ontario Energy Board in 1957. The DSA is comprised of approximately 312 hectares. Enbridge is confident that the DSA adequately protects the Payne Pool. In addition, the Oil, Gas and Salt Resources Act provides protection for the reservoir with a 1.6 km buffer zone surrounding each DSA.

The report reviews the geology, the existing and abandoned wells within 1 kilometre of the storage zone, subsurface operations within 5 kilometres of the storage zone, and wells penetrating the storage zone.

Well drilling records from the Oil, Gas and Salt Resources Library (OGSRL) indicate that forty wells have been drilled within 1 km of the base of gas of the Payne Pool. 16 of the wells – 3 abandoned wells and 16 active wells – penetrate the storage zone. Enbridge has conducted a review and a qualitative risk ranking of all wells within 1 km of the base of gas of the Payne Pool, and is satisfied that they have not had any “impact on the integrity of the storage facility” as required by CSA Z341.1-18 Clause 5.2(a).

A review of records from the OGSRL for subsurface activities within 5 kilometres of the Payne Pool indicates that there are 12 subsurface operations, including oil and natural gas production and natural gas storage operations. Enbridge is satisfied that there is no “impact on the integrity of the storage zone” as required by the CSA Z341.1-18 Clause 5.2(b).

In conclusion, the Payne Pool has been safely operated as a natural gas storage pool since 1957 and is protected by an approved DSA. The technical information reviewed, indicates that there is minimal risk regarding the potential migration of natural gas between any known existing or abandoned wells within 1 km, and existing operations within 5 km, of the Payne Pool. All active wells that penetrate the storage zone within the Payne Pool are utilized as part of storage operations.

All the active wells are operated and maintained in accordance with CSA Z341.1-18 Storage of Hydrocarbons in Underground Formations and in accordance with the Oil, Gas and Salt Resources Act, its regulations and Provincial Operating Standards. Enbridge is satisfied that the new operating pressure will not compromise the integrity of the Payne Pool or any associated facilities.

**Executive Summary**

**Date: August 2021**

**Title: "What if" Analysis of Hazards and Operability Issues  
Delta Pressuring Project 2021 - Payne Pool**

**Author: Gordon Cowan, P.Eng., U G M Engineering Ltd.**

U G M Engineering was contracted to prepare a "What if" Analysis for the Payne Pool concerning the Delta Pressuring Project 2021. This assessment refers to the Payne Pool facilities as a whole, in its examination of natural gas storage reservoir risk. The activities examined by "What if" Analysis for the Payne Pool were covered through virtual DP21 sessions held April 27, 28, 29 and May 3, 4, 5, 2021. The sessions were limited to 2 hrs /day in consideration of attendee fatigue. The Payne Pool sessions used similar methodology to previous CSA Z341.1-18 Delta Pressuring Project qualitative risk assessments.

These sessions were attended by the "What if" Leader and up to six technical experts, the number being variable according to project set. The preparation for the sessions, selection of the project scope systems, subsystems, session conduction, and reporting function for the "What if" analysis was performed by U G M Engineering Ltd., using PHA Pro 8.8 software for recording, organizing and reporting functions. Mr. Gordon W. Cowan, P.Eng., of U G M Engineering Ltd. (UGM), was team leader.

The delta pressuring sessions generated a total of 232 "What ifs" from the scope of the CSA Z341.1-18. Relative risk expression, in the form of risk ranking, was performed for each "What if," using the 7+7 Enbridge Standardized Operational Risk Matrix.

The risk matrices provided a qualitative expression made up of the session group's assignment of values for likelihood and severity, which are then multiplied or added to provide an expression of risk.

The operability, and storage aspects of the project were of primary concern for the "What if" examinations. Financial, safety, environmental, public impact, and personnel protection issues were also addressed. For all the systems examined, the group as a whole determined whether the system/question/topic had been covered in adequate depth.

It was concluded that the "What if" sessions records and risk rankings, consideration of the development location, and the review of qualitative aspects of the Payne Pool formed a complete study of the 2021 Payne Pool Delta Pressuring Project, within the scope of the CSA Z341.1-18 regulation. It was agreed that the sessions had examined safety, operability and technical integrity in a responsible and diligent manner.

## Executive Summary

**Title:** Assessment of Neighbouring Activities  
2022 Storage Enhancement Project – The South Kimball Pool

**Authors:** Enbridge Gas Inc.

The “Assessment of Neighbouring Activities” report has been completed to comply with the requirements of Clause 5.2 of Standard CSA Z341.1-18 – Storage of Hydrocarbons in Underground Formations – Reservoir Storage (“CSA Z341.1-18”) in support of drilling an additional natural gas storage well in the South Kimball Pool.

Enbridge Gas Inc (Enbridge) proposes to increase pressure in the South Kimball Pool. The South Kimball Pool is protected by a Designated Storage Area (DSA) which was approved by Ontario Energy Board in 1962 with gas injections starting in 1966. The DSA is comprised of approximately 1345 hectares. Enbridge is confident that the DSA adequately protects the South Kimball Pool. In addition, the Oil, Gas and Salt Resources Act provides protection for the reservoir with a 1.6 km buffer zone surrounding each DSA.

The report reviews the geology, the existing and abandoned wells within 1 kilometre of the storage zone, subsurface operations within 5 kilometres of the storage zone, and wells penetrating the storage zone.

Well drilling records from the Oil, Gas and Salt Resources Library (OGSRL) indicate that eighty-eight wells have been drilled within 1 km of the base of gas of the South Kimball Pool. Enbridge has conducted a review of these wells and is satisfied that they have not had any “impact on the integrity of the storage facility” as required by CSA Z341.1-18 Clause 5.2(a).

A review of records from the OGSRL for subsurface activities within 5 kilometres of the South Kimball Pool indicates that there are fifteen subsurface operations, including oil and natural gas production and natural gas storage operations. Enbridge is satisfied that there is no “impact on the integrity of the storage zone” as required by the CSA Z341.1-18 Clause 5.2(b).

In conclusion, the South Kimball Pool has been safely operated as a natural gas storage pool since 1966 and is protected by an approved DSA. The technical information reviewed, indicates that there is minimal risk regarding the potential migration of natural gas between any known existing or abandoned wells within 1 km, and existing operations within 5 km, of the South Kimball Pool. All active wells that penetrate the storage zone within the South Kimball Pool are utilized as part of storage operations.

All the active wells are operated and maintained in accordance with CSA Z341.1-18 Storage of Hydrocarbons in Underground Formations and in accordance with the Oil, Gas and Salt Resources Act, its regulations and Provincial Operating Standards. Enbridge is satisfied that the new operating pressure will not compromise the integrity of the South Kimball Pool or any associated facilities.

**Executive Summary**

**Date: August 2021**

**Title: "What if" Analysis of Hazards and Operability Issues  
Drilling Project 2021 - South Kimball-Colinville Pool - TKC 69V**

**Author: Gordon Cowan, P.Eng., U G M Engineering Ltd.**

U G M Engineering was contracted to prepare a "What if" Analysis for the South Kimball-Colinville Pool concerning the Drilling Project 2021. This assessment refers to the South Kimball-Colinville Pool facilities as a whole, in its examination of natural gas storage reservoir risk. The activities examined by "What if" Analysis for the Dow Moore Pool were covered through virtual DR21 sessions held April 27, 28, 29 and May 3, 4, 5, 2021. The sessions were limited to 2 hrs /day in consideration of attendee fatigue. The South Kimball-Colinville Pool sessions used similar methodology to previous CSA Z341.1-18 Drilling Project qualitative risk assessments.

These sessions were attended by the "What if" Leader and up to six technical experts, the number being variable according to project set. The preparation for the sessions, selection of the project scope systems, subsystems, session conduction, and reporting function for the "What if" analysis was performed by U G M Engineering Ltd., using PHA Pro 8.8 software for recording, organizing and reporting functions. Mr. Gordon W. Cowan, P.Eng., of U G M Engineering Ltd. (UGM), was team leader.

The delta pressuring sessions generated a total of 268 "What ifs" from the scope of the CSA Z341.1-18. Relative risk expression, in the form of risk ranking, was performed for each "What if," using the 7+7 Enbridge Standardized Operational Risk Matrix.

The risk matrices provided a qualitative expression made up of the session group's assignment of values for likelihood and severity, which are then multiplied or added to provide an expression of risk.

The operability, and storage aspects of the project were of primary concern for the "What if" examinations. Financial, safety, environmental, public impact, and personnel protection issues were also addressed. For all the systems examined, the group as a whole determined whether the system/question/topic had been covered in adequate depth.

It was concluded that the "What if" sessions records and risk rankings, consideration of the development location, and the review of qualitative aspects of the South Kimball-Colinville Pool formed a complete study of the 2021 South Kimball-Colinville Pool Drilling Project, within the scope of the CSA Z341.1-18 regulation. It was agreed that the sessions had examined safety, operability and technical integrity in a responsible and diligent manner.

## ENVIRONMENTAL MATTERS

### Environmental Report

1. An Environmental Report (“ER”) for the Project was prepared by Stantec Consulting Ltd. (“Stantec”). The ER conforms to the OEB’s *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7<sup>th</sup> Edition, 2016* (“Guidelines”). A copy of the ER is set out as Attachment 1 to this Exhibit.
  
2. The principal objective of the ER was to outline the various environmental mitigation and protection measures for the construction and operation of the Project while meeting the intent of the Guidelines. To meet this objective, the ER was prepared to:
  - Describe the proposed work necessary for the Project;
  - Implement a consultation program to receive input from interested and potentially affected parties;
  - Assess potential environmental impacts of the Project on environmental features, and establish mitigation and protective measures that may be used to reduce and eliminate, where possible and feasible, potential environmental impacts of the project; and
  - Identify any necessary supplemental studies and monitoring and contingency plans.
  
3. The ER identified that there is potential for the presence of 8 Species at Risk (SAR) within the study area of the Project. A field investigation to confirm the potential presence of wildlife, wildlife habitat, and SAR was undertaken by Stantec on August 6 and 7, 2021. The field investigation confirmed that the proposed work areas do not provide suitable SAR habitat. General mitigation and protective measures for potential impacts on wildlife, wildlife habitat, and SAR are included in

Table 4.1 in the ER and will be adhered to by Enbridge Gas. With the implementation of such mitigation and protective measures, no significant adverse residual impacts on wildlife habitat, wildlife, and SAR are anticipated.

4. The ER concluded that with the implementation of its recommendations, on-going communication and consultation, environmental and supplementary studies 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.
5. Notice of Study Commencement letters were provided to the Ontario Pipeline Coordinating Committee (“OPCC”) and other applicable agencies on July 23, 2021. These letters introduced the Project and invited the parties to provide or coordinate comments regarding the Project to assist in the environmental study process. Copies of the letters can be found in Appendix B3 of the ER. One comment was received from the Ministry of Northern Development and Mines, Natural Resources and Forestry on July 29, 2021 and can be found in Appendix B4 of the ER.
6. The ER was provided to the OPCC and other applicable agencies on August 23, 2021. Enbridge Gas requested comments on the ER by October 4, 2021. See Attachment 2 to this Exhibit for a summary of OPCC comments and Enbridge Gas responses.

#### Archaeological Assessment

7. A Stage 1 and 2 Archaeological Assessment (“AA”) was completed on the proposed work area for well TKC 69 on September 7, 2021 and no archaeological resources were identified. The AA will continue on lands disturbed by the Project in the fall of

2021 and a clearance letter from the Ministry of Heritage, Sport, Tourism and Cultural Industries ("MHSTCI") will be obtained prior to construction.



**2022 Storage Enhancement  
Project: Environmental Report**

FINAL REPORT

Prepared for:  
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August 20, 2021

This document entitled 2022 Storage Enhancement Project: Environmental Report was prepared by (“Stantec”) for the account of Enbridge Gas Inc. (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.

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## Executive Summary

Enbridge Gas Inc. (Enbridge Gas) has identified the need to enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County. The 2022 Storage Enhancement Project (the Project) will involve increasing the Maximum Operating Pressure (MOP) of the Dow Moore and Payne Storage Pool – two designated storage areas (DSAs) as defined in s. 36.1(1)(a) of the *Ontario Energy Board Act*.

The Project will also involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, approximately 85 metres of Nominal Pipe Size (NPS) 10-inch pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an environmental study of the construction and operation of the Project. The environmental study included a consultation program impact assessment, and a cumulative impact assessment.

A consultation program was conducted for the Project to engage with federal and provincial agencies, conservation authorities, municipal staff, Indigenous communities, landowners, and other interested parties. Enbridge Gas and Stantec have also been in direct contact with agency and municipal staff. Enbridge Gas has committed to on-going consultation with directly affected and interested parties through 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 and mitigation and protective measures are considered sufficient to protect the features encountered. Monitoring and contingency measures will assess whether mitigation and protective measures were effective in both the short and long term.

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. 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, environmental and supplementary studies, 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.

## Abbreviations

AA	Archaeological Assessment
ANSI	Area of Natural and Scientific Interest
BGS	Below ground surface
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
COSSARO	Committee on the Status of Species at Risk in Ontario
DFO	Fisheries and Oceans Canada
DSA	Designated Storage Area
EASR	Environmental Activity and Sector Registry
Enbridge Gas	Enbridge Gas Inc.
ER	Environmental Report
ESA	<i>Endangered Species Act</i>
ESC	Erosion and sediment control
IPZ	Intake Protection Zone
MECP	Ministry of the Environment, Conservation and Parks
ME	Ministry of Energy
NDMNRF	Ministry of Northern Development, Mines, Natural Resources and Forestry
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
MOP	Maximum Operating Pressure
NHIC	Natural Heritage Information Centre
NPS	Nominal Pipeline Size
OP	Official Plan
OEB	Ontario Energy Board

OGS	Ontario Geological Survey
OHA	<i>Ontario Heritage Act</i>
OMAFRA	Ontario Ministry of Agricultural, Food and Rural Affairs
OPCC	Ontario Pipeline Coordinating Committee
O. Reg.	Ontario Regulation
PTTW	Permit to Take Water
PPS	Provincial Policy Statement
PSW	Provincially Significant Wetland
SAR	Species at Risk
SCN	Soybean Cyst Nematode
SCRCA	St. Clair Region Conservation Authority
SGRA	Significant Groundwater Recharge Area
SOCC	Species of Conservation Concern
Stantec	Stantec Consulting Ltd.
The Project	2022 Storage Enhancement Project
WHPA	Wellhead Protection Area
WWR	Water Well Record(s)

## 1.0 INTRODUCTION

### 1.1 PROJECT DESCRIPTION

Enbridge Gas Inc. (Enbridge Gas) has identified the need to enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County. The 2022 Storage Enhancement Project (the Project) will involve increasing the Maximum Operating Pressure (MOP) of the Dow Moore and Payne Storage Pool – two designated storage areas (DSAs) as defined in s. 36.1(1)(a) of the *Ontario Energy Board Act*. To complete wellhead upgrades and pressure testing of wells at the Payne Storage Pool Project location, temporary steel plates will be used upon access to the sites' natural gas storage wells. No temporary or permanent access road or structure will be installed at the Dow Moore Project location.

The Project will also involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, approximately 85 metres of Nominal Pipe Size (NPS) 10-inch pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

Project locations are shown in Appendix A.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an environmental study of the construction and operation of the Project.

### 1.2 ENVIRONMENTAL STUDY

#### 1.2.1 Objectives

A multidisciplinary team of environmental planners and scientists from Stantec conducted the environmental study. Enbridge Gas provided environmental support and engineering expertise throughout the study.

The environmental study was completed in accordance with the Ontario Energy Board (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition* (OEB Environmental Guidelines) (2016), as well as relevant federal and provincial environmental guidelines and regulations.

The principal objective of the environmental study was to 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:

- Implement a consultation program to receive input from interested and potentially affected parties
- Assess potential environmental impacts of the Project on environmental features, and establish mitigation and protective measures that may be used to reduce and eliminate, where possible and feasible, potential environmental impacts of the Project
- Identify any necessary supplemental studies and monitoring and contingency plans

### 1.2.2 Process

The environmental study was divided into two main phases:

#### **Phase I: Consultation and Gathering Background Environmental Information**

Phase I began with notifying impacted and potentially interested parties regarding the Project. Concurrent with consultation, environmental and socio-economic features at the three Project locations, Dow Moore DSA, Payne Storage Pool DSA, and Kimball-Colinville DSA, were mapped and characterized using relevant published literature, maps, and digital data. Geographically based environmental features were incorporated onto a series of digital base maps. Discussions with relevant agencies provided information for compiling the existing conditions inventory and mapping.

#### **Phase II: Environmental Report**

Phase II involved determining potential environmental and socio-economic impacts and cumulative effects that may result from the Project and developing mitigation and protective measures, supplemental studies, monitoring, and contingency plans to reduce or avoid potential impacts. The environmental study concluded with the preparation of this Environmental Report (ER) as well as Environmental Alignment Sheets to identify site-specific mitigation and protective measures to be implemented during construction (see Appendix D).

### 1.2.3 The Environmental Report

The environmental study has relied on a technically sound and consistently applied approach that is replicable and transparent. The ER, which documents the environmental study, will form the basis 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 Consultation Program:** describes the consultation program
- 3.0 Existing Conditions:** describes the environmental and socio-economic existing conditions
- 4.0 Impact Identification, Assessment, and Mitigation:** predicts potential effects and impacts, recommends supplemental studies, mitigation, and protective measures, and considers net impacts

- 5.0 Cumulative Effects:** provides an analysis of potential cumulative effects associated with the Project
- 6.0 Monitoring and Contingency Plans:** describes monitoring and contingency plans to address potential environmental impacts of the Project
- 7.0 Conclusion:** provides a conclusion on the significance of the potential environmental impacts associated with the Project

The ER also includes references and appendices for documentation.

### 1.2.4 The OEB Regulatory Process

Once complete, the ER is circulated 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 will accompany a future Enbridge Gas application to the OEB for the proposed Project.

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. Enbridge Gas must comply with these conditions at all stages of the Project, including during construction, site restoration, and post construction.

### 1.2.5 Additional Environmental Regulatory Processes

Enbridge Gas will also be required to obtain additional environmental permits and approvals from provincial agencies, as outlined in Table 1.1 below. This ER will serve to support these permit and approval applications.

**Table 1.1: Summary of Potential Environmental Permit and Approval Requirements**

Permit/Approval Name	Administering Agency	Description
<b>PROVINCIAL PERMITS AND APPROVALS</b>		
Development Permits under Ontario Regulation (O. Reg.) 171/06 (Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses), as per the <i>Conservation Authorities Act</i> (1990)	St. Clair Region Conservation Authority (SCRCA)	Required for works in SCRCA 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	Ministry of the Environment,	Under O. Reg. 64/16 and O. Reg. 63/16, the MECP requires a PTTW for dewatering more than 400,000 L/day, and an

**Table 1.1: Summary of Potential Environmental Permit and Approval Requirements**

Permit/Approval Name	Administering Agency	Description
Registry (EASR) (surface and groundwater) under the <i>Ontario Water Resources Act</i> (1990)	Conservation and Parks (MECP)	EASR for dewatering between 50,000 and 400,000 L/day. This can include trench dewatering and taking water for hydrostatic testing from a natural water source. There are some exceptions for surface water takings where active or passive surface water diversions occur such that all water taken is returned within another portion of the same surface water feature.
Permitting or registration under the <i>Endangered Species Act</i> (ESA) (2007)	MECP	<p>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.</p> <p>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.”</p> <p>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.”</p>
Archaeological clearance under the <i>Ontario Heritage Act</i> (OHA) (1990)	Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI)	A Stage 1 and Stage 2 archaeological assessment (AA) is required to identify areas of archaeological potential prior to any ground disturbances and/or site alterations. Depending on the results of the Stage 1 and Stage 2 AAs, Stage 3 and 4 AAs may be required. The completed archaeological assessment reports are forwarded to the MHSTCI for review and comment.
Review of Built Heritage and Cultural Landscapes under the OHA (1990)	MHSTCI	A Heritage Overview Study will be completed to determine the presence of built heritage and cultural landscapes. If identified, a Cultural Heritage Assessment Report is required to determine the effects of the project on heritage resources and recommend mitigation measures as necessary.
<b>MUNICIPAL PERMITS AND APPROVALS</b>		
Noise By-Law No. 44 of 2014	St. Clair Township	Project activities should adhere to the local noise by-law.
Woodlands Conservation By-Law No. 4 of 2012	Lambton County	Project activities should meet the intent of the local woodlands conservation (tree-cutting) by law.

## 2.0 CONSULTATION PROGRAM

### 2.1 OBJECTIVES

Consultation is an important component of the OEB *Environmental Guidelines* (2016). As noted by the OEB (2016), consultation 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 input into key Project decisions before those decisions are finalized.

Stantec believes that community involvement and consultation is a critical and fundamental component of this environmental study and that Indigenous community participation is essential to the Project. We also recognize that each potentially affected Indigenous community has unique conditions and needs and that the process followed may not satisfy the “duty to consult” component from an Indigenous community’s perspective. To demonstrate that we respect this view, we will use the term “engagement” throughout the remainder of this Report when we refer to seeking input from Indigenous communities.

The consultation and engagement program for the 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 and engagement program 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

### 2.2 IDENTIFYING INTERESTED AND POTENTIALLY AFFECTED PARTIES

As part of the consultation and engagement process, Indigenous and stakeholder Contact Lists (including Agency, Municipal, and Interest Groups), were developed.

#### 2.2.1 Identifying Indigenous Communities

Engagement with Indigenous communities was guided by the OEB *Environmental Guidelines* (2016), as noted above, but also by the Enbridge Gas’ Indigenous Peoples Policy.

Indigenous engagement commenced with the submission of a Project description to the former Ministry of Energy, Northern Development and Mines (MENDM).<sup>1</sup> This submission to the MENDM provided details on the Project location and sought to determine the requirements of the duty to consult. Potentially impacted Indigenous communities were identified by the MENDM and enumerated in the Letter of Delegation dated April 13, 2021. See Appendix B1.

The Letter of Delegation confirmed that the MENDM would be delegating the procedural aspects of consultation in respect to the Project and that, based on the Crown's assessment, identified that the following Indigenous communities should be consulted:

- Aamjiwnaang First Nation
- Bkejwanong (Walpole Island) First Nation
- Chippewas of the Thames First Nation
- Chippewas of Kettle and Stony Point First Nation
- Oneida Nation of the Thames

## **2.2.2 Identifying Interested and Potentially Affected Parties**

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 Enbridge Gas and Stantec.

The parties listed below were among those considered when developing the initial Agency and Municipal Contact Lists and public outreach:

- Federal and provincial agencies and authorities
- Municipal personnel
- Special interest groups

As the environmental study progressed, the initial Contact Lists evolved, and updates were made in response to changes in personnel, correspondence, and feedback gathered from the Notice of Study Commencement. The Project Contacts Lists are provided in Appendix B2.

## **2.3 COMMUNICATION: LETTERS AND EMAILS**

Letters and emails were sent to those identified on the Agency Contact List on July 23, 2021, and those identified on the Indigenous Contact List on July 28, 2021, to inform them of the commencement of the Project and outline the environmental study process. The letters and emails solicited information on planning principles or guidelines that may affect the project, background environmental and socio-economic information, and other developments proposed in the area. The letters and emails sent to

<sup>1</sup> On June 18, 2021, the Ontario government implemented changes to several ministries. The Ministry of Energy will continue to handle matters pertaining to delegation of Duty to Consult, while the rest of the MENDM has been combined with the former Ministry of Natural Resources and Forestry to become the Ministry of Northern Development, Mines, Natural Resources and Forestry.

Indigenous communities requested information on adverse impacts that the Project may have on constitutionally protected Indigenous or treaty rights and measures for mitigating those adverse impacts. Appended to the letters and emails was a map.

A notification letter detailing the proposed works at the Kimball-Colinville DSA and TKC 69 was provided to the Aamjiwnaang First Nation on June 7, 2021. This letter did not include details on the other two Project locations or the environmental study.

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

## **2.4 CONSULTATION EVENTS**

Meetings about the Project occurred between Enbridge Gas and Indigenous communities.

As the Project progresses in the planning, design, and construction phase, meetings with directly impacted landowners will occur. Landownership differs across the Project locations. Enbridge Gas owns and operates the land in which drilling for TKC 69 will occur. The majority of land at the Dow Moore Project location is held by third parties, under lease to Enbridge Gas, and is owned by the Aamjiwaang community. The Payne Storage Pool Project location is under lease to Enbridge Gas.

Enbridge Gas will consult with the various landowners and third-party users across the Project locations.

## **2.5 INPUT RECEIVED**

The consultation and engagement program allowed interested or 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 is provided in Appendix B4.

### **2.5.1 Indigenous Input**

An Indigenous Consultation Summary Report will be submitted as part of the OEB Application and will provide additional details on engagement activities for this Project.

### **2.5.2 Agency Input**

Two (2) comments were received from agencies at the time of writing this ER:

- The Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF) provided information to guide identification and assessment of natural features and resources as required by applicable policies and legislation.
- The former MENDM provided a Letter of Delegation in response to a request to determine the procedural aspects of the Duty to Consult.

### **2.5.3 Municipal and Interest Group Input**

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

## **2.6 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.

Enbridge Gas has committed to on-going consultation with directly affected and interested parties through detailed design and construction and will continue to respond to concerns through the life of the Project. Input was reviewed and considered during the identification of potential impacts and determination of mitigation and protective measures.

## **3.0 EXISTING CONDITIONS**

### **3.1 STUDY AREAS**

A Study Area is the area in which direct interactions with the socio-economic and natural environment could occur. For the purposes of the environmental study, the Study Area boundary was defined by a 500 m buffer extending from the three Project locations.

### **3.2 DATA SOURCES**

The existing conditions maps (Appendix C) have been generated from base mapping provided from Enbridge Gas and data obtained from Land Information Ontario (LIO) (Ontario, NDMNRF 2020a). 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.

### **3.3 PHYSICAL FEATURES**

#### **3.3.1 Bedrock Geology and Drift Thickness**

Bedrock geology is uniform across the three Project Study Areas and is comprised predominantly of thin-bedded, fissile grey to black bituminous shale underlain by Upper Devonian black shale of the Kettle Point Formation (Hewitt and Liberty 1972; Ontario Geological Survey [OGS] 1991). A map of bedrock geology is provided in Figure 1, Appendix C.

The Kettle Point Formation, which outcrops principally in Lambton and Kent County, has a thickness that varies from 12 to 88 m (Caley 1946 p.49). To determine the drift thickness (also referred to as overburden) in the three Study Areas, general depth from the soil surface to the bedrock was reviewed and results indicate that, in the Payne Storage Pool DSA and Kimball-Colinville DSA Study Areas, the layer of overburden range is equal to or greater than 75 m. As shown on Figure 2, Appendix C, drift thickness in the Dow Moore DSA Study Area is equal to or greater than 40 m. A review of available Water Well Records (WWR) within 1 km of the three Project locations confirmed these general results.

MECP WWRs (2021) indicated there are 11 WWRs in the Dow Moore DSA Study Area. Where data on overburden and bedrock material was available, the average depth to bedrock was recorded to be between 1.2 m to 36.9 m below ground surface (BGS), the average BGS is 27 m. In the Payne Storage Pool DSA Study Area, 2 WWRs were available; however, data on overburden and bedrock material was available for only one water well. The depth to bedrock at this well was recorded to be 43 m BGS. At the Kimball-Colinville DSA Study Area, 4 WWRs were available. The average depth to bedrock was recorded to be between 21 m to 40 m BGS.

### 3.3.2 Physiography and Surficial Geology

The topography of the Project is in the Beveled Till Plains physiographic region of southern Ontario, a region characterized as attributing relatively flat, reworked plains, that were deposited and then overridden by a subsequent glacial event. See Figure 3, Appendix C (Chapman and Putnam 1984).

As shown in surficial geology mapping, see Figure 4, Appendix C, the Dow Moore DSA and Kimball-Colinville DSA Study Areas are composed of fine-textured deposits underlain by massive well laminated fine-textured glaciolacustrine (OGS 2010). The surficial geology of the Payne Storage Pool DSA is silty to clayey glaciolacustrine-derived till (OGS 2010).

### 3.3.3 Groundwater

Mapping provided by the Thames-Sydenham and Region Source Protection Area (2015), as well as the County of Lambton (2017), identifies vulnerable areas, potential threats to drinking water, and source water protection areas and policies in and adjacent to the Project. As shown on mapping from these sources, no Intake Protection Zones (IPZ's) or Wellhead Protection Areas (WPHA's) are in the Project Study Areas.

Regional groundwater flow is generally interpreted to be to the west towards St. Clair River and south towards Lake Erie, with local groundwater flow conditions impacted by surface water features. As shown on Map 'A' of the County's Official Plan (OP) (Country of Lambton 2017), municipal drinking water intakes predominately use surface water from Lake Huron, Lake Erie, and the connecting channels of St. Clair River and Lake St. Clair. IPZ's are, thus, concentrated along these waterbodies and adjacent lands and are well outside the three Study Areas. The nearest IPZ is located 1.4 km west of the Dow Moore DSA Study Area.

Source water mapping further indicates that no Significant Groundwater Recharge Areas (SGRAs) are located in the three Study Areas. One SGRA is found 840 north of the Dow More DSA Study Area. Two SGRAs are located 1.7 km northeast and northwest of the Kimball-Colinville DSA Study Area and one SGRA is located 650 m from the Payne Storage Pool DSA Study Area (Thames-Sydenham and Region Source Protection Area 2015; County of Lambton 2017).

Also provided in section 1.3.1 of the Report, MECP WWRs (2021) indicated there are 11 WWRs in the Dow Moore DSA Study Area: two (2) of these well records have uses designated as domestic use, two (2) livestock, three (3) are unknown well types or abandoned, and four (4) are monitoring / observation wells. There are 2 WWRs in the Payne Storage Pool DSA Study Area: one (1) is designated as an abandoned domestic well and the second well use is unknown. The Kimball-Colinville DSA Study Area contains 4 WWRs: one (1) of these records is designated domestic use and the remaining three (3) are identified as livestock water supply wells.

A map of groundwater conditions, including aquifer vulnerability, and locations of nearby domestic and municipal wells, is provided in Figure 5, Appendix C.

### 3.3.4 Aggregates and Petroleum Resources

The Project locations is situated in DSAs as defined in s. 36.1(1)(a) of the *Ontario Energy Board Act*. These are lands that contain geological formations used for subsurface storage of natural gas. As it is located in DSAs, there are active and abandoned wells in all Study Areas. The location of these designated Natural Gas Storage Pools are also shown on the County of Lambton OP (2017) Map 'C'.

Map 'B' of the County of Lambton OP (2017) identifies mineral and aggerate resources throughout the municipality. Potential Aggregate Deposits, shown on Map 'B' of the OP, are concentrated along the shores of Lake Huron and the nearest Potential Aggregate Deposit is located 5.4 km northwest of the Dow Moore DSA Study Area. There are seven (7) designated Aggregates Sites located in Wyoming, well outside the Project Study Areas.

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

### 3.3.5 Soil and Soil Capability

Caistor Clay (LIO, NDMNRF 2020a) is the only soil type identified in the Project Study Areas. See Figure 7, Appendix C. This soil is an imperfectly drained soil that belongs to the Grey-Brown Podzolic Great Soil Group. Caistor occurs on slightly undulating topography and represents the transition area between the Brookston Clay and Bottom Land. The soil is moderately acidic and is inherently low in organic content. Caistor Clay soils are best utilized for livestock farming, legume crops, and rotations that include some row crops.

Soil capability for agriculture is mapped by Agriculture and Agri-Food Canada (2005). 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 to be prime agricultural soils for common field crop production.

Most rural land in Lambton is comprised of prime agricultural lands (Classes 1-3), including specialty crop areas that are suitable to produce fruits and vegetables. All of rural Lambton, according to the County's OP (2017), is a prime agricultural area.

Soils in the Study Areas have been classified at Class 3. Soils in this class have moderately severe limitations that restrict the range of crops or require special conservation practices. The agricultural features in the Study Areas are illustrated on Figure 8, Appendix C.

### 3.3.6 Agricultural Tile Drains

Agricultural fields in Lambton County commonly have tile drainage to increase the agricultural productivity. Agricultural tile drains are mapped in Figure 9, Appendix C. As shown on Figure 9:

- Approximately 2.8 ha of the Dow Moore DSA Study Area is mapped as containing agricultural tile drainage, systematic tile drainage covers 0 ha and random tile drainage covers the full 2.8 ha (OMAFRA 2019).
- Approximately 73.1 ha of the Payne Storage Pool DSA Study Area is mapped as containing agricultural tile drainage, systematic tile drainage covers 8.8 ha and random tile drainage covers 64.3 (OMAFRA 2019).
- Approximately 40.6 ha of the Kimball-Colinville DSA Study Area is mapped as containing agricultural tile drainage, systematic tile drainage covers 35.22 ha and random tile drainage covers 5.3 ha (OMAFRA 2019).

### **3.3.7 Soybean Cyst Nematode (SCN)**

In southwestern Ontario, soybean cyst nematode (SCN) is present in the topsoil of many agricultural fields in populations large enough to impact soybean yields. SCN can spread many ways such as wind, animals, or in topsoil stuck to machinery as the machinery passes from an impacted field to a non-impacted field. SCN is common in agricultural lands in Lambton County. Once a field has been infested, there is significant potential for soybean crop yield reductions (Olechowski 1990). SCN concerns are limited to agricultural fields that will be traversed by construction equipment. SCN is not a concern in the road allowance, or areas where the topsoil has been completely removed.

### **3.3.8 Natural Hazards**

Natural hazards are elements of the physical environment that have the potential to affect a Project in an adverse manner. Potential natural hazards are limited but may include seismic activity and flooding.

The Project Study Areas lie in the Southern Great Lakes Seismic Zone (Natural Resources Canada 2019). This zone has a low to moderate level of seismicity when compared to the more active seismic zones to the east, such as the Western Quebec Seismic Zone which captures the area along the Ottawa River and in Quebec. According to data from Natural Resources Canada (2019), over the last 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.

Three moderately sized (magnitude 5) events have occurred in the 250 years of European settlement of this region, all of them in the United States - 1929, Attica, New York, 1986, near Cleveland, Ohio, and 1998, near the Pennsylvania/Ohio border. All three earthquakes were widely felt but caused no damage in Ontario.

## **3.4 BIOPHYSICAL FEATURES**

### **3.4.1 Aquatic Features**

A municipal drain, located in the Payne Storage Pool DSA Study Area, is identified as containing aquatic Species at Risk, as shown on Figure 10, Appendix C. Another unnamed drain is in the Kimball-Colinville DSA Study Area.

### **3.4.2 Designated Natural Areas and Vegetation**

#### **Wetlands**

The Ontario Wetland Evaluation System is an established process used to identify Provincially Significant Wetlands (PSWs). Evaluated wetlands may be one contiguous unit or a series of smaller wetlands determined by a set of criteria to be functioning together as a whole. Evaluated wetlands that do not qualify for PSW designation may still be designated locally significant and may be protected through local planning and policy measures. There may also be wetlands that have not been evaluated or even identified in an area.

A review of the LIO and NHIC database (NDMNRF 2020a) indicates that the Project is not located in any PSW's. There are also no unevaluated wetlands within 500 m of the Project. One PSW, the Ladysmith Wetland Complex, is located 1.5 km west of the Kimball-Colinville DSA Study Area.

#### **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 a responsibility for designating significant woodlands, using criteria that include size, ecological function, uncommon characteristics, and economic and social functional values (NDMNRF 2010). LIO identifies woodlands that overlap with the unevaluated wetland throughout the Study Area. A desktop review using available aerial imagery was completed to confirm their location and extent across the Study Area. 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 (NDMNRF 2010).

It is the local planning authority's responsibility to designate significant woodlands. The Study Area is located St. Clair Township, in Lambton County. The OPs of the lower- and upper-tier municipality were reviewed for the criteria and identification of significant woodlands. The Township of St. Clair's OP (2015) defines significant woodlands as "...those forested areas which are designated Environmental Protection in a Primary corridor or Significant Natural Area, or any contiguous forested area that is 4 hectares, or greater in size." Significant woodlands are not identified on the Township's associated OP mapping.

Lambton County's OP (2017) does not identify Significant Woodlands as part of their Natural Heritage System (Map 2) but does detail criteria to be used in the identification of significant woodlands, including a minimum of 2 ha in size, has interior habitat (i.e., greater than 100 m from all edges), and is the largest in the area. Smaller woodlots (0.5 – 1.9 ha) may be considered significant based on criteria guided by the province (i.e., proximity to other features, linkages, unique features, high socio-economic value, etc.).

There is one wooded area located in the Payne Storage Pool DSA Study Area. The wooded area meets the size criteria for significance under criteria of both the Township (>4 ha) and County's (>2 ha).

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

A review of NDMNRF LIO mapping (NDMNRF 2020a) and the NHIC (NDMNRF 2020b) did not identify any ANSIs within 500 m of the Project. The nearest ANSIs is located 5.3 m southwest of the Kimball-Colinville DSA Study Area and is associated with the Bickford Oak Woods Conservation Reserve.

### **3.4.3 Wildlife Habitat, Wildlife, and Species at Risk**

#### **3.4.3.1 Wildlife Habitat and Wildlife**

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 (NDMNRF 2000). Significant wildlife habitats 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

#### **Seasonal Concentration Areas**

Seasonal concentration areas are those sites where large numbers of a species gather together at one time of the year, or where several species congregate. No seasonal concentration areas have been identified in NDMNRF mapping and the NHIC database (NDMNRF 2020b) in 500 m of Project.

### **Animal Movement Corridors**

Animal movement corridors are elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another (NDMNRF 2000). Rivers, creeks, and drains may be used as movement corridors; these features are present in all three Study Areas. Hedgerows may also serve as small linkages (NDMNRF 2000). Map '2' of the County of Lambton Official Plan (2019) identifies linkage features throughout the municipality – shown as Group "C" Features. No mapped Group "C" Features or linkage features are in the Study Areas.

### **Rare Vegetation Communities or Specialized Habitats**

Rare or specialized habitats are two separate components. Rare habitats are those with vegetation communities that are considered rare in the province. SRANKS are rarity rankings applied to species at the "state", or in Canada at the provincial level, and are part of a system developed under the auspices of the Nature Conservancy. Generally, community types with SRANKS of S1 to S3 (i.e., extremely rare to rare – uncommon in Ontario), as defined by the NHIC, could qualify. It is assumed that these habitats are at risk and that they are also likely to support additional wildlife species that are considered significant.

Specialized habitats are microhabitats that are critical to some wildlife species. The Significant Wildlife Habitat Technical Guide (NDMNRF 2000) identifies eight potential specialized habitats associated with the eco-region of Ontario in which the Project is located:

- Waterfowl nesting area
- Bald Eagle and Osprey Nesting, Foraging and Perching Habitat
- Woodland Raptor Nesting Habitat
- Turtle Nesting Areas
- Seeps and Springs
- Amphibian Breeding Habitat (Woodland)
- Amphibian Breeding Habitat (Wetlands)
- Woodland Area-Sensitive Bird Breeding Habitat

Based on a preliminary review of background information and available aerial imagery, there is potential for Amphibian Breeding Habitat (Woodland) to occur in the wooded area in the Payne Storage Pool DSA Study Area.

**Habitat for Species of Conservation Concern**

There are four types of species of conservation concern: those which are rare, those with significantly declining populations, those which have been identified as being at risk from certain common activities and those with relatively large populations in Ontario compared to the remainder of the globe.

Rare species are considered at five levels: globally rare, federally rare (with designations by the *SARA*), provincially rare (with designations by Committee on the Status of Species at Risk in Ontario (COSSARO)), regionally rare (at the Site Region level), and locally rare (in the municipality or Site District). This is also the order of priority that should be assigned to the importance of maintaining species. Some species have been identified as being susceptible to certain practices, and their presence may result in an area being designated significant wildlife habitat. Examples include species vulnerable to habitat loss and species such as woodland raptors that may be vulnerable to forest management or human disturbance. The final group of species of conservation concern includes species that have a high proportion of their global population in Ontario. Although they may be common in Ontario, they are found in low numbers in other jurisdictions.

The NHIC database (NDMNR 2020b) was searched to obtain historic records of species of conservation concern (SOCC) from the vicinity of the Project. The background review documented 2 SOCC that are known to occur in the vicinity of the Project (Table 3.1).

Exact locations of species are not available from these atlases and, instead, are recorded within 1 x 1 km or 10 x 10 km squares. The potential for species to be present will be limited by habitat suitability and availability. Therefore, the identified species recorded from these databases may not be present. Prior to construction, this list should be further refined upon field investigations and consultation with the MECP and/or SCRCA.

**Table 3.1: Terrestrial Species of Conservation Concern**

Common Name	Scientific Name	S Rank	Provincial Status (COSSARO)	National Status (COSEWIC)	Source
<b>Dow Moore DSA Study Area</b>					
Short-eared Owl	<i>Asio flammeus</i>	S2N,S4B	Special Concern	Special Concern	NDMNR
<b>Kimball-Colinville DSA Study Area</b>					
Wood Thrush	<i>Hylocichla mustelina</i>	S4B	Special Concern	Threatened	NDMNR

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

S4: Apparently Secure—Uncommon but not rare

Sources

NDMNR – NDMNR Consultation, March 5, 2019

### 3.4.3.2 Species at Risk

Species at Risk (SAR) are identified as endangered or threatened by federal and/or provincial legislation. The NHIC database (NDMNR 2020b) was searched to obtain historic records of species at risk from the vicinity of the Project. Based on a review of background information, 8 SAR are known to occur in the vicinity of the Project (Table 3.2).

Exact locations of species are not available from these atlases and, instead, are recorded within 1 x 1 km or 10 x 10 km squares. The potential for species to be present will be limited by habitat suitability and availability. Therefore, the identified species recorded from these databases may not be present. This list will be further refined upon field investigations and consultation with the MECP.

**Table 3.2: Terrestrial Species at Risk**

Common Name	Scientific Name	S Rank	Provincial Status (COSSARO)	National Status (COSEWIC)	Source
<b>Dow Moore DSA Study Area</b>					
Spoon-leaved Moss	<i>Bryoandersonia illecebra</i>	S2	Endangered	Endangered	NHIC
Bobolink	<i>Dolichonyx oryzivorus</i>	S4B	Threatened	Threatened	NHIC
Eastern Meadowlark	<i>Sturnella magna</i>	S4B	Threatened	Threatened	NHIC
Butler's Gartersnake	<i>Thamnophis butleri</i>	S2	Endangered	Endangered	NHIC
Spiny Softshell	<i>Apalone spinifera</i>	S2	Endangered	Endangered	NHIC
<b>Kimball-Colinville DSA Study Area</b>					
Butler's Gartersnake	<i>Thamnophis butleri</i>	S2	Endangered	Endangered	NHIC
<b>Payne Storage Pool DSA Study Area</b>					
Butler's Gartersnake	<i>Thamnophis butleri</i>	S2	Endangered	Endangered	NHIC
Bobolink	<i>Dolichonyx oryzivorus</i>	S4B	Threatened	Threatened	NHIC

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

S4: Apparently Secure—Uncommon but not rare

S#B- Breeding status rank

## 3.5 SOCIO-ECONOMIC ENVIRONMENT

### 3.5.1 Employment and Business

The most recent economy and employment statistics are provided in the 2016 Census Population. Table 3.3 summarizes the unemployment and employment rate, participation rate, and the median income of persons over the age of 15 captured at the time of census (Statistics Canada, 2017). As shown in the table, St. Clair Township had lower participation rate and higher unemployment rate than the province of Ontario in 2016.

**Table 3.3: Labour Characteristics for Persons > 15 years St. Clair Township and Ontario, 2016**

Location	Total Population 15 years and Over	Labour Force	Employed	Participation Rate (%)	Employment Rate (%)	Unemployment Rate (%)
Ontario	11,038,440	7,141,675	6,612,150	64.7	59.9	7.4
St. Clair Township	14,086	11,715	6,530	61.2	55.7	9.0

Source: Statistics Canada, 2017.

Despite the higher unemployment rate (Table 3.4), median household income in St. Clair Township in 2015 was higher than the provincial median by approximately \$11,825. The median income for individuals was also higher than the provincial median by \$7,192.

**Table 3.4: Median Income, St. Clair Township and Ontario, 2015**

Location	Income of Households Median Total Income of Households (\$)	Income of Individuals Median Total Income among recipients (\$)
Ontario	\$74,287	\$33,539
St. Clair Township	\$86,112	\$40,731

Source: Statistics Canada, 2017

The labour force in the St. Clair Township is concentrated in three main occupations: manufacturing (15%), health care and social assistance (13.3%), and agricultural (5.6%) (Statistics Canada 2017).

According to the Demographic and Industrial Profile Report published by Mellor Murray Consulting (2016), St. Clair Township is home to an impressive manufacturing sector. When compared to the provincial average, the community has 70 per cent more firms in the heavy and civil engineering sector than the rest of Ontario as a whole. As recorded in the Report by Mellor Murray Consulting (2016), there are eight firms in the St. Clair utilities sector, seven of which are in electric power generation, transmission, and distribution.

Being the leading sector in the Township, heavy and civil engineering/manufacturing is critical to the health of the Township’s economy. As echoed in the St. Clair Official Plan (2005), large scale or heavy industries (which includes petrochemical refining and chemical refining), are the predominant form of industrial development.

St. Clair Township also has an impressive agricultural sector when compared to provincial averages. Though agriculture is not the leading source of employment, St. Clair has a “very high concentration of establishments in the crop production sector; specifically soybean farming which is the main area of farming in the community” (Mellor Murray Consulting 2016, pg.2). Compared to the provincial average, there are over 100 times as many soybean farms located in the Township.

### 3.5.2 Residents

In the five-year period between 2011-2016, the St. Clair Township experienced a 3.0 per cent decline in population (Statistics Canada 2017). As shown in Table 3.5, during this five-year period, the population of St. Clair decreased from 14,515 to 14,086.

One of the challenges facing the community, which Mellor Murry Consulting outlines in their Report on St. Clair’s Demographic and Industrial Profile (2016), has been the lack of inward migration. The 2011 National Household Survey found that less than six per cent of the population were first generation immigrants. In the five-year period between 2006-2011, only 0.8 per cent of the population living in St. Clair had moved to the Township from another province; about half the Ontario average and less than a third when compared to the country as a whole (Mellor Murry Consulting 2016).

**Table 3.5: Population Growth from 2011-2016, St. Clair Region and Province**

Location	Total Population 2011	Total Population 2016	Annual Growth (%)
Ontario	12,851,821	13,448,494	0.9
St. Clair Region	14,515	14,086	-3.0

While there are no definitive sources or speculations on population projections for St. Clair Township, it is expected that, if growth were to take place, it would be largely concentrated along the St. Clair River to the west. Due to the limitations on residential land use in the Project Study Areas (see section 3.5.6 for further discussion), growth would likely not occur in the vicinity of the Project.

At present, there are no residential properties located in 500 m of the Project.

### 3.5.3 Culture, Tourism and Recreational Facilities

Residents of and visitors to St. Clair Township and Lambton County have access to a variety of cultural, tourism, and recreational facilities and activities. Among the variety of opportunities made available to the public, the County is a popular vacation destination during the summer months with its numerous festivals and events, cultural attractions, trails, parks and campgrounds, and farm-gate produce.

The County of Lambton Interactive Online Planning tool maps cultural designations in the municipality (2021). Despite the abundance of cultural, tourism, and recreational activities in St. Clair Township, no mapped cultural designations are location within 500m of the Project.

### 3.5.4 Community Services & Infrastructure

#### **Permanent and Temporary Accommodations**

In 2016, there were 5,785 occupied private dwellings in St. Clair Township. The majority (98%) of homes were single-detached houses.

Temporary accommodations are available in the Township and include small bed-and-breakfasts, six (6) motels, as well as two campgrounds (St. Clair Parkway Campgrounds and Mooretown Campground) and one (1) RV resort (St. Clair RV Resort) (St. Clair Township 2019a).

### **Municipal Services and Infrastructure**

The County of Lambton is responsible for the provision of suitable waste disposal facilities for St. Clair Township. The County of Lambton uses its own active site as well as privately owned facilities, including Petrolia and Warwick landfills (County of Lambton 2019).

St. Clair Township is serviced by one water supply system, the St. Clair Township Water Distribution System (St. Clair Township 2019b). Approximately 95% of the population is serviced with a piped water supply (St. Clair Township 2019b).

### **Health Services and Infrastructure**

St. Clair Township is located in the Lambton Health Unit. In 2013, the Lambton Health Unit serviced 126,200 individuals (Statistics Canada 2013). There are currently no hospitals in the Project Study Areas, however; the nearest medical centres include: Aamjiwnaang First Nation Health Centre (located at 1300 Tashmoo Ave, Sarnia) and the Blue Water Health - Sarnia Hospital (located at 89 Norman Street, Sarnia) (Bluewater Health 2019).

There are no health services and associated infrastructure located within 500 m of the Project. The nearest service is located at 1300 Tashmoo Ave, Sarnia, ON, 4 km west of the Dow Moore DSA. This facility is currently being used as a COVID-19 Assessment Centre and serves as the Aamjiwnaang First Nation Health Centre.

### **Education Services and Infrastructure**

There are more than 129 elementary schools, 34 secondary schools, and one combined school from kindergarten to Grade 12 in Lambton County which are managed by four school boards: Lambton Kent District School Board, St. Clair Catholic District School Board, Conseil scolaire de district du Centre-Sud-Ouest (French School Board) and Conseil scolaire de district des écoles catholiques du Sud-Ouest (French Catholic School Board).

### **Roads, Highways and Culverts**

The Public Works department of the County of Lambton is responsible for managing the County of Lambton Road system, which includes almost 650 km of roadway and over 190 bridges and major culverts.

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

Lambton County has contracted their Police Services with the Ontario Provincial Police. There are three detachments in Lambton County, located in the Sarnia, Petrolia and Lambton Shores (Ontario Provincial Police 2019). St. Clair Township's Fire Department includes six fire stations that provides fire suppressant

services, as well as response to vehicle accidents, medical calls, and industrial fires (St. Clair Township 2019c).

### **3.5.5 Air Quality and Noise**

The Project locations are situated in DSAs where industrial activities take place. The locations are also situated in or adjacent to active agricultural land use, and amongst rural roads. The existing industrial activities, agricultural operations, and rural roads have the potential to create air and noise emissions.

#### Air Quality

The Project, as described in Section 3.5.6, is situated in St. Clair Township's Type Three industrial land use area; an area intended to accommodate large scale or heavy industries in which volatile materials are required in or are a product of manufacturing or processing (St. Clair Township 2005). Surrounding the three DSA's are petroleum refining, chemical refining, and manufacturing plants. Generally, air quality in the County of Lambton is a matter of concern among residents and environmental and social justice organizations.

#### Noise

According to the MECP's Environmental Noise Guideline (2016), the Project locations 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.

### **3.5.6 Land Use Designations**

Municipal land uses, policies, and practices at the three Project locations are governed by the Lambton County OP (2017) and the St. Clair Township OP (2005) and Zoning By-law (2013).

Section 1.4 of the Lambton County OP cites that detailed land use policies and designations are enunciated through local municipal official plans. As such, to determine the potential impact to land use, the following discussion and analysis is focused on the Projects conformity to the St. Clair Township OP.

Schedule 'A-1' of the St. Clair Official Plan (2005) designates the land use of the Project area as Industrial Type Three (2005). Type Three industrial designations are intended to accommodate large scale or heavy industries and include possible land uses, i.e., petrochemical refining, chemical refining, and any other use in which volatile materials are required in or are a product of manufacturing or processing. Given the high industrial activity permitted in these areas, residential land uses are limited. According to part C, Section 2.1 "except as provided for in Section 2.2, the following public services and facilities are permitted in all land use categories, subject to the development policies of this Plan: f) natural gas pipelines and accessory works."

At three Project locations there are oil and gas developments comprising of existing Enbridge Gas pipelines, natural gas storage wells, and associated infrastructure. No change in existing property use and zoning are proposed.

As cited in section 1.3.5 of this Report, most rural land in Lambton County is comprised of prime agricultural land (Classes 1-3, Canada Land Inventory), including specialty crop areas that are suitable to produce fruits and vegetables. All rural Lambton is a prime agricultural area (County of Lambton 2017, page 4-11). The Provincial Policy Statement (PPS) (2020), which the County OP must conform to and be consistent with, establishes that planning authorities may permit non-agricultural uses in prime agricultural areas for extraction of minerals, petroleum resources, and mineral aggregate resources (see policy 2.3.6.1 of the PPS).

### **3.5.7 Landfills and Contaminated Sites**

#### **Landfills**

In accordance with the MECP's Guideline D-4 Land Use on or Near Landfills and Dumps (1994), active and closed landfills within 500 m of the Study Area were reviewed. The potential location of these sites in the Study Area was determined by cross-referencing the Lambton County and St. Clair Township OP maps and the MECP's Small and Large Landfill Sites listed on the MECP website (2012; 2020).

These resources identified the presence of two closed or active landfills in the 500 m buffer of the Dow Moore Project Area. No other Small Landfill Sites or Large Landfill Sites listed on the MECP website were identified in the Project Study Areas.

#### **Contaminated Sites**

The three Project locations occur on agricultural lands, surrounded by industrial land uses and in active DSAs.

### **3.5.8 Archaeological Resources**

Within the realm of archaeology, it is commonly accepted that the spatial distribution of archaeological sites is largely dependent on a wide spectrum of features such as landform, soil type, water proximity, vegetation cover, climatic conditions, and other variables that characterize the environmental context and influence the cultural decisions made regarding site location. It is therefore possible for Indigenous and/or early European artifacts to be present at the Payne Storage Pool DSA and Kimball-Colinville DSA.

### **3.5.9 Cultural Heritage Resources**

A screening for built heritage resources and cultural heritage landscapes in the Study Areas was conducted. The screening identified that in no portion of the Study Areas contains known or recognized cultural heritage value, nor the potential for cultural heritage value. There is also no local or Indigenous knowledge, or accessible documentation, suggesting the Study Areas are considered a landmark in the local community, contains structures or sites important in defining the character of the area, has a special association with a community, person, or historical event, or contains or is a part of a cultural heritage landscape.

### 3.5.10 Indigenous Interests

The Project is located on lands that form Treaty 29, or the Huron Tract Purchase, signed on July 10, 1827, by representatives of the Crown and certain Anishinaabe peoples. The territory described in the written treaty covers approximately 2,200,000 acres (Indigenous and Northern Affairs Canada 2016). Located 600 m north of the Dow Moore Study Area is the Sarnia Indian Reserve No. 45 that was established because of treaties negotiated with the Crown in the 1820s. According to Census Canada, Sarnia Indian Reserve No. 45 has a population of 640 (Statistics Canada 2017b).

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. In the Letter of Delegation, the MENDM identified that the potential for impacts to the following Indigenous communities:

- Bkejwanong (Walpole Island) First Nation
- Aamjiwnaang First Nation
- Chippewas of Kettle and Stony Point First Nation
- Chippewas of the Thames
- Oneida Nation of the Thames

## **4.0 POTENTIAL IMPACTS, MITIGATION AND PROTECTIVE MEASURES, AND NET IMPACTS**

### **4.1 METHODOLOGY**

#### **4.1.1 Overview**

The potential effects and impacts of the project on physical, biophysical, and socio-economic features have been assessed in the Study Areas upon review of the existing conditions outlined in Sections 3.3-3.5. With an understanding of construction and operation/maintenance activities (see Sections 4.1.2 and 4.1.3, respectively) the assessment:

- Describes the environmental and socio-economic setting
- Predicts the effects and associated impacts of 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 determination of effects, impacts, and mitigation and protective measures considered:

- Comments expressed during the consultation program
- Information available from published and unpublished literature
- Maps and digital data
- Mitigation guidance documents
- The oil and gas development experience of Enbridge Gas 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 Areas to a site-specific survey of features in the Project footprint. The data available at the current stage of the environmental study is appropriate for predicting potential impacts and recommending mitigation and protective measures.

There are instances where field investigations are recommended before construction. Given the location of the Project components and experience of Stantec in providing environmental services for the oil and gas sector, 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.

Table 4.1 below summarizes the potential impacts, mitigation, and protective measures, including recommended supplemental studies, and net impacts for the existing conditions described in Section 3.0.

## **4.1.2 Construction**

### **4.1.2.1 Dow Moore DSA**

Project construction activities at the Dow Moore DSA Project location will be limited to the use of existing infrastructure (laneways, well pads). Activities to increase the MOP at the existing natural gas storage wells will be restricted to the existing graveled well pads.

### **4.1.2.2 Payne Storage Pool DSA**

Project construction activities at the Payne Storage Pool DSA Project location will involve the placement of temporary steel plates on agricultural land to access the sites' natural gas storage wells. Activities to increase the MOP at the existing natural gas storage wells will be restricted to the existing graveled well pads.

### **4.1.2.3 Kimball-Colinville Storage Pool DSA**

Project construction activities at the Kimball-Colinville Storage Pool DSA Project location involve a temporary gravel drilling pad (later reduced to a smaller permanent well pad and permanent access laneway), a new natural gas storage well, and 85 m of 10-inch natural gas pipeline. All activities will occur on agricultural land.

Construction will start with preparing the construction area by installing environmental silt fencing at required locations. The temporary gravel drill pad will involve excavation of topsoil and placement of crushed gravel on top of the native subsoil.

The new natural gas storage well will be drilled with either a rotary tool (with a rotating bit) or cable tool (with a chisel-type bit). Either method will involve the removal of drill cuttings via a fluid. Drill cuttings and the medium to remove them will be stored in tanks on the drilling pad, prior to testing for contaminants and subsequent removal to an appropriate facility.

The pipeline installation will follow typically construction techniques: excavation of a trench (separating topsoil from subsoil), pipe welding, lowering the pipe into the trench, connections with existing pipe infrastructure, hydrostatic testing of the new pipeline, backfilling of the trench with suitable material, then drying the pipe, purging the pipe of air, and filling the pipe with natural gas.

Following construction of the new natural gas storage well and pipeline, the temporary gravel drilling pad will be reduced in size by removing extraneous crushed gravel, importing additional subsoil as required, and replacing the stockpiled topsoil. The remaining areas will form a permanent graveled access laneway, and a permanent graveled well pad with storage well.

### **4.1.3 Operation and Maintenance**

Once the Project is operational, the following activities are undertaken to patrol and maintain the pipeline:

- Completing inspection by Enbridge Gas at least once a year to check for exposed pipelines, evidence of damage to aboveground equipment and piping, evidence of damage to underground piping and gas leaks, and identify any unassociated construction activity near the pipeline.
- Checking cathodic corrosion protection – an electric current that runs along the length of the pipeline to prevent the development of corrosion.
- Reviewing operating conditions of pipeline facilities such as storage wells and valve sites.

## **4.2 SUMMARY TABLE**

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
<b>PHYSICAL FEATURES</b>			
Bedrock Geology and Drift Thickness <i>Section 3.3.1</i>	Based on the deep location of bedrock, it is likely that it will only be encountered during drilling of the new well at the Kimball-Colinville DSA, for which bedrock removal will be required.	<ul style="list-style-type: none"> <li>• Consultation should occur with landowners to confirm distance of the drilling for the new well at the Kimball-Colinville DSA with active water wells. Should drilling occur within 100m of an active water well, Enbridge Gas should consult a hydrogeologist to determine whether mitigation and/or monitoring may be warranted.</li> <li>• Mitigation and protective measures for disturbance to wildlife are outlined in Section 3.4.</li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts from encountering bedrock are anticipated.
Surficial Geology and Physiography <i>Section 3.3.2</i>	Disturbance to the overburden in the Study Area may cause surface soil erosion.	<ul style="list-style-type: none"> <li>• 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.</li> <li>• When land is exposed, the exposure should be kept to the shortest practical period.</li> <li>• The contractor should 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.</li> <li>• Even with ESC measures, extreme precipitation events could result in collapse of silt fencing, overflow or bypass of barriers, and other situations which could lead to erosion. When site conditions permit, permanent protection measures should be 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.</li> <li>• ESC and stabilization measures should be maintained during construction, restoration, and rehabilitation until the site is established. Where evidence of erosion exists, corrective control measures should be implemented as soon as conditions permit.</li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts to or from the overburden material are anticipated.

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<ul style="list-style-type: none"> <li>Permits obtained from the SCRCA may contain conditions pertaining to ESC.</li> </ul>	
<p>Groundwater <i>Section 3.3.3</i></p>	<p><u>Hydrostatic Testing and Dewatering</u></p> <p>The pipeline will be hydrostatically tested before commissioning. Water required for the testing may be obtained from a municipal or natural source. Before the withdrawal of water from a municipal source, the municipality will be contacted to confirm the maximum rate of withdrawal.</p> <p>Where excavation encounters 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. Other potential effects of uncontrolled discharge may include introduction of foreign aquatic organism to a drainage basin and introduction of hazardous materials or pollutants to soils or bodies of water.</p>	<p><u>Hydrostatic Testing and Dewatering</u></p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>To reduce the potential for erosion and scouring at discharge locations during construction dewatering 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 using 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.</li> <li>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</li> </ul>	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on groundwater are anticipated.</p>

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	<p><u>Private Water Wells</u></p> <p>There are potentially 17 private water wells in the Study Areas. Depending on the proximity to wells, the depth of the well installation, and the groundwater levels encountered, dewatering has the potential to impact water well quality or quantity.</p>	<p>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> <ul style="list-style-type: none"> <li>A private well survey should be conducted to assess domestic groundwater use near the Project and a private well monitoring program may be recommended for residents who rely on overburden groundwater supply for domestic use. This monitoring program may include pre--construction water quality monitoring as well as water level monitoring, if available. Should a private water well be affected by project construction, a potable water supply should be provided, and the water well should be repaired or restored as required.</li> </ul>	
<p>Aggregates and Petroleum Resources <i>Section 3.3.4</i></p>	<p>The Study Areas are located in DSAs, and Project construction may interact with existing infrastructure.</p>	<ul style="list-style-type: none"> <li>Enbridge Gas will follow internal procedures and communication protocols to identify and avoid adverse impacts to existing infrastructure in the DSAs.</li> </ul>	<p>With following procedures and communication, no significant adverse residual impacts on aggregates and petroleum resources are anticipated.</p>
<p>Soil and Soil Capability <i>Section 3.3.5</i></p>	<p>Excess soil may be generated on-site during construction activities that will require off-site management.</p> <p>Trenching and construction activities have the potential to affect soil quality. The movement of heavy machinery on wet soil may cause rutting 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</p>	<p><u>Excess Soil</u></p> <ul style="list-style-type: none"> <li>It is noted that the MECP has new regulations for the movement of excess soils in the province of Ontario. Though the Project is not expected to generate significant quantities of excess soil, Enbridge Gas should retain or consult with a qualified person who is knowledgeable in the current excess soils guidelines, to make recommendations for the management of excess soils.</li> </ul> <p><u>Wet Soil Shutdown</u></p> <ul style="list-style-type: none"> <li>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</li> </ul>	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on soil or soil capability are anticipated.</p>

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	<p>and subsoil mixing, rutting, and erosion.</p>	<p>on lands where excessively wet soil conditions are encountered. Enbridge Gas's on-site inspection team should determine when construction activities may be resumed.</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p><u>High Winds</u></p> <ul style="list-style-type: none"> <li>• 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:                             <ul style="list-style-type: none"> <li>– Suspend earth moving operations</li> <li>– Apply dust suppressants or vegetate the piles</li> <li>– Protect soil stockpiles with a barrier or windscreen</li> </ul> </li> <li>• In conjunction with the above measures, all required materials and equipment should be readily accessible and available for use as required.</li> </ul> <p><u>Soil Stripping</u></p> <ul style="list-style-type: none"> <li>• Enbridge Gas should review the construction footprint and determine if soil stripping is feasible. If stripping is undertaken, topsoil/organic layer and subsoil should be stripped and stockpiled separately to avoid mixing.</li> <li>• 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 soil for over-wintering.</li> </ul> <p><u>Soil Compaction</u></p> <p>Within agricultural lands where soil has been compacted by the construction process, an agronomist should determine where</p>	

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<p>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 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 as well as determining that soil has been sufficiently de-compacted.</p>	
<p>Agricultural Tile Drains <i>Section 3.3.6</i></p>	<p>Where there is interaction with agricultural land, construction activities have the potential to crush and/or sever agricultural tile drains.</p>	<p>Enbridge Gas should undertake consultation with landowners of agricultural fields to confirm where systematic tile drainage is present. If tile drainage is present, Enbridge Gas should undertake standard mitigation during ground disturbance, including:</p> <ul style="list-style-type: none"> <li>• Develop site specific tile plans with an independent tile contractor</li> <li>• Conduct pre-tiling, and install header tile to maintain tile system function</li> <li>• Record and flag severed or crushed tile drains</li> <li>• If a main drain, header drain, or large diameter drain is severed, maintain field drainage and prevent flooding of the work area and adjacent lands through temporary repairs</li> <li>• Cap the downstream side of severed drains that cross the excavation to prevent the entry of soil, debris and rodents, as required</li> <li>• Repair damaged and severed drains following construction</li> <li>• After repair and before backfilling, invite the landowner to inspect and approve the repair</li> </ul>	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on agricultural tile drains are anticipated.</p>

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
<p>SCN <i>Section 3.3.7</i></p>	<p>Lands with SCN or other pests and/or diseases have the potential to impact soil productivity, and to be transported by construction equipment from infected to non-infected locations.</p>	<ul style="list-style-type: none"> <li>• In consultation with the landowner(s) and an agrologist, Enbridge Gas may develop and implement an agricultural soil sampling plan for potential pests and/or diseases that are known to the area. If the results indicate an issue or concern, in consultation with the landowner, Enbridge Gas will work with the agrologist to develop a best practice protocol.</li> <li>• Any imported topsoil used for rehabilitation will also have a composite sample analyzed for identified concerns before it is placed on the easement</li> </ul>	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts from SCN are anticipated.</p>
<p>Natural Hazards <i>Section 3.3.8</i></p>	<p>The probability of significant seismic activity in the Study Areas is low; therefore, no potential impacts are anticipated.</p> <p>The likelihood of a flooding event interfering with Project 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, and damage or loss of construction equipment and contamination of a watercourse as a result of equipment entering a watercourse. The nature of these impacts would depend on the spatial extent, duration, and magnitude of the flooding event.</p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Temporary workspaces should be located above the floodplain to the extent practical, unless necessary for watercourse crossings.</li> <li>• All work in the floodplain will be subject to a permit from the SCRCA.</li> </ul>	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts from natural hazards are anticipated.</p>

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
<b>BIOPHYSICAL FEATURES</b>			
Aquatic Features <i>Section 3.4.1</i>	Unnamed watercourses will be crossed at existing culverts, and therefore direct impacts are not anticipated to aquatic features. Indirect impacts may occur through sedimentation and/or spills.	<ul style="list-style-type: none"> <li>• Mitigation and protective measures for erosion and sediment control are outlined in Section 3.3.2. Contingency measures for accidental spills are outlined in Section 6.2.2.</li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts to aquatic features are anticipated.
Designated Natural Areas and Vegetation <i>Section 3.4.2</i>	Project activities will occur on agricultural land and therefore direct impacts are not anticipated to designated natural area and vegetation. Indirect impacts may occur through sedimentation and/or spills into adjacent wooded lands.	<ul style="list-style-type: none"> <li>• Mitigation and protective measures for erosion and sediment control are outlined in Section 3.3.2. Contingency measures for accidental spills are outlined in Section 6.2.2.</li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts to designated natural areas and vegetation are anticipated.
Wildlife Habitat, Wildlife, and Species at Risk <i>Section 3.4.3</i>	There is the potential for 2 SOCC and 8 SAR to occur in/near the Project, and the adjacent woodland at the Dow Moore DSA has the potential to contain amphibians. Potential impacts on wildlife, wildlife habitat, and SAR from construction include direct mortality from construction vehicles and/or adults abandoning young due to disturbance, habitat degradation through spills, and sensory disturbance.	<ul style="list-style-type: none"> <li>• A field investigation to confirm the potential presence of wildlife, wildlife habitat, and SAR will be undertaken prior to construction. Species and site-specific mitigation and protective measures, and permitting as required, will be recommended based on the findings of the field investigation.</li> <li>• General mitigation and protective measures for potential impacts on wildlife, wildlife habitat, and SAR are:                             <ul style="list-style-type: none"> <li>○ Speed limits should be lowered where field investigations identify specific wildlife concerns.</li> <li>○ Equipment and vehicles should yield 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>○ Mitigation and protective measures for noise are outlined in Section 3.5.2. Mitigation and protective measures for erosion and sediment control are outlined in Section 3.3.2.</li> </ul> </li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on wildlife habitat, wildlife, and SAR are anticipated.

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		Contingency measures for accidental spills are outlined in Section 6.2.2.	
<b>SOCIO-ECONOMIC ENVIRONMENT</b>			
<p>Employment and Business <i>Section 3.5.1</i></p>	<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. Residual effects on employment are related to the project's labour demand 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 in order 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>During all phases of the project, labour conditions will be affected by direct, indirect, and induced employment.</p>	<ul style="list-style-type: none"> <li>• Overall, it is expected that the Project will generally result in positive effects on employment by providing work opportunity for local and Indigenous people and increasing the employment rate. These positive effects do not require mitigation, but Enbridge Gas will identify and implement various mechanisms to enhance project benefits.</li> <li>• To further increase the positive effects generated from the Project, contractors should make all reasonable efforts, where practicable, to procure services and materials from local suppliers, where services or materials are available in required quantity and at competitive prices. To help encourage further local and Indigenous content on the Project, it is recommended that Enbridge Gas post purchasing requirements in advance, so that businesses can position themselves to effectively bid to supply goods and services needed for construction and operation. Increased participation of local and Indigenous businesses will enhance positive local economic effects.             <ul style="list-style-type: none"> <li>– To mitigate adverse impacts to existing businesses, see the measures recommended below for 'Residents'.</li> </ul> </li> </ul>	<p>With the initiatives to encourage local participation on the Project, it is anticipated that the effects from the Project on employment and business will generate positive economic activity through new direct, indirect, and induced employment.</p> <p>Project expenditures on local businesses and suppliers also have the potential to positively affect the economy. Additionally, those who have worked on the project will gain transferrable skills and experience that could help them gain employment in other industries. Mitigation measures will any unlikely nuisance impacts on existing businesses.</p> <p>With the implementation of the Project, local procurement, and mitigation and protective measures, positive residual impacts on the economy</p>

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	<p>The required workforce will create work opportunity for those living in Lambton County and will result in increased employment income and municipal government revenue.</p> <p>Local businesses, including businesses owned by Indigenous peoples, will also likely benefit from the project through purchases of labour, goods, and services that will be needed to complete construction of the Project.</p> <p>While construction will generally result in positive effects on employment, some local businesses may be temporarily adversely impacted by increases in noise and traffic volumes during construction.</p>		<p>and employment are anticipated.</p>
<p>Residents <i>Section 3.5.2</i></p>	<p>Despite the lack of residents in vicinity to the project, those travelling near the areas during construction may experience nuisance concerns of increased noise, equipment exhaust, and dust.</p>	<ul style="list-style-type: none"> <li>• During construction, motorized construction equipment should be equipped with mufflers. Company and construction personnel should avoid idling of vehicles; vehicles or equipment should be turned off when not in use unless required for operation of the vehicle or equipment. To the greatest extent 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 situated to reduce disturbance to residents and businesses.</li> <li>• Site practices during construction should be implemented that are in line with the document 'Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities' prepared by Cheminfo Services Inc. for Environment Canada (Cheminfo Services Inc., 2005), which may include:</li> </ul>	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on residents are anticipated.</p>

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<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> <li>- 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.</li> </ul>	
Culture, Tourism and Recreational Facilities <i>Section 3.5.3</i>	No culture, tourism, or recreational facilities were identified in the vicinity of the Project.	<ul style="list-style-type: none"> <li>• As no impacts to culture, tourism, and recreational facilities are anticipated, no mitigation or protective measures are recommended.</li> </ul>	As no impacts are anticipated, no net impacts will occur.
Community Services and Infrastructure <i>Section 3.5.4</i>	The presence of temporary workers during the construction period has the potential to increase the demand on local community services and infrastructure.	<ul style="list-style-type: none"> <li>• The contractor should have emergency response equipment and trained personnel on-site during construction. In addition, an Emergency Response Plan should be developed and implemented, which will address field health services, emergency call-out procedures and fire response plans.</li> <li>• The capacity of waste disposal sites will be considered and if Project needs are not easily accommodated, alternative disposal locations will be considered.</li> <li>• Contact information for a designated Enbridge representative will be available to address questions and concerns during construction. Consultation has been initiated and will continue with municipal personnel.</li> </ul>	Community services and infrastructure appear to have additional capacity to absorb potential increased temporary demands that may result from the Project. Given the available capacity of the local community services and infrastructure, along with the implementation of the mitigation and protective measures, no significant adverse residual impacts on community services and infrastructure are anticipated.

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
Air Quality and Noise <i>Section 3.5.5</i>	Residential and business properties may experience noise, dust and equipment exhaust associated with construction activity. Drill of the new well may also require blow down/flaring of natural gas. During operation, no substantial air or noise emissions are anticipated to occur.	<ul style="list-style-type: none"> <li>• Mitigation and protective measures for air quality and noise are outlined in Section 3.5.2.</li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts from air quality and noise are anticipated.
Land Use Designations <i>Section 3.5.6</i>	Natural gas pipelines and their associated facilities/structures are permitted land uses, and therefore no impacts are anticipated.	<ul style="list-style-type: none"> <li>• As no impacts to land use designations are anticipated, no mitigation or protective measures are recommended.</li> </ul>	As no impacts are anticipated, no net impacts will occur.
Landfills and Contaminated Sites <i>Section 3.5.7</i>	Improper disposal of waste material generated during construction may result in contamination to soil, groundwater, and/or surface water resources. Litter generated during construction may also become a nuisance to adjacent properties if not contained. There is also the potential to encounter contaminated soil and/or water.	<ul style="list-style-type: none"> <li>• The construction contractor should implement a site-specific waste collection and disposal management plan, which may include:                             <ul style="list-style-type: none"> <li>– Waste materials (including drilling cuttings and fluid), sanitary waste, and recycling transported off-site by private waste contractors licensed by the MECP.</li> <li>– Contractors required to remove their excess materials from the site.</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> </li> <li>• Section 6.2.3 outlines contingency measures to be implemented should contaminated soils be encountered.</li> <li>• Section 3.3.3 outlines testing measures to be implemented during dewatering activities.</li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts from landfills and contaminated sites are anticipated.

**Table 4.1: Potential Impacts and Recommended Mitigation and Protective Measures**

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
Archaeological Resources <i>Section 3.5.8</i>	Construction at the Payne Storage Pool DSA and Kimball Colinville DSA have the potential to interact with archaeological resources.	<ul style="list-style-type: none"> <li>A Stage 1 and Stage 2 AA will be conducted on lands disturbed at the Payne Storage Pool DSA and Kimball-Colinville DSA. The results of the assessments will determine appropriate mitigation and protective measures for the sites. Where feasible for the Project, archaeological sites that are determined to retain further cultural heritage value and interest may be mitigated in whole or in part by avoidance and protection/preservation measures. Where avoidance and protection/preservation measures are not feasible, archaeological resources may be mitigated in whole or in part by excavation.</li> </ul>	With the implementation of the archaeological assessment and subsequent mitigation measures, including avoidance and protection/preservation (where feasible) and excavation, no significant adverse residual impacts on archaeological resources are anticipated.
Cultural Heritage Resources <i>Section 3.5.9</i>	The cultural heritage checklist identified no heritage features or landscapes, and therefore no impacts are anticipated.	<ul style="list-style-type: none"> <li>As no impacts to cultural heritage resources are anticipated, no mitigation or protective measures are recommended.</li> </ul>	As no impacts are anticipated, no net impacts will occur.
Indigenous Interests <i>Section 3.5.10</i>	The project may affect traditional territories of Indigenous communities, and during construction harvesting and hunting in the construction RoW could be impeded. Archaeological surveys could also result in the finding of Indigenous artifacts. Potential permits and approvals required for the project may trigger a duty to consult.	<ul style="list-style-type: none"> <li>Enbridge Gas has sought input from the identified Indigenous communities and will continue engaging with Indigenous communities as the Project moves forward. Enbridge Gas will also continue to work with their respective Economic Development departments and Enbridge Gas’s contractors to find opportunities for their participation in providing goods and services during construction. Information on the current state of Indigenous engagement will be provided in the application to the OEB.</li> </ul>	By undertaking the engagement and archaeological assessments, no significant adverse residual impacts on Indigenous interests are anticipated.

## 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 oil and gas infrastructure in Ontario, the *OEB Environmental Guidelines* (2016) notes that cumulative effects should be identified and discussed in the ER.

Building upon the intent of the *OEB Environmental Guidelines* (2016), the OEB has specified that only those effects that are additive or interact with the 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. The cumulative effects assessment has been prepared with consideration of this direction from the OEB.

### 5.1 METHODOLOGY

The cumulative effects assessment describes the potential cumulative effects resulting from the interaction of residual effects of constructing and operating the Project 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 in systems by either an additive (i.e., cumulative) or interactive (i.e., synergistic) manner. Positive residual effects have not been assessed in the cumulative effects assessment.

By applying the principles of avoidance, reduction, 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 Project
- 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 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 Project locations was used for the cumulative effects assessment. The 100 m boundary has been found, through previous experience with pipeline construction, to be appropriate for the most encountered net effects.

### Temporal

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

1. ER and technical design – 2021
2. Construction – Winter 2021/Spring 2022
3. Operation and Maintenance – 2022 to 2072\*

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

Based upon these milestone activities, two time periods were selected for evaluation: 2021/2022 and 2027. The year 2022 was selected to represent the construction period, and the year 2027 was selected to represent the operation and maintenance period. Forecasting beyond 2027 increases the uncertainty in predicting whether projects will proceed, and the effects associated with these projects.

## 5.3 PROJECT INCLUSION LIST

As part of the study of cumulative effects, projects that are either currently existing, and those that have been approved and are scheduled (or are likely to be scheduled) during the construction period and early operation and maintenance of the Project were reviewed and added to the project inclusion list. The list was developed by reviewing publicly available information for projects and activities with the potential for effects to interact with the identified effects of the proposed pipeline in the spatial and temporal study boundaries. The following resources were reviewed:

- Canada Energy Regulator, Major Applications and Projects (CER, 2021)
- Canadian Environmental Assessment Agency, Canadian Environmental Assessment Registry (CEA Agency, 2021)
- County of Lambton, Budget and Financial Statements (County of Lambton, 2021)
- Government of Ontario, Environmental Assessment Projects by Category (Government of Ontario, 2021)
- Government of Ontario, Renewable Energy Approval Projects (2021)

- Infrastructure Ontario, Infrastructure Ontario Projects – Interactive Map (Government of Ontario, n.d.)
- MTO, Southern Highways Program (2017-2021) (MTO, n.d.)
- OEB Applications Currently Before the Board (facilities applications only) (OEB, 2021)

Based on the review of publicly available resources, no projects have been identified for the project inclusion list. However, the Dow Moore DSA project location occurs in proximity to the Pembina Corunna industrial facility, and it is assumed that on-going improvements to Lasalle Line (Dow Moore DSA), Ladysmith Road (Payne Storage Pool DSA) and Tecumseh Road (Kimball-Colinville Storage Pool DSA) may occur in the spatial and temporal study boundaries.

## **5.4 ANALYSIS OF CUMULATIVE EFFECTS**

The ER considers the potential impacts of the Project on specific features and conditions and proposes 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 – Year Late 2021/Spring 2022**

Residual project impacts which may occur during project construction are outlined in Table 4.1. To consider the additive and interactive effects at their maximum intensity, the cumulative effects assessment assumes that operation of other unrelated facilities and Project construction will occur concurrently. Potential cumulative effects resulting from the Project construction and the concurrent nearby activities are additive effects on wildlife, air quality and the acoustic environment.

The construction of the project will result in an increase in noise and air pollutants and increase in dust from the operation of vehicles and equipment. These potential effects on air quality and the acoustic environment may be felt by nearby wildlife, residents, and businesses, and may be compounded by work being undertaken by municipal public works or at the Pembina Corunna facility. Provided that the mitigation and protective measures outlined in this ER are implemented, significant changes to existing conditions and adverse cumulative residual effects are not anticipated to occur. This is also based on the assumption that concurrent facility operation follow similar mitigative measures and operates in compliance with applicable local, provincial, and federal guidelines.

### **5.4.2 Operation and Maintenance – Year 2072**

Operation and maintenance of the proposed Project will have relatively little impact on the environment. On a day-to-day basis there is no operational noise that is anticipated to occur following Project construction. Should well maintenance or an integrity dig be necessitated, this is the only anticipated instance when the Project would have potential temporary impacts during its operation.

During the operation phase of the Project, Enbridge Gas will conduct internal inspections on the pipeline system to determine if anomalies such as cracks, corrosion, or dents may be present. If an anomaly is dedicated, subsequent excavation along a section of the pipe will be required to confirm and field verify if

maintenance work is required. This is known as an integrity dig. If necessitated, it can be assumed that during an integrity dig, the operation of construction vehicles and daylighting of the pipe may have potential impacts on the surrounding environment. These impacts, however, would be temporary and easily mitigated or reduced by following standard mitigation measures. While there is a potential that an integrity dig may occur during the operational phase, the likelihood of one taking place is low given the conditions of the natural environment in which the pipeline is situated and the modern technology that the pipeline will be using.

Any operation and maintenance activities undertaken by Enbridge Gas, such as an integrity dig, will be completed in co-ordination with the Enbridge Gas Environmental Planning Team and will consider any potential impacts on natural heritage and the socio-economic environment. Appropriate mitigation measures will be developed and implemented based on the proposed maintenance work and all necessary agency permits and approvals will be secured, 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, adverse residual effects are not anticipated to be significant.

## **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 and operation of the Project. A 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.

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.

## **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 projects.

Previous construction experience, and a review of post-construction monitoring reports from other projects, indicates that impacts from oil and gas 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. With this in mind, Enbridge Gas 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 in the ER are executed. Enbridge Gas should implement an orientation program for inspectors and contractor personnel to provide information regarding Enbridge Gas' environmental program and commitments, as well as safety measures.
- Recommendations and commitments made in this ER should become part of the contract specification with the contractor selected to construct the project.
- A walking inspection of the project area should be done approximately one year after construction to determine whether areas require further rehabilitation or as required by OEB conditions of approval.

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

#### **6.1.1 Water Wells**

Before construction, a private well survey should take place to assess domestic groundwater use near the Project and determine the need for a well monitoring program, as outlined in Table 4.1.

#### **6.1.2 Exposed Soils**

Monitoring of potential effects on exposed soils should occur during construction by Enbridge Gas's on-site inspection team.

#### **6.1.3 Species at Risk**

Should SAR be identified during field investigations, construction monitoring may need to be undertaken. The exact nature of monitoring will be determined in consultation with the MECP and will depend on the species present.

#### **6.1.4 Residents and Businesses**

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

### **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 Project. 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, Enbridge Gas and the pipeline 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 Watercourse Sedimentation**

Even with properly installed ESC measures, extreme runoff events could lead to sedimentation of watercourses. If sedimentation of a watercourse occurs, immediate action should be taken under the direction of on-site environmental personnel to install temporary measures that will contain the erosion as quickly and effectively as practical. Notification should occur to the SCRCA regarding the incident and the corrective actions being implemented. When site conditions permit, permanent protection measures should be reinstalled 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.

#### **6.2.2 Accidental Spills**

During construction, accidental spill of fluids may occur of hydrocarbon-based construction fluid, or well drilling fluid. The impact of the spill will depend upon the type of fluid, the magnitude and extent of the spill, and the environmental and socio-economic conditions in which it takes place. Upon release of a fluid, Enbridge Gas 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 potential spill depending on the magnitude and extent. Spills should be immediately reported to Enbridge Gas's on-site inspection team. If necessary, the MECP Spills Action Center should be notified at 1-800-268-6060.

A Spills Response Plan should be developed by the contractor, 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 Spills Response Plan should be implemented.

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

Should previously unidentified archaeological or heritage resources be uncovered or suspected of being uncovered during construction, ground disturbance in the find location should cease immediately. An archaeologist licensed in the Province of Ontario should be notified immediately. As needed, the licensed archaeologist will consult with the MHSTCI, and other relevant stakeholders, i.e., Indigenous communities, to develop a site-specific response plan. A site-specific response plan for the newly identified archaeological or heritage resource 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. If 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, Enbridge Gas should retain expert advice on assessing and developing a plan to include soil sampling, handling, disposal, and remediation.

## 7.0 CONCLUSION

The environmental study investigated data on the physical, biophysical, and socio-economic environment for the Project. 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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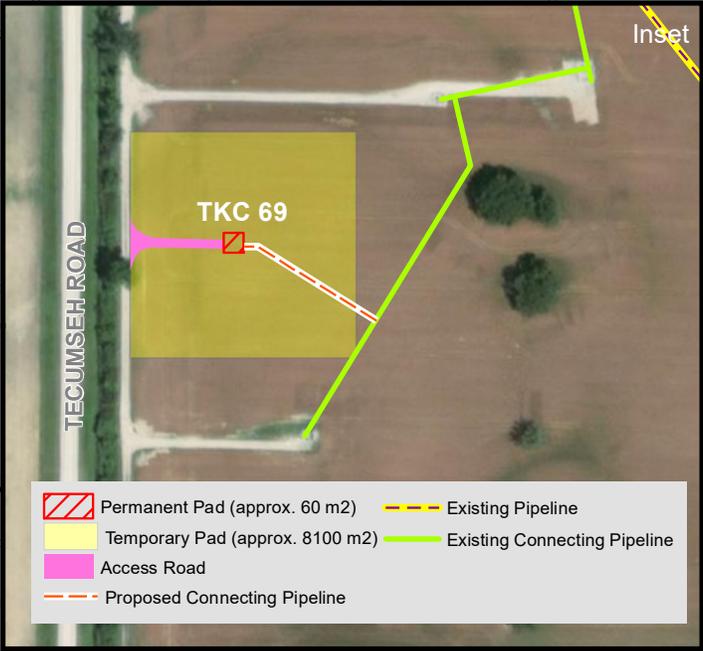
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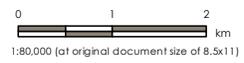
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# **APPENDIX A: FIGURES**



- Legend**
- ◆ 1. Dow Moore DSA
  - ◆ 2. Payne Storage Pool DSA
  - ◆ 3. Kimball-Colinville DSA & Proposed Location of TKC 69
  - Highway
  - Major Road
  - Minor Road
  - Railway
  - Watercourse
  - Municipal Boundary
  - Municipal Boundary, Lower
  - Waterbody
  - Wooded Area



**Stantec**

Project Location: 160961428 REV C  
 Township of St. Clair Prepared by AMW on 2021-07-22  
 Technical Review by MK on 2021-07-22

Client/Project: ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

Figure No.: **1**  
 Title: **Project Locations**

**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, 2021.

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:  
LETTER OF DELEGATION*

Ministry of Energy, Northern  
Development and Mines

Ministère de l'Énergie, du  
Développement du Nord et des  
Mines

77 Grenville Street  
6<sup>th</sup> Floor  
Toronto ON M7A 2C1

77, rue Grenville  
6<sup>e</sup> étage  
Toronto ON M7A 2C1



VIA EMAIL

April 13, 2021

Asha Patel  
Technical Manager, Regulatory Applications  
Enbridge Gas Inc.  
500 Consumers Road,  
North York, ON M2J 1P8

**Re: 2022 Storage Enhancement Project**

Dear Asha Patel:

Thank you for your emails, dated January 25, 2021 and March 18, 2021 (update), notifying the Ministry of Energy, Northern Development and Mines (ENDM) of Enbridge Gas' (Enbridge) intention to apply to the Ontario Energy Board (OEB) for Leave to Construct for part of the proposed 2022 Storage Enhancement Project (the Project).

I understand that Enbridge is planning to drill a new horizontal natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool and install a lateral pipeline from well TKC 69 to the Kimball-Colinville Storage Pool gathering system.

On behalf of the Government of Ontario (the Crown), ENDM has reviewed the information provided by Enbridge 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 Enbridge through this letter. ENDM expects that Enbridge 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>
Aamjiwnaang First Nation	978 Tashmoo Avenue Sarnia, ON N7T 7H5 T: (519) 336-8410 F: (519) 336-0382 Web: <a href="#">Aamjiwnaang First Nation</a>
Bkejwanong (Walpole Island) First Nation)	RR 3, Wallaceburg, ON N8A 4K9 T: (519) 627-1481 F: (519) 627-0440 Web: <a href="#">Walpole Island First Nation</a>
Chippewas of the Thames First Nation	RR 1, Muncey, ON N0L 1Y0 T: (519) 289-5555 F: (519) 289-2230 Web: <a href="#">Chippewas of the Thames First Nation</a>
Chippewas of Kettle and Stony Point First Nation	6247 Indian Lane Kettle and Stony Point First Nation, ON N0N 1J1 T: (519) 786-2125 F: (519) 786-2108 Web: <a href="#">Chippewas of Kettle and Stony Point First Nation</a>
Oneida Nation of the Thames	RR 2, Southwold, ON N0L 2G0 T: (519) 652-3244 F: (519) 652-9287

	Web: <a href="#">Oneida Nation of the Thames</a>
--	--

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.

### **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 Rosalind Ashe, Senior Advisor, Indigenous Energy Policy ([Rosalind.Ashe@ontario.ca](mailto:Rosalind.Ashe@ontario.ca)).

I trust that this information provides clarity and direction regarding the respective roles of the Crown and Enbridge. If you have any questions about this letter or require any additional information, please contact me directly.

Sincerely,



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.

*APPENDIX B2:  
PROJECT CONTACT LIST*

**Table B2.1: Indigenous Contacts**

FIRST NAME	SURNAME	ORGANIZATION	POSITION/DEPARTMENT	ADDRESS	CITY /TOWN	PROVINCE	Postal Code	E-MAIL
Charles	Sampson	Bkejwanong (Walpole Island) First Nation	Chief	117 Tahgahoning, R.R. 3	Wallaceburg	ON	N8A 4K9	
Dean	Jacobs	Bkejwanong (Walpole Island) First Nation	Consultation Manager	117 Tahgahoning, R.R. 3	Wallaceburg	ON	N8A 4K9	Dean.Jacobs@wifn.org
Janet	Macbeth	Bkejwanong (Walpole Island) First Nation	Project Review Coordinator	117 Tahgahoning, R.R. 3	Wallaceburg	ON	N8A 4K9	janet.macbeth@wifn.org
Chris	Plain	Aamjiwnaang First Nation	Chief	978 Tashmoo Avenue	Sarnia	ON	N7T 7H5	Chief.plain@aamjiwnaang.ca
Sharilyn	Johnston	Aamjiwnaang First Nation	Environment Coordinator	978 Tashmoo Avenue	Sarnia	ON	N7T 7H5	sjohnston@aamjiwnaang.ca
		Aamjiwnaang First Nation	Environment email	979 Tashmoo Avenue	Sarnia	ON	N7T 7H6	environment@aamjiwnaang.ca
Jason	Henry	Chippewas of Kettle and Stony Point First Nation	Chief	6247 Indian Lane	Lambton County	ON	N0N 1J1	jason.henry@kettlepoint.org
Valerie	George	Chippewas of Kettle and Stony Point First Nation	Environment Coordinator	6248 Indian Lane	Lambton County	ON	N0N 1J2	valerie.george@kettlepoint.org
Clint	Couchie	Chippewas of Kettle and Stony Point First Nation	Band Manager	6249 Indian Lane	Lambton County	ON	N0N 1J3	clint.couchie@kettlepoint.org
Jacqueline	French	Chippewas of the Thames	Chief	328 Chippewa Road, R.R. #1	Munsee	ON	N0L 1Y0	jfrench@cottfn.com
Fallon	Burch	Chippewas of the Thames	Consultation Coordinator	328 Chippewa Road, R.R. #1	Munsee	ON	N0L 1Y0	fburch@cottfn.com
		Chippewas of the Thames	Consultation email	329 Chippewa Road, R.R. #1	Munsee	ON	N0L 1Y1	consultation@cottfn.com
Brandon	Doxtator	Oneida Nation of the Thames	Environmental Coordinator	RR2	Southworld	ON	NoL 2G0	environment@oneida.on.ca
Adrian	Chrisjohn	Oneida Nation of the Thames	Chief	2212 Elm Ave.	Southworld	ON	N0L 2G0	adrian.chrisjohn@oneida.on.ca

**Table B2.2: Agency Contacts**

First Name	Surname	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
<b>PROVINCIAL AGENCIES</b>										
David	Cooper	Ministry of Agriculture and Food, Ministry of Rural Affairs	Land Use Policy & Stewardship	Manager	1 Stone Road West, 3rd Floor SE	Guelph	ON	N1G 4Y2	519-766-5990	david.cooper@ontario.ca
Sarah	Kielek-Caster	Ministry of Agriculture and Food, Ministry of Rural Affairs	Land Use Policy & Stewardship	Rural Planner	667 Exeter Road	London	ON	N6E 1L3		sarah.kielek-caster@ontario.ca
Annamaria	Cross	Environmental Assessment and Permissions Branch	Director, EA Modernization		136 St. Clair Ave. W, 1st Floor	Toronto	ON	M4V 1P5	416-314-7967	annamaria.cross@ontario.ca
		Ministry of Environment, Conservation and Parks	Source Protection Programs Branch		40 St.Clair Ave. W. 14th Floor	Toronto	ON	M4V 1M2		sourceprotectionscreening@ontario.ca
		Ministry of Natural Resources and Forestry	MNRF Aylmer							MNRF.Ayl.Planners@ontario.ca
<b>ONTARIO PIPELINE COORDINATING COMMITTEE</b>										
Zora	Crnojacki	Ontario Pipeline Coordinating Committee	Ontario Energy Board		2300 Young Street, 26th Floor, PO Box 2319	Toronto	ON	M4P 1E4	416-440-8104	zora.crnojacki@oeb.ca
Helma	Geerts	Ontario Pipeline Coordinating Committee	Ministry of Agriculture, Food and Rural Affairs		1 Stone Road West, 3rd Floor SE	Guelph	ON	N1G 4Y2	519-546-7423	
Dan	Minkin	Ontario Pipeline Coordinating Committee	Ministry of Heritage Sport Tourism and Culture Industries	Team Lead, Heritage	401 Bay Street	Toronto	ON	M7A 0A7	416-314-7147	
Tony	Di Fabio	Ontario Pipeline Coordinating Committee	Ministry of Transportation		301 St. Paul Street, 2nd Floor	St. Catharines	ON	L2R 7R4	905-704-2656	
Kourosh	Manouchehri	Ontario Pipeline Coordinating Committee	Technical Standards and Safety Authority		345 Carlingview Drive	Toronto	ON	M9W 6N9	416-734-3539	

First Name	Surname	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Sally	Renwick	Ontario Pipeline Coordinating Committee	Ministry of Natural Resources and Forestry	Team Lead, Land Use and Environmental Planning	300 Water Street	Peterborough	ON	K9J 8M5	705-755-5195	
Michelle	Knieriem	Ontario Pipeline Coordinating Committee	Ministry of Municipal Affairs and Housing, Western Municipal Services Office		659 Exeter Road, 2nd Floor	London	ON	N6E 1L3	226-980-8239	
Jason	McCullough	Ontario Pipeline Coordinating Committee	Ministry of Energy, Northern Development and Mines	Senior Advisor, Indigenous Energy Policy Unit	77 Grenville Street, 6th Floor	Toronto	ON	M7A 2C1	416-526-2963	
Cory	Ostrowka	Ontario Pipeline Coordinating Committee	Infrastructure Ontario	Environmental Specialist	1 Dundas Street West, Suite 2000	Toronto	ON	M5G 2L5	416-571-8294	
Uyen	Ha	Ontario Pipeline Coordinating Committee	Ministry of Government and Consumer Services, Realty Policy Branch, Realty Division	Policy Lead	777 Bay Street, 2nd Fl Suite 2300	Toronto	ON	M5G 2E5		
		Ontario Pipeline Coordinating Committee	Ministry of the Environment, Conservation and Parks							<a href="mailto:eanotification.swregion@ontario.ca">eanotification.swregion@ontario.ca</a>
<b>CONSERVATION AUTHORITY</b>										
Melissa	Deisley	St. Clair Region Conservation Authority (SCRCA)	Planning and Regulations	Manager	205 Mill Pond Crescent	Strathroy	ON	N7G 3P9	519-245-3710 Ext. 251	<a href="mailto:mdeisley@scrca.on.ca">mdeisley@scrca.on.ca</a>
<b>INTEREST GROUPS/OTHER</b>										
Melina	Damian	Ontario Nature	Communications Coordinator	Communications Coordinator	214 King Street West, Suite 612	Toronto	ON	M5H 3S6		
		Lambton Wildlife Inc.			Box 681	Sarnia	ON	N7T 7J7		<a href="mailto:info@lambtonwildlife.com">info@lambtonwildlife.com</a>

**Table B2.3: Municipal Contacts**

First Name	Surname	Title	Agency	Department	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Steve	Arnold	Mayor	St. Clair Township	Elected official	1155 Emily Street	Mooretown	ON	N0N 1M0	(519) 381-7440	<a href="mailto:steve.arnold@county-lambton.on.ca">steve.arnold@county-lambton.on.ca</a>
Bill	Miller	Deputy Mayor	St. Clair Township	Elected official	1155 Emily Street	Mooretown	ON	N0N 1M0	(519) 677-5676	<a href="mailto:smiller@stclairtownship.ca">smiller@stclairtownship.ca</a>
John	Rodey	CAO	St. Clair Township	General Government	1155 Emily Street	Mooretown	ON	N0N 1M0	519-867-2021	<a href="mailto:jrodey@twp.stclair.on.ca">jrodey@twp.stclair.on.ca</a>
Brian	Black	Director of Public Works	St. Clair Township	General Government	1155 Emily Street	Mooretown	ON	N0N 1M0	519-867-2994 x255	<a href="mailto:bblack@stclairtownship.ca">bblack@stclairtownship.ca</a>
Jeff	Baranek	Clerk	St. Clair Township	Clerk's Department	1155 Emily Street	Mooretown	ON	N0N 1M0	519-867-2021	<a href="mailto:jbaranek@stclairtownship.ca">jbaranek@stclairtownship.ca</a>
Carlie	McClemens	Deputy Clerk and Coordinator of Planning	St. Clair Township	Planning and Zoning	1155 Emily Street	Mooretown	ON	N0N 1M0	(519) 867-2021	<a href="mailto:cmcclemens@stclairtownship.ca">cmcclemens@stclairtownship.ca</a>



*APPENDIX B3:  
NOTIFICATION LETTERS*

July 23, 2021

«FIRST\_NAME» «SURNAME»  
«POSITION»  
«ORGANIZATION»  
«DEPARTMENT»  
«ADDRESS»  
«CITYTOWN» «PROVINCE» «POSTAL\_CODE»  
Sent Via Email: «EMail»

Dear «FIRST\_NAME» «SURNAME»,

**Reference: Enbridge Gas Inc. – Notice of Study Commencement for the 2022 Storage Enhancement Project**

Enbridge Gas Inc. (Enbridge Gas) has identified the need to enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County. The 2022 Storage Enhancement Project (the Project) will involve increasing the Maximum Operating Pressure (MOP) of the Dow Moore and Payne Storage Pools – two designated storage areas (DSAs) as defined in s. 36.1(1)(a) of the *Ontario Energy Board Act* (OEB Act). To complete construction at the Payne Project location, temporary steel plates will be used upon access to the site's natural gas storage wells. No other temporary or permanent access road or structure will be installed at either the Dow Moore or Payne Project location.

The Project will also involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, a 85 metre Nominal Pipe Size (NPS) 10 inch lateral pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

For more details, please refer to the attached map.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. 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)".

It is anticipated that the Environmental Report for the study will be completed in Summer 2021, after which Enbridge Gas will file an application for the Project to the OEB. The OEB's review and approval is required before the proposed Project can proceed. If approved, the Project is currently anticipated to begin Spring 2022.

As an agency with jurisdiction or a potential interest in developments in that area, you are invited to provide or coordinate comments regarding the proposed Project. Specifically, Stantec is seeking information regarding planning principles or guidelines implemented by your agency that may affect routing, construction and/or operation of the proposed Project. Stantec is also seeking background environmental, socio-economic, and archaeological/cultural heritage information that may be useful in compiling the inventory of the Environmental Study Area.

To support the quality of the assessment process, we also request that you provide us with information regarding other proposed developments within the Environmental Study Area. This information will be incorporated into the Environmental Study and related report as a component of the cumulative effect's assessment. Please contact us to discuss the most efficient way to obtain this information.

If you have questions or comments regarding the 2022 Storage Enhancement Project, please do not hesitate to contact the undersigned.

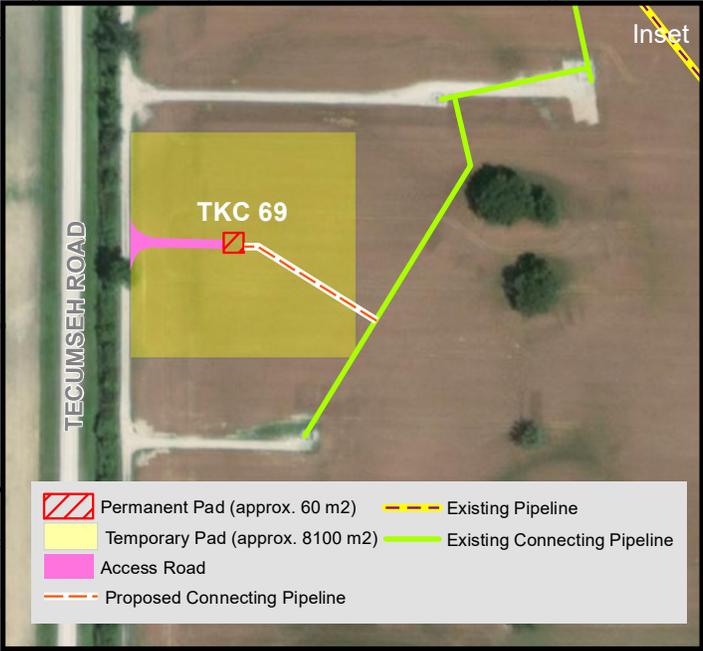
Yours truly,

**Stantec Consulting Ltd.**

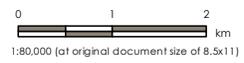
**Mark Knight** MA, MCIP, RPP  
Associate, Environmental Planner  
Team Leader – Assessment & Permitting  
Mobile: 519-400-9618  
Mark.Knight@stantec.com

Attachment: Map of Project Area

c. Evan Tomek, Sr. Analyst, Environment, Enbridge Gas



- Legend**
- ◆ 1. Dow Moore DSA
  - ◆ 2. Payne Storage Pool
  - ◆ 3. Kimball-Colinville DSA & Proposed Location of TKC 69
  - Highway
  - Major Road
  - Minor Road
  - Railway
  - Watercourse
  - Municipal Boundary
  - Municipal Boundary, Lower
  - Waterbody
  - Wooded Area



Project Location: 160961428 REV C  
 Prepared by AMW on 2021-07-22  
 Township of St. Clair  
 Technical Review by MK on 2021-07-22

Client/Project: ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

Figure No.: **1**  
 Title: **Project Locations**

**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, 2021.

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July 23, 2021

«TITLE» «FIRST\_NAME» «SURNAME»  
«POSITION»  
«ORGANIZATION»  
«CITY» «PROVINCE» «POSTAL\_CODE»  
Sent Via Email: «EMail»

**Reference: Enbridge Gas Inc. Proposed 2022 Storage Enhancement Project,  
Notice of Study Commencement**

Dear «FIRST\_NAME» «SURNAME»,

I am writing to advise you of the *2022 Storage Enhancement Project* (the Project) and to begin engagement on the proposed work.

To enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County, Enbridge Gas Inc. (Enbridge Gas) is proposing to undertake construction at the Kimball-Colinville Storage Pool – a designated storage area (DSA) as defined in s. 36.1(1)(a) of the *Ontario Energy Board Act* (OEB Act). The Project will involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, a 85 metre Nominal Pipe Size (NPS) 10 inch lateral pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

Attached please find a map detailing the Project location.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. 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)".

The Study will examine and determine, from an environmental and socio-economic perspective, the impacts of the Project. Once the Environmental Report is complete, Enbridge Gas will apply to the Ontario Energy Board (OEB) for approval to construct. This Study is being conducted in accordance with the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (2016).

It is anticipated that the Environmental Report for the study will be completed in Summer 2021, after which Enbridge Gas will file an application for the Project to the OEB. The OEB's review and approval is required before the proposed Project can proceed. If approved, the Project is currently anticipated to begin Spring 2022.

As an Indigenous community with a potential interest in the vicinity of the pipeline route, we are inviting «ORGANIZATION» to provide comments and feedback regarding the Project. We are also seeking information about areas that may be culturally significant to your community in the vicinity of the pipeline route and information about potential effects that the Project may have on asserted or established Aboriginal and treaty rights. Stantec is presently compiling an environmental, socio-economic, and archaeological/cultural heritage inventory of the Project location. We would welcome your feedback and comments regarding the proposed Project as we undertake the requisite environmental study.

As you know, Enbridge Gas is committed to meaningful engagement with Indigenous communities. As such, we would be interested in holding a conference call with the «ORGANIZATION» consultation office to share Project related information, should you wish. If you have any questions, would like to provide feedback or share knowledge or would be interested in setting up a briefing on this Project please feel free to contact me directly.

We kindly request that any initial input and comments regarding the Project are provided by your community by **August 6, 2021**. Please let us know if you are unable to respond by this date but are interested in participating in the consultation and engagement process for the Project.

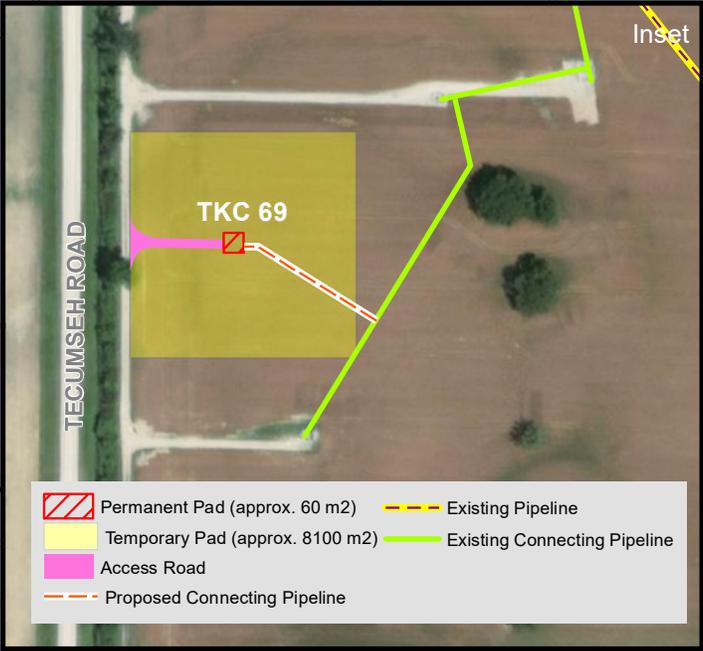
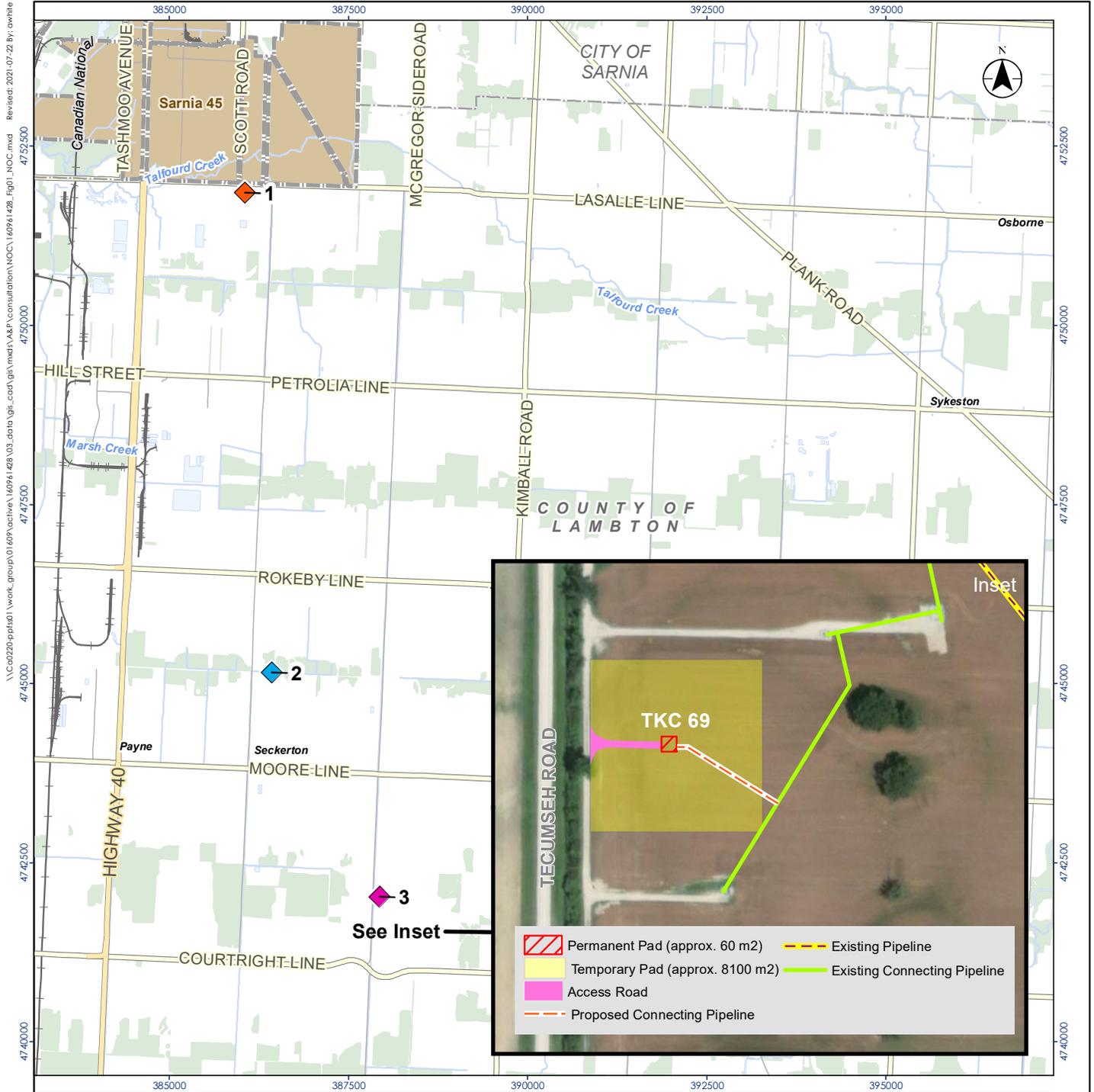
If you have any questions or want to discuss the Project, please feel free to contact me at any time. We look forward to engaging with you to ensure your community's interests are being considered and represented.

Respectfully,

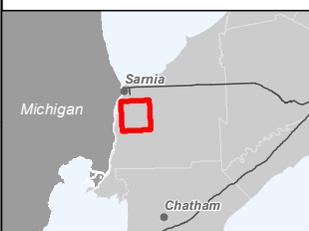
**Kevin Berube**  
*ENBRIDGE GAS INC.*  
Sr. Advisor, Community & Indigenous Engagement  
Public Affairs and Communications  
416-666-6759  
Kevin.Berube@enbridge.com

Attachment: Map of Project Area

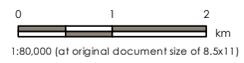
c. Evan Tomek, Sr. Analyst, Environment, Enbridge Gas  
Mark Knight, Project Manager, Stantec Consulting Ltd.



	Permanent Pad (approx. 60 m2)		Existing Pipeline
	Temporary Pad (approx. 8100 m2)		Existing Connecting Pipeline
	Access Road		
	Proposed Connecting Pipeline		



- Legend**
- 1. Dow Moore DSA
  - 2. Payne Storage Pool
  - 3. Kimball-Colinville DSA & Proposed Location of TKC 69
  - Highway
  - Major Road
  - Minor Road
  - Railway
  - Watercourse
  - Municipal Boundary
  - Municipal Boundary, Lower
  - Waterbody
  - Wooded Area



Project Location: 160961428 REV C  
 Prepared by AMW on 2021-07-22  
 Township of St. Clair  
 Technical Review by MK on 2021-07-22

Client/Project: ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

Figure No.: 1  
 Title: Project Locations

**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, 2021.

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Sharilyn Johnston  
Aamjiwnaang First Nation  
978 Tashmoo Ave  
Sarnia, ON  
N7T 7H5

June 7, 2021

Dear Sharilyn,

**Re: 2021-2024 Enbridge Gas Storage Well & Reservoir Projects**

Enbridge Gas Inc. (Enbridge Gas) is currently conducting a review of its gas storage and reservoir system and has identified the potential need to replace and/or enhance some assets in order to maintain the safe and reliable operation of Enbridge Gas's systems and continue to meet the firm demands of Enbridge Gas's customers.

The following two (2) proposed projects may include all or some of the following:

**2022 Storage Enhancement Project**

- Involves drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- Involves the installation of approximately 125 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

**Coveny and Kimball-Colinville Well Drilling Project**

- Involves drilling a new injection/withdrawal well (TKC 68) in the Kimball-Colinville Storage Pool in May/June 2022
- TKC 68 will require approximately 120 metres of 10" lateral pipeline to connect to the main Kimball-Colinville gathering line.

Collectively referred to as the "**Projects**".

The area in which these Projects are to be constructed is rural agricultural and is either owned by Enbridge Gas or Enbridge Gas has the right to enter through a Gas Storage Lease. It is expected that the majority of adverse environmental and/or socio-economic effects will be construction related. These effects are expected to be temporary and transitory. The Projects will also be located underground once construction is complete, further limiting the potential for any long-term effects.

As part of the planning process for each of these Projects, Enbridge Gas has and will retain an external consulting firm to undertake an Environmental Study of the construction and operation of the Project. The Environmental Study as required by the Ontario Energy Board's (OEB) *"Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)"*.

Enbridge Gas' preliminary work on the Projects has identified the following potential authorizations:

Provincial approvals:

- Ontario Energy Board
- Ministry of Natural Resources and Forestry
- Ministry of Environment, Conservation and Parks
- Ministry of Heritage, Sport, Tourism and Culture Industries

Municipal approvals:

- County of Lambton
- Township of St. Clair

Other approvals:

- St. Clair Region Conservation Authority
- Hydro One Networks Inc.

We would like to consult with your community on these proposed Projects. We are interested in your community's feedback, including any suggestions or proposals on avoiding, minimizing or mitigating any potential adverse impacts these Projects may have on your Aboriginal or treaty rights.

Enbridge acknowledges that capacity support may be required to enable you to engage in timely technical reviews of documents, participation in field work associated with the Projects, and to allow for meaningful consultation. Consistent with our approach on all projects, we are

prepared to provide capacity funding to support your team's engagement in relation to the Projects.

Enbridge Gas has been delegated the procedural aspects for consultation by the Ministry of Energy on behalf of Ontario. Ministry officials are also available should you wish to contact them directly with any questions or concerns. Please contact:

For 2021/2022 Storage Enhancement Project Part 2,

Rosalind Ashe, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[rosalind.ashe@ontario.ca](mailto:rosalind.ashe@ontario.ca)

For Coveny and Kimball-Colinville Well Drilling Project,

Jonathon Wilkinson, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[Jonathon.Wilkinson@ontario.ca](mailto:Jonathon.Wilkinson@ontario.ca)

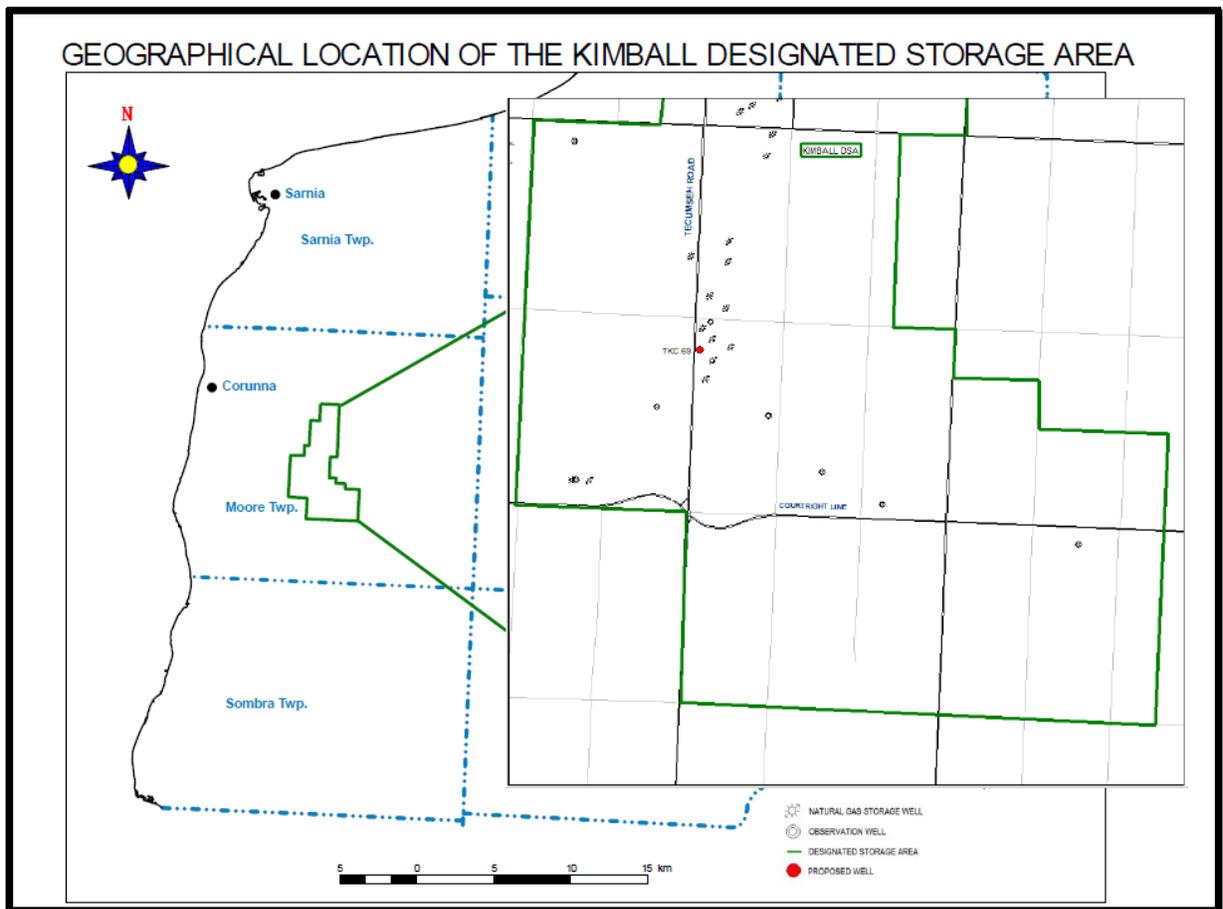
We would like to set up a meeting to discuss these Projects with you to provide you with an opportunity to express any questions or concerns you have. Please feel free to contact me at [lauren.whitwham@enbridge.com](mailto:lauren.whitwham@enbridge.com) or 519-852-3474 so we can set up a time to meet. You may also provide me with any feedback you may have regarding the Projects in writing by July 7, 2021, if possible.

Many thanks,

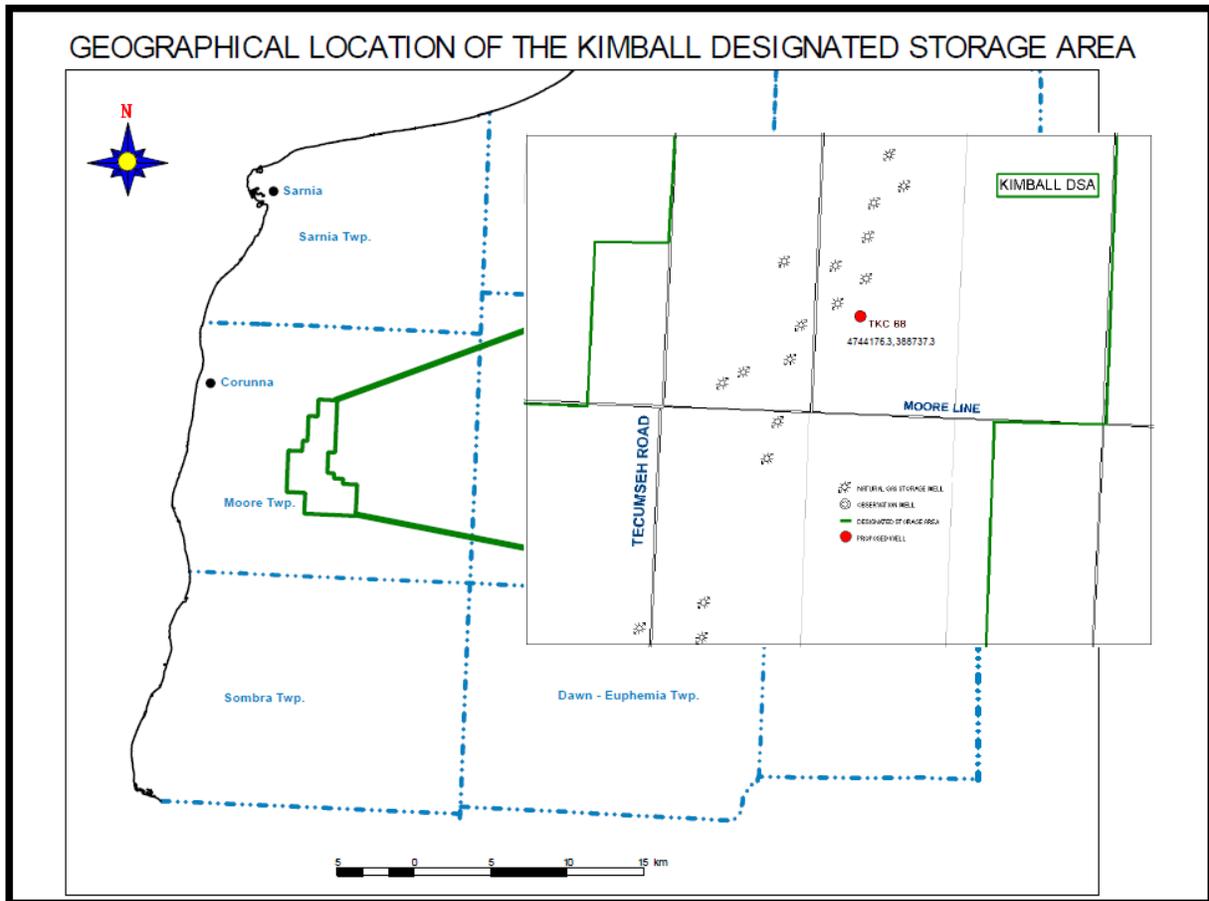
A handwritten signature in black ink, appearing to read 'L. Whitwham', with a large, stylized flourish at the end.

Lauren Whitwham  
Senior Advisor, Community & Indigenous Engagement, Eastern Region  
Enbridge Inc.  
519-852-3474  
[Lauren.whitwham@enbridge.com](mailto:Lauren.whitwham@enbridge.com)

### 2022 Storage Enhancement Project



### Coveny and Kimball-Colinville Well Drilling Project



July 23, 2021

«FIRST\_NAME» «SURNAME»  
«TITLE»  
«AGENCY»  
«DEPARTMENT»  
«ADDRESS»  
«CITYTOWN» «PROVINCE» «POSTAL\_CODE»  
Sent Via Email: «EMail»

Dear «FIRST\_NAME» «SURNAME»,

**Reference: Enbridge Gas Inc. – Notice of Study Commencement for the 2022 Storage Enhancement Project**

Enbridge Gas Inc. (Enbridge Gas) has identified the need to enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County. The 2022 Storage Enhancement Project (the Project) will involve increasing the Maximum Operating Pressure (MOP) of the Dow Moore and Payne Storage Pools – two designated storage areas (DSAs) as defined in s. 36.1(1)(a) of the *Ontario Energy Board Act* (OEB Act). To complete construction at the Payne Project location, temporary steel plates will be used upon access to the site's natural gas storage wells. No other temporary or permanent access road or structure will be installed at either the Dow Moore or Payne Project location.

The Project will also involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, a 85 metre Nominal Pipe Size (NPS) 10 inch lateral pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

For more details, please refer to the attached map.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. 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)".

It is anticipated that the Environmental Report for the study will be completed in Summer 2021, after which Enbridge Gas will file an application for the Project to the OEB. The OEB's review and approval is required before the proposed Project can proceed. If approved, the Project is currently anticipated to begin Spring 2022.

As an agency with jurisdiction or a potential interest in developments in that area, you are invited to provide or coordinate comments regarding the proposed Project. Specifically, Stantec is seeking information regarding planning principles or guidelines implemented by your agency that may affect routing, construction and/or operation of the proposed Project. Stantec is also seeking background environmental, socio-economic, and archaeological/cultural heritage information that may be useful in compiling the inventory of the Environmental Study Area.

To support the quality of the assessment process, we also request that you provide us with information regarding other proposed developments within the Environmental Study Area. This information will be incorporated into the Environmental Study and related report as a component of the cumulative effect's assessment. Please contact us to discuss the most efficient way to obtain this information.

If you have questions or comments regarding the 2022 Storage Enhancement Project, please do not hesitate to contact the undersigned.

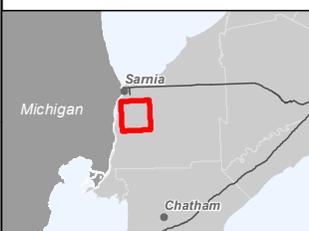
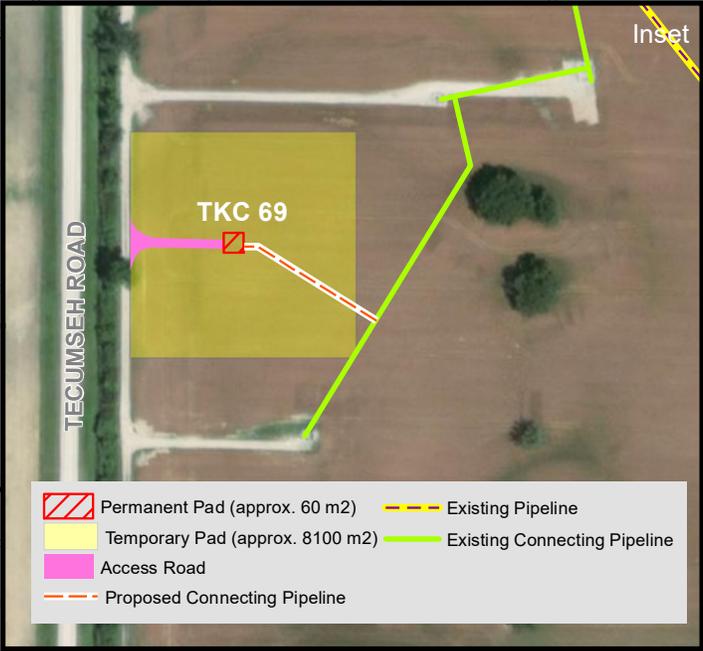
Yours truly,

**Stantec Consulting Ltd.**

**Mark Knight** MA, MCIP, RPP  
Associate, Environmental Planner  
Team Leader – Assessment & Permitting  
Mobile: 519-400-9618  
Mark.Knight@stantec.com

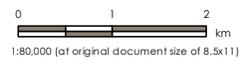
Attachment: Map of Project Area

c. Evan Tomek, Sr. Analyst, Environment, Enbridge Gas



- Legend**
- ◆ 1. Dow Moore DSA
  - ◆ 2. Payne Storage Pool
  - ◆ 3. Kimball-Colinville DSA & Proposed Location of TKC 69
  - Highway
  - Major Road
  - Minor Road
  - Railway
  - Watercourse

- Municipal Boundary
- Municipal Boundary, Lower
- Waterbody
- Wooded Area



Project Location: 160961428 REV C  
 Prepared by AMW on 2021-07-22  
 Township of St. Clair  
 Technical Review by MK on 2021-07-22

Client/Project: ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

Figure No.: **1**  
 Title: **Project Locations**

**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, 2021.

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*APPENDIX B4:  
PROJECT CORRESPONDENCE*

**Table B4.1: Correspondence Tracking – Government and Agencies**

Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
1	Former Ministry of Energy, Northern Development and Mines (MENDM)	Dan Delaquis (MENDM)	Email	March 18, 2021	Enbridge Gas, sent an email, including a updated Project Description for the Project, noting that a Leave to Construct application will be filed with the Ontario Energy Board (OEB), and inquired as to if the Project triggers the Duty to Consult process.	April 13, 2021	The MENDM responded to the inquiry sent on 3/18/2021 and provided a letter noting that the Project may have the potential to affect Indigenous communities, and provided a list of these potentially affected communities to consult with.
See Appendix B1 and B2	All agencies and municipalities on contact lists	N/A	Email	July 23, 2021	Notice of Study Commencement.	N/A	N/A
2	The Ministry Northern Development and Mines, Natural Resources and Forestry (NDMNRF)	Karina Černiavskaja (NDMNRF)	Email	July 29, 2021	NDMNRF provided information to guide identification and assessment of natural features and resources as required by applicable policies and legislation	N/A	N/A

N/A – Not Available

**Table B4.2: Correspondence Tracking – Indigenous Communities**

Comment Number	Community	Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date Response Provided	Summary of Response
See Appendix B1 and B2	All communities on contact list	N/A	Email	June 7, 2021	Notification letter and map sent to the Aamjiwnaang First Nation.	N/A	N/A
See Appendix B1 and B2	All communities on contact list	N/A	Email	July 28, 2021	Notice of Study Commencement letter and map sent to all communities and contacts on the Indigenous Communities contact list.	N/A	N/A

N/A – Not Available

**Table B4.3: Correspondence Tracking – Landowners and Public**

Comment Number	Stakeholder Group	Method of Communication	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/A – Not Available



Asha Patel  
Technical Manager  
Regulatory Affairs

tel. 416-495-5642  
[EGIRegulatoryProceedings@enbridge.com](mailto:EGIRegulatoryProceedings@enbridge.com)

Enbridge Gas Inc.  
500 Consumers Road  
North York, Ontario M2J 1P8  
Canada

March 18, 2021

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

Ministry of Energy, Northern Development and Mines  
Dan Delaquis  
Manager (Acting), Indigenous Energy Policy  
Unit 77 Grenville St.  
6<sup>th</sup> Floor  
Toronto, ON  
M7A 1B3

Dear Mr. Delaquis:

**Re: 2022 Storage Enhancement Project**

The *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7<sup>th</sup> Edition 2016* (Guidelines) issued by the Ontario Energy Board (Board) indicate that a project applicant shall provide the Ministry of Energy, Northern Development and Mines (Ministry) with a description of a project in the planning process, such that the Ministry can determine if there are any Duty to Consult requirements for the project.

The purpose of this letter is to inform the Ministry that Enbridge Gas Inc. (Enbridge Gas) intends to increase the maximum operating pressure (MOP) in two existing storage pools and drill a horizontal natural gas storage well (Project).

The Project involves:

- Increasing the MOP of the Dow Moore and Payne Storage Pools; and
- Drill a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool.

Enbridge Gas will be filing an application with the Board for leave to vary, a request for a favourable report from the Board to the Ministry of Natural Resources and Forestry, and a leave to construct in support of the Project. Enbridge Gas is therefore contacting the Ministry to determine whether the Project triggers the Duty to Consult.

Attachment 1 contains a description of the Project's characteristics and its location for the Ministry's review and to assist it with its determination as to whether it will delegate the procedural aspects of the Duty to Consult to Enbridge Gas. While work on the Project is still in its early stages, Enbridge Gas would be pleased to discuss the Project with you should you have any questions.

Regards,

Asha Patel, M.A. CFA  
Technical Manager, Regulatory Applications  
Enbridge Gas Inc.  
416-495-5642

Enbridge Gas Inc. (Enbridge Gas) is proposing to increase the maximum operating pressure (MOP) of two existing natural gas storage pools and to drill a new natural gas storage well.

The two storage pools for which the MOP will be increased are the Dow Moore Storage Pool and the Payne Storage Pool.

A new natural gas storage well (TKC 69) will be drilled in the Kimball-Colinville Storage Pool.

All of the aforementioned storage pools are part of Enbridge Gas's storage operations. Each of the storage pools is a Designated Storage Area (DSA) as defined in the *Ontario Energy Board Act, 1998*.

The Project requires the installation of new emergency shut down valves and performing wellhead upgrades on existing natural gas storage wells within the Dow Moore and Payne Storage Pools, in order to increase the MOP of each of these storage pools.

It is proposed that the well work required for the MOP increase be completed from April 2022 to October 2022. Drilling of well TKC 69 is expected to occur from March 2022 to July 2022.

Enbridge Gas plans to file an application with the Ontario Energy Board (Board) which will make several requests of the Board. The application will include a request for leave to vary the current MOP of the Dow Moore and Payne Storage Pools. The application will also include a request for a favourable report from the Board to the Ministry of Natural Resources and Forestry (MNRF) for the drilling of well TKC 69, and a request for leave to construct to install a lateral pipeline from well TKC 69 to the Kimball-Colinville Storage Pool gathering system.

Enbridge Gas will ensure that it has fulfilled all of the relevant requirements of CSA Z341, as they relate to the new natural gas storage well and the MOP increase, to the satisfaction of the MNRF.

Enbridge Gas will conduct engineering and geological studies to verify the ability to increase the MOP of the Dow Moore and Payne Storage Pools. No new lands are required for the work to be completed on the natural gas storage wells in each of the Dow Moore and Payne DSAs. All work will take place on previously disturbed land either owned by Enbridge Gas or for which Enbridge Gas has the right to enter into and upon for the purposes of its natural gas storage operations.

Drilling of well TKC 69, will occur on previously disturbed lands owned by Enbridge Gas. These lands are leased to a tenant farmer. A temporary gravel pad will be installed for the drilling of the well and the pad is expected to occupy 8100 square metres or 0.0081 square kilometers. The final well site is expected to measure approximately 60 square metres or 0.00006 square kilometers. Once the well is drilled a lateral pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system.

Figure 1 shows the location of the Dow Moore DSA and all natural gas wells contained therein. Figure 2 shows the location of the Payne DSA and all natural gas wells contained therein. Figure 3 shows the surface location of the new natural gas storage well in the Kimball-Colinville DSA.

## **2.0 Project Information**

Enbridge Gas currently operates approximately 280 billion cubic feet of natural gas storage in 35 DSAs. Enbridge Gas is involved in the sale, transmission, distribution and storage of natural gas. As part of its business, Enbridge Gas provides gas storage services to third parties, such as power generators or other natural gas utilities. These third parties purchase storage capacity from Enbridge Gas and in turn use that storage capacity to meet their gas demand requirements. The gas storage services offered by Enbridge Gas allow these third parties to optimize their gas purchases. Over 100 customers have gas storage contracts with Enbridge Gas. The additional storage capacity and deliverability created by the Project will be offered as storage services to natural gas market participants.

The Dow Moore Storage Pool has been in operation since 1988. There are 16 natural gas storage wells and 2 observation wells in the Dow Moore DSA. The Payne Storage Pool has been in operation since 1957. There are 10 natural gas storage wells; 2 observation wells; and 1 suspended well in the Payne DSA. The Kimball-Colinville Storage Pool has been in operation since 1965. There are 33 natural gas storage wells; 10 observation wells and one suspended well in the Kimball-Colinville DSA.

The Project will allow Enbridge Gas to store additional natural gas and will increase the deliverability of Enbridge Gas's storage operations. The additional storage capacity and deliverability created by the Project will be sold to third parties as part of Enbridge Gas's unregulated storage portfolio.

## **3.0 Authorizations and Recommendations Required**

An Environmental Report (ER) will be completed for the Project. Enbridge Gas either owns the lands within or has Gas Storage Lease Agreements and Petroleum & Natural Gas Lease Agreements in place for all of the DSAs. Permanent or temporary access roads will be required to complete the work required for some of the wells. A temporary gravel pad will be installed for the drilling of the well. Upon completion of drilling activities, the pad size will be reduced, and a permanent well site will be established.

The ER will be prepared using the Board's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines in Ontario, 7<sup>th</sup> Edition (2016)* (Guidelines). The ER will identify potential authorizations required. Enbridge Gas's preliminary work on the Project has identified the following potential authorizations:

### Provincial approvals:

- Ontario Energy Board
- Ministry of Natural Resources and Forestry
- Ministry of Heritage, Sport, Tourism and Cultural Industries

- Ministry of the Environment, Conservation and Parks

Municipal approvals:

- Township of St. Clair
- County of Lambton

Other approvals:

- St. Clair Region Conservation Authority
- Hydro One Networks Inc.

Other authorizations, notifications, permits and/or approvals may be required in addition to those identified above.

#### **4.0 Project Activities**

Planning and design activities for the Project commenced in 2019 and will continue into 2022. Pursuant to the Guidelines an ER will be prepared and archaeological studies will be completed where and as required.

The MOP increase and the drilling of well TKC 69 will be planned in accordance with the requirements of CSA Z341 – Storage of Hydrocarbons in Underground Formations. Pursuant to the requirements of CSA Z341, the following studies and reviews will be completed to support the Project:

- Engineering studies to confirm that the maximum safe operating pressure for each pool exceeds the proposed MOP for each pool;
- An assessment of neighbouring activities to determine the impact of the Project on: a) wells within 1 km, b) operations within 5 km, and c) the integrity of all wells penetrating the storage zone; and
- A “what if” analysis of hazards and operability (HAZOP) for each of the storage pools.

Upon receiving a drilling license from the MNRF, Enbridge Gas will commence operations to drill well TKC 69.

A copy of the application filed with the Board will be provided to all landowners in the Dow Moore DSA, the Payne DSA, the Kimball-Colinville DSA.

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

The ER will assess physical, natural and socio-economic features potentially impacted by construction activities. Mitigation measures will be recommended as part of the ER to minimize potential adverse effects to the environment. It is expected that the majority of adverse

environmental and/or socio-economic effects will be construction related. These effects are expected to be temporary and transitory.

Mitigation measures recommended in the ER will be followed in conjunction with Enbridge Gas's Construction and Maintenance Manual. In addition, Enbridge Gas will use professional judgement, past experience, industry best practices and any additional feedback received through the consultation process when constructing the Project.

## **6.0 Project Benefits**

Demand for natural gas storage is expected to continue to increase. The Project will allow Enbridge Gas to expand its storage capacity and deliverability and provide additional storage services to natural gas market participants.

## **7.0 Contact Information**

*Regulatory Affairs:*

Asha Patel

[asha.patel@enbridge.com](mailto:asha.patel@enbridge.com)

416-495-5642

*Technical / MNR Contact:*

Kathy McConnell

[kathy.mcconnell@enbridge.com](mailto:kathy.mcconnell@enbridge.com)

519-862-6032

*Indigenous Affairs:*

Lauren Whitwham

[lauren.whitwham@enbridge.com](mailto:lauren.whitwham@enbridge.com)

519-667-4100 x5153545

Figure 1: Dow Moore DSA

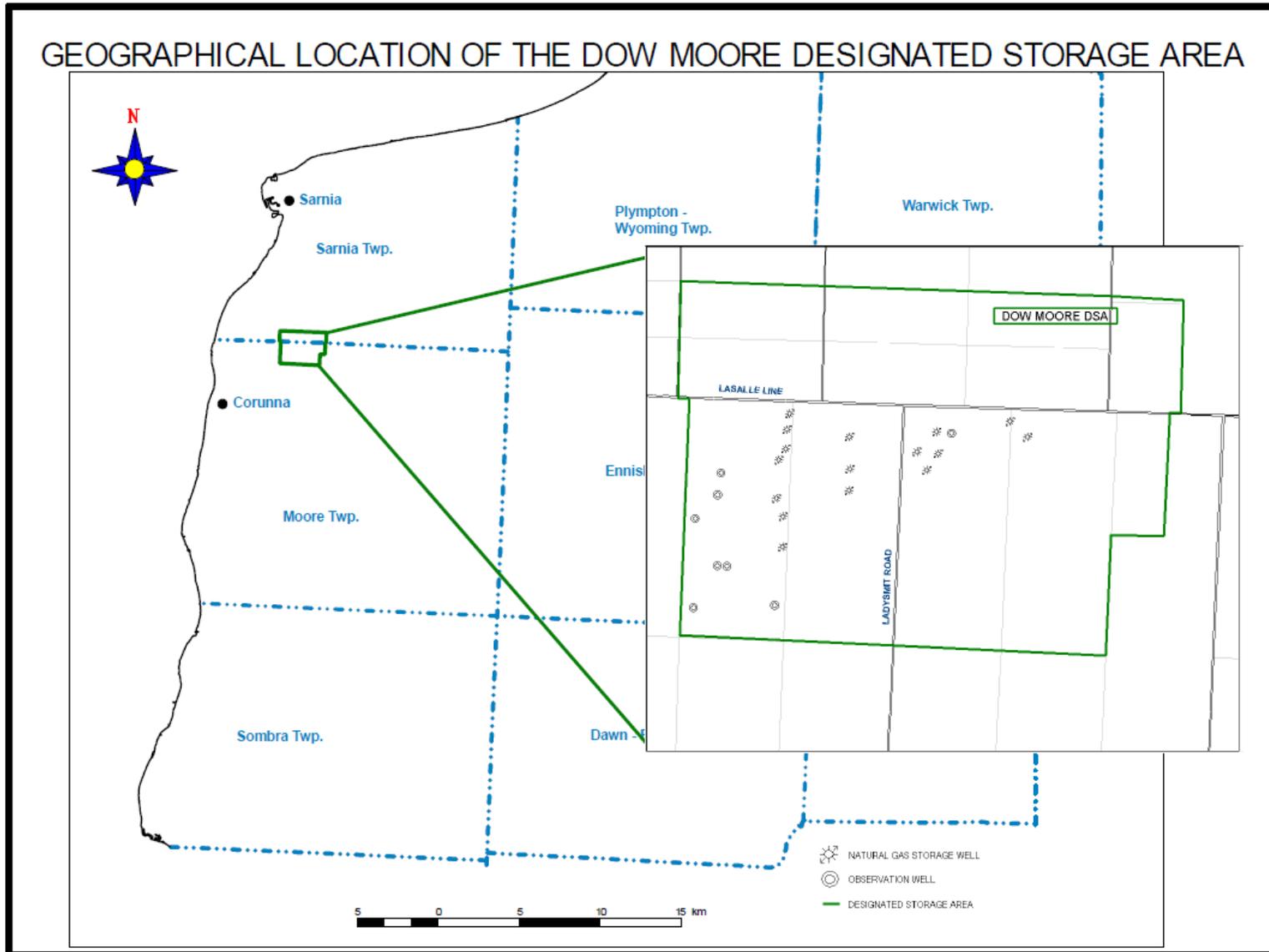


Figure 2: Payne DSA

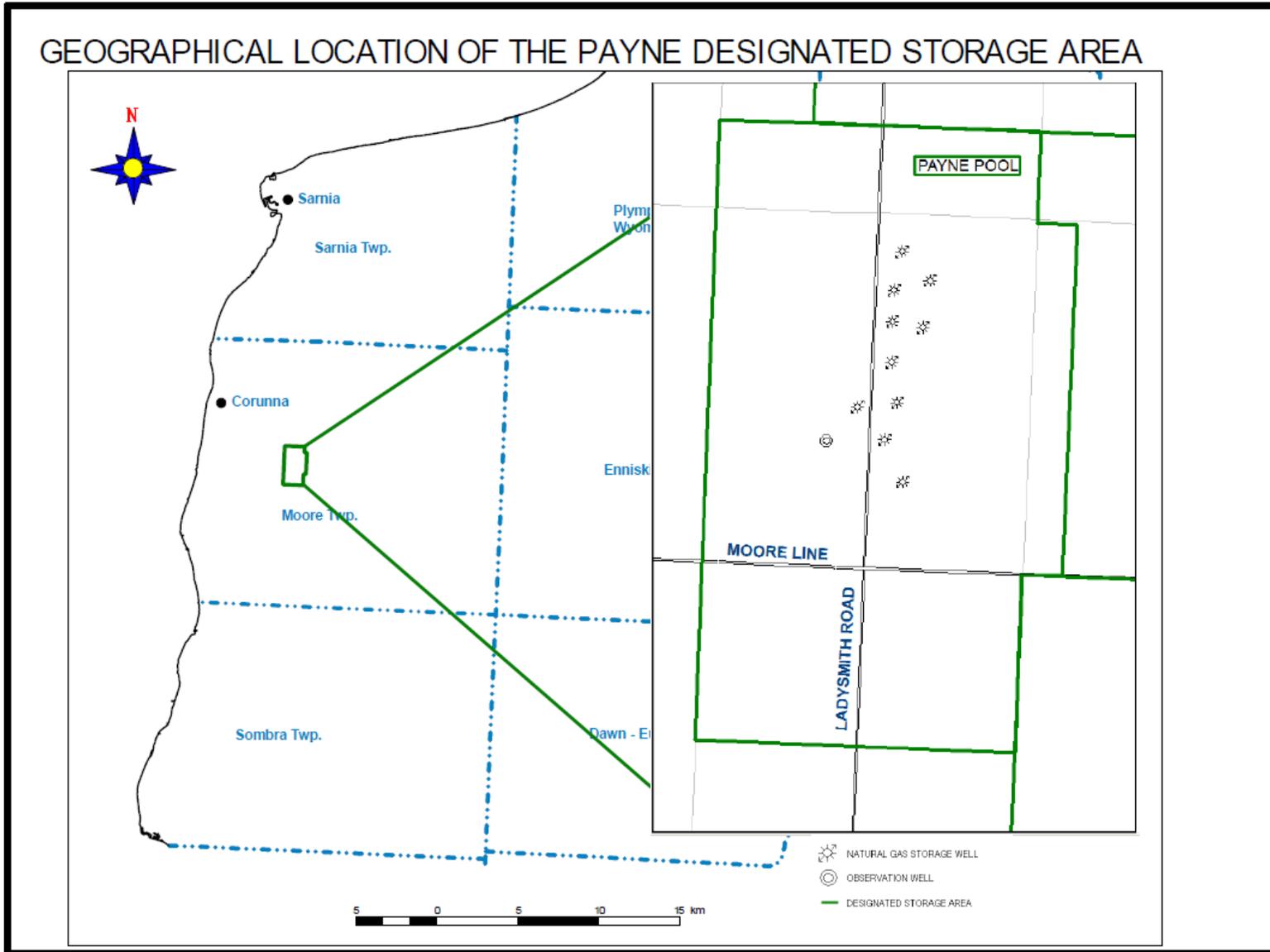
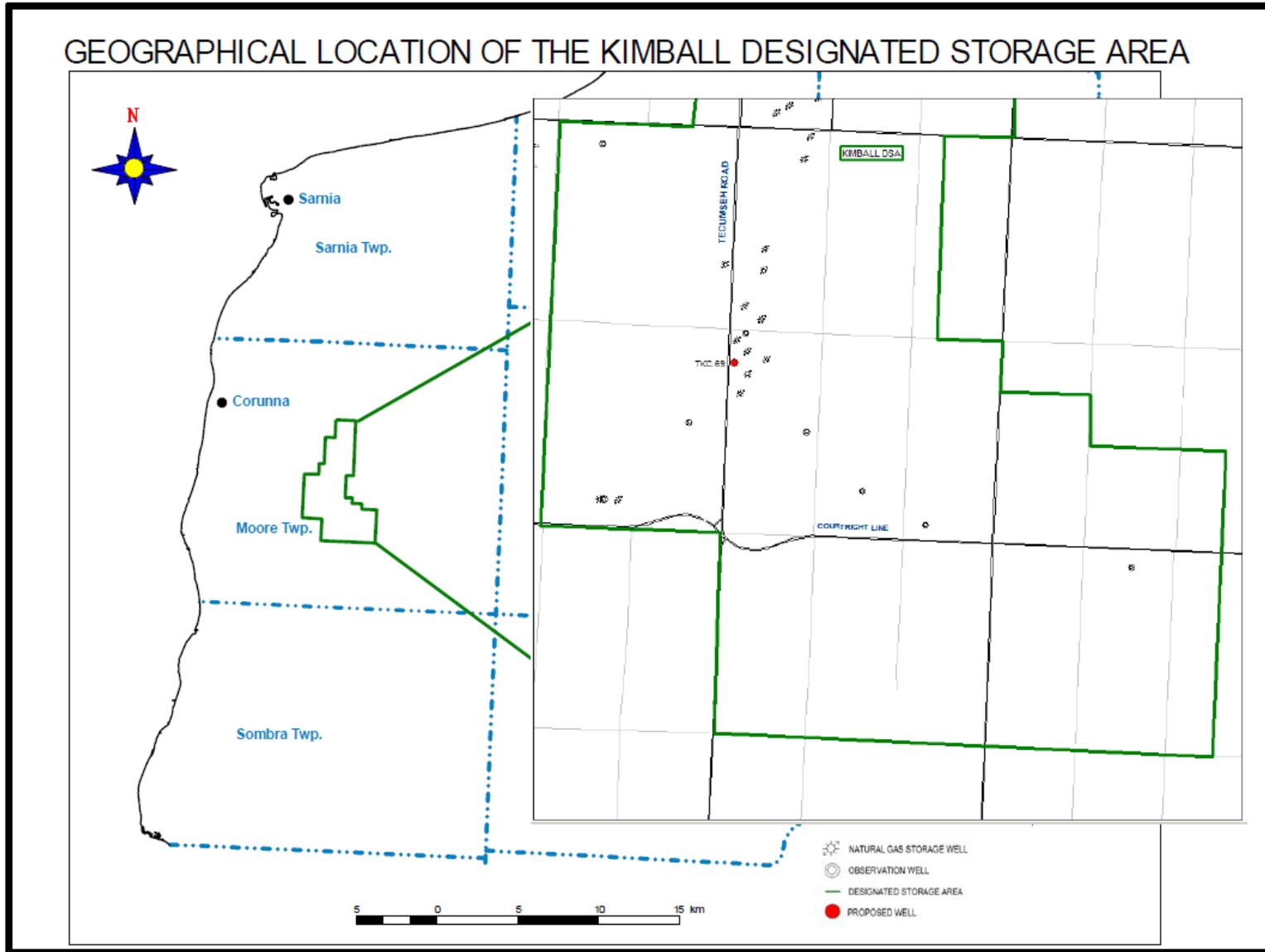


Figure 3: Kimball DSA & Proposed Location to TKC 69



**From:** [MNRF Ayl Planners \(MNRF\)](#)  
**To:** [Ginter, Kayla](#)  
**Cc:** [Knight, Mark](#)  
**Subject:** RE: Enbridge Gas Inc. – Notice of Study Commencement for the 2022 Storage Enhancement Project  
**Date:** Thursday, July 29, 2021 8:40:29 AM  
**Attachments:** [image001.emz](#)  
[image002.png](#)  
[image003.png](#)  
[let\\_mnrf-avlmer\\_160961428\\_Agency\\_NoC\\_20210723\\_fnl.pdf](#)  
[NHGuide\\_MNRF\\_2019-04-01.pdf](#)

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**Ministry of Northern Development,  
Mines, Natural Resources  
and Forestry**

**Ministère du Développement du Nord,  
des Mines, des Richesses naturelles  
et des Forêts**

July 29, 2021

**Subject: Enbridge Gas Inc. – Notice of Study Commencement for the 2022 Storage Enhancement Project**

The Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF) received the notice for the Enbridge Gas Inc. 2022 Storage Enhancement Project. Thank you for circulating this information to our office, however, please note that we have not completed a screening of natural heritage or other resource values for the project at this time. Please also note that it is your responsibility to be aware of and comply with all relevant federal or provincial legislation, municipal by-laws or other agency approvals.

This response provides information to guide you in identifying and assessing natural features and resources as required by applicable policies and legislation, and engaging with the Ministry for advice as needed.

**Natural Heritage & Endangered Species Act**

-  
In order to provide the most efficient service possible, the attached Natural Heritage Information Request Guide has been developed to assist you with accessing natural heritage data and values from convenient online sources.

It remains the proponent's responsibility to complete a preliminary screening for each project, to obtain available information from multiple sources, to conduct any necessary field studies, and to consider any potential environmental impacts that may result from an activity. We wish to emphasize the need for the proponents of development activities to complete screenings prior to contacting the Ministry or other agencies for more detailed technical information and advice.

The Ministry continues to work on updating data housed by Land Information Ontario and the Natural Heritage Information Centre, and ensuring this information is accessible through online resources. Species at risk data is regularly being updated. To ensure access to reliable and up to date information, please contact the Ministry of the Environment, Conservation and Parks at [SAROntario@ontario.ca](mailto:SAROntario@ontario.ca).

**Petroleum Wells & Oil, Gas and Salt Resource Act**

-

There may be petroleum wells within the proposed project area. Please consult the Ontario Oil, Gas and Salt Resources Library website ([www.ogsrlibrary.com](http://www.ogsrlibrary.com)) for the best known data on any wells recorded by NDMNRF. Please reference the 'Definitions and Terminology Guide' listed in the publications on the Library website in order to better understand the well information available. Any oil and gas wells in your project area are regulated by the *Oil, Gas and Salt Resource Act*, and the supporting regulations and operating standards. If any unanticipated wells are encountered during development of the project, or if the proponent has questions regarding petroleum operations, the proponent should contact the Petroleum Operations Section at [POSRecords@ontario.ca](mailto:POSRecords@ontario.ca) or 519-873-4634.

### **Public Lands Act & Lakes and Rivers Improvement Act**

Some projects may be subject to the provisions of the *Public Lands Act* or the *Lakes and Rivers Improvement Act*. Please review the information on NDMNRF's web pages provided below regarding when an approval is required or not. Please note that many of the authorizations issued under the *Lakes and Rivers Improvement Act* are administered by the local Conservation Authority.

- For more information about the *Public Lands Act*: <https://www.ontario.ca/page/crown-land-work-permits>
- For more information about the *Lakes and Rivers Improvement Act*: <https://www.ontario.ca/document/lakes-and-rivers-improvement-act-administrative-guide>

After reviewing the information provided, if you have not identified any of NDMNRF's interests stated above, there is no need to circulate any subsequent notices to our office.

If you have any questions or concerns, please feel free to contact me.

Sincerely,  
Karina

---

**Karina Černiavskaja | District Planner**

Ministry of Northern Development, Mines, Natural Resources and Forestry

Email: [MNRF.Ayl.Planners@ontario.ca](mailto:MNRF.Ayl.Planners@ontario.ca)



*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:** Ginter, Kayla <Kayla.Ginter@stantec.com>

**Sent:** July-23-21 5:17 PM

**To:** MNRF Ayl Planners (MNRF) <MNRF.Ayl.Planners@ontario.ca>

**Cc:** Knight, Mark <Mark.Knight@stantec.com>

**Subject:** Enbridge Gas Inc. – Notice of Study Commencement for the 2022 Storage Enhancement Project

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good Afternoon,

Attached please find a Notice of Study Commencement for the Enbridge Gas Inc. 2022 Storage Enhancement Project.

Regards,

**Kayla Ginter** M.ES. (Planning), OPPI Candidate  
Environmental Coordinator, Assessment and Permitting

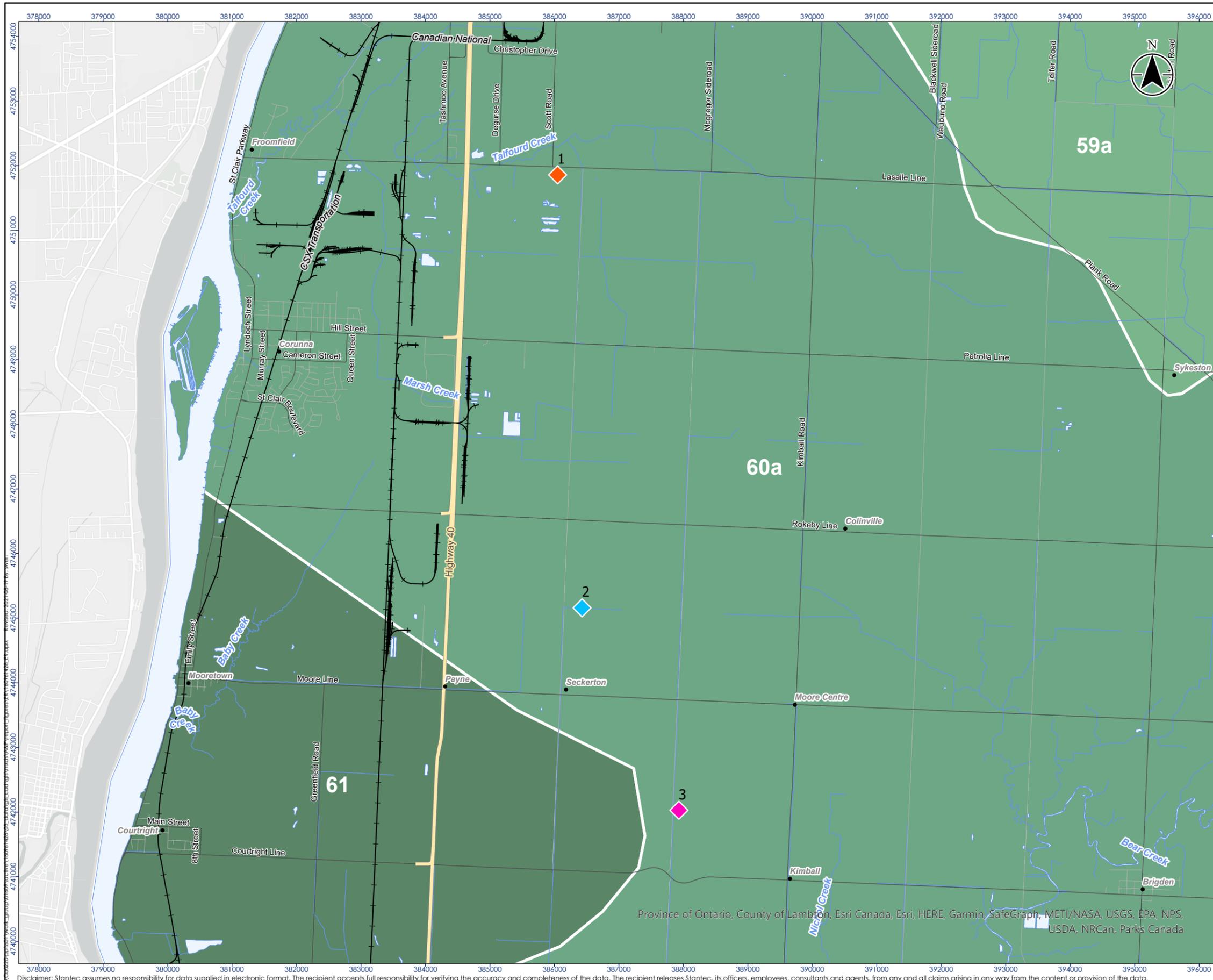
Direct: 226-980-5347  
[Kayla.Ginter@stantec.com](mailto:Kayla.Ginter@stantec.com)

Stantec  
300W-675 Cochrane Drive  
Markham ON L3R 0B8



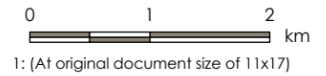
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## **APPENDIX C: EXISTING CONDITIONS FIGURES**



**Legend**

- ◆ 1. Dow Moore DSA
- ◆ 2. Payne Storage Pool
- ◆ 3. Kimball-Colinville DSA
- +— Railway
- Expressway / Highway
- Major Road
- Minor Road
- Watercourse (Permanent)
- Waterbody
- Bedrock Geology**
- 61: Shale; Port Lambton Gp.
- 60a: Kettle Point Fm.
- 59a: Hamilton Gp.



- Notes**
1. Coordinate System: Name: 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. 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



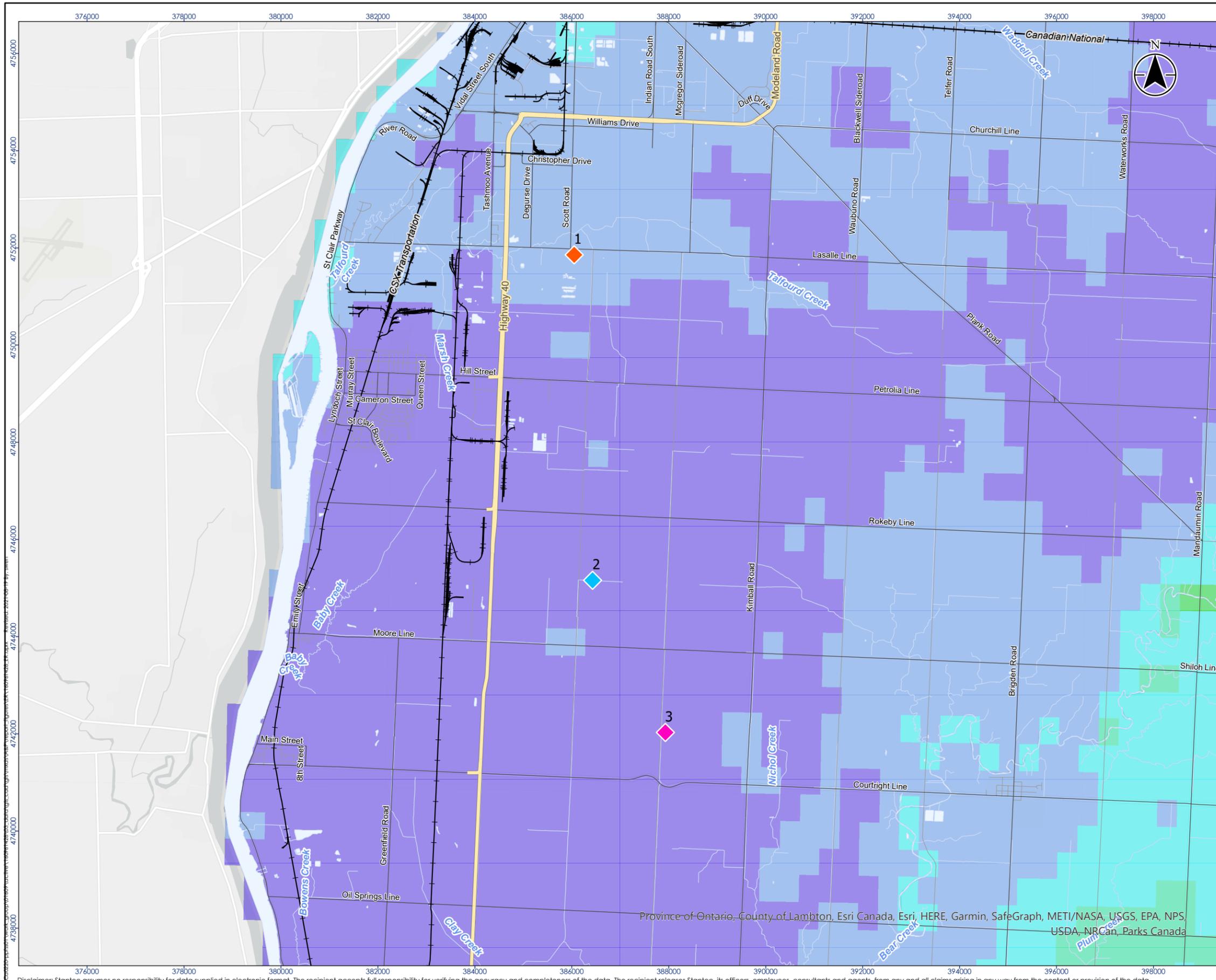
Project Location 160961428\_ER\_Fig01\_Bedrock\_Geology REVA  
 Lambton County Prepared by AMW on 2021-08-19  
 Technical Review by KG on 2021-07-30

Client/Project  
 ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

Figure No.  
**1**

Title  
**Bedrock Geology**

Province of Ontario, County of Lambton, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada



**Legend**

- ◆ 1. Dow Moore DSA
- ◆ 2. Payne Storage Pool
- ◆ 3. Kimball-Colinville DSA
- Railway
- Expressway / Highway
- Major Road
- Minor Road
- Watercourse
- Waterbody

**Drift Thickness (m)**

- ≤ 15
- ≤ 20
- ≤ 30
- ≤ 40
- ≤ 75



1: (At original document size of 11x17)

**Notes**

1. Coordinate System: Name: 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. Drift thickness data source: Gao, C., Shirota, J., Kelly, R.I., Brunton, F.R. and van Haften, S. 2006. Bedrock topography and overburden thickness mapping, Southern Ontario: Ontario Geological Survey, Miscellaneous Release—Data 207.



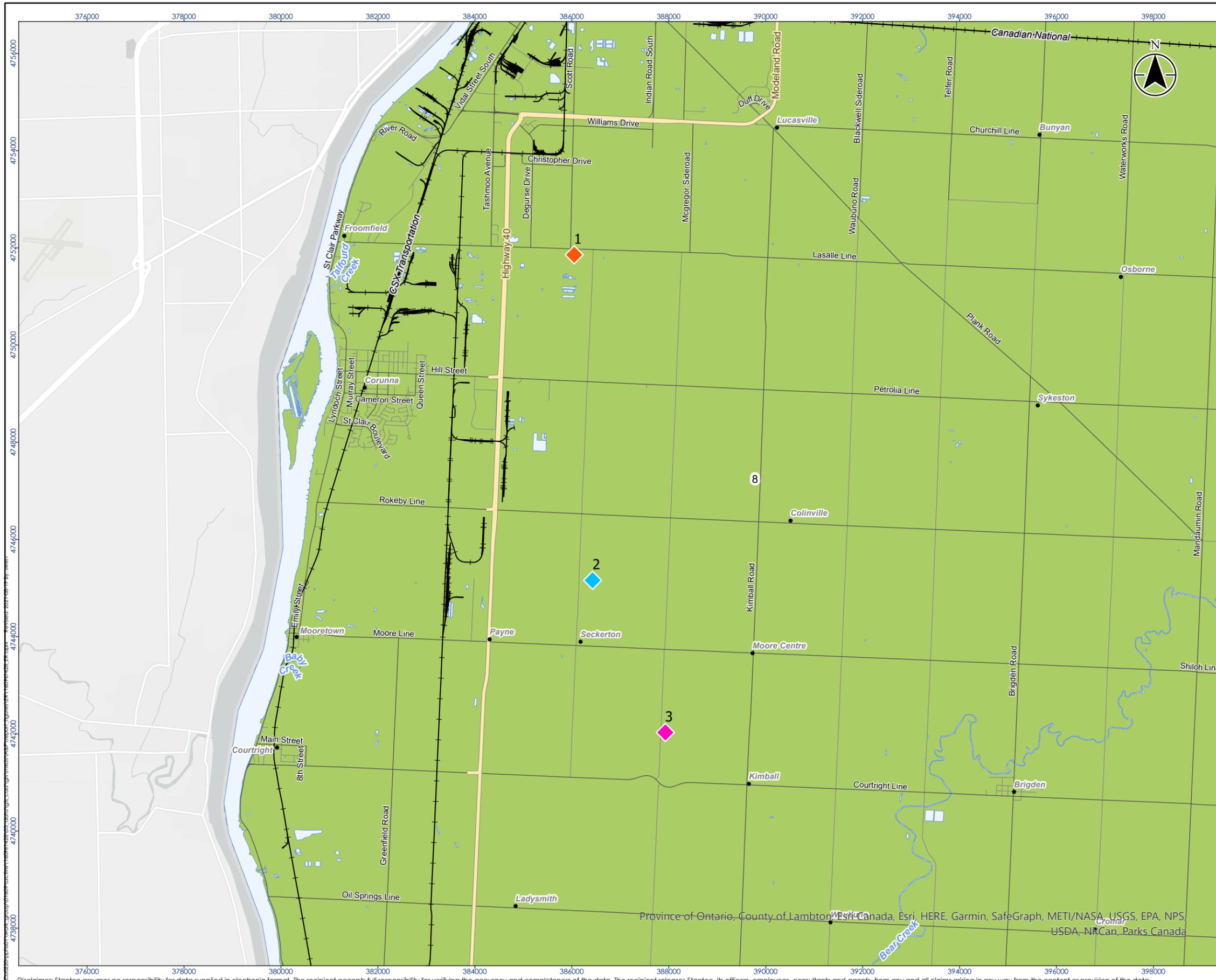
Project Location: Lambton County  
 Prepared by swen on 2021-08-19  
 Technical Review by KG on 2021-07-30

Client/Project: ENBRIDGE GAS INC. 2022 STORAGE ENHANCEMENT

Figure No. **2**

Title: **Drift Thickness**

Province of Ontario, County of Lambton, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCAN, Parks Canada



Legend

- ◆ 1. Dow Moore DSA
- ◆ 2. Payne Storage Pool
- ◆ 3. Kimball-Colinville DSA
- Railway
- Expressway / Highway
- Major Road
- Minor Road
- Waterbody
- Physiography**
- 8: Bevelled Till Plains



1: (At original document size of 11x17)

Notes

1. Coordinate System: Name: 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. Physiography data source: Chapman, L.J. and Putnam, D.F. 2007. Physiography of southern Ontario; Ontario Geological Survey, Miscellaneous Release—Data 228.



Project Location: Lambton County  
 Prepared by AMW on 2021-08-19  
 Technical Review by KG on 2021-07-30

Client/Project: ENBRIDGE GAS INC.  
 DAWN TO CORUNNA PIPELINE PROJECT

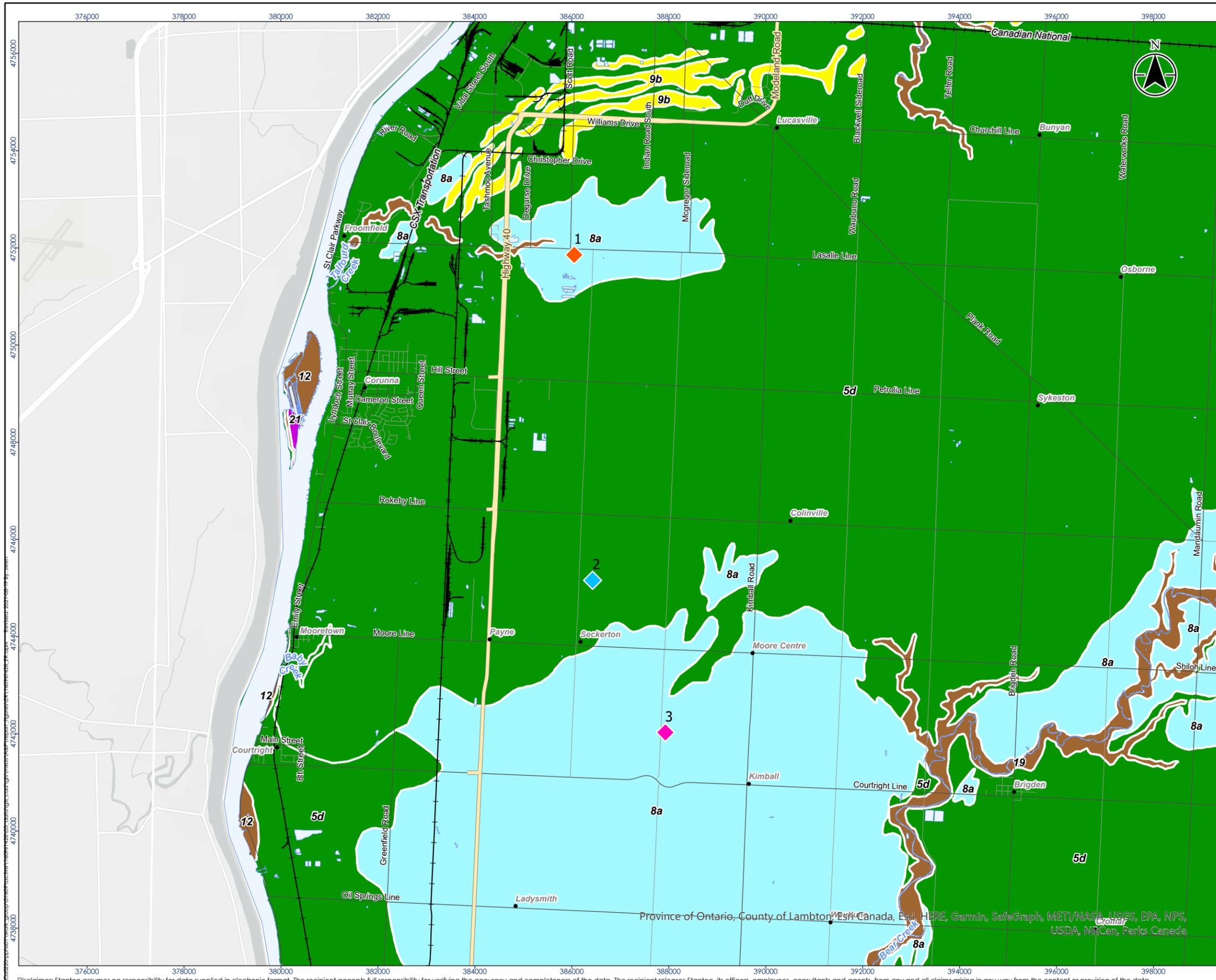
Figure No.

**3**

Title

**Physiography**

Province of Ontario, County of Lambton, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRC, Parks Canada



- ◆ 1. Dow Moore DSA
- ◆ 2. Payne Storage Pool
- ◆ 3. Kimball-Colinville DSA

- Railway
- Expressway / Highway
- Major Road
- Minor Road
- Waterbody

**Surficial Geology**

- 5d: Glaciolacustrine-derived silty to clayey till
- 8a: Fine-textured glaciolacustrine deposits (Massive-well laminated)
- 9b: Coarse-textured glaciolacustrine deposits (Littoral-foreshore deposits)
- 12: Older alluvial deposits
- 19: Modern alluvial deposits
- 21: Man-made deposits



1: (At original document size of 11x17)

**Notes**

1. Coordinate System: Name: 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. 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: 160961428 REVA  
 Prepared by: ENBRIDGE on 2021-08-19 Technical Review by KG on 2021-07-30

Client/Project  
 ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

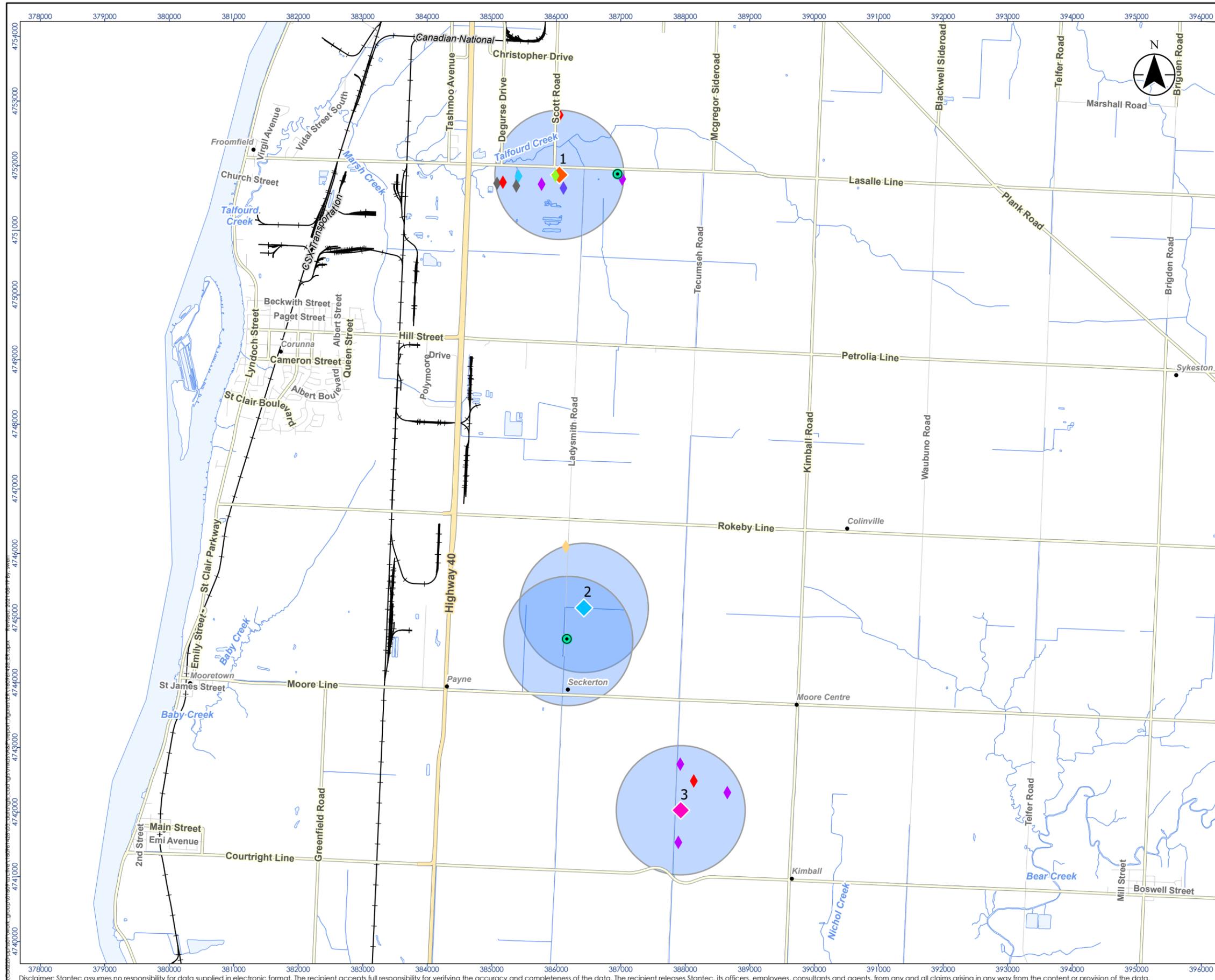
Figure No.

**4**

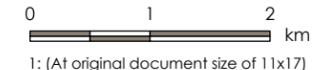
Title

**Surficial Geology**

Province of Ontario, County of Lambton, Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRC, Parks Canada



- ◆ 1. Dow Moore DSA
- ◆ 2. Payne Storage Pool
- ◆ 3. Kimball-Colinville DSA
- Other Named Place
- Expressway / Highway
- Major Road
- Minor Road
- Railway
- Waterbody
- Watercourse (Permanent)
- 1 km Search Radius
- ◆ Water Supply, Domestic
- ◆ Water Supply, Livestock
- ◆ Test Hole, Monitoring and Test Hole
- ◆ Test Hole, Test Hole
- ◆ Observation Wells
- ◆ Abandoned-Other
- ◆ Abandoned-Other, Domestic
- ◆ Abandoned-Other, Test Hole
- Other Well



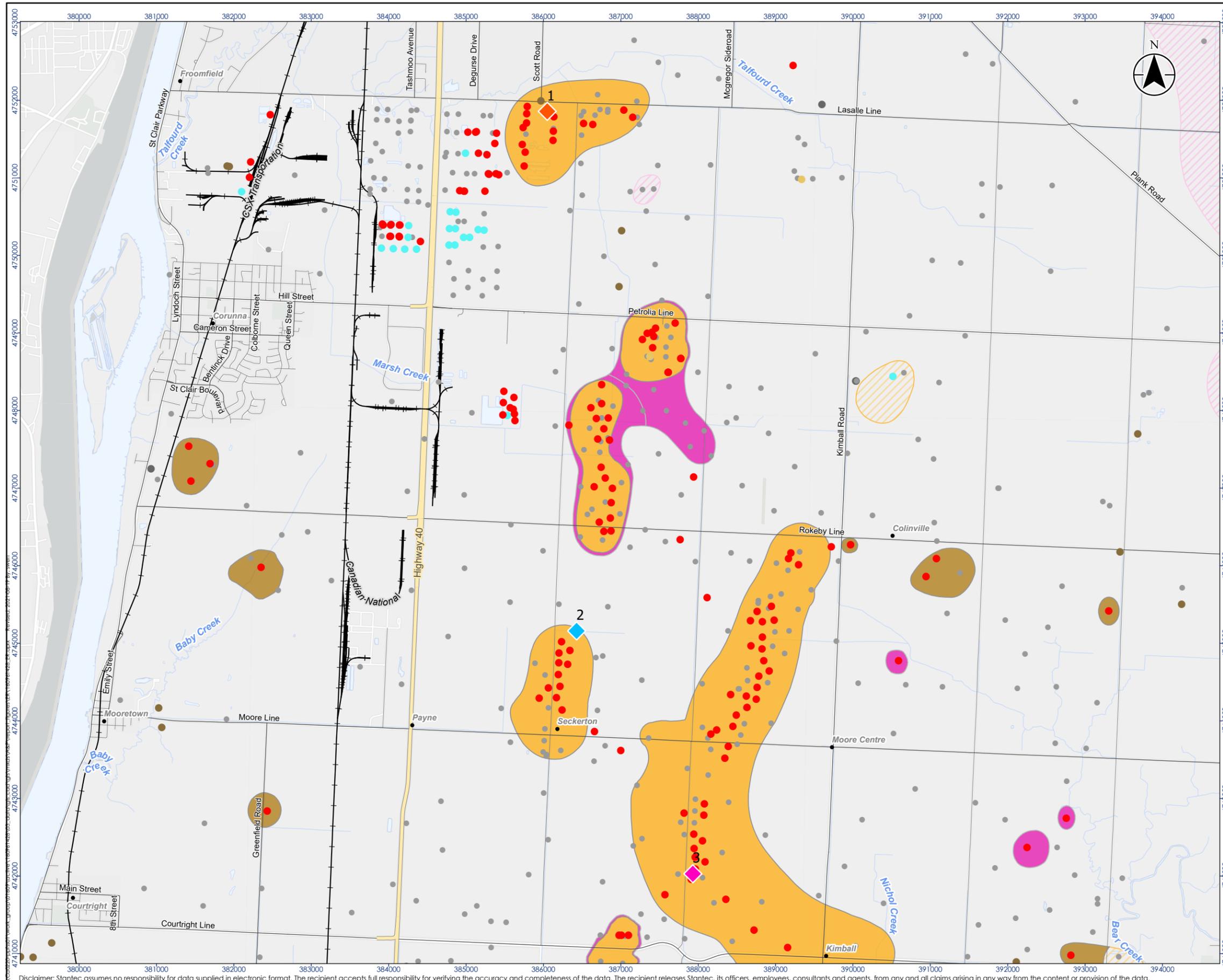
**Notes**  
 1. Coordinate System: Name: NAD 1983 UTM Zone 17N  
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2020.  
 3. MOECP WWIS data Q3 2020.



Project Location: 160961428 REVA  
 Prepared by: ENBRIDGE on 2021-08-19 Technical Review by KG on 2021-07-30

Client/Project:  
 ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

Figure No.:  
**5**  
 Title:  
**Groundwater Conditions**



- Legend**
- ◆ 1. Dow Moore DSA
  - ◆ 2. Payne Storage Pool
  - ◆ 3. Kimball-Colinville DSA
  - Railway
  - Expressway / Highway
  - Major Road
  - Minor Road
  - Watercourse
  - Waterbody
- Well Mode**
- Active Well
  - Plugged back and whipstocked
  - Potential
  - Suspended Well
  - Abandoned Well
  - Abandoned and Junked (Lost)
  - Unknown
- Petroleum Pool (status)**
- Active, Natural Gas
  - Active, Natural Gas Storage
  - Abandoned, Natural Gas
  - Active, Oil
  - Abandoned, Oil



1: (At original document size of 11x17)

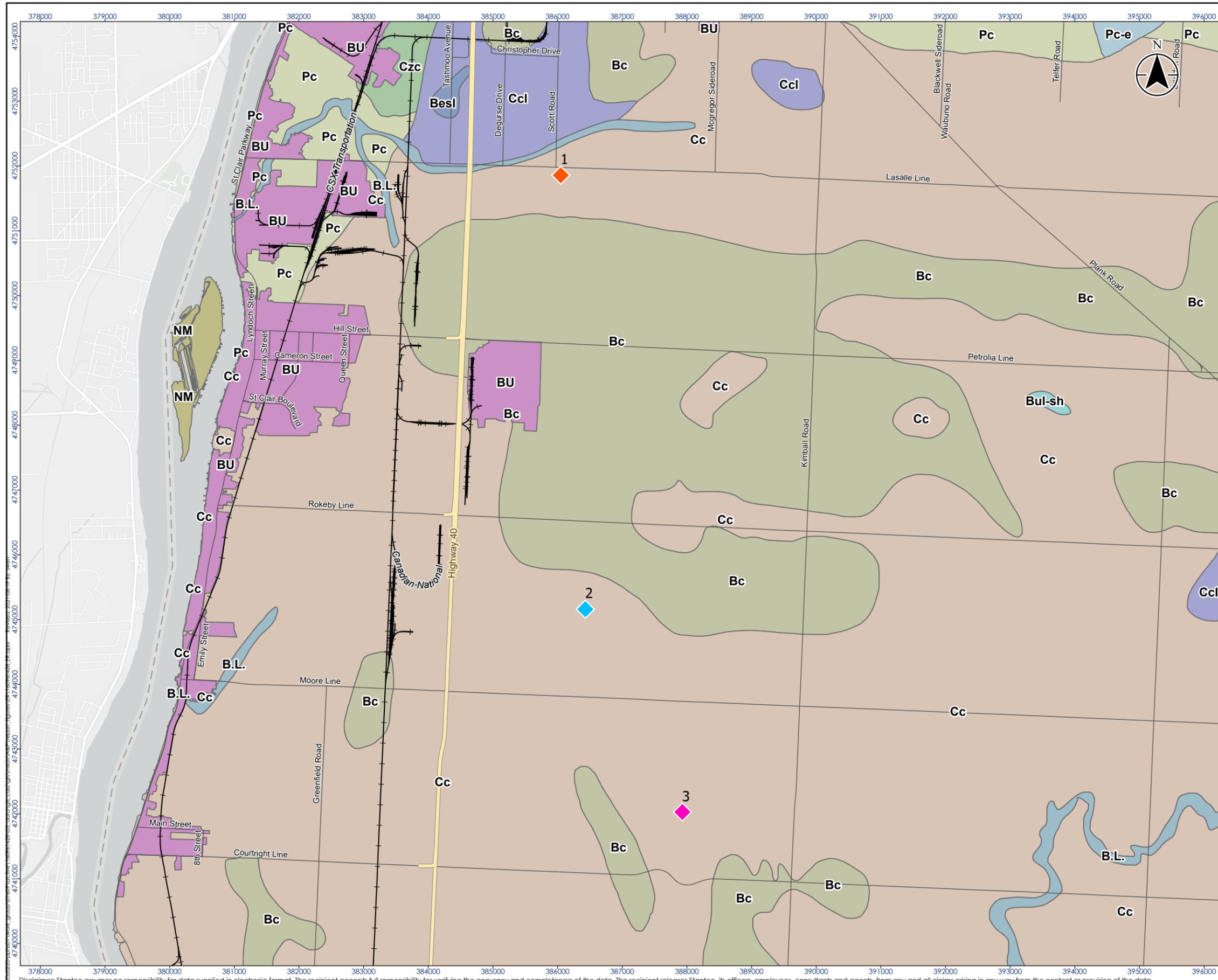
- Notes**
1. Coordinate System: Name: NAD 1983 UTM Zone 17N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2020.



Project Location: 160961428 REVA  
 Prepared by: ENBRIDGE on 2021-08-19 Technical Review by KG on 2021-07-30

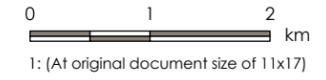
Client/Project:  
 ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

Figure No.:  
**6**  
 Title:  
**Aggregate and Petroleum Resources**

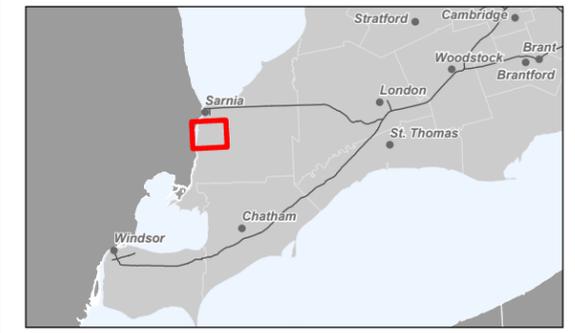


Legend

- ◆ 1. Dow Moore DSA
  - ◆ 2. Payne Storage Pool
  - ◆ 3. Kimball-Colinville DSA
  - +— Railway
  - +— Expressway / Highway
  - Major Road
  - Minor Road
- Soils**
- B.L. - BOTTOM LAND
  - BU - BUILT UP AREA
  - Bc - BROOKSTON CLAY
  - Besl - BERRIEN SANDY LOAM
  - Bul-sh - BURFORD LOAM - SHALLOW PHASE
  - Cc - CAISTOR CLAY
  - Ccl - CAISTOR CLAY LOAM
  - Czc - CLYDE CLAY
  - NM - NOT MAPPED
  - Pc - PERTH CLAY
  - Pc-e - PERTH CLAY - ERODED PHASE



**Notes**  
 1. Coordinate System: Name: 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.

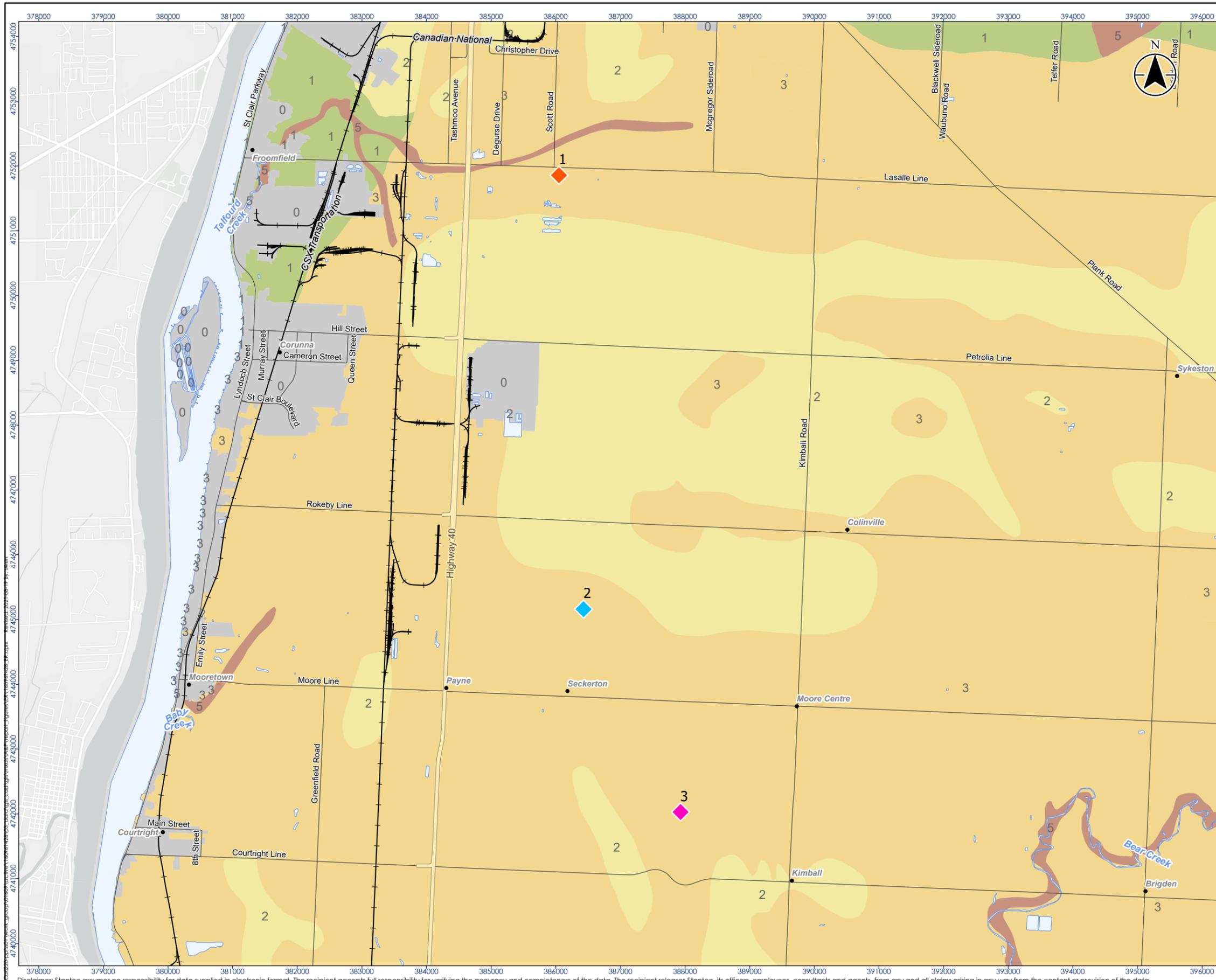


Project Location: Sarnia  
 Prepared by: ENBRIDGE  
 Date: 2021-08-19  
 Technical Review by: KG on 2021-07-30  
 Reference: 160961428 REVA

Client/Project: ENBRIDGE GAS INC. 2022 STORAGE ENHANCEMENT

Figure No. 7

Title: Soil Types

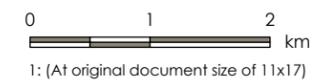


**Legend**

- ◆ 1. Dow Moore DSA
- ◆ 2. Payne Storage Pool
- ◆ 3. Kimball-Colinville DSA
- Expressway / Highway
- Major Road
- Minor Road
- Railway
- Waterbody

**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
- 5: Soils in this class gave very severe limitations that restrict their capability in producing perennial forage crops, and improvement practices are feasible
- CLI Unavailable



**Notes**  
 1. Coordinate System: Name: 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.

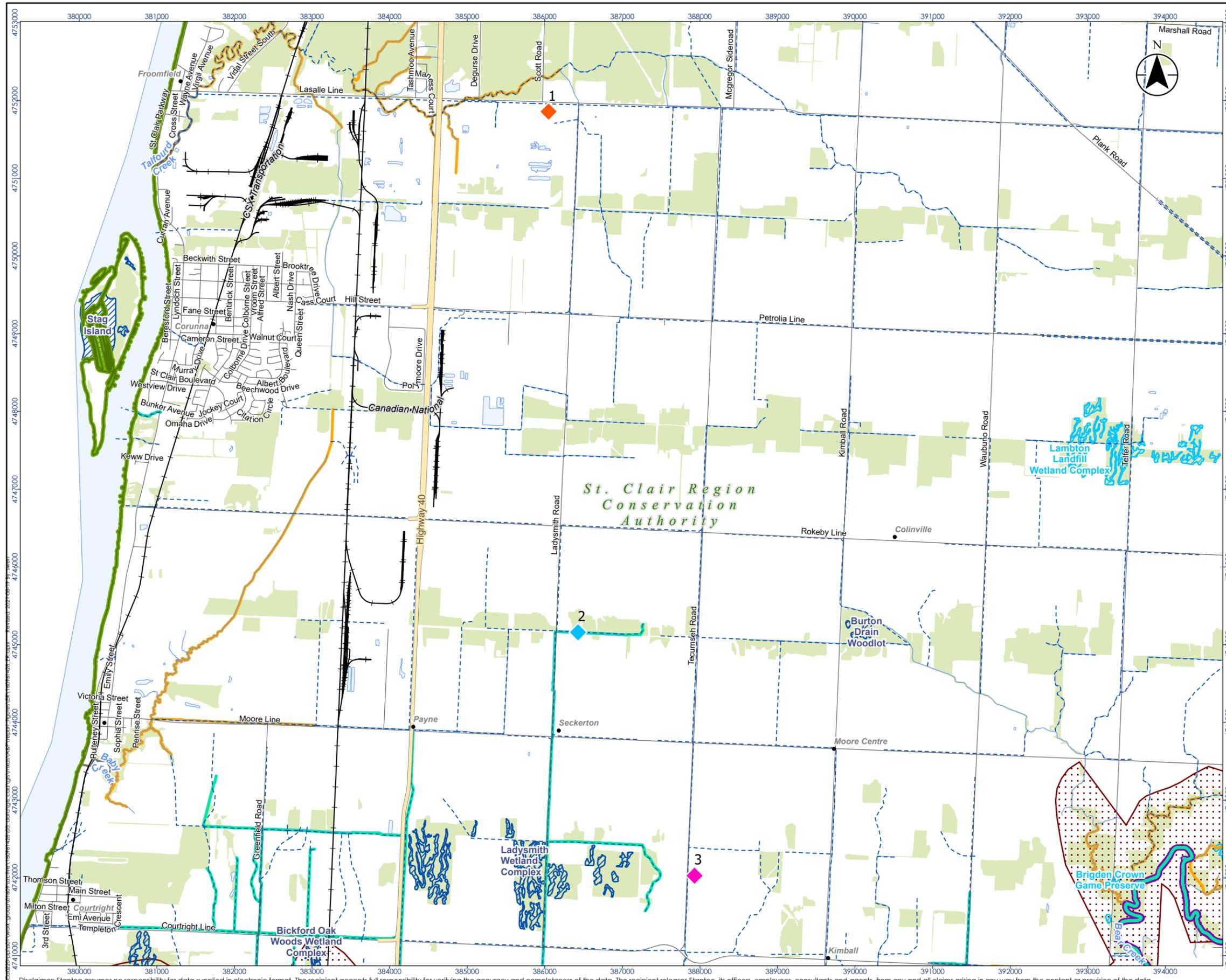


Project Location: 160961428 REVA  
 Prepared by: ENBRIDGE on 2021-08-19 Technical Review by KG on 2021-07-30

Client/Project:  
 ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

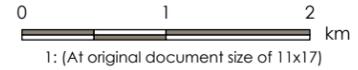
Figure No.  
**8**

Title  
**Soil Capability**



**Legend**

- ◆ 1. Dow Moore DSA
- ◆ 2. Payne Storage Pool
- ◆ 3. Kimball-Colinville DSA
- Railway
- Constructed Drain
- Watercourse (Permanent)
- Thermal Regime, Warm
- Thermal Regime, Warm
- DFO Aquatic Species at Risk - Fish
- DFO Aquatic Species at Risk - Mussel
- Wetland, Provincially Significant
- Wetland, Other Evaluated
- Deer Wintering Area (Stratum 2)
- Waterbody
- Wooded Area



**Notes**  
 1. Coordinate System: Name: 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: Lambton County  
 Prepared by AMW on 2021-08-19  
 Technical Review by KG on 2021-07-30

Client/Project: ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

Figure No. **9**

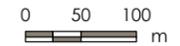
Title: **Biophysical Features**

## **APPENDIX D: MITIGATION PHOTOMOSAIC**



Legend

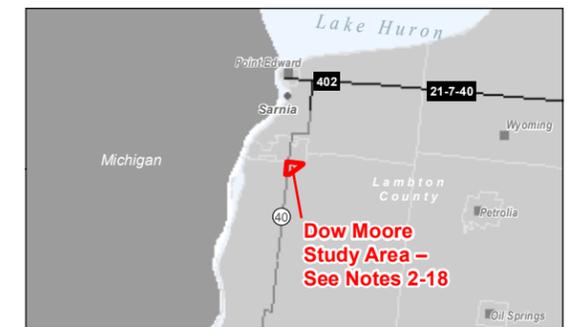
- Dow Moore Study Area - See Notes 2-18
- Water Well Record (MECP) - See Note 1
- Constructed Drain
- Hydro Line
- Watercourse (Permanent)
- First Nation Reserve
- Lot
- Waterbody
- Wooded Area



1:6,500 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
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3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Location: Lambton County  
 160961468 REVA  
 Prepared by AW on 2021-08-20

Client/Project: ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

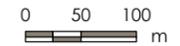
Figure No.: **Appendix D - 1**

Title: **Mitigation Photo Mosaic  
 Dow Moore DSA**



Legend

- Payne Storage Pool Study Area – See Notes 2-19
- Water Well Record (MECP) - See Note 1
- Constructed Drain
- Watercourse (Permanent)
- Lot
- Wooded Area



1:6,500 (At original document size of 11x17)

Notes

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Project Location: Lambton County  
 160961468 REVA  
 Prepared by AW on 2021-08-20

Client/Project: ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

Figure No.: **Appendix D - 2**

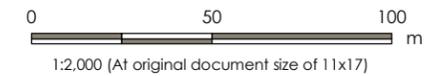
Title: **Mitigation Photo Mosaic  
 Payne DSA**

\\Ca0220-spl01\work\group\01609\active\160961428\03\_data\gis\_cad\gdb\mxd\A&P\report\_figures\BR\_V\67961428\_ER\_A\appendx02\_Mitigation\_mapbook.mxd Revised: 2021-08-20 By: pmoser  
 4743900  
 4744200  
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 4744800  
 4745100



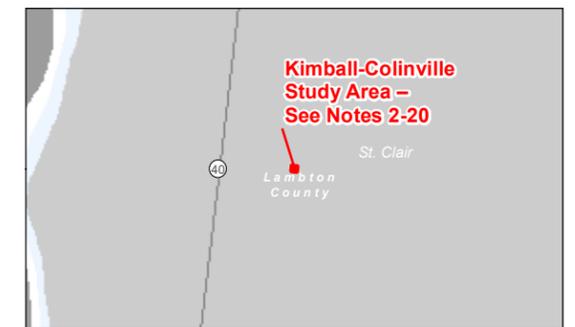
Legend

- Kimball-Colinville Study Area – See Notes 2-20
- Constructed Drain
- Watercourse (Permanent)
- Lot
- Project Components**
- Proposed Connecting Pipeline
- Existing Pipeline
- Existing Connecting Pipeline
- Permanent Pad (approx. 60 m<sup>2</sup>)
- Access Road
- Temporary Pad (approx. 8100 m<sup>2</sup>)



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, 2021.
3. Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Location: Lambton County  
 Prepared by: AW on 2021-08-20  
 160961468 REVA

Client/Project:  
 ENBRIDGE GAS INC.  
 2022 STORAGE ENHANCEMENT

Figure No.  
**Appendix D - 3**

Title  
**Mitigation Photo Mosaic  
 Kimball-Colinville DSA & Proposed  
 Location to TKC**

\\Co0220-splso1\work\_group\01609\active\160961428\03\_data\gis\_cad\gls\mxd\A&P\report\_figures\BR\_V\60961428\_ER\_A\appendixD\_Mitigation\_mapbook.mxd Revised: 2021-08-20 By: pmoser  
 4741800



Enbridge Gas 2022 Storage Enhancement Project  
Correspondence Tracking - Post Environmental Report Submission  
**Ontario Pipeline Coordinating Committee (OPCC)**

N/A - Not Available							
Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
1	All OPCC, Agency, and Municipal contacts on the Project's Contact Lists.	N/A	Email	8/23/2021	On behalf of Enbridge Gas, Stantec emailed a notice of the Environmental Report and a link to the Report, with a request for comments to be submitted by October 4, 2021.	N/A	N/A
2	Policy Lead, Ministry of Government and Consumer Services OPCC Member	Uyen Ha	Email	8/24/2021	Uyen Ha informed Stantec that Infrastructure Ontario will provide a letter of acknowledgement once the Report has been reviewed.	8/24/2021	Stantec thanked Uyen Ha for their email.
3	Program Analyst Ministry of Transportation	Amanda Rodek	Email	9/27/2021	The MTO informed Zora Crnojacki, OPCC Project Advisor, that the proposed project and study area are outside of MTO's permit control area and therefor MTO has no comment.	N/A	N/A

August 23, 2021

«FIRST\_NAME» «SURNAME»  
«POSITION»  
«ORGANIZATION»  
«DEPARTMENT»  
«ADDRESS»  
«CITYTOWN» «PROVINCE» «POSTAL\_CODE»  
«EMail»

«TITLE» «FIRST\_NAME» «SURNAME»,

**Reference: Enbridge Gas Inc. – 2022 Storage Enhancement Project**

Enbridge Gas Inc. (Enbridge Gas) has identified the need to enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County. The 2022 Storage Enhancement Project (the Project) will involve increasing the Maximum Operating Pressure (MOP) of the Dow Moore and Payne Storage Pools – two designated storage areas (DSAs) as defined in s.36.1(1)(a) of the *Ontario Energy Board Act*. To complete wellhead upgrades and pressure testing of wells at the Payne Storage Pool Project location, temporary steel plates will be used upon access to the sites' natural gas storage wells. No other temporary or permanent access road or structure will be installed at the Dow Moore Storage Pool Project location.

The Project will also involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, approximately 85 metres of Nominal Pipe Size (NPS) 10-inch pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

Enbridge Gas retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. The Environmental Study is intended to 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)".

An Environmental Report (ER), summarizing the results of the Environmental Study, is enclosed for your review. Please forward any comments you may have regarding the ER and Project to the undersigned. Your comments would be appreciated by **October 4, 2021**.

Yours truly,

**Stantec Consulting Ltd.**

**Kayla Ginter** M.ES. (Planning), OPPI Candidate  
Environmental Coordinator, Assessment and Permitting  
Direct: 226-980-5347  
Kayla.Ginter@stantec.com

Attachment: 2022 Storage Enhancement Project Environmental Report

c. Evan Tomek, St. Analyst, Environmental, Enbridge Gas

August 23, 2021

«FIRST\_NAME» «SURNAME»  
«POSITION»  
«ORGANIZATION»  
«DEPARTMENT»  
«ADDRESS»  
«CITYTOWN» «PROVINCE» «POSTAL\_CODE»  
«EMail»

«TITLE» «FIRST\_NAME» «SURNAME»,

**Reference: Enbridge Gas Inc. – 2022 Storage Enhancement Project**

Enbridge Gas Inc. (Enbridge Gas) has identified the need to enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County. The 2022 Storage Enhancement Project (the Project) will involve increasing the Maximum Operating Pressure (MOP) of the Dow Moore and Payne Storage Pools – two designated storage areas (DSAs) as defined in s.36.1(1)(a) of the *Ontario Energy Board Act*. To complete wellhead upgrades and pressure testing of wells at the Payne Storage Pool Project location, temporary steel plates will be used upon access to the sites' natural gas storage wells. No other temporary or permanent access road or structure will be installed at the Dow Moore Storage Pool Project location.

The Project will also involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, approximately 85 metres of Nominal Pipe Size (NPS) 10-inch pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

Enbridge Gas retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. The Environmental Study is intended to 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)".

An Environmental Report (ER), summarizing the results of the Environmental Study, is enclosed for your review. If you wish to receive a hardcopy of the ER, please feel free to contact the undersigned.

Please forward any comments you may have regarding the ER and Project to Zora Crnojacki, Chairperson, Ontario Pipeline Coordination Committee, Ontario Energy Board, 2300 Yonge Street, 26<sup>th</sup> Floor, P.O. Box 2319, Toronto, ON M4P 1E4, [Zora.Crnojacki@oeb.gov.on.ca](mailto:Zora.Crnojacki@oeb.gov.on.ca) and the undersigned. Your comments would be appreciated by **October 4, 2021**.

Yours truly,

**Stantec Consulting Ltd.**

**Kayla Ginter** M.ES. (Planning), OPPI Candidate  
Environmental Coordinator, Assessment and Permitting  
Direct: 226-980-5347  
[Kayla.Ginter@stantec.com](mailto:Kayla.Ginter@stantec.com)

Attachment: 2022 Storage Enhancement Project Environmental Report

c. Evan Tomek, St. Analyst, Environmental, Enbridge Gas

**From:** [Ha, Uyen \(MGCS\)](#)  
**To:** [Ginter, Kayla](#)  
**Cc:** [Knight, Mark](#)  
**Subject:** RE: Enbridge Gas Inc. – 2022 Storage Enhancement Project Environmental Report  
**Date:** Tuesday, August 24, 2021 9:34:54 AM

---

Thank you Kayla. Once we review, Infrastructure Ontario will be sending an acknowledgement letter.

---

**From:** Ginter, Kayla <Kayla.Ginter@stantec.com>  
**Sent:** August-23-21 4:52 PM  
**To:** Ha, Uyen (MGCS) <Uyen.Ha@ontario.ca>  
**Cc:** Knight, Mark <Mark.Knight@stantec.com>  
**Subject:** Enbridge Gas Inc. – 2022 Storage Enhancement Project Environmental Report

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good afternoon,

Enbridge Gas Inc. (Enbridge Gas) has identified the need to enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County. The 2022 Storage Enhancement Project (the Project) will involve increasing the Maximum Operating Pressure (MOP) of the Dow Moore and Payne Storage Pools – two designated storage areas (DSAs) as defined in s.36.1(1)(a) of the *Ontario Energy Board Act*. The Project will also involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA and will involve the installation of approximately 85 metres of Nominal Pipe Size (NPS) 10-inch pipeline.

Enbridge Gas, retained Stantec to undertake an environmental study for the construction and operation of the Project. An Environmental Report (ER), summarizing the results of the environmental study, is enclosed at the FTP file link (below) for your review.

Please forward any comments you may have regarding the ER and Project to Zora Crnojacki, Chairperson, Ontario Pipeline Coordination Committee, Ontario Energy Board, 2300 Yonge Street, 26th Floor, P.O. Box 2319, Toronto, ON M4P 1E4, [Zora.Crnojacki@oeb.gov.on.ca](mailto:Zora.Crnojacki@oeb.gov.on.ca) and the undersigned. Your comments would be appreciated by October 4, 2021.

## Login Information

**Browser link:** <https://tmpsftp.stantec.com>

**Login name:** s0902121436

**Password:** 9518079

Regards,

**Kayla Ginter** M.ES. (Planning), OPPI Candidate  
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347

[Kayla.Ginter@stantec.com](mailto:Kayla.Ginter@stantec.com)

Stantec  
300W-675 Cochrane Drive  
Markham ON L3R 0B8



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**From:** [Rodek, Amanda \(MTO\)](#)  
**To:** [Zora.Crnojacki@oeb.gov.on.ca](mailto:Zora.Crnojacki@oeb.gov.on.ca)  
**Cc:** [Ginter, Kayla](#)  
**Subject:** RE: Enbridge Gas Inc. – 2022 Storage Enhancement Project Environmental Report  
**Date:** Monday, September 27, 2021 8:15:23 AM

---

Hi Zora,

Stantec's, August 23, 2021 letter to Tony Di Fabio regarding the Enbridge Gas Inc. – 2022 Storage Enhancement Project Environmental Report, has been forwarded to my attention for review and response.

Please find the following comments from the Ministry of Transportation for your consideration regarding the proposed project:

- the proposed project and study area are outside of MTO's permit control area and therefor MTO has no comment

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:** Ginter, Kayla <[Kayla.Ginter@stantec.com](mailto:Kayla.Ginter@stantec.com)>  
**Sent:** August-23-21 4:52 PM  
**To:** Di Fabio, Tony (MTO) <[Tony.DiFabio@ontario.ca](mailto:Tony.DiFabio@ontario.ca)>  
**Cc:** Knight, Mark <[Mark.Knight@stantec.com](mailto:Mark.Knight@stantec.com)>  
**Subject:** Enbridge Gas Inc. – 2022 Storage Enhancement Project Environmental Report

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good afternoon,

Enbridge Gas Inc. (Enbridge Gas) has identified the need to enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County. The 2022 Storage Enhancement Project (the Project) will involve increasing the Maximum Operating Pressure (MOP) of the Dow Moore and Payne Storage Pools – two designated storage areas (DSAs) as defined in s.36.1(1)(a) of the *Ontario Energy Board Act*. The Project will also involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA and will involve the installation of approximately 85 metres of Nominal Pipe Size (NPS) 10-inch pipeline.

Enbridge Gas, retained Stantec to undertake an environmental study for the construction and operation of

the Project. An Environmental Report (ER), summarizing the results of the environmental study, is enclosed at the FTP file link (below) for your review.

Please forward any comments you may have regarding the ER and Project to Zora Crnojacki, Chairperson, Ontario Pipeline Coordination Committee, Ontario Energy Board, 2300 Yonge Street, 26th Floor, P.O. Box 2319, Toronto, ON M4P 1E4, [Zora.Crnojacki@oeb.gov.on.ca](mailto:Zora.Crnojacki@oeb.gov.on.ca) and the undersigned. Your comments would be appreciated by October 4, 2021.

## Login Information

**Browser link:** <https://tmpsftp.stantec.com>

**Login name:** s0902121436

**Password:** 9518079

Regards,

**Kayla Ginter** M.ES. (Planning), OPPI Candidate  
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347

[Kayla.Ginter@stantec.com](mailto:Kayla.Ginter@stantec.com)

Stantec  
300W-675 Cochrane Drive  
Markham ON L3R 0B8



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## LAND MATTERS

### Land Use – General

1. Land use requirements for the Project consist of the construction of gravel pads, temporary work space and access lanes. Appendix A of the Project ER set out at Exhibit F, Tab 1, Schedule 1, Attachment 1 illustrates the features to be constructed for TKC 69 well drilling and connection to existing gathering lines.
2. Attachment 1 to this Exhibit sets out the redacted Affidavit of Title Search for those landowners in the Dow Moore, Payne, and Kimball-Colinville DSAs that are directly affected (construction activities occurring on their lands) by the Project work and landowners on the immediately adjacent properties. Enbridge Gas will provide notice of this application to all landowners listed in Attachment 1.
3. All necessary permits, approvals and authorizations will be obtained by Enbridge Gas at the earliest appropriate opportunity. Enbridge Gas expects to receive all required approvals prior to commencing construction of the Project. Enbridge Gas will assign inspection staff to ensure that contractual obligations between Enbridge Gas and the pipeline contractor, provincial ministries, municipal government and landowners are complied with.

### ***Vertical Well – TKC 69***

4. For well TKC 69, Enbridge Gas must construct the following features:
  - A gravel pad temporary work space area approximately 8,100 square meters with a silt fence around the perimeter in order to complete the

drilling of the well. Once the drilling of TKC 69 is complete, the gravel pad will be reduced to approximately 60 square meters.

- A 6 m wide x 40 m long permanent gravel lane will be constructed off of an existing gravel lane in order to allow access to the well site.

***85 m NPS 10 Natural Gas Pipeline – Connect TKC 69 well to Kimball-Colinville Gathering Line***

5. For 85 m NPS 10 Natural Gas Pipeline, Enbridge Gas must construct the following features:
  - A temporary lateral work space area approximately 1200 square meters in order to allow the construction of the pipeline that will connect well TKC 69 to the existing Kimball-Colinville gathering lines. The majority of the pipeline work will take place within the confinements of the temporary drill pad.
6. As Enbridge Gas is the owner of the land, no easement or temporary land use agreement is required for work associated with the construction of the pipeline.

***Delta Pressuring Dow Moore & Payne Pools***

7. For delta pressuring the Dow-Moore & Payne Pools, Enbridge Gas must construct the following features:
  - A temporary laneway and working area constructed of steel plating laid on top of the existing agricultural field to all wells within the Payne Storage Pool except for UP24, which has an existing gravel laneway.
  - All wells in the Dow Moore Storage Pool will be accessed via existing gravel laneways.

8. Agreements for temporary working rights to complete construction in the Dow Moore and Payne Pools will be negotiated where required.

Negotiations to Date

9. Enbridge Gas land agents have contacted all parties directly impacted by the Project. The parties are a tenant farmer (in the case of well TKC 69 and the 85 m NPS 10 natural gas pipeline) and third party landowners (in the case of the MOP increase for Dow-Moore and Payne Pools). These parties will be notified again prior to commencement of construction. All parties directly impacted by the Project will be compensated for any crop loss as a result of construction activities.

**EB-2021-078**

**ONTARIO ENERGY BOARD**

**IN THE MATTER OF** the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15 (Schedule B);

**AND IN THE MATTER OF** an application by Enbridge Gas Inc. for the 2022 Storage Enhancement Project, within the Kimball-Colinville, Dow-Moore and Payne Designated Storage Areas.

**AFFIDAVIT OF SEARCH OF TITLE**

I, **Ann L. Gray**, of the City of Sarnia, Ontario, **MAKE OATH AND SAY AS FOLLOWS:**

1. I am a Free-Lance Title Searcher retained by Enbridge Gas Inc. (the "**Applicant**"), and as such have knowledge of the matters hereinafter deposed to.
2. On or about September 1, 2021, I conducted a search of title and obtained abstracts of title and other documents from the Land Registry Office for the Land Titles and the Land Registry Division of Lambton, in respect of the lands upon which the Applicant proposes the 2022 Storage Enhancement Project, within the Kimball-Colinville, Dow-Moore and Payne Designated Storage Areas and the lands immediately adjacent thereto (the "**Subject Lands**"). The said searches were conducted for the purpose of determining the status of land tenure ownership and other registered interests of encumbrancers (collectively, "**Interested Parties**") of the Subject Lands.

3. As a result of the said searches conducted and information provided by the Applicant, I determined the Interested Parties of the Subject Lands are those set in the list at Exhibit "A" hereto. This list of Interested Parties was compiled on the basis of the information provided to me by the Applicant, including a map of the area where to proposed wells will be drilled, and the searches of title undertaken therewith. Addresses for service for such Interested Parties were derived from the registered documents and from municipal directories, where applicable.

SWORN before me at Sarnia,

Ontario, this 9<sup>th</sup> day of

September 2021

[Redacted Signature]

Ann L. Gray

[Redacted Signature]

A Commissioner for Taking Affidavits

This is **Exhibit "A"** to the Affidavit of  
Ann L. Gray, sworn before me  
This 9<sup>th</sup> day of September, 2021.



A Commissioner, etc.

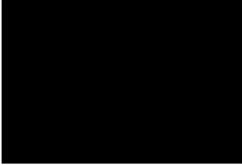
# Kimball-Colinville Designated Storage Area

## Directly Affected Land Area

OWNER:	ADDRESS:	ENCUMBRANCE HOLDER:	ADDRESS:	ENCUMBRANCE:	PIN #	LEGAL DESCRIPTION:
912176 Ontario Limited	3501 Tecumseh Rd., Mooretown, ON N0N 1M0	1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)	1. 3501 Tecumseh Rd., Mooretown, ON N0N 1M0	1. (a) Lease 1. (b) Agreement 1. (c) Easement 1. (d) OEB Order	43303-0094	Part of Lot 18, Concession 5, Moore, St. Clair

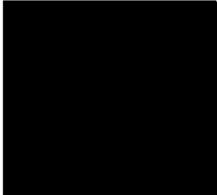
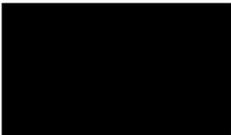
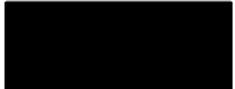
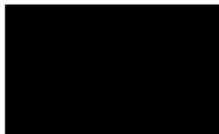
## Lands Adjacent to the Directly Affected Area

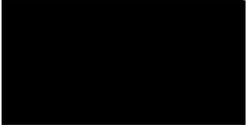
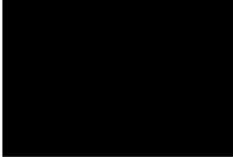
OWNER:	ADDRESS:	ENCUMBRANCE HOLDER:	ADDRESS:	ENCUMBRANCE:	PIN #	LEGAL DESCRIPTION:
The Corporation of the County of Lambton	789 Broadway St., Wyoming, ON NON 1T0	1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)  2. Enbridge Gas Inc. (Union Gas Limited)	1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0  2. 3501 Tecumseh Rd, Mooretown, ON NON 1M0	1. (a) Lease 1. (b) Easement 1. (c) Agreement  2. Easement	43303-0054 (Part)	Part of Lot 19, Concessions 5 & 6, and Part of the Road Allowance between Lots 18 & 19, Concessions 5 & 6, Moore, (Tecumseh Road) St. Clair
The Corporation of the Township of St. Clair	1155 Emily Street, Mooretown, ON NON 1M0	1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)  2. Enbridge Gas Inc. (Union Gas Limited)	1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0  2. 3501 Tecumseh Rd, Mooretown, ON NON 1M0	1. (a) Lease 1. (b) Easement 1. (c) Agreement  2. Easement	43303-0054 (Part)	Part of Lot 19, Concessions 5 & 6, and Part of the Road Allowance between Lots 18 & 19, Concessions 5 & 6, Moore, (Tecumseh Road) St. Clair

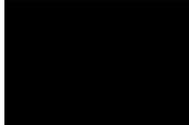
		<p>1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>2. Enbridge Gas Inc. (Union Gas Limited)</p> <p>3. The Corporation of the Township of St. Clair</p> <p>4. Royal Bank of Canada</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p> <p>2. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p> <p>3. 1155 Emily Street, Mooretown, ON NON 1M0</p> <p>4. 10 York Mills Road, 3rd Floor, Toronto, ON, M2P 0A2</p>	<p>1. (a) Lease 1. (b) Agreement</p> <p>2. (a) Agreement 2. (b) Easement</p> <p>3. (a) Agreement 3. (b) Easement</p> <p>4. Mortgage</p>	<p>43303-0083</p>	<p>Part of Lot 18, Concession 6, Moore, St. Clair</p>
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		<p>1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>2. Enbridge Gas Inc. (Union Gas Limited)</p> <p>3. The Corporation of the Township of St. Clair</p> 	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1MO</p> <p>2. 3501 Tecumseh Rd, Mooretown, ON NON 1MO</p> <p>3. 1155 Emily Street, Mooretown, ON NON 1MO</p> 	<p>1. (a) Lease 1. (b) Agreement</p> <p>2. (a) Agreement 2. (b) Easement</p> <p>3. (a) Agreement 3. (b) Easement</p> <p>4. Notice of Interest</p>	<p>43303-0084</p>	<p>Part of Lot 18, Concession 6, Moore, St. Clair</p>
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		<p>1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>2. Enbridge Gas Inc. (Union Gas Limited)</p> <p>3. The Corporation of the Township of St. Clair</p> <p>4. Farm Credit Canada</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>2. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>3. 1155 Emily Street, Mooretown, ON N0N 1M0</p> <p>4. Suite 200, 1133 St. George Blvd., Moncton, NB E1E 4E1</p>	<p>1. (a) Lease 1. (b) Agreement</p> <p>2. (a) Agreement 2. (b) Easement</p> <p>3. (a) Agreement 3. (b) Easement</p> <p>4. Mortgage</p>	<p>43303-0085</p>	<p>Part of Lot 18, Concession 6, Moore, St. Clair</p>
		<p>1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>2. Enbridge Gas Inc. (Union Gas Limited)</p> <p>3. The Corporation of the Township of St. Clair</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>2. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>3. 1155 Emily Street, Mooretown, ON N0N 1M0</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement</p> <p>2. (a) Agreement 2. (b) Easement</p> <p>3. (a) Agreement 3. (b) Easement</p>	<p>43303-0086</p>	<p>Part of Lot 18, Concession 6, Moore, St. Clair</p>

		<p>1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>2. Enbridge Gas Inc. (Union Gas Limited)</p> <p>3. The Corporation of the Township of St. Clair</p> <p>4. Plains Midstream Canada ULC (Cochin Pipe Lines Ltd.)</p>  	<p>1. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>2. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>3. 1155 Emily Street, Mooretown, ON N0N 1M0</p> <p>4. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7</p>  	<p>1. (a) Lease 1. (b) Easement</p> <p>2. (a) Agreement 2. (b) Easement</p> <p>3. (a) Agreement 3. (b) Easement</p> <p>4. (a) Agreement 4. (b) Easement</p> <p>5. Interest Holder</p> <p>6. Life Interest</p>	<p>43303-0087</p>	<p>Part of Lot 17, Concession 6, Moore, St. Clair</p>
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		<p>1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>2. The Hydro-Electric Power Commission of Ontario (Ontario Hydro)</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p> <p>2. 185 Clegg Rd., P.O. Box 4300, Internal R32, Markham, ON L6G 1B7</p>	<p>1. (a) Lease 1. (b) Easement 1. (c) OEB Order</p> <p>2. Easement</p>	<p>43303-0095</p>	<p>Part of Lot 18, Concession 5, Moore, St. Clair</p>
<p>911964 Ontario Limited</p>	<p>3165 Kimball Road, R.R.#1, Courtright, ON NON 1H0</p>	<p>1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>2. Enbridge Gas Inc. (Union Gas Limited)</p> 	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p> <p>2. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p> 	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement 1. (d) OEB Order</p> <p>2. Easement</p> <p>3. Mortgage</p>	<p>43303-0097</p>	<p>Part of Lot 17, Concession 5, Moore, St. Clair</p>

		<p>1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement 1. (d) OEB Order</p>	<p>43303-0098 (Part)</p>	<p>Part of Lot 17, Concession 5, Moore, St. Clair <b>MINERAL RIGHTS ONLY</b></p>
		<p>1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement 1. (d) OEB Order</p>	<p>43303-0098 (Part)</p>	<p>Part of Lot 17, Concession 5, Moore, St. Clair <b>SURFACE RIGHTS ONLY</b></p>

# Dow-Moore Designated Storage Area

## Directly Affected Land Areas

OWNER:	ADDRESS:	ENCUMBRANCE HOLDER:	ADDRESS:	ENCUMBRANCE:	PIN #	LEGAL DESCRIPTION:
1195714 Alberta Ltd.	Suite 3800, 525 - 8th St SW, Calgary, AB T2P 1G1	1. Polysar Limited  2. Plains Midstream Canada ULC (Dome NGL Pipeline Ltd.)  3. The Hydro-Electric Power Commission of Ontario (Ontario Hydro)  4. Nova Chemicals (Canada) Ltd. (Petrosar Limited)	1. c/o Nova Chemicals (Canada) Ltd., P.O. Box 3060, Sarnia, ON N7T 8C7  2. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7  3. 185 Clegg Road, P.O. Box 4300, Internal R32, Markham, ON L6G 1B7  4. 1086 Modeland Rd Bldg. 1040, Suite 201, Sarnia, ON N7S 6L2	1. Lien  2. Easement  3. Easement  4. (a) Easement 4. (b) Agreement	43289-0053	Part of Lots 23 & 24, Concession 12, Moore, Part of the Lots, Blocks & Streets, Plan 30, Moore, and Part of Lot 24, Concession 12, Moore ( <b>MINERAL RIGHTS ONLY under New Highway #40</b> ), St. Clair

<p>(1195714 Alberta Ltd. Continued)</p>		<p>(Continued)</p> <p>5. Enbridge Pipelines Inc. (Interprovincial Pipe Line Company)</p> <p>6. Air Products Canada Ltd.</p> <p>7. Enbridge Gas Inc. (Union Gas Limited)</p> <p>8. The Corporation of the Township of St. Clair</p> <p>9. Dow Chemical Canada ULC</p> <p>10. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p>	<p>(Continued)</p> <p>5. Western Research Park, 1086 Modeland Rd., Bldg. 1050, Sarnia, ON N7S 6L2</p> <p>6. 2090 Steeles Ave E, Brampton, ON L6T 1A7</p> <p>7. 3501 Tecumseh Rd Mooretown ON NON 1M0</p> <p>8. 1155 Emily Street, Mooretown, ON NON 1M0</p> <p>9. 215-2nd Street SW, Suite 2400, Calgary, AB T2P 1M4</p> <p>10.3501 Tecumseh Rd Mooretown ON NON 1M0</p>	<p>(Continued)</p> <p>5. Easement</p> <p>6. Easement</p> <p>7. Easement</p> <p>8. (a) Easement 8. (b) Agreement</p> <p>9. (a) Agreement 9. (b) Lease</p> <p>10. (a) Lease 10. (b) OEB Order</p>	<p>(43289-0053 Continued)</p>	
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<p><i>(1195714 Alberta Ltd. Continued)</i></p>		<p><i>(Continued)</i></p> <p>11. Bell Mobility Inc.</p> <p>12. Nova Chemicals (Canada) Ltd.</p> <p>13. Plains Midstream Canada ULC (Cochin Pipelines Ltd.)</p> <p>14. Enbridge Pipelines Inc.</p>	<p><i>(Continued)</i></p> <p>11. Real Estate Services 5099 Creekbank Rd., 6<sup>th</sup> Floor North, Mississauga, ON L4W 5N2</p> <p>12. P.O.Box 3060, Sarnia, ON N7T 8C7 Attn. Legal Dept.</p> <p>13. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7</p> <p>14. Western Research Park, 1086 Modeland Rd., Bldg. 1050, Sarnia, ON N7S 6L2</p>	<p><i>(Continued)</i></p> <p>11. Lease</p> <p>12. Easement</p> <p>13. (a) Easement 13. (b) Agreement</p> <p>14. Easement</p>	<p><i>(43289-0053 Continued)</i></p>	
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<p>Her Majesty the Queen in Right of Ontario as represented by the Minister of Public Infrastructure Renewal</p>	<p>c/o Ontario Realty Corporation, 11th Floor, Ferguson Building, Queen's Park, Toronto, ON M7A 1N3</p>	<p>1. Plains Midstream Canada ULC (Dome NGL Pipeline Ltd.)</p> <p>2. The Hydro-Electric Power Commission of Ontario (Ontario Hydro)</p> <p>3. Enbridge Pipelines Inc. (Interprovincial Pipe Line Company)</p> <p>4. Air Products Canada Ltd.</p> <p>5. Plains Midstream Canada ULC (Cochin Pipelines Ltd.)</p> <p>6. Plains Midstream Canada ULC (Dome Petroleum Ltd.)</p>	<p>1. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7</p> <p>2. 185 Clegg Rd., P.O. Box 4300, Internal R32, Markham, ON L6G 1B7</p> <p>3. Western Research Park, 1086 Modeland Rd, Bldg. 1050, Sarnia, ON N7S 6L2</p> <p>4. 2090 Steeles Ave E, Brampton, ON L6T 1A7</p> <p>5. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7</p> <p>6. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7</p>	<p>1. Easement</p> <p>2. Easement</p> <p>3. Easement</p> <p>4. Easement</p> <p>5. Easement</p> <p>6. Easement</p>	<p>43289-0055</p>	<p>Part of Lots 22 &amp; 23, Concession 12, Moore, and Part of the Lots, Blocks &amp; Streets, Plan 30, Moore, St. Clair</p>
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<p><i>(Her Majesty the Queen in Right of Ontario as represented by the Minister of Public Infrastructure Renewal Continued)</i></p>		<p><i>(Continued)</i></p> <p>7. Enbridge Gas Inc. (Union Gas Limited)</p> <p>8. Shell Canada Limited</p> <p>9. Hydro One Networks Inc.</p> <p>10. Dow Chemical of Canada Inc.</p> <p>11. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p>	<p><i>(Continued)</i></p> <p>7. 3501 Tecumseh Rd, Mooretown ON NON 1M0</p> <p>8. 90 Sheppard Ave E, Suite #600, Toronto, ON M2N 6Y2</p> <p>9. 185 Clegg Rd., P.O. Box 4300, Internal R32, Markham, ON L6G 1B7</p> <p>10. 215-2nd Street SW, Suite 2400, Calgary, AB T2P 1M4</p> <p>11. 3501 Tecumseh Rd Mooretown ON NON 1M0</p>	<p><i>(Continued)</i></p> <p>7. Easement</p> <p>8. (a) Easement 8. (b) Agreement</p> <p>9. Notice</p> <p>10. (a) Easement 10. (b) Lease 10. (c) Agreement</p> <p>11. (a) Easement 11. (b) Lease 11. (c) OEB Order</p>	<p><i>(43289-0055 Continued)</i></p>	
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[REDACTED]	[REDACTED]	1. 959669 Ontario Inc.	1. 2578 Confederation Line, Sarnia, ON N7T 7H3	1. Lease	43289-0075	Part of Lots 20 & 21, Concession 12, Moore, St. Clair
		2. Canadian Imperial Bank of Commerce	2. 595 Bay Street, Suite 500, Toronto, ON M5G 2C2	2. Mortgage		
		3. Plains Midstream Canada ULC (Dome NGL Pipeline Ltd)	3. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7	3. Easement		
		4. Enbridge Pipelines Inc. (Interprovincial Pipe Line Company)	4. Western Research Pk, 1086 Modeland Rd Bldg. 1050, Sarnia, ON N7S 6L2	4. Easement		
		5. Air Products Canada Ltd.	5. 2090 Steeles Ave E, Brampton, ON L6T 1A7	5. Easement		

		<p><i>(Continued)</i></p> <p>6. Enbridge Gas Inc. (Union Gas Limited)</p> <p>7. Dow Chemical Canada ULC</p> <p>8. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>9. Plains Midstream Canada ULC (Cochin Pipelines Ltd.)</p>	<p><i>(Continued)</i></p> <p>6. 3501 Tecumseh Rd., Mooretown ON NON 1M0</p> <p>7. 215-2nd Street SW, Suite 2400, Calgary, AB T2P 1M4</p> <p>8. 3501 Tecumseh Rd., Mooretown ON NON 1M0</p> <p>9. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7</p>	<p><i>(Continued)</i></p> <p>6. Easement</p> <p>7. (a) Agreement 7. (b) Lease</p> <p>8. (a) Lease 8. (b) OEB Order</p> <p>9. (a) Easement 9. (b) Agreement</p>	<p><i>(43289-0075 Continued)</i></p>	
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<p>Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p>	<p>3501 Tecumseh Rd, Mooretown, ON NON 1M0</p>	<p>1. Plains Midstream Canada ULC (Dome NGL Pipeline Ltd)</p> <p>2. Enbridge Pipelines Inc. (Interprovincial Pipe Line Company)</p> <p>3. Air Products Canada Ltd.</p> <p>4. Enbridge Gas Inc. (Union Gas Limited)</p> <p>5. The Corporation of the Township of St. Clair</p>	<p>1. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7</p> <p>2. Western Research Pk, 1086 Modeland Rd, Bldg. 1050, Sarnia, ON N7S 6L2</p> <p>3. 2090 Steeles Ave E, Brampton, ON L6T 1A7</p> <p>4. 3501 Tecumseh Rd., Mooretown ON NON 1M0</p> <p>5. 1155 Emily Street, Mooretown, ON NON 1M0</p>	<p>1. Easement</p> <p>2. Easement</p> <p>3. Easement</p> <p>4. Easement</p> <p>5. (a) Easement 5. (b) Agreement</p>	<p>43289-0076</p>	<p>Part of Lot 21, Concession 12, Moore, St. Clair</p>
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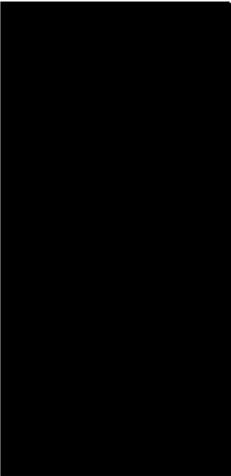
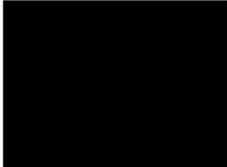
<p><i>(Enbridge Gas Inc. Enbridge Gas Distribution Inc.) Continued)</i></p>		<p><i>(Continued)</i></p> <p>6. Dow Chemical Canada ULC</p> <p>7. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>8. Plains Midstream Canada ULC (Cochin Pipelines Ltd.)</p>	<p><i>(Continued)</i></p> <p>6. 215-2nd Street SW, Suite 2400, Calgary, AB T2P 1M4</p> <p>7. 3501 Tecumseh Rd., Mooretown ON N0N 1M0</p> <p>8. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7</p>	<p><i>(Continued)</i></p> <p>6. (a) Agreement 6. (b) Lease</p> <p>7. (a) Lease 7. (b) Agreement 7. (c) OEB Order</p> <p>8. (a) Easement 8. (b) Agreement</p>	<p><i>(43289-0076 Continued)</i></p>	
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## Lands Adjacent to the Directly Affected Area

<p>The Corporation of the County of Lambton</p>	<p>789 Broadway Street, Wyoming, ON NON 1T0</p>	<p>1. Nova Chemicals (Canada) Ltd. (Petrosar Limited)  2. Polysar Hydrocarbons Limited  3 Air Products Canada Ltd.  4. Nova Chemicals (Canada) Ltd. (Novacor Chemicals (Canada) Ltd.)</p>	<p>1. 1086 Modeland Rd, Bldg. 1040, Suite 201, Sarnia, ON N7S 6L2  2. 201 North Front St., Sarnia, ON N7T 7V1  3. 2090 Steeles Ave E, Brampton, ON L6T 1A7  4. P.O.Box 3060, Sarnia, ON N7T 8C7 Attn. Legal Dept.</p>	<p>1. Easement  2. Easement  3. Easement  4. Easement</p>	<p>43289-0052 (Part)</p>	<p>Part of the Road Allowance between Concessions 10 &amp; 11, and Part of Lots 19 &amp; 20, Concessions 10 &amp; 11, Moore, (Petrolia Line) St. Clair</p>
<p>The Corporation of the Township of St. Clair</p>	<p>1155 Emily Street, Mooretown, ON NON 1M0</p>				<p>43288-0024 (Part)</p>	<p>Part of the Road Allowance between Moore and Sarnia Townships (LaSalle Line), St. Clair/Sarnia</p>

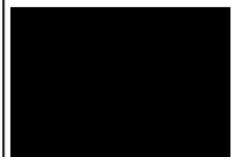
<p>The Corporation of the City of Sarnia</p>	<p>255 N. Christina St, Sarnia, ON N7T 7N2</p>				<p>43288-0024 (Part)</p>	<p>Part of the Road Allowance between Moore and Sarnia Townships (LaSalle Line), St. Clair/Sarnia</p>
<p>Her Majesty the Queen in Right of the Province of Ontario as Represented by the Minister of Transportation and Communications</p>	<p>659 Exeter Road London, ON N6E 1L3</p>	<p>1. Bell Canada  2. The Hydro-Electric Power Commission of Ontario (Ontario Hydro)  3. Enbridge Pipelines Inc. (Interprovincial Pipe Line Company)</p>	<p>1. 136 Bayfield Street, Floor 2, Barrie ON L4M 3B1  2. 185 Clegg Rd., P.O. Box 4300, Internal R32, Markham, ON L6G 1B7  3. Western Research Park, 1086 Modeland Rd, Bldg. 1050, Sarnia, ON N7S 6L2</p>	<p>1. Easement  2. Easement  3. Easement</p>	<p>43289-0051 (Part)</p>	<p>Road Allowance between Lots 24 &amp; 25, Concessions 11 &amp; 12, Moore, Part of Lot 24, Concession 11, and Part of Lot 24, Concession 12, Moore, (New Highway #40) St. Clair</p>

<p>Canadian Waste Services Inc. (UNITEC Disposals Inc.)</p>	<p>199 Bay Street, Toronto, ON M5L 1A9</p>	<p>1. Ministry of the Environment and Energy  2. Plains Midstream Canada ULC (Dome NGL Pipeline Ltd.)  3. Enbridge Pipelines Inc. (Interprovincial Pipe Line Company)  4. Shell Canada Limited  5. The Corporation of the Township of St. Clair  6. Dow Chemical Canada ULC  7. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p>	<p>1. c/o Ministry of Natural Resources, 659 Exeter Road, London, ON N6E 1L3  2. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7  3. 1086 Modeland Rd, Bldg. 1040, Suite 201, Sarnia, ON N7S 6L2  4. 90 Sheppard Ave East, #600, Toronto, ON M2N 6Y2  5. 1155 Emily Street, Mooretown, ON NON 1M0  6. 215-2nd Street SW, Suite 2400, Calgary, AB T2P 1M4  7. 3501 Tecumseh Rd, Mooretown ON NON 1M0</p>	<p>1. Agreement  2. Easement  3. Easement  4. (a) Easement 4. (b) Agreement  5. (a) Easement 5. (b) Agreement  6. (a) Easement 6. (b) Lease  7. (a) Lease 7. (b) OEB Order</p>	<p>43289-0054</p>	<p>Part of Lot 22, Concession 12, Moore, St. Clair <b>SURFACE RIGHTS ONLY</b></p>
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		<p>1. Enbridge Gas Inc. (Union Gas Limited)</p> <p>2. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>3. Union Energy Inc.</p> <p>4. Bank of Montreal</p> <p>5. Bank of Montreal</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>2. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>3. 2 Lansing Square, Suite 1200, Toronto, ON M2J 4P8</p> <p>4. 10 Fifth St South, 2<sup>nd</sup> Floor, Chatham, ON N7M 4V4</p> <p>5. 200 Ouellette Ave., Windsor, ON N9A 1A5</p>	<p>1. Easement</p> <p>2. (a) Lease 2. (b) Agreement</p> <p>3. Notice of Security Interest</p> <p>4. Mortgage</p> <p>5. Mortgage</p>	<p>43289-0059</p>	<p>Part of Lot 22, Concession 11, Moore, St. Clair</p>
<p>The Corporation of the Township of St. Clair</p>	<p>1155 Emily Street, Mooretown, ON N0N 1M0</p>				<p>43289-0068</p>	<p>Part of the Road Allowance between Lots 21 &amp; 22, Concessions 11 &amp; 12, Moore (Ladysmith Line), St. Clair</p>

<p>Shell Canada Limited</p>	<p>90 Sheppard Avenue East, Suite 600, Toronto, ON M2N 6Y2</p>	<p>1. 923726 Ontario Limited</p> <p>2. St. Clair Power, L.P., by its general partner St. Clair Management Corporation</p> <p>3. The Corporation of the Township of St. Clair</p> <p>4. Hydro One Networks Inc.</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>2. c/o Invenergy Investment Company LLC, One South Wacker Dr. Suite 2020, Chicago, Illinois 60606 Attention: President</p> <p>3. 1155 Emily Street, Mooretown, ON N0N 1M0</p> <p>4. 185 Clegg Road, P.O. Box 4300, Internal 32, Markham, ON L6G 1B7</p>	<p>1. Lease</p> <p>2. Lease</p> <p>3. Agreement</p> <p>4. Easement</p>	<p>43289-0069</p>	<p>Part of Lots 22 &amp; 23, Concession 11, Moore, St. Clair</p> <p><b>FREEHOLD PARCEL</b></p>
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<p>St. Clair Management Corporation, the General Partner of the Limited Partnership named St. Clair Power, L.P.</p>	<p>790 Petrolia Line, Corunna, ON N0N 1G0</p>	<p>1. 923726 Ontario Limited  2. St. Clair Power, L.P., by its general partner St. Clair Management Corporation  3. The Corporation of the Township of St. Clair  4. Hydro One Networks Inc.  5. MUFG Union Bank, N.A.</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0  2. c/o Invenergy Investment Company LLC, One South Wacker Dr. Suite 2020, Chicago, Illinois 60606 Attention: President  3. 1155 Emily Street, Mooretown, ON N0N 1M0  4. 185 Clegg Road, P.O. Box 4300, Internal 32, Markham, ON L6G 1B7  5. 445 South Figueroa Street, 15<sup>th</sup> Floor, Los Angeles, CA 90071 Attn. Efrain Soto, VP</p>	<p>1. Lease  2. Notice  3. Agreement  4. Easement  5. Mortgage</p>	<p>43289-0070</p>	<p>Part of Lots 22 &amp; 23, Concession 11, Moore, St. Clair  <b>LEASEHOLD PARCEL</b></p>
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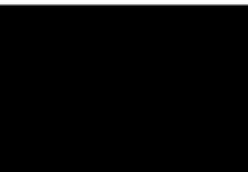
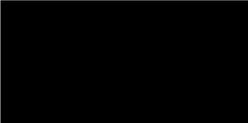
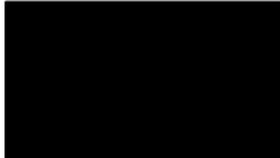
Stephen Brock Wellington	940 Petrolia Line, Corunna, ON NON 1G0				43289-0062	Part of Lot 21, Concession 11, Moore, St. Clair
		1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)  2. 923726 Ontario Limited	1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0  2. 3501 Tecumseh Rd, Mooretown, ON NON 1M0	1. (a) Lease 1. (b) Agreement 1. (c) OEB Order  2. (a) Lease 2. (b) Agreement	43289-0063	Part of Lot 20, Concession 11, Moore, St. Clair
		1. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)  2. Dow Chemical Canada ULC  3. Bank of Montreal  4. Bank of Montreal	1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0  2. 215-2nd Street SW, Suite 2400, Calgary, AB T2P 1M4  3. 10 Fifth St South, 2 <sup>nd</sup> Floor, Chatham, ON N7M 4V4  4. 200 Ouellette Ave., Windsor, ON N9A 1A5	1. Easement  2. Agreement  3. Mortgage  4. Mortgage	43289-0071	Part of Lot 21, Concession 11, Moore, St. Clair

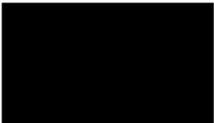
		<p>1. 959669 Ontario Inc.</p> <p>2. Canadian Imperial Bank of Commerce</p> <p>3. Plains Midstream Canada ULC (Dome NGL Pipeline Ltd)</p> <p>4. The Hydro-Electric Power Commission of Ontario (Ontario Hydro)</p> <p>5. Enbridge Pipelines Inc. (Interprovincial Pipe Line Company)</p>	<p>1. 2578 Confederation Line, Sarnia, ON N7T 7H3</p> <p>2. 595 Bay Street, Suite 500, Toronto, ON M5G 2C2</p> <p>3. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7</p> <p>4. 185 Clegg Rd., P.O. Box 4300, Internal R32, Markham, ON L6G 1B7</p> <p>5. Western Research Park, 1086 Modeland Rd Bldg. 1050, Sarnia, ON N7S 6L2</p>	<p>1. Lease</p> <p>2. Mortgage</p> <p>3. Easement</p> <p>4. Easement</p> <p>5. Easement</p>	<p>43289-0074</p>	<p>Part of Lot 20, Concession 12, Moore, St. Clair</p>
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		<p><i>(Continued)</i></p> <p>6. Air Products Canada Ltd.</p> <p>7. Enbridge Gas Inc. (Union Gas Limited)</p> <p>8. Dow Chemical Canada ULC</p> <p>9. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>10. Plains Midstream Canada ULC (Cochin Pipelines Ltd.)</p>	<p><i>(Continued)</i></p> <p>6. 2090 Steeles Ave E, Brampton, ON L6T 1A7</p> <p>7. 3501 Tecumseh Rd, Mooretown ON N0N 1M0</p> <p>8. 215-2nd Street SW, Suite 2400, Calgary, AB T2P 1M4</p> <p>9. 3501 Tecumseh Rd, Mooretown ON N0N 1M0</p> <p>10. Manager of Lands, 1400-607 8th Ave SW, Calgary, AB T2P 0A7</p>	<p><i>(Continued)</i></p> <p>6. Easement</p> <p>7. Easement</p> <p>8. (a) Agreement 8. (b) Lease</p> <p>9. (a) Easement 9. (b) Lease 9. (c) OEB Order</p> <p>10. (a) Easement 10. (b) Agreement</p>	<p><i>(43289-0074 Continued)</i></p>	
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# Payne Designated Storage Area

## Directly Affected Land Area

OWNER:	ADDRESS:	ENCUMBRANCE HOLDER:	ADDRESS:	ENCUMBRANCE:	PIN #	LEGAL DESCRIPTION:
		<p>1. Enbridge Gas Inc. (Union Gas Limited)</p> <p>2. Farm Credit Canada</p> <p>3. The Hydro-Electric Power Commission of Ontario (Ontario Hydro)</p>  <p>5. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>2. Suite 200, 1133 St. George Blvd., Moncton, NB E1E 4E1</p> <p>3. 185 Clegg Rd, P.O. Box 4300, Internal R32, Markham, ON L6G 1B7</p>  <p>5. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement</p> <p>2. Mortgage</p> <p>3. Easement</p> <p>4. Notice of Interest</p> <p>5. Agreement</p>	<p>43298-0081</p>	<p>Part of Lot 22, Concession 7, Moore, St. Clair</p>

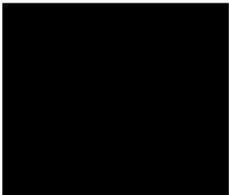
		<p>1. Enbridge Gas Inc. (Union Gas Limited)</p> <p>2. Farm Credit Canada</p> <p>3. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.) (Niagara Gas Transmission Limited)</p> <p>4. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>5. Enbridge Gas Inc.</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>2. Suite 200, 1133 St. George Blvd., Moncton, NB E1E 4E1</p> <p>3. 500 Consumers Rd, Box 650, Scarborough, ON M1K 5E3</p> <p>4. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>5. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement</p> <p>2. Mortgage</p> <p>3. Easement</p> <p>4. Agreement</p> <p>5. Easement</p>	<p>43298-0084</p>	<p>Part of Lot 21, Concession 7, Moore, St. Clair</p>
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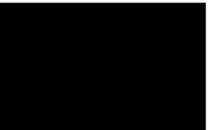
		<p>1. Enbridge Gas Inc. (Union Gas Limited)</p> <p>2. Farm Credit Canada</p> <p>3. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.) (Niagara Gas Transmission Limited)</p> <p>4. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>5. Enbridge Gas Inc.</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p> <p>2. Suite 200, 1133 St. George Blvd., Moncton, NB E1E 4E1</p> <p>3. 500 Consumers Rd, Box 650, Scarborough, ON M1K 5E3</p> <p>4. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p> <p>5. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement</p> <p>2. Mortgage</p> <p>3. Easement</p> <p>4. Agreement</p> <p>5. Easement</p>	<p>43298-0086</p>	<p>Part of Lot 21, Concession 7, Moore, St. Clair</p>
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## Lands Adjacent to the Directly Affected Area

OWNER:	ADDRESS:	ENCUMBRANCE HOLDER:	ADDRESS:	ENCUMBRANCE:	PIN #	LEGAL DESCRIPTION:
The Corporation of the Township of St. Clair	1155 Emily Street, Mooretown, ON N0N 1M0				43298-0052 (Part)	Part of the Road Allowance between Concessions 6 & 7, Moore, (Moore Line) St. Clair
The Corporation of the Township of St. Clair	1155 Emily Street, Mooretown, ON N0N 1M0	1. Enbridge Gas Inc. (Union Gas Limited)  2. Imperial Oil Limited  3. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)	1. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0  2. 505 Quarry Park Blvd., Calgary, AB T2C 5N1  3. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0	1. Lease  2. (a) Agreement 2. (b) Easement  3. (a) Agreement 3. (b) Easement	43298-0053 (Part)	Part of the Road Allowance between Lots 21 & 22, Concessions 7 & 8, Moore, (Ladysmith Line) St. Clair

		<p>1. Enbridge Gas Inc. (Union Gas Limited)</p> <p>2. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>3. The Toronto- Dominion Bank</p> <p>4. 923726 Ontario Limited</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1MO</p> <p>2. 3501 Tecumseh Rd, Mooretown, ON NON 1MO</p> <p>3. 4201 Petrolia Line, Petrolia, ON NON 1RO</p> <p>4. 3501 Tecumseh Rd, Mooretown, ON NON 1MO</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement</p> <p>2. (a) Lease 2. (b) Agreement 2. (c) Easement 2. (d) OEB Order</p> <p>3. Mortgage</p> <p>4. Lease</p>	<p>43298-0064</p>	<p>Part of Lot 21, Concession 8, Moore, St. Clair</p>
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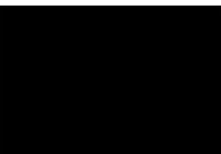
		<p>1. Enbridge Gas Inc. (Union Gas Limited)</p> <p>2. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>3. The Bank of Nova Scotia</p> <p>4. 923726 Ontario Limited</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1MO</p> <p>2. 3501 Tecumseh Rd, Mooretown, ON NON 1MO</p> <p>3. 4184 Petrolia Line, Petrolia, ON NON 1R0</p> <p>4. 3501 Tecumseh Rd, Mooretown, ON NON 1MO</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement</p> <p>2. (a) Lease 2. (b) Agreement 2. (c) Easement 2. (d) OEB Order</p> <p>3. Mortgage</p> <p>4. Lease</p>	<p>43298-0065</p>	<p>Part of Lots 20 &amp; 21, Concession 8, Moore, St. Clair</p>
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		<p>1. Enbridge Gas Inc. (Union Gas Limited)</p> <p>2. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>3. Farm Credit Canada</p> <p>4. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.) (Niagara Gas Transmission Limited)</p> 	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p> <p>2. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p> <p>3. Suite 200, 1133 St. George Blvd., Moncton, NB E1E 4E1</p> <p>4. 500 Consumers Rd, Box 650, Scarborough, ON M1K 5E3</p> 	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement</p> <p>2. Agreement</p> <p>3. Mortgage</p> <p>4. Easement</p> <p>5. Notice of Interest</p>	<p>43298-0078</p>	<p>Part of Lot 22, Concession 7, Moore, St. Clair</p>
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<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>1. Enbridge Gas Inc. (Union Gas Limited)</p> <p>2. Canadian Imperial Bank of Commerce</p> <p>[REDACTED]</p> <p>4. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p> <p>2. 100 University Ave, 3rd Floor, Toronto, ON M5J 2X4</p> <p>[REDACTED]</p> <p>4. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement</p> <p>2. Mortgage</p> <p>3. Notice of Interest</p> <p>4. Agreement</p>	<p>43298-0080</p>	<p>Part of Lot 22, Concession 7, Moore, St. Clair</p>
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		<p>1. Enbridge Gas Inc. (Union Gas Limited)</p>  <p>3. Farm Credit Canada</p> <p>4. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.) (Niagara Gas Transmission Limited)</p> <p>5. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p>  <p>3. Suite 200, 1133 St. George Blvd., Moncton, NB E1E 4E1</p> <p>4. 500 Consumers Rd, Box 650, Scarborough, ON M1K 5E3</p> <p>5. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement</p> <p>2. Notice of Interest</p> <p>3. Mortgage</p> <p>4. Easement</p> <p>5. Agreement</p>	<p>43298-0082</p>	<p>Part of Lot 22, Concession 7, Moore, St. Clair</p>
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<p>Enbridge Gas Inc. (Union Gas Limited)</p>	<p>3501 Tecumseh Rd, Mooretown, ON NON 1M0</p>	<p>1. Roy W. Boothe</p>	<p>1.R.R.#1, Courtright, ON NON 1H0</p>	<p>1. Life Interest</p>	<p>43298-0083</p>	<p>Part of Lot 21, Concession 7, Moore, St. Clair</p>
		<p>1. Enbridge Gas Inc. (Union Gas Limited)</p> <p>2. The Toronto-Dominion Bank</p> <p>3. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p> <p>2. 4720 Tahoe Blvd., 5th Floor, Mississauga, ON L4W 5P2</p> <p>3. 3501 Tecumseh Rd, Mooretown, ON NON 1M0</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement</p> <p>2. Mortgage</p> <p>3. Agreement</p>	<p>43298-0085</p>	<p>Part of Lot 21, Concession 7, Moore, St. Clair</p>

		<p>1. Enbridge Gas Inc. (Union Gas Limited)</p> <p>2. Mainstreet Credit Union Limited</p> <p>3. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.) (Niagara Gas Transmission Limited)</p>  <p>5. Enbridge Gas Inc. (Enbridge Gas Distribution Inc.)</p> <p>6. Enbridge Gas Inc.</p>	<p>1. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>2. 1295 London Rd, Sarnia, ON N7S 1P6</p> <p>3. 500 Consumers Rd, Box 650, Scarborough, ON M1K 5E3</p>  <p>5. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p> <p>6. 3501 Tecumseh Rd, Mooretown, ON N0N 1M0</p>	<p>1. (a) Lease 1. (b) Agreement 1. (c) Easement</p> <p>2. Mortgage</p> <p>3. Easement</p> <p>4. Notice of Interest</p> <p>5. Agreement</p> <p>6. Easement</p>	<p>43298-0088</p>	<p>Part of Lot 20, Concession 7, Moore, St. Clair</p>
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## INDIGENOUS<sup>1</sup> CONSULTATION

1. Enbridge Gas is committed to creating processes that support meaningful engagement with potentially affected Indigenous groups (First Nations and Métis). Enbridge Gas works to build an understanding of project related interests, ensure regulatory requirements are met, mitigate or avoid project-related impacts on Indigenous interests including rights, and provide mutually beneficial opportunities where possible.
2. Pursuant to the OEB's Guidelines, Enbridge Gas provided the Ontario Ministry of Energy Northern Development and Mines ("MENDM")<sup>2</sup> with a description of the Project on March 18, 2021. This project description is set out in Attachment 1 to this Exhibit.
3. Subsequently, on April 13, 2021, Enbridge Gas received a letter ("Delegation Letter") from the MENDM indicating that the MENDM had delegated the procedural aspects of consultation to Enbridge Gas for the Project. The Delegation Letter identified five Indigenous communities to be consulted. A copy of the Delegation Letter is provided in Attachment 2 to this Exhibit.
4. This Indigenous Consultation Report ("ICR") was provided to the Ontario Ministry of Energy ("MOE") on October 27, 2021. The MOE will review Enbridge Gas's consultation with Indigenous groups potentially affected by the Project and provide

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<sup>1</sup> Enbridge Gas has used the terms "Aboriginal" and "Indigenous" interchangeably in its application. "Indigenous" has the meaning assigned by the definition "aboriginal peoples of Canada" in subsection 35(2) of the *Constitution Act, 1982*.

<sup>2</sup> On June 18, 2021, the Ontario government implemented changes to several ministries. The Ministry of Energy will continue to handle matters pertaining to delegation of Duty to Consult, while the rest of the MENDM has been combined with the former Ministry of Natural Resources and Forestry to become the Ministry of Northern Development, Mines, Natural Resources and Forestry.

its decision as to whether Enbridge Gas' consultation has been sufficient. Upon receipt of the MOE's decision regarding the sufficiency of Indigenous consultation on the Project, Enbridge Gas will file it with the OEB. The sufficiency letter provided by the MOE will be included as Attachment 3 to this Exhibit.

#### Indigenous Engagement Program Objectives

5. The design of the Aboriginal engagement program was based on adherence to the OEB's Guidelines and Enbridge Gas's *Indigenous Peoples Policy* ("Policy") and principles as follows:
  - Enbridge Inc. has instituted a company-wide Policy (set out in Attachment 4 to this Exhibit). The Policy lays out key principles for establishing relationships with Indigenous groups, which includes, among other things, respect for traditional ways and land, heritage sites, the environment and traditional knowledge.
  - Enbridge Gas aims to establish meaningful relationships, provided timely exchanges of information, understands and addresses Indigenous Project-specific concerns, and ensures ongoing dialogue about its projects, their potential implications and benefits.
  - Enbridge Gas aligns its interests with those of Indigenous communities through meaningful, direct Indigenous economic activity in projects corresponding to community capacity and project needs, where possible.
6. The Indigenous engagement program for the Project recognizes the rights of Indigenous groups and assists Enbridge Gas in engaging in meaningful dialogue with potentially affected Indigenous groups about the Project. It also assists Enbridge Gas in meeting the procedural aspects of consultation that may be

required by the Crown and the OEB's Guidelines.

#### Overview of Indigenous Engagement Program Activities

7. Enbridge Gas conducts its Indigenous consultation generally through phone calls, in-person meetings, Project mail-outs, open houses and email communications. During these engagement activities, Enbridge Gas representatives will provide an overview of the Project, respond to questions and concerns, and address any interests or concerns expressed by Indigenous communities to appropriately mitigate any Project-related impacts. In order to accurately document Indigenous engagement activities and ensure follow-up, applicable supporting documents are tracked using a database.

#### Ongoing Indigenous Engagement Activities

8. Enbridge Gas will continue to actively engage all identified Indigenous groups in meaningful ongoing dialogue concerning the Project and endeavor to meet with each Indigenous group, provided they are willing, for the purpose of exchanging information regarding the Project and to respond to inquiries in a timely manner. Enbridge Gas will hear and address concerns as is feasible and seek information on the exercise of, and potential impacts to, Aboriginal and Treaty rights, traditional use in the Project area and how any potential Project-related impacts can be mitigated.
9. Attachment 5 to this Exhibit contains a summary of Enbridge Gas's Indigenous engagement activities for the Project. Attachment 6 to this Exhibit contains the ICR and associated attachments for the Project.
10. The information presented in the Attachment 6 and Attachment 7 reflects Enbridge Gas's Indigenous engagement activities for the Project up to and including October 25, 2021; however, Enbridge Gas will continue to engage throughout the life of the

Project to ensure any impacts on Indigenous rights and interests are addressed as appropriate.



**Asha Patel**  
Technical Manager  
Regulatory Affairs

tel. 416-495-5642  
[EGIRegulatoryProceedings@enbridge.com](mailto:EGIRegulatoryProceedings@enbridge.com)

**Enbridge Gas Inc.**  
500 Consumers Road  
North York, Ontario M2J 1P8  
Canada

March 18, 2021

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

Ministry of Energy, Northern Development and Mines  
Dan Delaquis  
Manager (Acting), Indigenous Energy Policy  
Unit 77 Grenville St.  
6<sup>th</sup> Floor  
Toronto, ON  
M7A 1B3

Dear Mr. Delaquis:

**Re: 2022 Storage Enhancement Project**

The *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7<sup>th</sup> Edition 2016* (Guidelines) issued by the Ontario Energy Board (Board) indicate that a project applicant shall provide the Ministry of Energy, Northern Development and Mines (Ministry) with a description of a project in the planning process, such that the Ministry can determine if there are any Duty to Consult requirements for the project.

The purpose of this letter is to inform the Ministry that Enbridge Gas Inc. (Enbridge Gas) intends to increase the maximum operating pressure (MOP) in two existing storage pools and drill a horizontal natural gas storage well (Project).

The Project involves:

- Increasing the MOP of the Dow Moore and Payne Storage Pools; and
- Drill a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool.

Enbridge Gas will be filing an application with the Board for leave to vary, a request for a favourable report from the Board to the Ministry of Natural Resources and Forestry, and a leave to construct in support of the Project. Enbridge Gas is therefore contacting the Ministry to determine whether the Project triggers the Duty to Consult.

Attachment 1 contains a description of the Project's characteristics and its location for the Ministry's review and to assist it with its determination as to whether it will delegate the procedural aspects of the Duty to Consult to Enbridge Gas. While work on the Project is still in its early stages, Enbridge Gas would be pleased to discuss the Project with you should you have any questions.

Regards,

Asha Patel, M.A. CFA  
Technical Manager, Regulatory Applications  
Enbridge Gas Inc.  
416-495-5642

## **Attachment 1: 2022 Storage Enhancement Project**

### **1.0 Project Summary**

Enbridge Gas Inc. (Enbridge Gas) is proposing to increase the maximum operating pressure (MOP) of two existing natural gas storage pools and to drill a new natural gas storage well.

The two storage pools for which the MOP will be increased are the Dow Moore Storage Pool and the Payne Storage Pool.

A new natural gas storage well (TKC 69) will be drilled in the Kimball-Colinville Storage Pool.

All of the aforementioned storage pools are part of Enbridge Gas's storage operations. Each of the storage pools is a Designated Storage Area (DSA) as defined in the *Ontario Energy Board Act, 1998*.

The Project requires the installation of new emergency shut down valves and performing wellhead upgrades on existing natural gas storage wells within the Dow Moore and Payne Storage Pools, in order to increase the MOP of each of these storage pools.

It is proposed that the well work required for the MOP increase be completed from April 2022 to October 2022. Drilling of well TKC 69 is expected to occur from March 2022 to July 2022.

Enbridge Gas plans to file an application with the Ontario Energy Board (Board) which will make several requests of the Board. The application will include a request for leave to vary the current MOP of the Dow Moore and Payne Storage Pools. The application will also include a request for a favourable report from the Board to the Ministry of Natural Resources and Forestry (MNRF) for the drilling of well TKC 69, and a request for leave to construct to install a lateral pipeline from well TKC 69 to the Kimball-Colinville Storage Pool gathering system.

Enbridge Gas will ensure that it has fulfilled all of the relevant requirements of CSA Z341, as they relate to the new natural gas storage well and the MOP increase, to the satisfaction of the MNRF.

Enbridge Gas will conduct engineering and geological studies to verify the ability to increase the MOP of the Dow Moore and Payne Storage Pools. No new lands are required for the work to be completed on the natural gas storage wells in each of the Dow Moore and Payne DSAs. All work will take place on previously disturbed land either owned by Enbridge Gas or for which Enbridge Gas has the right to enter into and upon for the purposes of its natural gas storage operations.

Drilling of well TKC 69, will occur on previously disturbed lands owned by Enbridge Gas. These lands are leased to a tenant farmer. A temporary gravel pad will be installed for the drilling of the well and the pad is expected to occupy 8100 square metres or 0.0081 square kilometers. The final well site is expected to measure approximately 60 square metres or 0.00006 square kilometers. Once the well is drilled a lateral pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system.

Figure 1 shows the location of the Dow Moore DSA and all natural gas wells contained therein. Figure 2 shows the location of the Payne DSA and all natural gas wells contained therein. Figure 3 shows the surface location of the new natural gas storage well in the Kimball-Colinville DSA.

## **2.0 Project Information**

Enbridge Gas currently operates approximately 280 billion cubic feet of natural gas storage in 35 DSAs. Enbridge Gas is involved in the sale, transmission, distribution and storage of natural gas. As part of its business, Enbridge Gas provides gas storage services to third parties, such as power generators or other natural gas utilities. These third parties purchase storage capacity from Enbridge Gas and in turn use that storage capacity to meet their gas demand requirements. The gas storage services offered by Enbridge Gas allow these third parties to optimize their gas purchases. Over 100 customers have gas storage contracts with Enbridge Gas. The additional storage capacity and deliverability created by the Project will be offered as storage services to natural gas market participants.

The Dow Moore Storage Pool has been in operation since 1988. There are 16 natural gas storage wells and 2 observation wells in the Dow Moore DSA. The Payne Storage Pool has been in operation since 1957. There are 10 natural gas storage wells; 2 observation wells; and 1 suspended well in the Payne DSA. The Kimball-Colinville Storage Pool has been in operation since 1965. There are 33 natural gas storage wells; 10 observation wells and one suspended well in the Kimball-Colinville DSA.

The Project will allow Enbridge Gas to store additional natural gas and will increase the deliverability of Enbridge Gas's storage operations. The additional storage capacity and deliverability created by the Project will be sold to third parties as part of Enbridge Gas's unregulated storage portfolio.

## **3.0 Authorizations and Recommendations Required**

An Environmental Report (ER) will be completed for the Project. Enbridge Gas either owns the lands within or has Gas Storage Lease Agreements and Petroleum & Natural Gas Lease Agreements in place for all of the DSAs. Permanent or temporary access roads will be required to complete the work required for some of the wells. A temporary gravel pad will be installed for the drilling of the well. Upon completion of drilling activities, the pad size will be reduced, and a permanent well site will be established.

The ER will be prepared using the Board's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines in Ontario, 7<sup>th</sup> Edition (2016)* (Guidelines). The ER will identify potential authorizations required. Enbridge Gas's preliminary work on the Project has identified the following potential authorizations:

### Provincial approvals:

- Ontario Energy Board
- Ministry of Natural Resources and Forestry
- Ministry of Heritage, Sport, Tourism and Cultural Industries

- Ministry of the Environment, Conservation and Parks

Municipal approvals:

- Township of St. Clair
- County of Lambton

Other approvals:

- St. Clair Region Conservation Authority
- Hydro One Networks Inc.

Other authorizations, notifications, permits and/or approvals may be required in addition to those identified above.

#### **4.0 Project Activities**

Planning and design activities for the Project commenced in 2019 and will continue into 2022. Pursuant to the Guidelines an ER will be prepared and archaeological studies will be completed where and as required.

The MOP increase and the drilling of well TKC 69 will be planned in accordance with the requirements of CSA Z341 – Storage of Hydrocarbons in Underground Formations. Pursuant to the requirements of CSA Z341, the following studies and reviews will be completed to support the Project:

- Engineering studies to confirm that the maximum safe operating pressure for each pool exceeds the proposed MOP for each pool;
- An assessment of neighbouring activities to determine the impact of the Project on: a) wells within 1 km, b) operations within 5 km, and c) the integrity of all wells penetrating the storage zone; and
- A “what if” analysis of hazards and operability (HAZOP) for each of the storage pools.

Upon receiving a drilling license from the MNRF, Enbridge Gas will commence operations to drill well TKC 69.

A copy of the application filed with the Board will be provided to all landowners in the Dow Moore DSA, the Payne DSA, the Kimball-Colinville DSA.

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

The ER will assess physical, natural and socio-economic features potentially impacted by construction activities. Mitigation measures will be recommended as part of the ER to minimize potential adverse effects to the environment. It is expected that the majority of adverse

environmental and/or socio-economic effects will be construction related. These effects are expected to be temporary and transitory.

Mitigation measures recommended in the ER will be followed in conjunction with Enbridge Gas's Construction and Maintenance Manual. In addition, Enbridge Gas will use professional judgement, past experience, industry best practices and any additional feedback received through the consultation process when constructing the Project.

## **6.0 Project Benefits**

Demand for natural gas storage is expected to continue to increase. The Project will allow Enbridge Gas to expand its storage capacity and deliverability and provide additional storage services to natural gas market participants.

## **7.0 Contact Information**

*Regulatory Affairs:*

Asha Patel

[asha.patel@enbridge.com](mailto:asha.patel@enbridge.com)

416-495-5642

*Technical / MNR Contact:*

Kathy McConnell

[kathy.mcconnell@enbridge.com](mailto:kathy.mcconnell@enbridge.com)

519-862-6032

*Indigenous Affairs:*

Lauren Whitwham

[lauren.whitwham@enbridge.com](mailto:lauren.whitwham@enbridge.com)

519-667-4100 x5153545

Figure 1: Dow Moore DSA

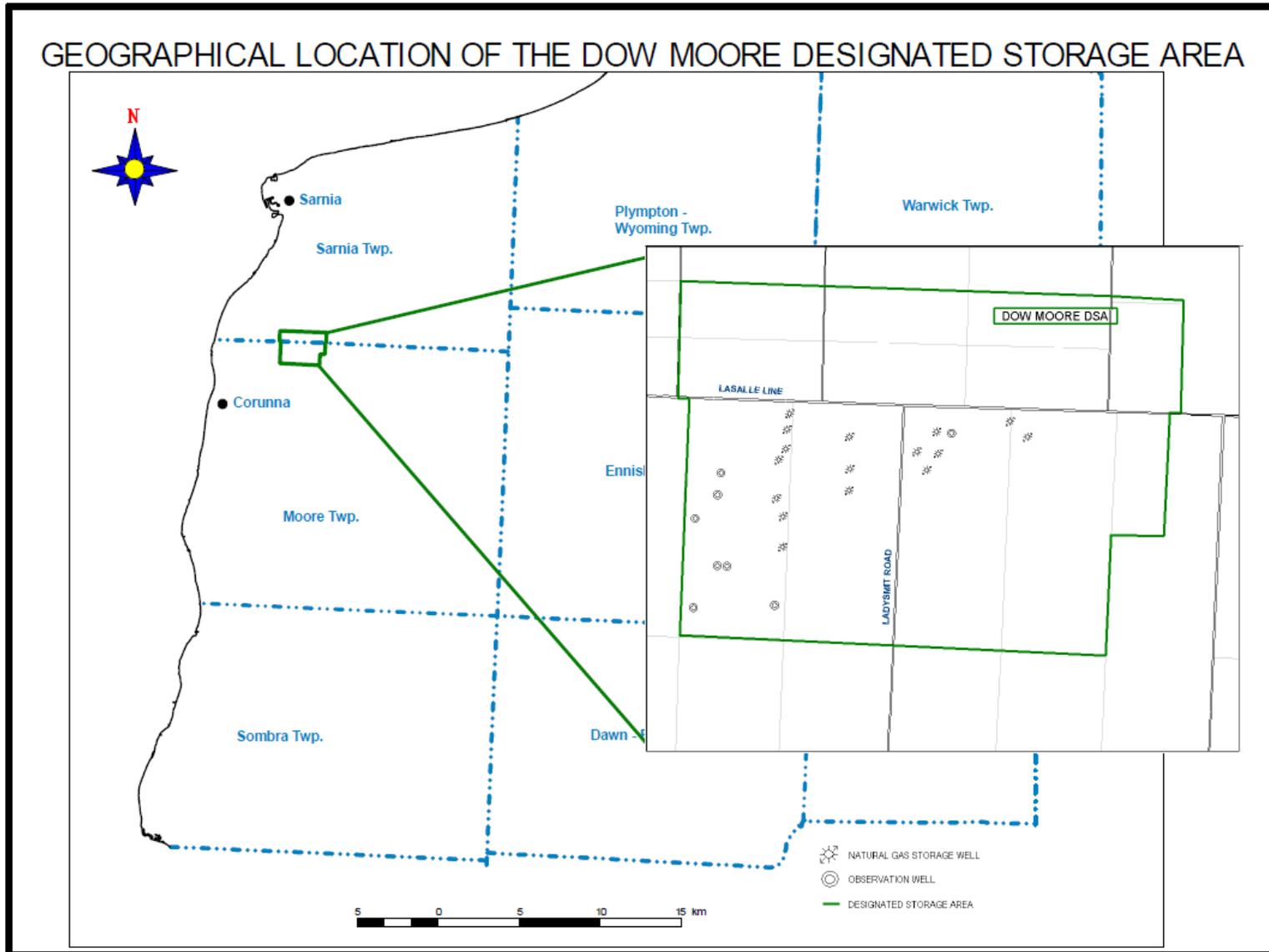


Figure 2: Payne DSA

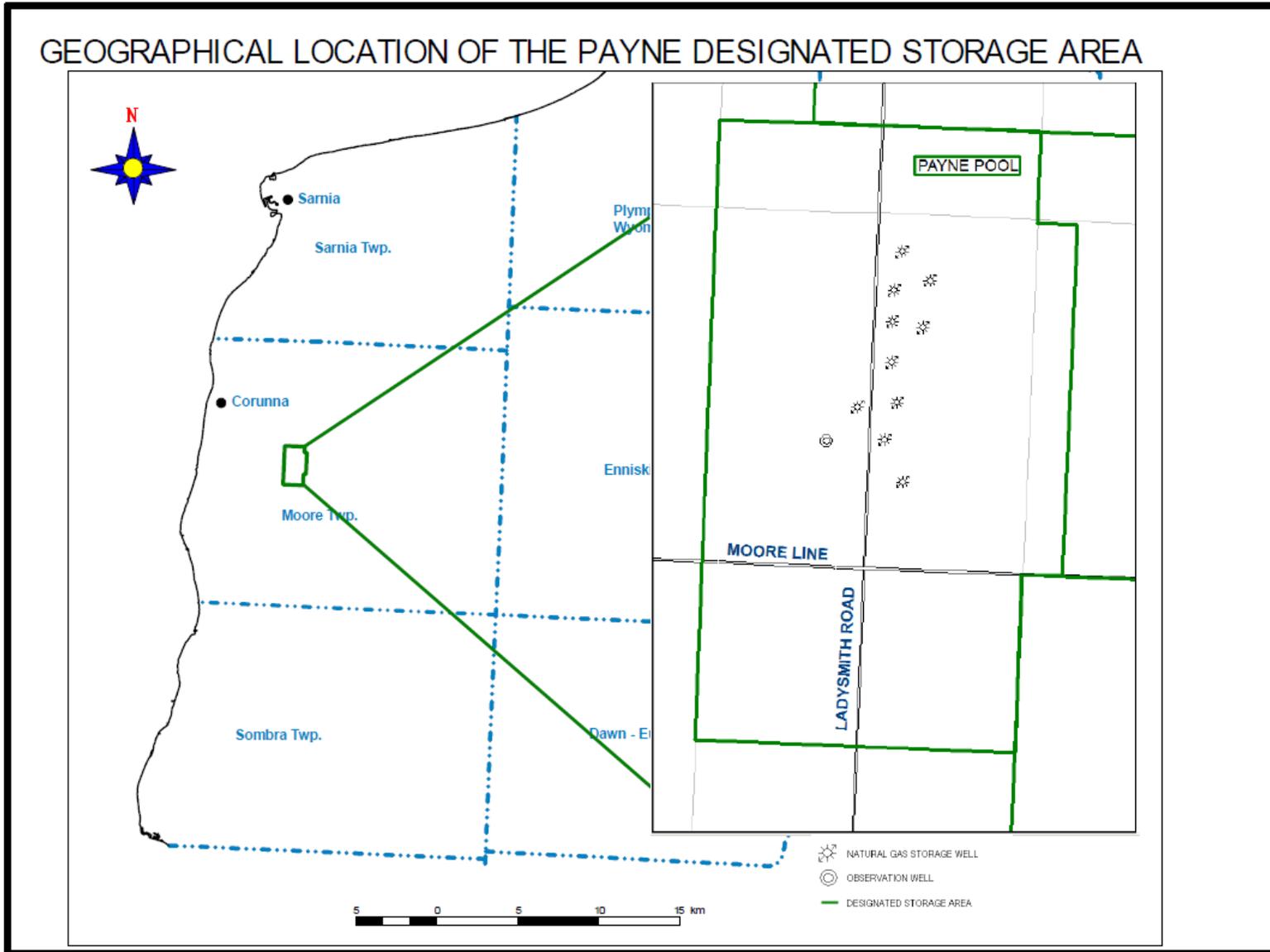
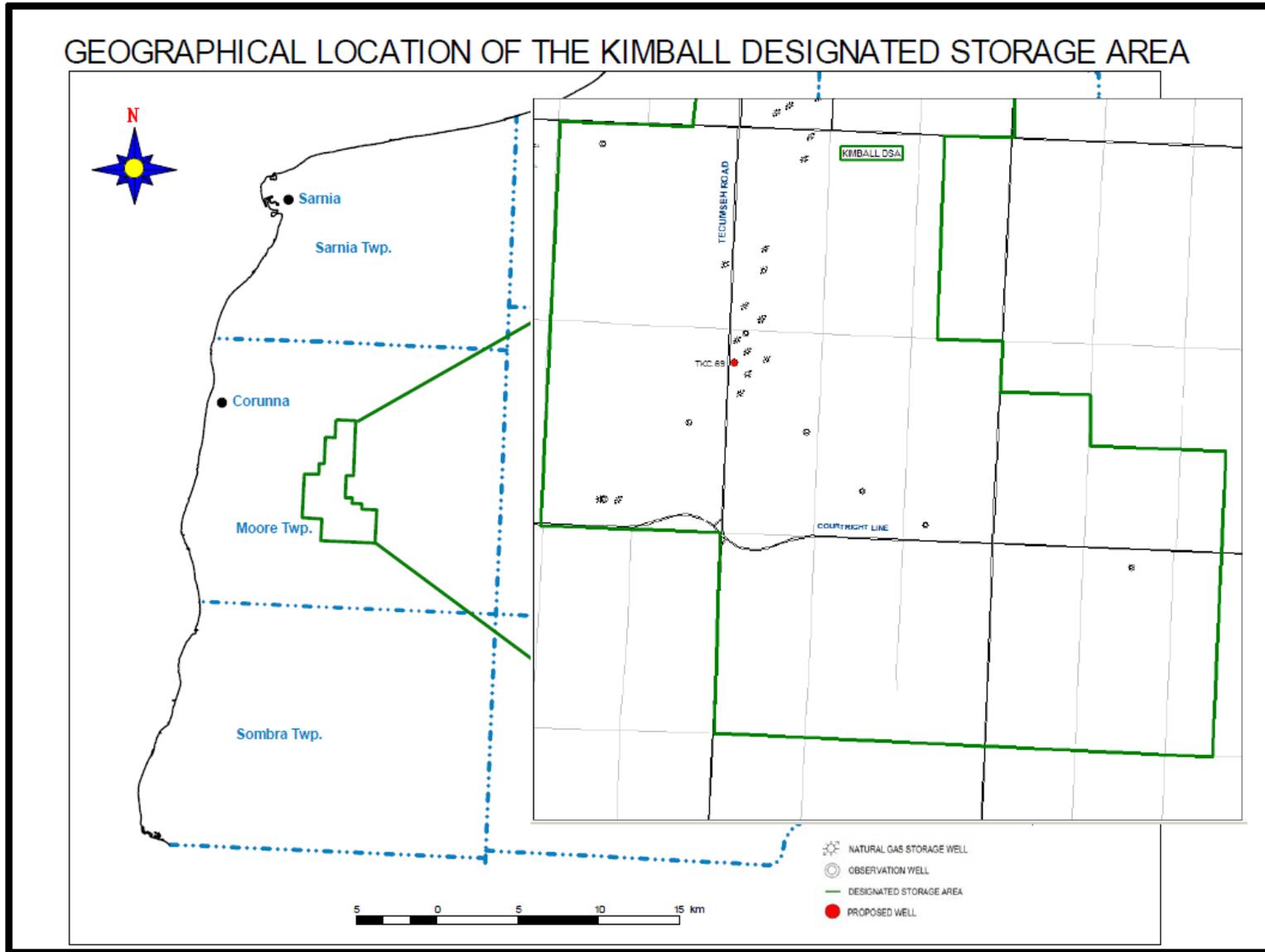


Figure 3: Kimball DSA & Proposed Location to TKC 69



Ministry of Energy, Northern  
Development and Mines

Ministère de l'Énergie, du  
Développement du Nord et des  
Mines

77 Grenville Street  
6<sup>th</sup> Floor  
Toronto ON M7A 2C1

77, rue Grenville  
6<sup>e</sup> étage  
Toronto ON M7A 2C1



VIA EMAIL

April 13, 2021

Asha Patel  
Technical Manager, Regulatory Applications  
Enbridge Gas Inc.  
500 Consumers Road,  
North York, ON M2J 1P8

**Re: 2022 Storage Enhancement Project**

Dear Asha Patel:

Thank you for your emails, dated January 25, 2021 and March 18, 2021 (update), notifying the Ministry of Energy, Northern Development and Mines (ENDM) of Enbridge Gas' (Enbridge) intention to apply to the Ontario Energy Board (OEB) for Leave to Construct for part of the proposed 2022 Storage Enhancement Project (the Project).

I understand that Enbridge is planning to drill a new horizontal natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool and install a lateral pipeline from well TKC 69 to the Kimball-Colinville Storage Pool gathering system.

On behalf of the Government of Ontario (the Crown), ENDM has reviewed the information provided by Enbridge 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 Enbridge through this letter. ENDM expects that Enbridge 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>
Aamjiwnaang First Nation	978 Tashmoo Avenue Sarnia, ON N7T 7H5 T: (519) 336-8410 F: (519) 336-0382 Web: <a href="#">Aamjiwnaang First Nation</a>
Bkejwanong (Walpole Island) First Nation)	RR 3, Wallaceburg, ON N8A 4K9 T: (519) 627-1481 F: (519) 627-0440 Web: <a href="#">Walpole Island First Nation</a>
Chippewas of the Thames First Nation	RR 1, Muncey, ON N0L 1Y0 T: (519) 289-5555 F: (519) 289-2230 Web: <a href="#">Chippewas of the Thames First Nation</a>
Chippewas of Kettle and Stony Point First Nation	6247 Indian Lane Kettle and Stony Point First Nation, ON N0N 1J1 T: (519) 786-2125 F: (519) 786-2108 Web: <a href="#">Chippewas of Kettle and Stony Point First Nation</a>
Oneida Nation of the Thames	RR 2, Southwold, ON N0L 2G0 T: (519) 652-3244 F: (519) 652-9287

	Web: <a href="#">Oneida Nation of the Thames</a>
--	--

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.

**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 Rosalind Ashe, Senior Advisor, Indigenous Energy Policy ([Rosalind.Ashe@ontario.ca](mailto:Rosalind.Ashe@ontario.ca)).

I trust that this information provides clarity and direction regarding the respective roles of the Crown and Enbridge. If you have any questions about this letter or require any additional information, please contact me directly.

Sincerely,



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.

SUFFICIENCY LETTER

1. The sufficiency letter provided by the Ministry of Energy for the 2022 Storage Enhancement Project will be filed with the OEB once it has been received by Enbridge Gas.

# Enbridge Inc. Indigenous Peoples Policy

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# Enbridge Indigenous Peoples Policy

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Enbridge recognizes the diversity of Indigenous Peoples who live where we work and operate. We understand that the history of Indigenous Peoples in both Canada and the United States has had destructive impacts on the social and economic wellbeing of Indigenous Peoples. Enbridge recognizes the importance of reconciliation between Indigenous communities and broader society. Positive relationships with Indigenous Peoples, based on mutual respect and focused on achieving common goals, will create constructive outcomes for Indigenous communities and for Enbridge.

Enbridge commits to pursuing sustainable relationships with Indigenous Nations and groups in proximity to where Enbridge conducts business. To achieve this, Enbridge will govern itself by the following principles:

- We recognize the legal and constitutional rights possessed by Indigenous Peoples in Canada and in the U.S., and the importance of the relationship between Indigenous Peoples and their traditional lands and resources. We commit to working with Indigenous communities in a manner that recognizes and respects those legal and constitutional rights and the traditional lands and resources to which they apply, and we commit to ensuring that our projects and operations are carried out in an environmentally responsible manner.
- We recognize the importance of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) within the context of existing Canadian and U.S. law and the commitments that governments in both countries have made to protecting the rights of Indigenous Peoples.

- We engage in forthright and sincere consultation with Indigenous Peoples about Enbridge's projects and operations through processes that seek to achieve early and meaningful engagement so their input can help define our projects that may occur on lands traditionally used by Indigenous Peoples.
- We commit to working with Indigenous Peoples to achieve benefits for them resulting from Enbridge's projects and operations, including opportunities in training and education, employment, procurement, business development, and community development.
- We foster understanding of the history and culture of Indigenous Peoples among Enbridge's employees and contractors, in order to create better relationships between Enbridge and Indigenous communities.

This commitment is a shared responsibility involving Enbridge and its affiliates, employees and contractors, and we will conduct business in a manner that reflects the above principles. Enbridge will provide ongoing leadership and resources to ensure the effective implementation of the above principles, including the development of implementation strategies and specific action plans.

Enbridge commits to periodically reviewing this policy to ensure it remains relevant and meets changing expectations.

**INDIGENOUS CONSULTATION REPORT: SUMMARY TABLES**

As of October 25, 2021

<p><b>Aamjiwnaang First Nation (AFN) Environmental Coordinator</b></p>		
<p><b>Was project information provided to the community?</b></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>On June 8, 2021, an Enbridge Gas representative notified an AFN representative of the 2022 Storage Enhancement Project (“Project”). The Project notification letter included a map and description of the Project.</p> <p>On June 18, an Enbridge Gas representative emailed the AFN representative to set up a date to meet regarding the Project as well as other Enbridge Gas projects. After numerous emails back and forth, the representatives agreed that Enbridge Gas would present to the Environmental Committee on September 14.</p> <p>On July 29, 2021, an Enbridge Gas representative emailed the AFN representative and provided a Notice of Study commencement on the Project.</p> <p>On August 24, 2021, an Enbridge Gas representative emailed the AFN representative requesting to move the September 14 meeting to early October due to the release of an Environmental Report related to another project. The representatives agreed to defer the presentation for the Environmental Committee to October 5.</p> <p>On August 26, 2021, an Enbridge Gas representative emailed the AFN representative to advise that the Environmental Report was available and provided the internet link for the report. The Enbridge Gas representative requested that any comments be provided on the Environmental Report by October 4, 2021, as per the Ontario Energy Board’s <i>Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7th Edition 2016</i> (“Guidelines”).</p> <p>The Enbridge Gas representative also indicated that a meeting was set on October 5, 2021 to provide the Environmental Committee with an opportunity to ask any questions and provide their views on the potential impact the Project may have on the community’s rights and interests.</p>

		<p>On October 5, 2021, the AFN representative emailed the Enbridge representative the Third-Party review of the Project's environmental report. The AFN representative inquired as to whether the costs could be reimbursed. The Enbridge Gas representative responded on the same day to acknowledge the reports and also to advise that Enbridge Gas would cover the costs for the third-party review. AFN will provide a quote for Enbridge Gas's review.</p> <p>On October 5, 2021, The Enbridge Gas representative and the AFN representatives met by virtual meeting to discuss proposed Enbridge Gas Projects. The Enbridge Gas representative provided information on the Project including the Species at Risk (SAR) and general mitigation for SAR.</p>
<p><b>Was the community responsive/did you have direct contact with the community?</b></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>A meeting occurred on October 5, 2021 to discuss the Project.</p>
<p><b>Did the community members or representatives have any questions or concerns?</b></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>There was no questions about the Project at the October 5, 2021 meeting.</p> <p>AFN has provided a third-party review of the Environmental report for Enbridge to review and provide comments on.</p>
<p><b>Does the community have any outstanding concerns?</b></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>To date, AFN has no outstanding concerns.</p>

<p><b>Chippewas of Kettle and Stony Point First Nation (“CKSPFN”)</b>  <b>Consultation Coordinator</b>  <b>519-786-2125</b></p>		
<p><b>Was project information provided to the community?</b></p>	<p><input checked="" type="checkbox"/> Yes  <input type="checkbox"/> No</p>	<p>On June 8, 2021, an Enbridge Gas representative notified an CKSPFN representative of the Project. The Project notification letter included a map and description of the Project.</p> <p>On July 5, 2021, an Enbridge Gas representative emailed the CKSPFN representative requesting a meeting to discuss the Project and other proposed Enbrige projects.</p> <p>On July 19, 2021, an Enbridge Gas representative left a voice message for the CKSPFN representative requesting a call back to discuss the Project.</p> <p>On July 29, 2021, an Enbridge Gas representative emailed the CKSPFN representative and provided a Notice of Study Commencement on the Project. On August 9, 2021, the parties agreed to meet to discuss the Project on September 9.</p> <p>On August 29, 2021, an Enbridge Gas representative emailed the CKSPFN representative to advise that the Environmental Report was available and provided the internet link for the report. The Enbridge Gas representative requested that any comments be provided on the Environmental Report by October 4, 2021, as per the Ontario Energy Board’s <i>Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7th Edition 2016 (“Guidelines”)</i>.</p> <p>On September 7 and 14, the parties changed the date of the meeting to September 20, 2021.</p> <p>On September 20, 2021, the Enbridge Gas representative and the CKSPFN representative had a telephone meeting to discuss the Project.</p>
<p><b>Was the community responsive/did you have direct contact with the community?</b></p>	<p><input checked="" type="checkbox"/> Yes  <input type="checkbox"/> No</p>	<p>On September 20, 2021, the Enbridge Gas representative and the CKSPFN representative had a telephone meeting to discuss the Project.</p>
<p><b>Did the community members or representatives</b></p>	<p><input type="checkbox"/> Yes  <input checked="" type="checkbox"/> No</p>	<p>At this time, CKSPFN has not raised any questions or</p>

<p><b>have any questions or concerns?</b></p>		<p>concerns regarding the Project. However, the parties discussed monitors and capacity funding for third party reviews of technical documents. CKSPFN will be reviewing the Environmental Report and following up with the Enbridge Gas representative with any Project-related questions.</p>
<p><b>Does the community have any outstanding concerns?</b></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>To date, CKSPFN does not have any outstanding concerns regarding the Project.</p>
<p><b>Chippewas of the Thames First Nation (“COTTFN”) Consultation Coordinator 519-289-5555</b></p>		
<p><b>Was project information provided to the community?</b></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>On September 15, 2021, an Enbridge Gas representative sent an email requesting a meeting in early October with the COTTFN representative on Enbridge Gas projects.</p> <p>On September 19, 2021, an Enbridge Gas representative sent the Notice of Study Commencement for the Project to the COTTFN consultation department and asked for a meeting in October to discuss the Project.</p> <p>Also on September 19, 2021, an Enbridge Gas representative emailed the COTTFN representative to advise that the Environmental Report was available and provided the internet link for the report. The Enbridge Gas representative requested that any comments be provided on the Environmental Report by October 4, 2021, as per the Ontario Energy Board’s <i>Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7th Edition 2016 (“Guidelines”)</i>.</p> <p>On September 28, 2021, an Enbridge Gas representative notified an COTTFN representative of the Project. The Project notification letter included a map and description of the Project.</p> <p>On October 18, 2021, an Enbridge Gas representative emailed the COTTFN representative asking to set up a meeting for October 21. The two parties went back and forth to set up a date to meet. The meeting will take place on October 27, 2021 at COTTFN band office.</p>
<p><b>Was the community responsive/did</b></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>A meeting will take place on October 27, 2021 at COTTFN band office.</p>

<p><b>you have direct contact with the community?</b></p>		
<p><b>Did the community members or representatives have any questions or concerns?</b></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>To date, COTTFN has not raised any questions or concerns related to the Project.</p>
<p><b>Does the community have any outstanding concerns?</b></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>To date, COTTFN does not have any outstanding concerns related to the Project; however, representatives from Enbridge Gas will be meeting with COTTFN in October to discuss the Project.</p>
<p><b>Oneida Nation of the Thames (“Oneida Nation”) Environment and Consultation Coordinator (519) 652-6922</b></p>		
<p><b>Was project information provided to the community?</b></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>On June 22, 2021, an Enbridge Gas representative emailed the Oneida Nation representative to try to confirm a meeting with community representatives to provide an update on the Enbridge Gas projects.</p> <p>On September 19, 2021, an Enbridge Gas representative sent the Notice of Study Commencement for the Project to the Oneida Nation consultation coordinator in advance of an October community meeting.</p> <p>Also on September 19, 2021, an Enbridge Gas representative emailed the Oneida Nation representative to advise that the Environmental Report was available and provided the internet link for the report. The Enbridge Gas representative requested that any comments be provided on the <i>Environmental Report by October 4, 2021, as per the Ontario Energy Board’s Environmental Guidelines for the Location, Construction and</i></p>

		<p><i>Operation of Hydrocarbon Pipelines and Facilities in Ontario 7th Edition 2016 (“Guidelines”).</i></p> <p>On September 20, 2021, the Oneida Nation representative responded to the email advising that an early October meeting could be accommodated.</p> <p>On September 28, 2021, an Enbridge Gas representative notified an Oneida Nation representative of the Project. The Project notification letter included a map and description of the Project.</p> <p>On October 14, 2021, an Enbridge Gas representative dropped off Project information at the Band office in hopes to connect with the Oneida Nation representative. The Oneida Nation representative was not available that day and the Enbridge Gas representative sent an email on October 15, 2021 advising him that the package was at the band office.</p>
<p><b>Was the community responsive/did you have direct contact with the community?</b></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Yes, an Enbridge Gas representative dropped off Project information at the Band office and will continue to follow up to see if there are any questions or concerns.</p>
<p><b>Did the community members or representatives have any questions or concerns?</b></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>To date, the Oneida Nation has not raised any questions or concerns related to the Project.</p>
<p><b>Does the community have any outstanding concerns?</b></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>To date, the Oneida Nation does not have any outstanding concerns; however, representatives from Enbridge Gas will be meeting with the community in early October to discuss the Project.</p>

<b>Walpole Island First Nation (“WIFN”)                      Consultation Manager</b>		
<b>Was project information provided to the community?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>On June 8, 2021, an Enbridge Gas representative notified an WIFN representative of the Project. The Project notification letter included a map and description of the Project.</p> <p>On July 8, 2021, an Enbridge Gas representative emailed a WIFN representative to inquire who should be receiving project notification in the absence of the WIFN representative.</p> <p>On July 13, 2021, an Enbridge representative emailed the WIFN representative requesting a meeting to discuss the numerous Enbridge Gas projects.</p> <p>On July 23, 2021, an Enbridge Gas representative met with the WIFN representative to discuss the Project as well as other current and proposed Enbridge Gas projects. WIFN did not have any Project-related questions.</p> <p>On July 29, 2021 an Enbridge Gas representative emailed the WIFN representative and provided a Notice of Study Commencement on the Project.</p> <p>On August 26, 2021, an Enbridge Gas representative emailed the WIFN representative to advise that the Environmental Report was available and provided the internet link for the report. The Enbridge Gas representative requested that any comments be provided on the Environmental Report by October 4, 2021, as per the Ontario Energy Board’s <i>Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7th Edition 2016 (“Guidelines”)</i>.</p> <p>The Enbridge Gas representative also indicated that they would like to set up a meeting for early October to discuss the Project and have WIFN provide their views on the potential impact the Project may have on the community’s rights and interests.</p> <p>On September 10, 2021, an Enbridge Gas representative emailed the WIFN representatives requesting a meeting to discuss current and proposed Enbridge Gas Projects.</p> <p>On October 6, 2021, an Enbridge Gas representative emailed the WIFN representative to remind them that the ER was available for review. The WIFN representative responded that a third-party would be reviewing the report and providing Enbridge with a quote. On October 8, 2021 a quote was received and approved.</p>

		<p>On October 19, 2021, an Enbridge Gas representative emailed the WIFN representative a Capacity Funding agreement letter for the Project for their signature.</p>
<p><b>Was the community responsive/did you have direct contact with the community?</b></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>On July 23, 2021, the representatives from Enbridge Gas and WIFN discussed the Project during a telephone meeting. A meeting will be set up to further discuss the Project.</p>
<p><b>Did the community members or representatives have any questions or concerns?</b></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>To date, WIFN has not raised any questions or concerns regarding the Project.</p>
<p><b>Does the community have any outstanding concerns?</b></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>To date, there are no outstanding concerns from WIFN.</p>

INDIGENOUS CONSULTATION REPORT: LOG AND PROJECT CORRESPONDENCE

As of October 25, 2021

<b>Aamjiwnaang First Nation (“AFN”)</b>					
<b>Line Item</b>	<b>Date of Engagement</b>	<b>Method of Engagement</b>	<b>Summary of Engagement Activity</b>	<b>Response from Community/Outstanding Issues</b>	<b>Attachment</b>
1.1	June 8, 2021	Email	An Enbridge Gas representative notified an AFN representative of the 2022 Storage Enhancement Project (“Project”). The Project notification letter included a map and description of the Project.	No response received from AFN representative.	Attachment 1.1
1.2	June 18, 2021	Email	An Enbridge Gas representative emailed the AFN representative to set up a date to meet regarding the Project as well as other Enbridge Gas projects.	After numerous emails back and forth, the representatives agreed that Enbridge Gas would present to the Environmental Committee on September 14.	Attachment 1.2
1.3	July 29, 2021	Email	An Enbridge Gas representative emailed the AFN representative and provided a Notice of Study Commencement on the Project.	No response received from AFN representative.	Attachment 1.3
1.4	August 24, 2021	Email	An Enbridge Gas representative emailed the AFN representative requesting to move the September 14 meeting to early October due to the release of an Environmental Report related to another project.	The representatives agreed to defer the presentation for the Environmental Committee to October 5.	Attachment 1.4
1.5	August 26, 2021	Email	An Enbridge Gas representative emailed the AFN representative to advise that the Environmental Report was available and provided the internet link for the report. The Enbridge Gas representative requested that any comments be provided on the Environmental Report by October 4, 2021, as per the Ontario Energy Board’s <i>Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7<sup>th</sup> Edition 2016</i> (“Guidelines”).  The Enbridge Gas representative also indicated that a meeting was set on October 5, 2021 to provide the Environmental Committee with an opportunity to ask any questions and provide their views on the potential impact the Project may have on the community’s rights and interests.	No response received from AFN representative.	Attachment 1.5
1.6	October 5, 2021	Email	The AFN representative emailed the Enbridge Gas representative the Third-Party review of the Project’s environmental report. The AFN representative inquired as to whether the costs could be reimbursed.	The Enbridge Gas representative responded on the same day to acknowledge the reports and also to advise that Enbridge Gas would cover the costs for the third-party review. The AFN representative advised they would provide a quote for Enbridge Gas’s review.	Attachment 1.6
1.7	October 5, 2021	Virtual Meeting	The Enbridge Gas representative and the AFN representatives met by virtual	There were no Project-related questions from the	Attachment 1.7

			meeting to discuss proposed Enbridge Gas projects.  The Enbridge Gas representative provided information on the Project including the Species at Risk (SAR) and general mitigation for SAR.	AFN environmental committee	
<b>Chippewa of Kettle and Stony Point First Nation (“CKSPFN”)</b>					
<b>Line Item</b>	<b>Date of Engagement</b>	<b>Method of Engagement</b>	<b>Summary of Engagement Activity</b>	<b>Response from Community/Outstanding Issues</b>	<b>Attachment</b>
2.1	June 8, 2021	Email	An Enbridge Gas representative notified an CKSPFN representative of the Project. The Project notification letter included a map and description of the Project.	No response received from CKSPFN representative.	Attachment 2.1
2.2	July 5, 2021	Email	An Enbridge Gas representative emailed the CKSPFN representative requesting a meeting to discuss the Project and other proposed Enbridge projects.	No response received from CKSPFN representative.	Attachment 2.2
2.3	July 29, 2021	Email	An Enbridge Gas representative emailed the CKSPFN representative and provided a Notice of Study Commencement on the Project.	On August 9, 2021, the KSPFN representative responded and provided some dates to meet to discuss the Project. The parties agreed to meet on September 9.	Attachment 2.3
2.4	August 26, 2021	Email	An Enbridge Gas representative emailed the CKSPFN representative to advise that the Environmental Report was available and provided the internet link for the report. The Enbridge Gas representative requested that any comments be provided on the Environmental Report by October 4, 2021, as per the Ontario Energy Board’s <i>Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7<sup>th</sup> Edition 2016</i> (“Guidelines”).	No response received from the CKSPFN representative.	Attachment 2.4
2.5	Sept 7, 2021	Email	The Enbridge Gas representative emailed the CKSPFN representative to advise that they would not be able to travel to meet in person to discuss the Project. The Enbridge Gas representative advised they would still be able to meet on the telephone for the scheduled time or that they could reschedule to a better time.	The CKSPFN representative requested, and the parties agreed to meet September 15, 2021 by telephone.	Attachment 2.5
2.6	September 14, 2021	Email	The Enbridge Gas representative emailed the presentation deck to the CKSPFN ahead of the meeting scheduled for September 15.	The CKSPFN representative emailed in response to advise that we would need to postpone due to an appointment. The parties agreed to meet on September 20.	Attachment 2.6
2.7	September 20, 2021	Telephone meeting	The Enbridge Gas representative and the CKSPFN representative met by telephone to discuss the current and proposed Enbridge Gas projects.  The Enbridge Gas representative provided information on the Project including the Species at Risk (SAR) and general mitigation for SAR.	The parties discussed CKSPFN capacity for Environment and Archaeological monitors for Projects. The CKSPFN representative advised that they only have one monitor available on an irregular basis. The Enbridge Gas	Attachment 2.7

				<p>representative advised CKSPFN that training for monitors could be accommodated to ensure that representatives from the community were present on projects.</p> <p>The Enbridge Gas representative advised the CKSPFN representative that if they required a third party to review the Environment Reports on the Project, Enbridge Gas would be happy to accommodate this request.</p>	
<b>Chippewas of the Thames First Nation (“COTTFN”)</b>					
<b>Line Item</b>	<b>Date of Engagement</b>	<b>Method of Engagement</b>	<b>Summary of Engagement Activity</b>	<b>Response from Community/Outstanding Issues</b>	<b>Attachment</b>
3.1	September 15, 2021	Email	An Enbridge Gas representative emailed a COTTFN representative to confirm a date for a community visit to provide an update on Enbridge Gas projects.	No response was received from the COTTFN representative.	Attachment 3.1
3.2	September 19, 2021	Email	An Enbridge Gas representative sent the Notice of Study Commencement for the Project to the COTTFN consultation department and asked for a meeting in October to discuss the Project.	On September 27, 2021, the COTTFN representative acknowledged the email from the Enbridge representative and advised that they would be on annual leave until October 18, 2021.	Attachment 3.2
3.3	September 19, 2021	Email	An Enbridge Gas representative emailed the COTTFN representative to advise that the Environmental Report was available and provided the Internet link for the report. The Enbridge Gas representative requested that any comments be provided on the Environmental Report by October 4, 2021, as per the Ontario Energy Board’s <i>Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7<sup>th</sup> Edition 2016</i> (“Guidelines”).	No response was received from the COTTFN representative.	Attachment 3.3
3.4	September 28, 2021	Email	An Enbridge Gas representative notified an COTTFN representative of the Project. The Project notification letter included a map and description of the Project.		Attachment 3.4
3.5	October 18, 2021	Email	An Enbridge Gas representative emailed the COTTFN representative asking to set up a meeting for October 21. The two parties went back and forth to set up a date to meet.	The meeting will take place on October 27, 2021 at COTTFN band office.	Attachment 3.5
<b>Oneida Nation of the Thames (“Oneida Nation”)</b>					
<b>Line Item</b>	<b>Date of Engagement</b>	<b>Method of Engagement</b>	<b>Summary of Engagement Activity</b>	<b>Response from Community/Outstanding Issues</b>	<b>Attachment</b>
4.1	June 22, 2021	Email	An Enbridge Gas representative emailed the Oneida Nation representative to try to confirm a meeting with community	No response was received from the Oneida Nation representative.	Attachment 4.1

			representatives to provide an update on a variety of Enbridge projects.		
4.2	September 19, 2021	Email	An Enbridge Gas representative sent the Notice of Study Commencement for the Project to the Oneida Nation consultation coordinator in advance of an October community meeting.	The Oneida Nation representative emailed the Enbridge Gas representative that a meeting in early October could be accommodated.	Attachment 4.2
4.3	September 19, 2021	Email	An Enbridge Gas representative emailed the Oneida Nation representative to advise that the Environmental Report was available and provided the Internet link for the report. The Enbridge Gas representative requested that any comments be provided on the Environmental Report by October 4, 2021, as per the Ontario Energy Board's <i>Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7<sup>th</sup> Edition 2016</i> ("Guidelines").	No response was received from the Oneida Nation representative.	Attachment 4.3
4.4	September 28, 2021	Email	An Enbridge Gas representative notified an Oneida Nation representative of the Project. The Project notification letter included a map and description of the Project.	No response was received from the Oneida Nation representative.	
4.4	October 14, 2021	In person	An Enbridge Gas representative dropped off Project information at the Band office in hopes to connect with the Oneida Nation representative.	The Oneida Nation representative was not available that day and the Enbridge Gas representative sent an email on October 15, 2021 advising him that the package was at the band office.	Attachment 4.4
<b>Walpole Island First Nation ("WIFN")</b>					
<b>Line Item</b>	<b>Date of Engagement</b>	<b>Method of Engagement</b>	<b>Summary of Engagement Activity</b>	<b>Response from Community/Outstanding Issues</b>	<b>Attachment</b>
5.1	June 8, 2021	Email	An Enbridge Gas representative notified an WIFN representative of Project. The Project notification letter included a map and description of the Project.	No response was received from WIFN representative.	Attachment 5.1
5.2	July 8, 2021	Email	An Enbridge representative emailed a WIFN representative to inquire who should be receiving project notification in the absence of the WIFN representative.	The WIFN representative advised to continue to engage with the retired WIFN representative.	Attachment 5.2
5.3	July 13, 2021	Email	An Enbridge representative emailed the WIFN representative requesting a meeting to discuss a number of Enbridge Gas projects.	A meeting date was set for July 23, 2021.	Attachment 5.3
5.4	July 23, 2021	Telephone meeting	The Enbridge Gas representative met with the WIFN representative to discuss the current Project and additional proposed Enbridge Gas projects.	No questions from the WIFN representative were raised at this time.  The Enbridge Gas representative advised that capacity funding could be provided to the community for the review of the Environmental Report once it has been completed.	Attachment 5.4

5.5	July 29, 2021	Email	An Enbridge Gas representative emailed the WIFN representative and provided a notice of commencement on the Project.	No response was received from the WIFN representative.	Attachment 5.5
5.6	August 26, 2021	Email	An Enbridge Gas representative emailed the WIFN representative to advise that the Environmental Report was available and provided the Internet link for the report. The Enbridge Gas representative requested that any comments be provided on the Environmental Report by October 4, 2021, as per the Ontario Energy Board's <i>Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario 7<sup>th</sup> Edition 2016</i> ("Guidelines").  The Enbridge Gas representative also indicated that they would like to set up a meeting for early October to discuss the Project and have WIFN provide their views on the potential impact the Project may have on the community's rights and interests.	No response was received from WIFN representative.	Attachment 5.6
5.7	September 10, 2021	Email	An Enbridge Gas representative emailed the WIFN representatives requesting a meeting to discuss current and proposed Enbridge Gas Projects.	No response was received from the WIFN representative.	Attachment 5.7
5.8	October 6, 2021	Email	An Enbridge Gas representative emailed the WIFN representative to provide the ER link on a different project and a reminder that the ER for the Project was available for review.	The WIFN representative responded that he has requested the third-party reviewer provide Enbridge with a quote.  Quote was received and approved on October 8, 2021.	Attachment 5.8
5.9	October 19, 2021	Email	An Enbridge Gas representative emailed the WIFN representative a Capacity Funding agreement letter for the Project for their review and signature.	No response was received.	Attachment 5.9

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED] [Aamjiwnaang Environment](#)  
**Cc:** [Matthew Chegahno](#); [Wilkinson, Jonathon \(ENDM\)](#); [Ashe, Rosalind \(ENDM\)](#)  
**Subject:** Project Notification: Lateral pipelines  
**Date:** Tuesday, June 8, 2021 4:04:00 PM  
**Attachments:** [UGS Well Work Notification Letter - Aamjiwnaang First Nation.pdf](#)

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Good afternoon [REDACTED],

Enbridge Gas is currently conducting a review of its gas storage and reservoir system and has identified the potential need to enhance some assets in order to maintain the safe and reliable operation of Enbridge Gas's systems and continue to meet the firm demands of Enbridge Gas's customers.

We currently have two proposed projects we would like to discuss with you as we are interested in your community's feedback, including any suggestions or proposals on avoiding, minimizing or mitigating any potential adverse impacts these Projects may have on your Aboriginal or treaty rights. Please find attached the Project Notification letter which also contains the maps within it.

I look forward to hearing back from you.

Many thanks and hope you are well,  
Lauren

**Lauren Whitwham**

Senior Advisor, Community & Indigenous Engagement, Eastern Region

**Public Affairs, Communications & Sustainability**



Enbridge Inc.  
109 Commissioners Road West,  
London, ON  
N6A4P1

[REDACTED]  
Aamjiwnaang First Nation  
978 Tashmoo Ave  
Sarnia, ON  
N7T 7H5

June 7, 2021

Dear [REDACTED]

**Re: 2021-2024 Enbridge Gas Storage Well & Reservoir Projects**

Enbridge Gas Inc. (Enbridge Gas) is currently conducting a review of its gas storage and reservoir system and has identified the potential need to replace and/or enhance some assets in order to maintain the safe and reliable operation of Enbridge Gas's systems and continue to meet the firm demands of Enbridge Gas's customers.

The following two (2) proposed projects may include all or some of the following:

**2022 Storage Enhancement Project**

- Involves drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- Involves the installation of approximately 125 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

**Coveny and Kimball-Colinville Well Drilling Project**

- Involves drilling a new injection/withdrawal well (TKC 68) in the Kimball-Colinville Storage Pool in May/June 2022
- TKC 68 will require approximately 120 metres of 10" lateral pipeline to connect to the main Kimball-Colinville gathering line.

Collectively referred to as the "Projects".



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London, ON  
N6A4P1

The area in which these Projects are to be constructed is rural agricultural and is either owned by Enbridge Gas or Enbridge Gas has the right to enter through a Gas Storage Lease. It is expected that the majority of adverse environmental and/or socio-economic effects will be construction related. These effects are expected to be temporary and transitory. The Projects will also be located underground once construction is complete, further limiting the potential for any long-term effects.

As part of the planning process for each of these Projects, Enbridge Gas has and will retain an external consulting firm to undertake an Environmental Study of the construction and operation of the Project. The Environmental Study as required by the Ontario Energy Board's (OEB) *"Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)"*.

Enbridge Gas' preliminary work on the Projects has identified the following potential authorizations:

Provincial approvals:

- Ontario Energy Board
- Ministry of Natural Resources and Forestry
- Ministry of Environment, Conservation and Parks
- Ministry of Heritage, Sport, Tourism and Culture Industries

Municipal approvals:

- County of Lambton
- Township of St. Clair

Other approvals:

- St. Clair Region Conservation Authority
- Hydro One Networks Inc.

We would like to consult with your community on these proposed Projects. We are interested in your community's feedback, including any suggestions or proposals on avoiding, minimizing or mitigating any potential adverse impacts these Projects may have on your Aboriginal or treaty rights.

Enbridge acknowledges that capacity support may be required to enable you to engage in timely technical reviews of documents, participation in field work associated with the Projects, and to allow for meaningful consultation. Consistent with our approach on all projects, we are



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N6A4P1

prepared to provide capacity funding to support your team's engagement in relation to the Projects.

Enbridge Gas has been delegated the procedural aspects for consultation by the Ministry of Energy on behalf of Ontario. Ministry officials are also available should you wish to contact them directly with any questions or concerns. Please contact:

For 2021/2022 Storage Enhancement Project Part 2,

Rosalind Ashe, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[rosalind.ashe@ontario.ca](mailto:rosalind.ashe@ontario.ca)

For Coveny and Kimball-Colinville Well Drilling Project,

Jonathon Wilkinson, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[Jonathon.Wilkinson@ontario.ca](mailto:Jonathon.Wilkinson@ontario.ca)

We would like to set up a meeting to discuss these Projects with you to provide you with an opportunity to express any questions or concerns you have. Please feel free to contact me at [lauren.whitwham@enbridge.com](mailto:lauren.whitwham@enbridge.com) or 519-852-3474 so we can set up a time to meet. You may also provide me with any feedback you may have regarding the Projects in writing by July 7, 2021, if possible.

Many thanks,

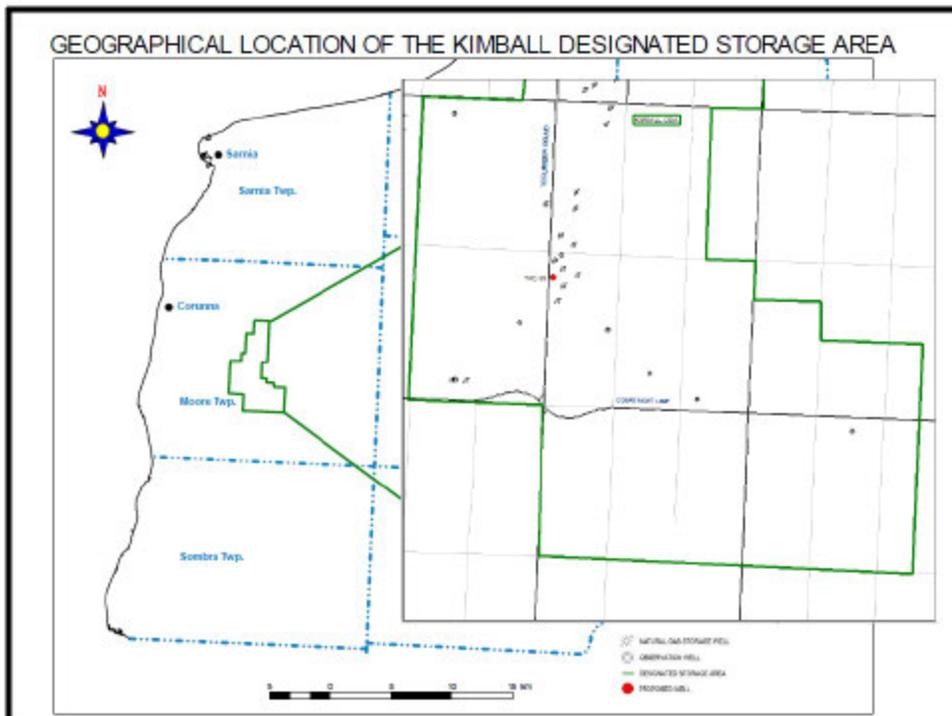


Lauren Whitwham  
Senior Advisor, Community & Indigenous Engagement, Eastern Region  
Enbridge Inc.  
519-852-3474  
[Lauren.whitwham@enbridge.com](mailto:Lauren.whitwham@enbridge.com)



Enbridge Inc  
105 Commissioners Road West,  
London, ON  
N5A4P1

### 2022 Storage Enhancement Project



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**From:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>  
**Sent:** Friday, June 18, 2021 10:04 AM  
**To:** Aamjiwnaang Environment <environment@aamjiwnaang.ca>  
**Subject:** Dawn Corunna and Storage Enhancement Project meeting

Hi [REDACTED]

Hope all is well.

We have determined a preferred route for the Dawn Corunna project and will be hosting a virtual Open house from July 19 to August 2, 2021. We will be able to speak to watercourses, environmental aspects and species at risks now that the preferred route has been chose.

We also would like to speak to the Environmental Committee on the Storage Enhancement projects that we also have going on. I've re-attached the letter to this email.

I recognize that summer is upon us and the Environmental Committee might not be meeting as frequently so I was hoping I could reach out to find out the schedule and set up something.

I look forward to hearing from you. Have a great weekend

Lauren

**From:** [Aamjiwnaang Environment](#)  
**To:** [Lauren Whitwham](#)  
**Subject:** [External] RE: Dawn Corunna and Storage Enhancement Project meeting  
**Date:** Friday, June 18, 2021 12:57:58 PM

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Hi Lauren,

We have July 6, 2021 and August 10, 2021 open for presentations. I hope that one of those days work for you?

Thank you,

██████████

---

**From:** Lauren Whitwham <[Lauren.Whitwham@enbridge.com](mailto:Lauren.Whitwham@enbridge.com)>  
**Sent:** Friday, June 18, 2021 1:03 PM  
**To:** Aamjiwnaang Environment <[environment@aamjiwnaang.ca](mailto:environment@aamjiwnaang.ca)>

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**Subject:** RE: Dawn Corunna and Storage Enhancement Project meeting

Thanks ██████████

I'll follow up with my environmental planners to see what their vacation schedule are like.

I am away on vacation on August 10 so unfortunately that one is out for me.

I'll be back in touch.

Enjoy the weekend,  
Lauren

---

**From:** Aamjiwnaang Environment <[environment@aamjiwnaang.ca](mailto:environment@aamjiwnaang.ca)>  
**Sent:** Wednesday, June 23, 2021 3:34 PM  
**To:** Lauren Whitwham <[Lauren.Whitwham@enbridge.com](mailto:Lauren.Whitwham@enbridge.com)>  
**Subject:** [External] RE: Dawn Corunna and Storage Enhancement Project meeting

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

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Hi Lauren,

Just letting you know that Tuesday July 20, 2021 Environment Committee meeting is open for presentations as well.

Thank you,



---

**From:** Lauren Whitwham <[Lauren.Whitwham@enbridge.com](mailto:Lauren.Whitwham@enbridge.com)>

**Sent:** Tuesday, June 29, 2021 12:28 PM

**To:** Aamjiwnaang Environment <[environment@aamjiwnaang.ca](mailto:environment@aamjiwnaang.ca)>

**Subject:** RE: Dawn Corunna and Storage Enhancement Project meeting

Hi 

Sorry for taking so long. Is July 20 still available? We seem to all be available that day/evening.

Also, would you be able to provide me with the contact information for the band manager at Aamjiwnaang. I know that the previously hired person left in the winter.

Thanks,  
Lauren

---

**From:** Aamjiwnaang Environment <[environment@aamjiwnaang.ca](mailto:environment@aamjiwnaang.ca)>  
**Sent:** Tuesday, June 29, 2021 1:20 PM  
**To:** Lauren Whitwham <[Lauren.Whitwham@enbridge.com](mailto:Lauren.Whitwham@enbridge.com)>  
**Subject:** [External] RE: Dawn Corunna and Storage Enhancement Project meeting

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

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Hello Lauren,

No worries. Yes, we have room that evening for your presentation. Can you and your group log into the meeting at approximately 6:20 P.M. and wait in the lobby?  
Send me additional email addresses for the meeting.

---

We have a few other presentations that evening as well.

Also, could you send me your presentation no later than Friday July 2, 2021 at Noon? Just so that I can finalize the agenda.

Thank you,

██████████

---

**From:** Lauren Whitwham <[Lauren.Whitwham@enbridge.com](mailto:Lauren.Whitwham@enbridge.com)>  
**Sent:** Tuesday, June 29, 2021 1:25 PM  
**To:** Aamjiwnaang Environment <[environment@aamjiwnaang.ca](mailto:environment@aamjiwnaang.ca)>  
**Subject:** RE: Dawn Corunna and Storage Enhancement Project meeting

Hi there,

I am not able to get a presentation to you by July 2 unfortunately. I apologize but I don't have all the information yet to do so.

Should we delay into September? I want to ensure we have all the information together for the committee.

Do you have a September date?

Sorry about this [REDACTED].  
Lauren

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**From:** Aamjiwnaang Environment <[environment@aamjiwnaang.ca](mailto:environment@aamjiwnaang.ca)>  
**Sent:** Tuesday, June 29, 2021 1:30 PM  
**To:** Lauren Whitwham <[Lauren.Whitwham@enbridge.com](mailto:Lauren.Whitwham@enbridge.com)>  
**Subject:** [External] RE: Dawn Corunna and Storage Enhancement Project meeting

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Hi Lauren,

We can wait until September if that works better.

Here are the September Committee dates: Tuesday September 14, 2021 and Tuesday September 21, 2021.

Hopefully one of these dates work better?

Thank you,



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**From:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>  
**Sent:** Tuesday, June 29, 2021 1:46 PM  
**To:** Aamjiwnaang Environment <environment@aamjiwnaang.ca>  
**Subject:** RE: Dawn Corunna and Storage Enhancement Project meeting

Thanks for your understanding [REDACTED]. I just want to ensure I'm prepared with a proper presentation to provide.

Can we please get onto the agenda for September 14? We can be in touch later on to get a date for the presentation but I'll aim to have it complete by early August.

Thanks for the email address for the Band Manager.

All the best to you and we will talk soon.

Lauren

---

**From:** [Aamjiwnaang Environment](#)  
**To:** [Lauren Whitwham](#)  
**Subject:** [External] RE: Dawn Corunna and Storage Enhancement Project meeting  
**Date:** Tuesday, June 29, 2021 1:51:27 PM

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

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Hi Lauren,

I will book you in for the September 14 Environment Committee meeting.

If you can send me the presentation, on or before Wednesday September 8, 2021, that would be great!

You're welcome for the information.

Talk soon,  
[REDACTED]

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED] [Aamijwaaang Environment](#)  
**Subject:** Notice of Study Commencement- 2022 Storage Enhancement  
**Date:** Thursday, July 29, 2021 2:25:00 PM  
**Attachments:** [Aamijwaaang NoC 2022 Storage.pdf](#)

---

Good afternoon [REDACTED]

Hope this finds you well and enjoying the summer weather. My tomato plants were happy for that good thunderstorm we got today.

Further to my email on June 8, 2021, attached is the Enbridge/Stantec Notice of Study Commencement letter for the 2022 Storage Enhancement Project.

When the environmental report is complete, we will forward it onto you for your review. I have worked with Norm to get onto the agenda for the September 14 environmental committee meeting to discuss this project with the committee. Please let me know what you might need in terms of capacity funding for this project.

If you have any questions or concerns about the project, feel free to reach out to me.

Thanks,  
Lauren

**Lauren Whitwham**

Senior Advisor, Community & Indigenous Engagement, Eastern Region

Public Affairs, Communications & Sustainability

—  
ENBRIDGE INC.

TEL: 519-667-4100 x 5153545 | CELL: 519-852-3474 | [lauren.whitwham@enbridge.com](mailto:lauren.whitwham@enbridge.com)  
109 Commissioners Road West, London, ON N6A4P1



July 29, 2021

[REDACTED]  
Environment Coordinator  
Aamjiwnaang First Nation  
978 Tashmo Avenue  
Sarnia ON N7T 7H5  
Sent Via Email: [REDACTED]@aamjiwnaang.ca

**Reference: Enbridge Gas Inc. Proposed 2022 Storage Enhancement Project,  
Notice of Study Commencement**

Dear [REDACTED]

I am writing to advise you of the *2022 Storage Enhancement Project* (the Project) and to begin engagement on the proposed work.

To enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County, Enbridge Gas Inc. (Enbridge Gas) is proposing to undertake construction at the Kimball-Colinville Storage Pool – a designated storage area (DSA) as defined in s. 36.1(1)(a) of the *Ontario Energy Board Act* (OEB Act). The Project will involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, a 85 metre Nominal Pipe Size (NPS) 10 inch lateral pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

Attached please find a map detailing the Project location.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. 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)".

The Study will examine and determine, from an environmental and socio-economic perspective, the impacts of the Project. Once the Environmental Report is complete, Enbridge Gas will apply to the Ontario Energy Board (OEB) for approval to construct. This Study is being conducted in accordance with the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (2016).

It is anticipated that the Environmental Report for the study will be completed in Summer 2021, after which Enbridge Gas will file an application for the Project to the OEB. The OEB's review and approval is required before the proposed Project can proceed. If approved, the Project is currently anticipated to begin Spring 2022.

July 23, 2021

Page 2 of 2

Reference: Enbridge Gas Inc. Proposed 2022 Storage Enhancement Project,  
Notice of Study Commencement

As an Indigenous community with a potential interest in the vicinity of the pipeline route, we are inviting Aamjiwnaang First Nation to provide comments and feedback regarding the Project. We are also seeking information about areas that may be culturally significant to your community in the vicinity of the pipeline route and information about potential effects that the Project may have on asserted or established Aboriginal and treaty rights. Stantec is presently compiling an environmental, socio-economic, and archaeological/cultural heritage inventory of the Project location. We would welcome your feedback and comments regarding the proposed Project as we undertake the requisite environmental study.

As you know, Enbridge Gas is committed to meaningful engagement with Indigenous communities. As such, we would be interested in holding a conference call with the Aamjiwnaang First Nation consultation office to share Project related information, should you wish. If you have any questions, would like to provide feedback or share knowledge or would be interested in setting up a briefing on this Project please feel free to contact me directly.

We kindly request that any initial input and comments regarding the Project are provided by your community by **August 13, 2021**. Please let us know if you are unable to respond by this date but are interested in participating in the consultation and engagement process for the Project.

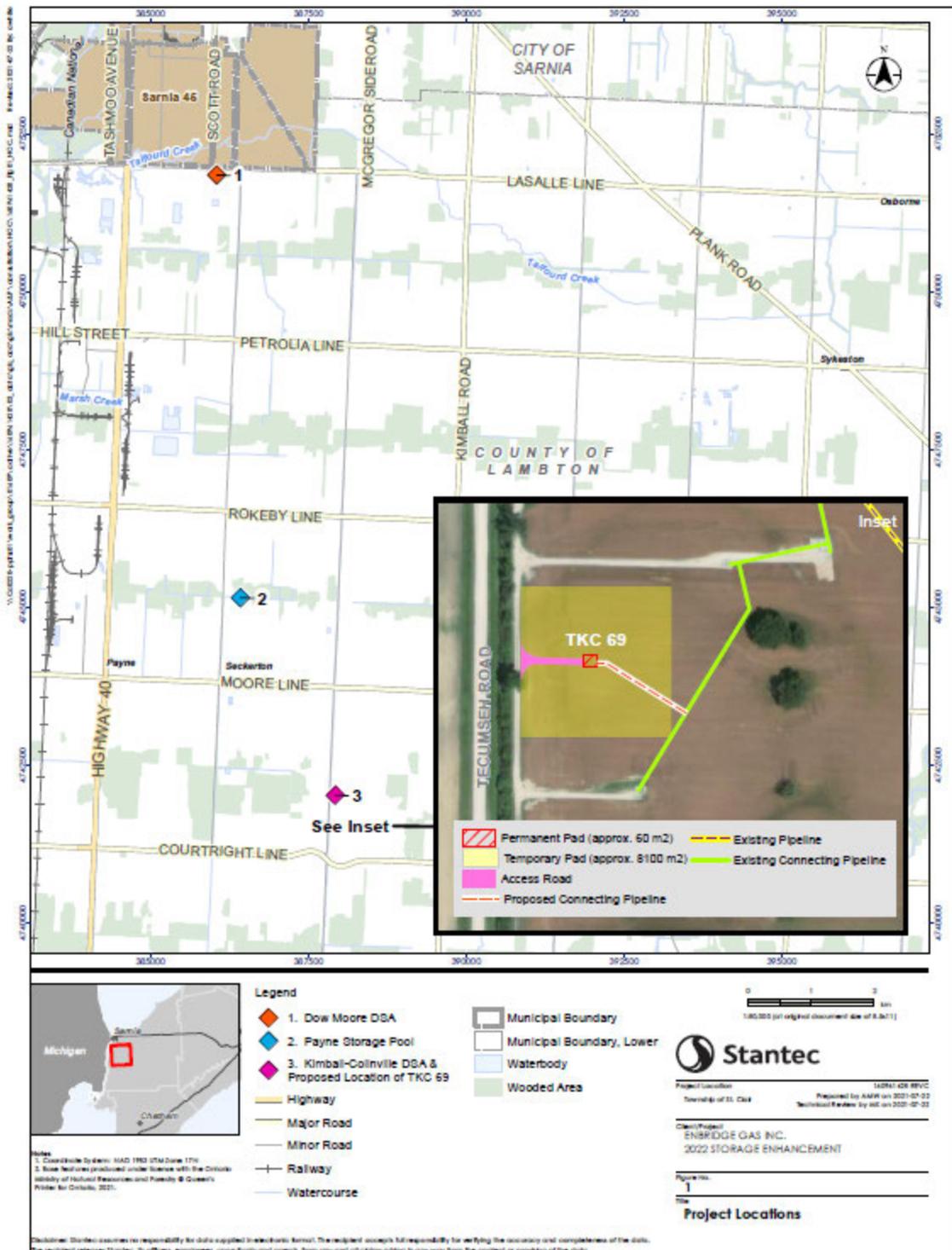
If you have any questions or want to discuss the Project, please feel free to contact me at any time. We look forward to engaging with you to ensure your community's interests are being considered and represented.

Respectfully,

  
**Lauren Whitwham**  
ENBRIDGE GAS INC.  
Sr. Advisor, Community & Indigenous Engagement  
Public Affairs and Communications  
519-852-3474  
Lauren.Whitwham@enbridge.com

Attachment: Map of Project Area

c. Evan Tomek, Sr. Analyst, Environment, Enbridge Gas  
Mark Knight, Project Manager, Stantec Consulting Ltd.



**From:** Lauren Whitwham <[Lauren.Whitwham@enbridge.com](mailto:Lauren.Whitwham@enbridge.com)>  
**Sent:** Tuesday, August 24, 2021 9:14 AM  
**To:** Aamjiwnaang Environment <[environment@aamjiwnaang.ca](mailto:environment@aamjiwnaang.ca)>  
**Subject:** Move our Sept 14 agenda spot

Hi [REDACTED]

Looking forward to meeting you in person this afternoon.

I was looking ahead at our September 14 spot on the Environmental Committee agenda and I was hoping we could move it a couple of weeks. We won't have the environmental report for Dawn Corunna ready until September 20 and would like to speak to parts within it.

Is there a later week in September or early October to attend a meeting?

Thanks,  
Lauren

**Lauren Whitwham**

Senior Advisor, Community & Indigenous Engagement, Eastern Region

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**From:** Aamjiwnaang Environment <[environment@aamjiwnaang.ca](mailto:environment@aamjiwnaang.ca)>  
**Sent:** Tuesday, August 24, 2021 9:16 AM  
**To:** Lauren Whitwham  
**Subject:** [External] RE: Move our Sept 14 agenda spot

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

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There are openings on Tuesday September 21, 2021 or Tuesday October 5, 2021.

Let me know which date works best for you?

Thank you,

[REDACTED]

---

**From:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>  
**Sent:** Tuesday, August 24, 2021 11:04 AM  
**To:** Aamjiwnaang Environment <environment@aamjiwnaang.ca>  
**Subject:** Re: Move our Sept 14 agenda spot

Thanks so much

October 5 would work best with us and having information on hand to speak about.

Thanks 

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**From:** [Aamjiwnaang Environment](#)  
**To:** [Lauren Whitwham](#)  
**Subject:** [External] RE: Move our Sept 14 agenda spot  
**Date:** Tuesday, August 24, 2021 11:07:57 AM

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

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You're welcome Lauren,

I will move you to October 5, 2021.



**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Cc:** [Aamjiwnaang Environment](#)  
**Subject:** Environmental Report: 2022 Storage Enhancement Project  
**Date:** Thursday, August 26, 2021 11:08:15 AM  
**Attachments:** [Environmental Review 2022 Storage Enhancement AFN.pdf](#)

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Good morning [REDACTED]

The Environmental Report for the 2022 Storage Enhancement Project is now complete and available for your review.

We let you know about this project on June 6, 2021. This project will involve:

- drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- installation of approximately 85 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

We are happy to provide capacity funding for the environmental report review.

As the report is too large to email over, please find the information on how to access the Environmental Report here. If you require a printed copy, please let me know and we can ensure it gets couriered over to you.

[Link to ER](#)

**Login Information**

**Browser link:** <https://tmppsftp.stantec.com>

**FTP Client Hostname:** tmppsftp.stantec.com **Port:** 22 (can be used within an FTP client to view and transfer files and folders; e.g., FileZilla)

**Login name:** s0902121436

**Password:** 9518079

We have a two other projects that are at the same stage and will provide you with information on three projects when we meet on October 5.

Please let me know if you have any questions or concerns.

Thanks so much,  
Lauren



August 23, 2021

[REDACTED]  
Environment Coordinator  
Aamjiwnaang First Nation  
978 Tashmoo Avenue  
Sarnia, ON N7T 7H5  
[REDACTED]@aamjiwnaang.ca

**Reference: Enbridge Gas Inc. – 2022 Storage Enhancement Project**

Dear [REDACTED]

Enbridge Gas Inc. (Enbridge Gas) has identified the need to enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County. The 2022 Storage Enhancement Project (the Project) will involve increasing the Maximum Operating Pressure (MOP) of the Dow Moore and Payne Storage Pools – two designated storage areas (DSAs) as defined in s.36.1(1)(a) of the *Ontario Energy Board Act*. To complete wellhead upgrades and pressure testing of wells at the Payne Storage Pool Project location, temporary steel plates will be used upon access to the sites' natural gas storage wells. No other temporary or permanent access road or structure will be installed at the Dow Moore Storage Pool Project location.

The Project will also involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, approximately 85 metres of Nominal Pipe Size (NPS) 10-inch pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

Enbridge Gas retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. The Environmental Study is intended to 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)".

August 23, 2021  
[REDACTED]

Page 2 of 2

**Reference:** Enbridge Gas Inc. – 2022 Storage Enhancement Project

An Environmental Report (ER), summarizing the results of the Environmental Study, is enclosed for your review. Please forward any comments you may have regarding the ER and Project to the undersigned. Your comments would be appreciated by **October 4, 2021**. We look forward to engaging with you to ensure your community's interests are being considered and represented.

Respectfully,  
[REDACTED]

**Lauren Whitwham**  
*ENBRIDGE GAS INC.*  
Sr. Advisor, Community & Indigenous Engagement  
Public Affairs and Communications  
519-852-3474  
Lauren.Whitwham@enbridge.com

Attachment: 2022 Storage Enhancement Project

c. Evan Tomek, Sr. Analyst, Environment, Enbridge Gas  
Mark Knight, Project Manager, Stantec Consulting Ltd.

**From:** [REDACTED]  
**To:** [Lauren Whitwham](#)  
**Subject:** [External] FW: Peer Review - Enbridge 2022 Storage Enhancement Project for new Kimball-Colinville well TKC 69  
**Date:** Tuesday, October 5, 2021 3:51:39 PM  
**Attachments:** [image001.png](#)  
[2022 Storage Enhancement Peer Review Memo \(27Sept2021\).pdf](#)  
[2022 Storage Enhancement Table 1 Peer Review Comments.docx](#)  
[Figure 1 TA8995 02 KimballColinvilleStudyArea.pdf](#)  
[2022 Storage Enhancement Table 2 St Clair OP and SCRCA review.pdf](#)

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Hi Lauren,

We have another cost associated with the peer review of the storage enhancement project. Can you look into getting them covered as well. I will send over the cost shortly. Attached are our comments for your review.

[REDACTED]

---

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Subject:** RE: Peer Review - Enbridge 2022 Storage Enhancement Project for new Kimball-Colinville well TKC 69  
**Date:** Tuesday, October 5, 2021 4:28:00 PM  
**Attachments:** [image001.png](#)

We are happy to cover off the cost for the Storage Enhancement ER review as well.

I will put both into the same letter once I receive the costs for the Storage Enhancement.



## Storage Enhancement - Lateral Pipelines

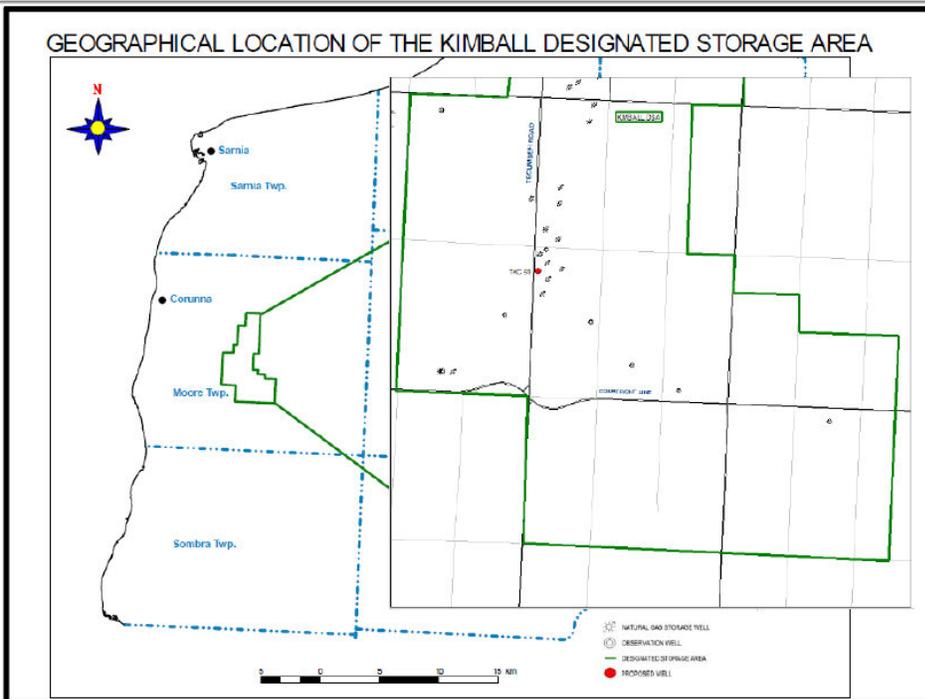
### 2022 Storage Enhancement Project

- Involves drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- TKC 69 will require approximately 85 metres of 10" lateral pipeline to connect to the main Kimball-Colinville gathering line.

### Coveny and Kimball-Colinville Well Drilling Project

- Involves drilling a new injection/withdrawal well (TKC 68) in the LEG Kimball-Colinville Storage Pool in May/June 2022
- TKC 68 will require approximately 120 metres of 10" lateral pipeline to connect to the main Kimball-Colinville gathering line.

6



7

## 2022 Storage Enhancement



Species at Risk Potentially Present in Project Area:

### **2 Species of Conservation Concern**

- Short-eared Owl
- Wood Thrush

### **6 SARS**

- Spoon-leaved Moss
- Bobolink
- Eastern Meadowlark
- Butler's Gartersnake
- Spiny Softshell

8

---

## Mitigation for SARS and SOCC



- A field investigation for 2022 Storage Enhancement has occurred and TKC 69 is located in a rotational agricultural field and is not suitable SAR habitat.
- Species of Conservation Concern and SAR are not anticipated to be impacted by project activities.
- General mitigation and protective measures for potential impacts on wildlife, wildlife habitat, and SAR are:
  - Speed limits lowered where field investigations identify specific wildlife concerns.
  - Equipment and vehicles yield to wildlife.
  - Fencing erected around deep excavations to prevent wildlife entrapment.
  - The contractor 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.

10

Attachment 2.1

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Cc:** [Matthew Cheqahno](#); [Wilkinson, Jonathon \(ENDM\)](#); [Ashe, Rosalind \(ENDM\)](#)  
**Subject:** Project Notification: Lateral pipelines  
**Date:** Tuesday, June 8, 2021 3:56:00 PM  
**Attachments:** [UGS Well Work Notification Letter - Kettle and Stony Point First Nation.pdf](#)

---

Good afternoon [REDACTED]

Before I get into the business part of this email, I wanted to express my deepest sympathies and sorrows to the survivors, families, and Kettle and Stony Point First Nation community members affected by the devastating discovery of the unmarked graves at the former residential school in British Columbia. I can only imagine that the discovery has resurfaced memories, emotions and pain for so many in your Nation. Reconciliation is about sharing the truth, building understanding and supporting those who suffered, and continue to suffer, through this shared reality. To stay silent is the same behavior that allowed these 215 children to be lost to history for so long. I am continuing to educate myself and my children on the residential school system, and consistently look for opportunities, as a visitor to these lands, to learn more about the Indigenous Nations who are stewards of these places and spaces.

Enbridge Gas is currently conducting a review of its gas storage and reservoir system and has identified the potential need to enhance some assets in order to maintain the safe and reliable operation of Enbridge Gas's systems and continue to meet the firm demands of Enbridge Gas's customers.

We currently have two proposed projects we would like to discuss with you as we are interested in your community's feedback, including any suggestions or proposals on avoiding, minimizing or mitigating any potential adverse impacts these Projects may have on your Aboriginal or treaty rights. Please find attached the Project Notification letter which also contains the maps within it.

From our conversations in December 2020, the Consultation Committee was being established in early 2021. I look forward to connecting with you and the committee on these projects. Please let me know what works best for you. Alternatively, if you have no concerns with these projects, please let me know.

I look forward to hearing back from you.

Many thanks and hope you are well,  
Lauren

**Lauren Whitwham**

Senior Advisor, Community & Indigenous Engagement, Eastern Region

Public Affairs, Communications & Sustainability



Enbridge Inc  
109 Commissioners Road West,  
London, ON  
N6A4P1

Ms. [REDACTED]  
Kettle & Stony Point First Nation  
6247 Indian Lane  
Lambton Shores, ON  
N0N 1J1

June 8, 2021

Dear [REDACTED]

**Re: 2021-2024 Enbridge Gas Storage Well & Reservoir Projects**

Enbridge Gas Inc. (Enbridge Gas) is currently conducting a review of its gas storage and reservoir system and has identified the potential need to replace and/or enhance some assets in order to maintain the safe and reliable operation of Enbridge Gas's systems and continue to meet the firm demands of Enbridge Gas's customers.

The following two (2) proposed projects may include all or some of the following:

**2021/2022 Storage Enhancement Project Part 2**

- Involves drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- Involves the installation of approximately 125 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

**Coveny and Kimball-Colinville Well Drilling Project**

- Involves drilling a new injection/withdrawal well (TKC 68) in the LEG Kimball-Colinville Storage Pool in May/June 2022
- No lateral pipeline associated with TCV7
- TKC 68 will require approximately 120 metres of 10" lateral pipeline to connect to the main Kimball-Colinville gathering line.

Collectively referred to as the "**Projects**".



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109 Commissioners Road West,  
London, ON  
N6A4P1

The area in which these Projects are to be constructed is rural agricultural and is either owned by Enbridge Gas or Enbridge Gas has the right to enter through a Gas Storage Lease. It is expected that the majority of adverse environmental and/or socio-economic effects will be construction related. These effects are expected to be temporary and transitory. The Projects will also be located underground once construction is complete, further limiting the potential for any long-term effects.

As part of the planning process for each of these Projects, Enbridge Gas has and will retain an external consulting firm to undertake an Environmental Study of the construction and operation of the Project. The Environmental Study as required by the Ontario Energy Board's (OEB) *"Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)"*.

Enbridge Gas' preliminary work on the Projects has identified the following potential authorizations:

Provincial approvals:

- Ontario Energy Board
- Ministry of Natural Resources and Forestry
- Ministry of Environment, Conservation and Parks
- Ministry of Heritage, Sport, Tourism and Culture Industries

Municipal approvals:

- County of Lambton
- Township of St. Clair

Other approvals:

- St. Clair Region Conservation Authority
- Hydro One Networks Inc.

We would like to consult with your community on these proposed Projects. We are interested in your community's feedback, including any suggestions or proposals on avoiding, minimizing or mitigating any potential adverse impacts these Projects may have on your Aboriginal or treaty rights.

Enbridge acknowledges that capacity support may be required to enable you to engage in timely technical reviews of documents, participation in field work associated with the Projects, and to allow for meaningful consultation. Consistent with our approach on all projects, we are prepared to provide capacity funding to support your team's engagement in relation to the Projects.



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London, ON  
N6A4P1

Enbridge Gas has been delegated the procedural aspects for consultation by the Ministry of Energy on behalf of Ontario. Ministry officials are also available should you wish to contact them directly with any questions or concerns. Please contact:

For 2021/2022 Storage Enhancement Project Part 2,

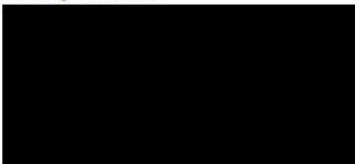
Rosalind Ashe, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[rosalind.ashe@ontario.ca](mailto:rosalind.ashe@ontario.ca)

For Coveny and Kimball-Colinville Well Drilling Project,

Jonathon Wilkinson, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[Jonathon.Wilkinson@ontario.ca](mailto:Jonathon.Wilkinson@ontario.ca)

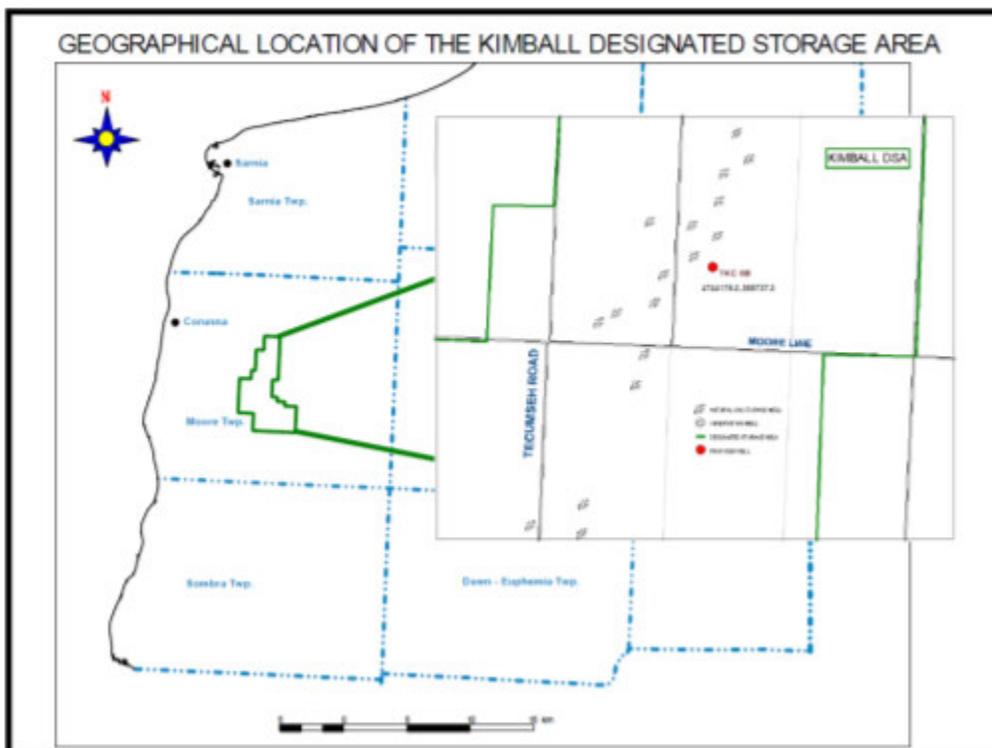
We would like to set up a meeting to discuss these Projects with you to provide you with an opportunity to express any questions or concerns you have. Please feel free to contact me at [lauren.whitwham@enbridge.com](mailto:lauren.whitwham@enbridge.com) or 519-852-3474 so we can set up a time to meet. You may also provide me with any feedback you may have regarding the Projects in writing by July 7, 2021, if possible.

Many thanks,



Lauren Whitwham  
Senior Advisor, Community & Indigenous Engagement, Eastern Region  
Enbridge Inc.  
519-852-3474

### Coveny and Kimball-Colinville Well Drilling Project



**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Subject:** Enbridge Projects: Dawn Corunna and Gathering Lines  
**Date:** Monday, July 5, 2021 2:52:00 PM  
**Attachments:** [Enbridge Gas Dawn Corunna Project.msg](#)  
[Project Notification Lateral pipelines.msg](#)

---

Hi [REDACTED]

Hope this finds you well.

I would like to touch base with you to set up a time to meet on Enbridge's Dawn Corunna and Storage Gathering Lines projects. We would like to begin the process to discuss and obtain your community's feedback, including any suggestions or proposals on mitigating, avoiding or accommodating any potential impacts to Aboriginal or treaty rights. I know that when we spoke in December, you had mentioned that the consultation committee would be pulled together in the first part of 2021 so I hope to find a time that works for the committee. If you could let me know of some dates/times that would be helpful.

Additionally, I would enjoying coming out to meet you in person now that the lockdown is lifting. I have volunteered at the Senior's Christmas lunch at the school a number of times but I'm not aware of restaurants in the area. I'd be happy to take you out for lunch or coffee if you are comfortable with the meeting. Let me know what works best for you as comfort levels are different for each person. A socially distant coffee would work just great as well.

I look forward to hearing back from you with some dates to discuss the projects (and a potential in person meeting)

All the best,  
Lauren

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Subject:** Notice of Study Commencement- 2022 Storage Enhancement  
**Date:** Thursday, July 29, 2021 2:30:00 PM  
**Attachments:** [Kettle and Stony Point NoC 2022 Storage.pdf](#)

---

Good afternoon [REDACTED],

Hope this finds you well and enjoying the summer weather.

Further to my email on June 8, 2021, attached is the Enbridge/Stantec Notice of Study Commencement letter for the 2022 Storage Enhancement Project.

When the environmental report is complete, we will forward it onto you for your review. We would like to set up a meeting for early September to discuss this project as well as a couple others. If you could pass along times that work with the Consultation Committee, that would be fantastic.

Please let me know what you might need in terms of capacity funding for this project.

If you have any questions or concerns about the project, feel free to reach out to me.

Thanks,  
Lauren



July 29, 2021

[REDACTED]  
Environment Coordinator  
Chippewas of Kettle and Stony Point First Nation  
6248 Indian Lane  
Lambton County ON N0N 1J2  
Sent Via Email: [REDACTED]@kettlepoint.org

**Reference: Enbridge Gas Inc. Proposed 2022 Storage Enhancement Project,  
Notice of Study Commencement**

Dear [REDACTED]

I am writing to advise you of the *2022 Storage Enhancement Project* (the Project) and to begin engagement on the proposed work.

To enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County, Enbridge Gas Inc. (Enbridge Gas) is proposing to undertake construction at the Kimball-Colinville Storage Pool – a designated storage area (DSA) as defined in s. 36.1(1)(a) of the *Ontario Energy Board Act* (OEB Act). The Project will involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, a 85 metre Nominal Pipe Size (NPS) 10 inch lateral pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

Attached please find a map detailing the Project location.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. 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)".

The Study will examine and determine, from an environmental and socio-economic perspective, the impacts of the Project. Once the Environmental Report is complete, Enbridge Gas will apply to the Ontario Energy Board (OEB) for approval to construct. This Study is being conducted in accordance with the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (2016).

It is anticipated that the Environmental Report for the study will be completed in Summer 2021, after which Enbridge Gas will file an application for the Project to the OEB. The OEB's review and approval is required before the proposed Project can proceed. If approved, the Project is currently anticipated to begin Spring 2022.

July 23, 2021

Page 2 of 2

Reference: Enbridge Gas Inc. Proposed 2022 Storage Enhancement Project,  
Notice of Study Commencement

As an Indigenous community with a potential interest in the vicinity of the pipeline route, we are inviting Chippewas of Kettle and Stony Point First Nation to provide comments and feedback regarding the Project. We are also seeking information about areas that may be culturally significant to your community in the vicinity of the pipeline route and information about potential effects that the Project may have on asserted or established Aboriginal and treaty rights. Stantec is presently compiling an environmental, socio-economic, and archaeological/cultural heritage inventory of the Project location. We would welcome your feedback and comments regarding the proposed Project as we undertake the requisite environmental study.

As you know, Enbridge Gas is committed to meaningful engagement with Indigenous communities. As such, we would be interested in holding a conference call with the Chippewas of Kettle and Stony Point First Nation consultation office to share Project related information, should you wish. If you have any questions, would like to provide feedback or share knowledge or would be interested in setting up a briefing on this Project please feel free to contact me directly.

We kindly request that any initial input and comments regarding the Project are provided by your community by **August 13, 2021**. Please let us know if you are unable to respond by this date but are interested in participating in the consultation and engagement process for the Project.

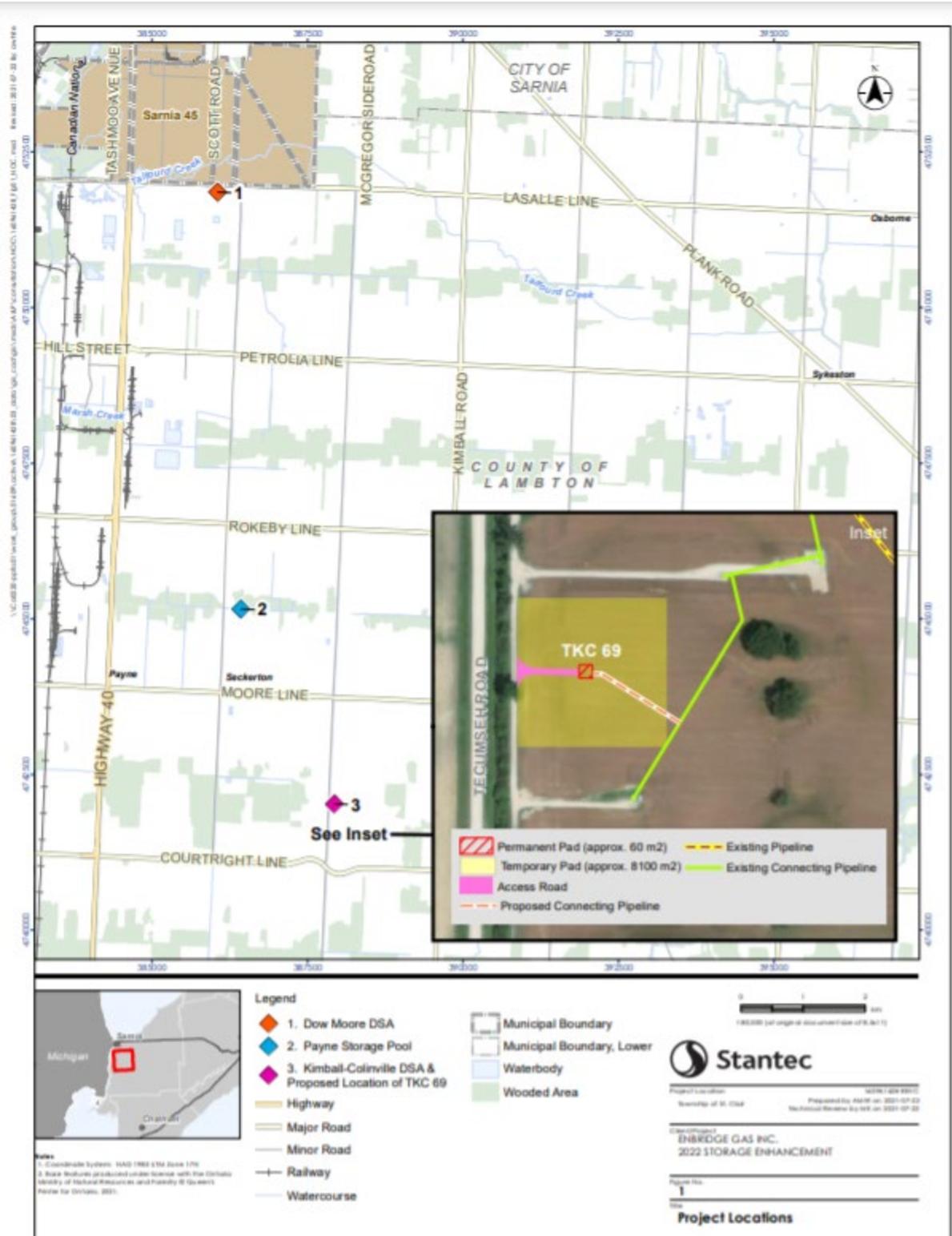
If you have any questions or want to discuss the Project, please feel free to contact me at any time. We look forward to engaging with you to ensure your community's interests are being considered and represented.

Respectfully,

Lauren Whitwham  
ENBRIDGE GAS INC.  
Sr. Advisor, Community & Indigenous Engagement  
Public Affairs and Communications  
519-852-3474  
lauren.whitwham@enbridge.com

Attachment: Map of Project Area

c. Evan Tomek, Sr. Analyst, Environment, Enbridge Gas  
Mark Knight, Project Manager, Stantec Consulting Ltd.



---

**From:** [REDACTED]@kettlepoint.org>  
**Sent:** Monday, August 9, 2021 8:52 AM  
**To:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>  
**Subject:** [External] RE: Notice of Study Commencement- 2022 Storage Enhancement

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Good morning Lauren

I would like to connect with you on the details in your email. For now I will propose September 2, 3 or 9.

Thank you.

[REDACTED]

---

**From:** Lauren Whitwham [mailto:Lauren.Whitwham@enbridge.com]  
**Sent:** August-11-21 10:41 AM  
**To:** [REDACTED]@kettlepoint.org>  
**Subject:** RE: Notice of Study Commencement- 2022 Storage Enhancement

Hi Valerie,

Thanks for the note and I hope that summer is treating you well.

I'd be happy to connect on September 9<sup>th</sup>. The kids will be back in school then and it will be quieter here.

I would like to speak with you about the 2022 Storage Enhancement project as well as the Dawn Corunna Project. Both are currently in the Environmental Review portion and will be filed with the OEB in the fall.

What time works best for you? I am available at any point.

Thanks,  
Lauren

---

**From:** [REDACTED]@kettlepoint.org>  
**Sent:** Wednesday, August 11, 2021 11:36 AM  
**To:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>  
**Subject:** [External] RE: Notice of Study Commencement- 2022 Storage Enhancement

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

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Hello Lauren

September 9 still looks good. Would you be able to accommodate 2:00pm?  
Thank you.

---

[REDACTED]

---

**From:** Lauren Whitwham [mailto:Lauren.Whitwham@enbridge.com]  
**Sent:** August-11-21 12:31 PM  
**To:** [REDACTED]@kettlepoint.org>  
**Subject:** RE: Notice of Study Commencement- 2022 Storage Enhancement

That works perfectly.

Did you want to do it via phone, in person or virtual. . . so many options now.

---

**From:** [REDACTED]@kettlepoint.org>  
**Sent:** Wednesday, August 11, 2021 1:21 PM  
**To:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>  
**Subject:** [External] RE: Notice of Study Commencement- 2022 Storage Enhancement

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

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It would be nice in person. Let's say that, but if things are rougher than now, lets go with phone. My computer doesn't have audio right now, but I'm working on it.

[REDACTED]

---

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Subject:** RE: Notice of Study Commencement- 2022 Storage Enhancement  
**Date:** Wednesday, August 11, 2021 1:56:00 PM

Perfect. Sounds great.

I'll send a meeting invite to get it into our calendars.

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Bcc:** [Lauren Whitwham](#)  
**Subject:** Environmental Report: 2022 Storage Enhancement Project  
**Date:** Thursday, August 26, 2021 11:00:00 AM  
**Attachments:** [Environmental Report 2022 Storage Enhancement KSPFN.pdf](#)

---

Good morning [REDACTED]

The Environmental Report for the 2022 Storage Enhancement Project is now complete and available for your review.

We let you know about this of this project on June 6, 2021. This project will involve:

- drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- installation of approximately 85 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

We are happy to provide capacity funding for the environmental report review.

As the report is too large to email over, please find the information on how to access the Environmental Report here. If you require a printed copy, please let me know and we can ensure it gets couriered over to you.

[Link to ER](#)

**Login Information**

**Browser link:** <https://tmppsftp.stantec.com>

**FTP Client Hostname:** tmppsftp.stantec.com **Port:** 22 (can be used within an FTP client to view and transfer files and folders; e.g., FileZilla)

**Login name:** s0902121436

**Password:** 9518079

We have a two other projects that are at the same stage and will provide you with information on three projects when we meet on September 9.

Please let me know if you have any questions or concerns.

Thanks so much,  
Lauren



August 23, 2021

[REDACTED]  
Environment Coordinator  
Chippewas of Kettle and Stony Point First Nation  
6248 Indian Lane  
Lambton County, ON N0N 1J2  
[REDACTED]@kettlepoint.org

**Reference: Enbridge Gas Inc. – 2022 Storage Enhancement Project**

Dear [REDACTED]

Enbridge Gas Inc. (Enbridge Gas) has identified the need to enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County. The 2022 Storage Enhancement Project (the Project) will involve increasing the Maximum Operating Pressure (MOP) of the Dow Moore and Payne Storage Pools – two designated storage areas (DSAs) as defined in s.36.1(1)(a) of the *Ontario Energy Board Act*. To complete wellhead upgrades and pressure testing of wells at the Payne Storage Pool Project location, temporary steel plates will be used upon access to the sites' natural gas storage wells. No other temporary or permanent access road or structure will be installed at the Dow Moore Storage Pool Project location.

The Project will also involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, approximately 85 metres of Nominal Pipe Size (NPS) 10-inch pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

Enbridge Gas retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. The Environmental Study is intended to 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)".

August 23, 2021  
[REDACTED]

Page 2 of 2

Reference: Enbridge Gas Inc. – 2022 Storage Enhancement Project

An Environmental Report (ER), summarizing the results of the Environmental Study, is enclosed for your review. Please forward any comments you may have regarding the ER and Project to the undersigned. Your comments would be appreciated by **October 4, 2021**. We look forward to engaging with you to ensure your community's interests are being considered and represented.

Respectfully,

[REDACTED]  
**Lauren Whitwham**  
*ENBRIDGE GAS INC.*  
Sr. Advisor, Community & Indigenous Engagement  
Public Affairs and Communications  
519-852-3474  
Lauren.Whitwham@enbridge.com

Attachment: 2022 Storage Enhancement Project

c. Evan Tomek, Sr. Analyst, Environment, Enbridge Gas  
Mark Knight, Project Manager, Stantec Consulting Ltd.

---

**From:** Lauren Whitwham [<mailto:Lauren.Whitwham@enbridge.com>]  
**Sent:** September-07-21 1:44 PM  
**To:** [REDACTED] [@kettlepoint.org](mailto:[REDACTED]@kettlepoint.org)>  
**Subject:** Over abundance of caution - Cancel in person meeting

Hi [REDACTED]

We had discussed meeting on Thursday to review some of the projects Enbridge has on the go. Due to an over abundance of caution, I won't be able to travel to meet you.

Could we do it via telephone or schedule something for next week?

I'd be happy to talk to you about the projects via the phone as well. If you'd still like to meet via phone and can do so on Thursday as scheduled, I'll email you the presentation tomorrow evening.

If you'd like to meet in person, I could do in person next Thursday September 16 or the Friday September 17.

Let me know what works best for you Valerie. I apologize for not coming out to see you. While I might be overreacting, I would never want to put you or your community at risk.

Thanks so much,  
Lauren

---

**From:** [REDACTED]@kettlepoint.org>

**Sent:** Tuesday, September 7, 2021 2:18 PM

**To:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>

**Subject:** [External] RE: Over abundance of caution - Cancel in person meeting

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

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No worries Lauren

Best be safe on both our parts. Was hoping for a more optimistic time but not sure if it'll improve before getting worse. So I'm told anyway.

Next week any day but Friday would work for me via phone. Let me know what works for you.

[REDACTED]

---

**From:** Lauren Whitwham [<mailto:Lauren.Whitwham@enbridge.com>]  
**Sent:** September-09-21 8:48 AM  
**To:** [REDACTED]@kettlepoint.org>  
**Subject:** RE: Over abundance of caution - Cancel in person meeting

Thanks for your understanding!

Looking ahead to next week, Wednesday afternoon (except from 3-4) or anytime Thursday afternoon work best for me? If we had an hour, it would be great to review our projects and get some of your input.

I'm just pulling together the presentation for you and will send it next week.

Let me know what works best for you and we can have a call.

Take care and stay safe!  
Lauren

---

**From:** [REDACTED]@kettlepoint.org>  
**Sent:** Thursday, September 9, 2021 8:53 AM  
**To:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>  
**Subject:** [External] RE: Over abundance of caution - Cancel in person meeting

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Lets go with Wednesday 2:00. Good?

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Subject:** RE: Over abundance of caution - Cancel in person meeting  
**Date:** Thursday, September 9, 2021 8:55:00 AM

---

Perfect! Thanks!

---

**From:** Lauren Whitwham [<mailto:Lauren.Whitwham@enbridge.com>]  
**Sent:** September-14-21 3:10 PM  
**To:** [REDACTED] [@kettlepoint.org](mailto:[REDACTED]@kettlepoint.org)>  
**Subject:** Deck for our call tomorrow

Hi [REDACTED]

Hope this finds you well.

Please find attached a deck for our phone call tomorrow. Talk to you at 2pm. I'll give your office a call unless I hear otherwise.

Thanks,  
Lauren

**Lauren Whitwham**

Senior Advisor, Community & Indigenous Engagement, Eastern Region

Public Affairs, Communications & Sustainability

From: [REDACTED] <[REDACTED]@kettlepoint.org>  
Sent: Wednesday, September 15, 2021 9:30 AM

---

To: Lauren Whitwham <Lauren.Whitwham@enbridge.com>  
Subject: [External] RE: Deck for our call tomorrow

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Good morning Lauren

I'm so sorry. I had a medical appointment for Friday but they needed to move it to today to assist a priority situation patient. I will need to postpone. Can we possibly do this any other day and time later this week?

Again, my apologies.

[REDACTED]

---

**From:** Lauren Whitwham [<mailto:Lauren.Whitwham@enbridge.com>]  
**Sent:** September-15-21 9:51 AM  
**To:** [REDACTED]@kettlepoint.org>  
**Subject:** RE: Deck for our call tomorrow

Thanks for the note [REDACTED] I totally understand and appreciate your note.

Would you be available on Friday? I have the entire day free if you have any time available.

I'm also available until 2pm on Monday September 20 with the exception of 11-12.

Let me know what works best for you.

Thanks,  
Lauren

---

**From:** [REDACTED]@kettlepoint.org>  
**Sent:** Thursday, September 16, 2021 9:01 AM  
**To:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>  
**Subject:** [External] RE: Deck for our call tomorrow

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Good morning Lauren

Thank you for your understanding. Friday, tomorrow would be fine but Monday is preferable. Could I suggest 10:00 Monday morning?

[REDACTED]

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Subject:** RE: Deck for our call tomorrow  
**Date:** Thursday, September 16, 2021 9:08:00 AM

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Sounds great. Have a great weekend and I'll speak with you on Monday.

Thanks!



## Storage Enhancement - Lateral Pipelines

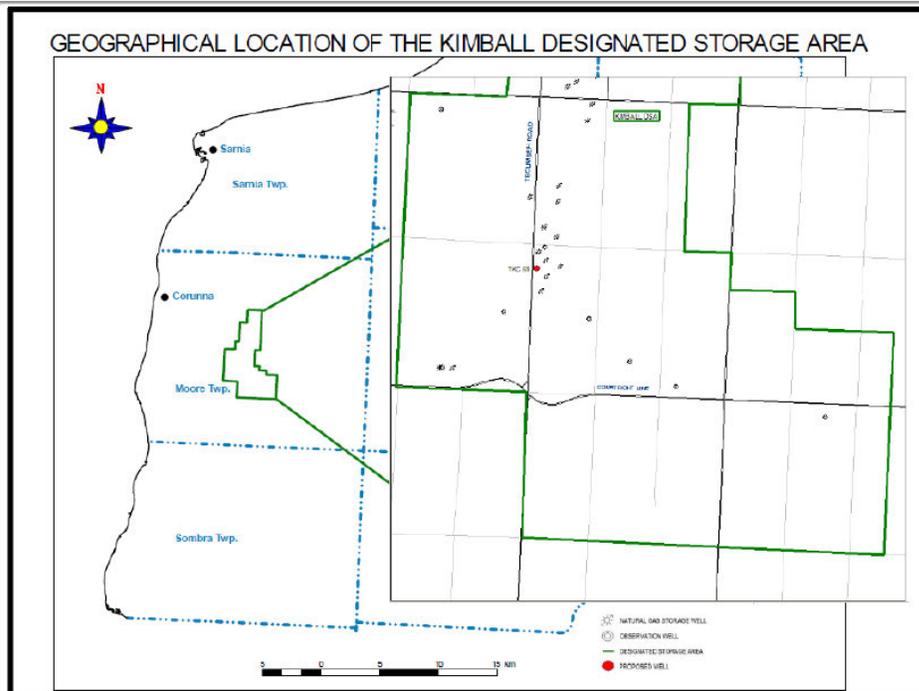
### 2022 Storage Enhancement Project

- Involves drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- Involves the installation of approximately 85 metres of 10” lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

### Coveny and Kimball-Colinville Well Drilling Project

- Involves drilling a new injection/withdrawal well (TKC 68) in the LEG Kimball-Colinville Storage Pool in May/June 2022
- TKC 68 will require approximately 120 metres of 10” lateral pipeline to connect to the main Kimball-Colinville gathering line.

13



14

## 2022 Storage Enhancement-Environmental aspects

Species at Risk Present in Project Area:

- 2 Species of Conservation Concern
  - Short-eared Owl
  - Wood Thrush
- 6 SARS
  - Spoon-leaved Moss
  - Bobolink
  - Eastern Meadowlark
  - Butler's Gartersnake
  - Spiny Softshell

15

## Mitigation for SARS and SOCC

- A field investigation to confirm the potential presence of wildlife, wildlife habitat, and SAR will be undertaken prior to construction. Species and site-specific mitigation and protective measures will be recommended based on the findings of the field investigation.
- General mitigation and protective measures for potential impacts on wildlife, wildlife habitat, and SAR are:
  - Speed limits should be lowered where field investigations identify specific wildlife concerns.
  - Equipment and vehicles should yield 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.

Species of Conservation Concern and SAR are not anticipated to be impacted by project activities.

17

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**From:** Kevin Berube  
**Sent:** Wednesday, September 15, 2021 9:12 AM  
**To:** [REDACTED]@cottfn.com>  
**Subject:** FW: Please Post Today

Hi [REDACTED]

I hope this finds you well and hope you had a good summer.

I want to forward this job posting to you to post in your community.

I would like to set up a time to come to your community in early October to update you and [REDACTED] on our projects coming up.

Meegwetch,  
Kevin Berube

---

**From:** Kevin Berube  
**Sent:** Sunday, September 19, 2021 11:53 AM  
**To:** [REDACTED]@cottfn.com>  
**Subject:** Project Notification 2022 Storage Enhancement

Boozhoo [REDACTED]

I hope this finds you well.

I've attached a notification letter for our 2022 Storage Enhancement Project. Work on the project is anticipated to begin in the spring of 2022. An environmental assessment was completed late summer. I will send you a link to review the assessment. Please invoice me accordingly for the time it takes to review the assessment. I will also make sure to let you know if any archaeological work will take place to invite monitor participation from your community.

I am making a trip in the second week of October to your region, let me know if you have any time available and I will make sure to stop in.

Any questions please do not hesitate to contact me.

Meegwetch,  
Kevin



Kevin Berube, Senior Advisor – Community and Indigenous Engagement  
500 Consumers Road, North York ON M2J 1P8  
416 495 6184 tel  
416 666 6759 cell  
kevin.berube@enbridge.com

September 19, 2021

[REDACTED]  
Consultation Coordinator  
Chippewas of the Thames  
328 Chippewa Road, R.R. #1  
Munsee ON N0L 1Y0  
Sent Via Email: [REDACTED]@cottfn.com

**Reference: Enbridge Gas Inc. Proposed 2022 Storage Enhancement Project,  
Notice of Study Commencement**

Dear [REDACTED]  
I am writing to advise you of the *2022 Storage Enhancement Project* (the Project) and to begin engagement on the proposed work.

To enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County, Enbridge Gas Inc. (Enbridge Gas) is proposing to undertake construction at the Kimball-Colinville Storage Pool – a designated storage area (DSA) as defined in s. 36.1(1)(a) of the *Ontario Energy Board Act* (OEB Act). The Project will involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, a 85 metre Nominal Pipe Size (NPS) 10 inch lateral pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

I will send a map detailing the Project location.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. 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)".

The Study will examine and determine, from an environmental and socio-economic perspective, the impacts of the Project. Once the Environmental Report is complete, Enbridge Gas will apply to the Ontario Energy Board (OEB) for approval to construct. This Study is being conducted in accordance with the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (2016).

It is anticipated that the Environmental Report for the study will be completed late Summer 2021, after which Enbridge Gas will file an application for the Project to the OEB. The OEB's review and approval is required before the proposed Project can proceed. If approved, the Project is currently anticipated to begin Spring 2022.

September 19, 2021

Page 2 of 2

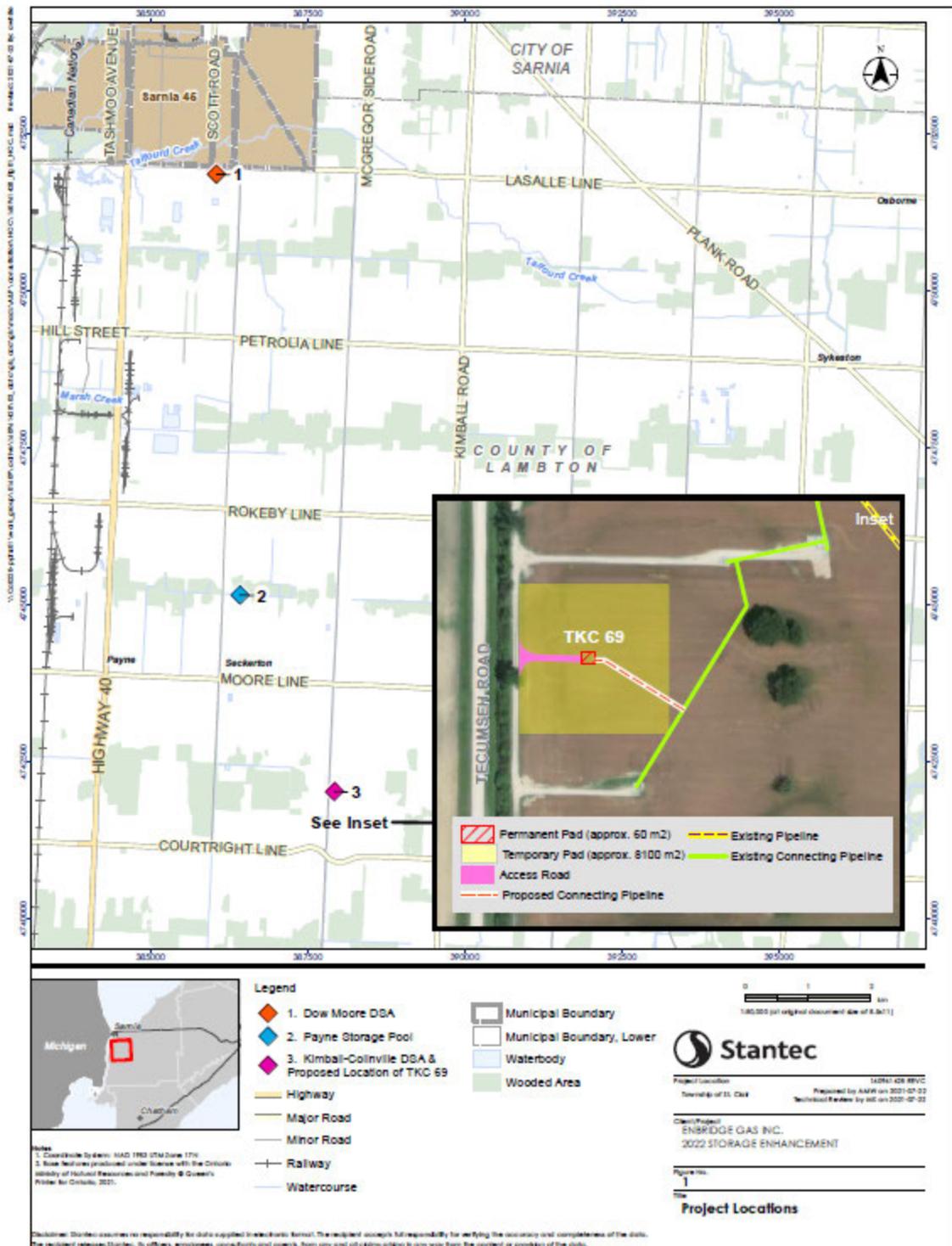
Reference: Enbridge Gas Inc. Proposed 2022 Storage Enhancement Project,  
Notice of Study Commencement

As an Indigenous community with a potential interest in the vicinity of the pipeline route, we are inviting Chippewas of the Thames to provide comments and feedback regarding the Project. We are also seeking information about areas that may be culturally significant to your community in the vicinity of the pipeline route and information about potential effects that the Project may have on asserted or established Indigenous and treaty rights. Stantec is presently compiling an environmental, socio-economic, and archaeological/cultural heritage inventory of the Project location. We would welcome your feedback and comments regarding the proposed Project as we undertake the requisite environmental study. As you know, Enbridge Gas is committed to meaningful engagement with Indigenous communities. As such, we would be interested in holding a conference call with the Chippewas of the Thames consultation office to share Project related information, should you wish. If you have any questions, would like to provide feedback or share knowledge or would be interested in setting up a briefing on this Project please feel free to contact me directly.

We kindly request that any initial input and comments regarding the Project are provided by your community by **October 8, 2021**. Please let us know if you are unable to respond by this date but are interested in participating in the consultation and engagement process for the Project. If you have any questions or want to discuss the Project, please feel free to contact me at any time. We look forward to engaging with you to ensure your community's interests are being considered and represented.  
Respectfully,

**Kevin Berube**  
ENBRIDGE GAS INC.  
Sr. Advisor, Community & Indigenous Engagement  
Public Affairs and Communications  
416-666-6759  
[Kevin.Berube@enbridge.com](mailto:Kevin.Berube@enbridge.com)

c. Evan Tomek, Sr. Analyst, Environment, Enbridge Gas  
Mark Knight, Project Manager, Stantec Consulting Ltd.



---

From: [REDACTED]@cottfn.com>  
Sent: Monday, September 27, 2021 11:49 AM  
To: Kevin Berube <kevin.berube@enbridge.com>  
Subject: [External] RE: Project Notification 2022 Storage Enhancement

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

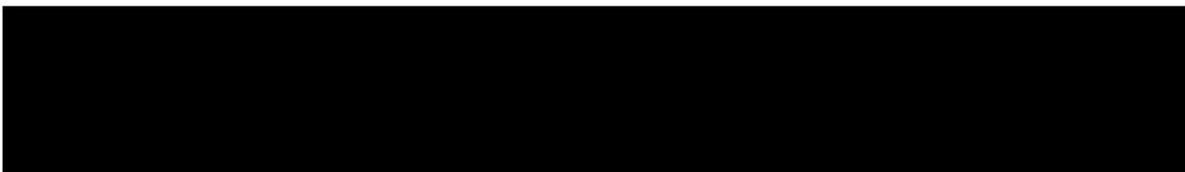
This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Hi Kevin,

I will review the notice as well as have our team review the EA. Unfortunately, Rochelle and I are scheduled for annual leave for the week of October 11<sup>th</sup> returning October 18<sup>th</sup>. Hope we work out a date to meet in the near future.

Thanks,

[REDACTED]



---

**From:** Kevin Berube  
**Sent:** Sunday, September 19, 2021 12:00 PM  
**To:** [REDACTED]@cottfn.com>  
**Subject:** Link to ER 2022 SE Project

Boozhoo [REDACTED]

The Environmental Report for the 2022 Storage Enhancement Project is now complete and available for your review.

Pursuant to my earlier project notification, this project will involve:

- drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- installation of approximately 85 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

We are happy to provide capacity funding for the environmental report review.

As the report is too large to email over, please find the information on how to access the Environmental Report here. If you require a printed copy, please let me know and we can ensure it gets couriered over to you.

[Link to ER](#)

**Login Information**

**Browser link:** <https://tmpsftp.stantec.com>

**FTP Client Hostname:** tmpsftp.stantec.com **Port:** 22 (can be used within an FTP client to view and transfer files and folders; e.g., FileZilla)

**Login name:** s0902121436

**Password:** 9518079

We have a two other projects that are at the same stage and will provide you with information on three projects when we confirm our meeting in October.

Please let me know if you have any questions or concerns.

Meegwetch,  
Kevin

**From:** [Kevin Berube](#)  
**To:** [REDACTED]  
**Subject:** Notification for Upcoming Well Work  
**Date:** Tuesday, September 28, 2021 4:21:07 PM  
**Attachments:** [UGS Well Work Notification Letter - Chippewas of the Thames First Nation.pdf](#)

---

Hi [REDACTED]

I've attached information on upcoming well work in your region. I backed up the date for review of the 2022 Storage Enhancement project as I understand you and [REDACTED] will be taking much needed vacation in October. If you have any questions please don't hesitate to contact me. See you later in October.

Meegwetch,  
Kevin



Kevin Berube  
Kevin.Berube@enbridge.com  
(416)-888-67454

Enbridge  
500 Consumers Rd  
North York, ON  
Canada, M2J 1P8

Chippewas of the Thames First Nation  
320 Chippewa Road  
Muncey, ON  
N0L 1Y0

September 27, 2021

Dear [REDACTED]

**Re: 2021-2024 Enbridge Gas Storage Well & Reservoir Projects**

Enbridge Gas Inc. (Enbridge Gas) is currently conducting a review of its gas storage and reservoir system and has identified the potential need to replace and/or enhance some assets in order to maintain the safe and reliable operation of Enbridge Gas's systems and continue to meet the firm demands of Enbridge Gas's customers.

The following two (2) proposed projects may include all or some of the following:

**2021/2022 Storage Enhancement Project Part 2**

- Involves drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- Involves the installation of approximately 125 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

**Coveny and Kimball-Colinville Well Drilling Project**

- Involves drilling a new injection/withdrawal well (TKC 68) in the Kimball-Colinville Storage Pool in May/June 2022
- TKC 68 will require approximately 120 metres of 10" lateral pipeline to connect to the main Kimball-Colinville gathering line.

Collectively referred to as the "**Projects**".



Kevin Berube  
Kevin.Berube@enbridge.com  
(416)-866-87454

Enbridge  
500 Consumers Rd  
North York, ON  
Canada, M2J 1P8

The area in which these Projects are to be constructed is rural agricultural and is either owned by Enbridge Gas or Enbridge Gas has the right to enter through a Gas Storage Lease. It is expected that the majority of adverse environmental and/or socio-economic effects will be construction related. These effects are expected to be temporary and transitory. The Projects will also be located underground once construction is complete, further limiting the potential for any long-term effects.

As part of the planning process for each of these Projects, Enbridge Gas has and will retain an external consulting firm to undertake an Environmental Study of the construction and operation of the Project. The Environmental Study as required by the Ontario Energy Board's (OEB) *"Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)"*.

Enbridge Gas' preliminary work on the Projects has identified the following potential authorizations:

Provincial approvals:

- Ontario Energy Board
- Ministry of Natural Resources and Forestry
- Ministry of Environment, Conservation and Parks
- Ministry of Heritage, Sport, Tourism and Culture Industries

Municipal approvals:

- County of Lambton
- Township of St. Clair

Other approvals:

- St. Clair Region Conservation Authority
- Hydro One Networks Inc.

We would like to consult with your community on these proposed Projects. We are interested in your community's feedback, including any suggestions or proposals on avoiding, minimizing or mitigating any potential adverse impacts these Projects may have on your Aboriginal or treaty rights.

Enbridge acknowledges that capacity support may be required to enable you to engage in timely technical reviews of documents, participation in field work associated with the Projects, and to allow for meaningful consultation. Consistent with our approach on all projects, we are prepared to provide capacity funding to support your team's engagement in relation to the Projects.



Kevin Berube  
Kevin.Berube@enbridge.com  
(416)-666-67454

Enbridge  
500 Consumers Rd  
North York, ON  
Canada, M2J 1P8

Enbridge Gas has been delegated the procedural aspects for consultation by the Ministry of Energy on behalf of Ontario. Ministry officials are also available should you wish to contact them directly with any questions or concerns. Please contact:

For 2021/2022 Storage Enhancement Project Part 2,

Rosalind Ashe, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[rosalind.ashe@ontario.ca](mailto:rosalind.ashe@ontario.ca)

For Coveny and Kimball-Colinville Well Drilling Project,

Jonathon Wilkinson, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[Jonathon.Wilkinson@ontario.ca](mailto:Jonathon.Wilkinson@ontario.ca)

We would like to set up a meeting to discuss these Projects with you to provide you with an opportunity to express any questions or concerns you have. Please feel free to contact me at [kevin.berube@enbridge.com](mailto:kevin.berube@enbridge.com) or 416-666-6754 so we can set up a time to meet. You may also provide me with any feedback you may have regarding the Projects in writing by October 22, 2021, if possible.

Many thanks,



Kevin Berube  
Senior Advisor, Community & Indigenous Engagement, Eastern Region  
Enbridge Inc.  
416-666-6754



---

**From:** Kevin Berube <[kevin.berube@enbridge.com](mailto:kevin.berube@enbridge.com)>

**Sent:** October 18, 2021 2:04 PM

**To:** [REDACTED] <[\[REDACTED\]@cottfn.com](mailto:[REDACTED]@cottfn.com)>

**Subject:** Community Visit

Hi [REDACTED]

Are you in the office this Thursday? If so, would it be possible for me to come to your office to meet and provide some project updates? I can update you on the Dawn Corunna and 2022 Storage Enhancement projects. [REDACTED]

Let me know if Thursday works for you and I'll make arrangements to come out.

Meegwetch,  
Kevin

---

**From:** [REDACTED]@cottfn.com>  
**Sent:** Monday, October 18, 2021 2:13 PM  
**To:** Kevin Berube <kevin.berube@enbridge.com>  
**Subject:** [External] RE: Community Visit

**CAUTION: EXTERNAL EMAIL**

This email originated from outside Enbridge and could be a phish. Criminals can pretend to be anyone. Do not interact with the email unless you are 100% certain it is legitimate. Report any suspicious emails.

Unfortunately, I will not be in the office on Thursday due to the children having an appointment. However, I am free any other day. I would like to meet in person when the time allows. I would really like to set a time to review the relationship agreement. Let me know if you have any other dates in mind.

Thanks,

[REDACTED]

---

**From:** Kevin Berube <kevin.berube@enbridge.com>  
**Sent:** October 18, 2021 2:15 PM  
**To:** [REDACTED]@cottfn.com>  
**Subject:** RE: Community Visit

Hi [REDACTED]

---

I can make this Friday work if that works for you?

---

**From:** [REDACTED] <[REDACTED]@cottfn.com>  
**Sent:** Monday, October 18, 2021 3:44:07 PM  
**To:** Kevin Berube <[kevin.berube@enbridge.com](mailto:kevin.berube@enbridge.com)>  
**Subject:** [External] RE: Community Visit

**CAUTION: EXTERNAL EMAIL**

This email originated from outside Enbridge and could be a phish. Criminals can pretend to be anyone. Do not interact with the email unless you are 100% certain it is legitimate. Report any suspicious emails.

Hi Kevin,

Due to covid policy our staff rotate days with that being said **Monday, Tuesday or Thursdays** work for us. On another note just to give you a heads up you will need your proof of vaccination or a negative PCR Test.

Thank you,

[REDACTED]

---

**From:** Kevin Berube <[kevin.berube@enbridge.com](mailto:kevin.berube@enbridge.com)>  
**Sent:** October 18, 2021 5:54 PM  
**To:** [REDACTED] <[REDACTED]@cottfn.com>  
**Subject:** Re: Community Visit

I can meet with you next Tuesday if you're available.

Meegwetch [REDACTED]

Kevin

---

**From:** [REDACTED]  
**Sent:** October 19, 2021 11:16 AM  
**To:** Kevin Berube <[kevin.berube@enbridge.com](mailto:kevin.berube@enbridge.com)>  
**Subject:** RE: Community Visit

Hi Kevin,

---

We have a schedule conflict on Tuesday, sorry. Does Thursday work for you?

[REDACTED]

**From:** [REDACTED] <[\[REDACTED\]@cottfn.com](mailto:[REDACTED]@cottfn.com)>  
**Sent:** Tuesday, October 19, 2021 11:18 AM  
**To:** Kevin Berube <[kevin.berube@enbridge.com](mailto:kevin.berube@enbridge.com)>  
**Subject:** [External] RE: Community Visit

**CAUTION: EXTERNAL EMAIL**

This email originated from outside Enbridge and could be a phish. Criminals can pretend to be anyone. Do not interact with the email unless you are 100% certain it is legitimate. Report any suspicious emails.

Kevin,

I apologize for all the emails but just looking at our calendars, we were just booked for a meeting on Thursday October 28. Lets see if we can schedule something for week of November 1<sup>st</sup>.

[REDACTED]

---

**From:** Kevin Berube <[kevin.berube@enbridge.com](mailto:kevin.berube@enbridge.com)>  
**Sent:** October 19, 2021 11:56 AM  
**To:** [REDACTED] <[\[REDACTED\]@cottfn.com](mailto:[REDACTED]@cottfn.com)>  
**Subject:** RE: Community Visit

Hi [REDACTED]

I'm available to meet on Nov. 1, [REDACTED]  
[REDACTED]

Thanks,  
Kevin

**From:** [REDACTED]@cottfn.com>  
**Sent:** Tuesday, October 19, 2021 12:18 PM  
**To:** Kevin Berube <kevin.berube@enbridge.com>  
**Subject:** [External] RE: Community Visit

**CAUTION: EXTERNAL EMAIL**

This email originated from outside Enbridge and could be a phish. Criminals can pretend to be anyone. Do not interact with the email unless you are 100% certain it is legitimate. Report any suspicious emails.

Hi Kevin,

---

Let me see what I can do.. I feel that our director should be present at this meeting as well as [REDACTED] and we do have a new employee that I would like to introduce you to..

[REDACTED]

---

**From:** [REDACTED]@cottfn.com>  
**Sent:** Tuesday, October 19, 2021 2:35 PM  
**To:** Kevin Berube <kevin.berube@enbridge.com>  
**Subject:** [External] RE: Community Visit

**CAUTION: EXTERNAL EMAIL**

This email originated from outside Enbridge and could be a phish. Criminals can pretend to be anyone. Do not interact with the email unless you are 100% certain it is legitimate. Report any suspicious emails.

Hi Kevin,

The earliest we can meet would be Friday October 21<sup>st</sup> or Wednesday October 27 after 1 p.m.

[REDACTED]

**From:** Kevin Berube <[kevin.berube@enbridge.com](mailto:kevin.berube@enbridge.com)>

**Sent:** October 20, 2021 10:00 AM

**To:** [REDACTED] <[\[REDACTED\]@cottfn.com](mailto:[REDACTED]@cottfn.com)>

**Subject:** RE: Community Visit

Hi [REDACTED],

---

Let's shoot for Wednesday October 27 in the afternoon. I can drive out from Toronto in the morning.

See you then,  
Kevin

---

**From:** [REDACTED] <[\[REDACTED\]@cottfn.com](mailto:[REDACTED]@cottfn.com)>

**Sent:** Wednesday, October 20, 2021 10:04 AM

**To:** Kevin Berube <[kevin.berube@enbridge.com](mailto:kevin.berube@enbridge.com)>

**Subject:** [External] RE: Community Visit

**CAUTION: EXTERNAL EMAIL**

This email originated from outside Enbridge and could be a phish. Criminals can pretend to be anyone. Do not interact with the email unless you are 100% certain it is legitimate. Report any suspicious emails.

Hi Kevin,

Great, I will send out a meeting invite just to hold the place in our schedule. Do you know approximately what time? How does 1:30 p.m. work for you?

[REDACTED]

---

**From:** Kevin Berube

**Sent:** Wednesday, October 20, 2021 10:07 AM

**To:** [REDACTED]@cottfn.com>

**Subject:** RE: Community Visit

1:30pm would work. It'll take me about three hours to get there, road trip!

Thanks [REDACTED]

---

**From:** Kevin Berube  
**Sent:** Tuesday, June 22, 2021 9:50 AM  
**To:** [REDACTED] <environment@oneida.on.ca>  
**Subject:** 2021-22 Storage Enhancement Project

Boozhoo [REDACTED]

I hope this find you well. Looks like we're getting to a place where things can begin to look more normal. Once travel opens up I would like to get an opportunity to visit your community.

I wanted to follow up regarding a plan to connect with your leadership on upcoming projects. I'm thinking, as we're getting closer to opening up travel, would it make more sense to schedule a face to face visit with leadership once travel reopens? I can also bring informational flyers for community members who are interested in learning about what we're working on.

Let me know if this works and we'll keep in touch to confirm a date once travel does open up.

Meegwetch [REDACTED]

Kevin

**From:** Kevin Berube  
**Sent:** Sunday, September 19, 2021 11:50 AM  
**To:** [REDACTED] <environment@oneida.on.ca>  
**Subject:** 2022 SE Notification - Oneida

Boozhoo [REDACTED]

I hope this finds you well.

I've attached a notification letter for our 2022 Storage Enhancement Project. Work on the project is anticipated to begin in the spring of 2022. An environmental assessment was completed late summer. I will send you a link to review the assessment. Please invoice me accordingly for the time it takes to review the assessment. I will also make sure to let you know if any archaeological work will take place to invite monitor participation from your community.

I am making a trip in the second week of October to your area, let me know if you have any time available and I will make sure to stop in.

Any questions please do not hesitate to contact me.

Meegwetch,  
Kevin



Kevin Berube, Senior Advisor – Community and Indigenous Engagement  
500 Consumers Road, North York ON M2J 1P8  
416 495 6184 tel  
416 866 6759 cell  
kevin.berube@enbridge.com

September 19, 2021

[REDACTED]  
Consultation Coordinator  
Oneida Nation of the Thames  
Sent Via Email: environment@oneida.on.ca

**Reference: Enbridge Gas Inc. Proposed 2022 Storage Enhancement Project,  
Notice of Study Commencement**

Dear [REDACTED]

I am writing to advise you of the *2022 Storage Enhancement Project* (the Project) and to begin engagement on the proposed work.

To enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County, Enbridge Gas Inc. (Enbridge Gas) is proposing to undertake construction at the Kimball-Colinville Storage Pool – a designated storage area (DSA) as defined in s. 36.1(1)(a) of the *Ontario Energy Board Act* (OEB Act). The Project will involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, a 85 metre Nominal Pipe Size (NPS) 10 inch lateral pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

I will send a map detailing the Project location.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. 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)".

The Study will examine and determine, from an environmental and socio-economic perspective, the impacts of the Project. Once the Environmental Report is complete, Enbridge Gas will apply to the Ontario Energy Board (OEB) for approval to construct. This Study is being conducted in accordance with the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (2016).

It is anticipated that the Environmental Report for the study will be completed late Summer 2021, after which Enbridge Gas will file an application for the Project to the OEB. The OEB's review and approval is required before the proposed Project can proceed. If approved, the Project is currently anticipated to begin Spring 2022.

September 19, 2021

Page 2 of 2

Reference: Enbridge Gas Inc. Proposed 2022 Storage Enhancement Project,  
Notice of Study Commencement

As an Indigenous community with a potential interest in the vicinity of the pipeline route, we are inviting Oneida Nation to provide comments and feedback regarding the Project. We are also seeking information about areas that may be culturally significant to your community in the vicinity of the pipeline route and information about potential effects that the Project may have on asserted or established Indigenous and treaty rights. Stantec is presently compiling an environmental, socio-economic, and archaeological/cultural heritage inventory of the Project location. We would welcome your feedback and comments regarding the proposed Project as we undertake the requisite environmental study. As you know, Enbridge Gas is committed to meaningful engagement with Indigenous communities. As such, we would be interested in holding a conference call with the Oneida Nation of the Thames consultation office to share Project related information, should you wish. If you have any questions, would like to provide feedback or share knowledge or would be interested in setting up a briefing on this Project please feel free to contact me directly.

We kindly request that any initial input and comments regarding the Project are provided by your community by **October 8, 2021**. Please let us know if you are unable to respond by this date but are interested in participating in the consultation and engagement process for the Project. If you have any questions or want to discuss the Project, please feel free to contact me at any time. We look forward to engaging with you to ensure your community's interests are being considered and represented.  
Respectfully,

**Kevin Berube**  
*ENBRIDGE GAS INC.*  
Sr. Advisor, Community & Indigenous Engagement  
Public Affairs and Communications  
416-666-6759  
[Kevin.Berube@enbridge.com](mailto:Kevin.Berube@enbridge.com)

c. Evan Tomek, Sr. Analyst, Environment, Enbridge Gas  
Mark Knight, Project Manager, Stantec Consulting Ltd.

---

**From:** [REDACTED] <environment@oneida.on.ca>  
**Sent:** Monday, September 20, 2021 12:14 PM  
**To:** Kevin Berube <kevin.berube@enbridge.com>  
**Subject:** [External] RE: 2022 SE Notification - Oneida

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Hi Kevin,

I hope you are doing well,

Thank you I will make sure to review.

I have sometime on the Tuesday or Friday during that time if that works.

[REDACTED]

**From:** Kevin Berube  
**Sent:** Sunday, September 19, 2021 12:01 PM  
**To:** [REDACTED] <environment@oneida.on.ca>  
**Subject:** Link to ER 2022 Storage Enhancement

Boozhoo [REDACTED]

The Environmental Report for the 2022 Storage Enhancement Project is now complete and available for your review.

Pursuant to my earlier project notification, this project will involve:

- drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- installation of approximately 85 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

We are happy to provide capacity funding for the environmental report review.

As the report is too large to email over, please find the information on how to access the Environmental Report here. If you require a printed copy, please let me know and we can ensure it gets couriered over to you.

[Link to ER](#)

**Login Information**

**Browser link:** <https://tmppsftp.stantec.com>

**FTP Client Hostname:** tmppsftp.stantec.com **Port:** 22 (can be used within an FTP client to view and transfer files and folders; e.g., FileZilla)

**Login name:** s0902121436

**Password:** 9518079

We have a two other projects that are at the same stage and will provide you with information on three projects when we confirm our meeting in October.

Please let me know if you have any questions or concerns.

Meegwetch,  
Kevin

**From:** [Kevin Berube](#)  
**To:** [REDACTED]  
**Subject:** Well Work Notification  
**Date:** Tuesday, September 28, 2021 4:29:29 PM  
**Attachments:** [UGS Well Work Notification Letter - Oneida Nation of the Thames.pdf](#)

---

Hello [REDACTED]

I hope you are doing well.

Attached is a notification of different well work projects that are coming up in your region. I will have a chance to go over them in more detail when we get together in October. In the meantime, if you have any questions please don't hesitate to reach out.

Meegwetch,  
Kevin



Kevin Berube  
Kevin.Berube@enbridge.com  
(416)-666-67454

Enbridge  
500 Consumers Rd  
North York, ON  
Canada, M2J 1P8

Oneida Nation of the Thames  
2212 Elm Ave  
Southwold, ON  
N0L 2G0

September 27, 2021

Dear [REDACTED]

**Re: 2021-2024 Enbridge Gas Storage Well & Reservoir Projects**

Enbridge Gas Inc. (Enbridge Gas) is currently conducting a review of its gas storage and reservoir system and has identified the potential need to replace and/or enhance some assets in order to maintain the safe and reliable operation of Enbridge Gas's systems and continue to meet the firm demands of Enbridge Gas's customers.

The following two (2) proposed projects may include all or some of the following:

**2021/2022 Storage Enhancement Project Part 2**

- Involves drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- Involves the installation of approximately 125 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

**Coveny and Kimball-Colinville Well Drilling Project**

- Involves drilling a new injection/withdrawal well (TKC 68) in the LEG Kimball-Colinville Storage Pool in May/June 2022
- No lateral pipeline associated with TCV7
- TKC 68 will require approximately 120 metres of 10" lateral pipeline to connect to the main Kimball-Colinville gathering line.

Collectively referred to as the "Projects".



Kevin Berube  
Kevin.Berube@enbridge.com  
(416)-666-67454

Enbridge  
500 Consumers Rd  
North York, ON  
Canada, M2J 1P8

The area in which these Projects are to be constructed is rural agricultural and is either owned by Enbridge Gas or Enbridge Gas has the right to enter through a Gas Storage Lease. It is expected that the majority of adverse environmental and/or socio-economic effects will be construction related. These effects are expected to be temporary and transitory. The Projects will also be located underground once construction is complete, further limiting the potential for any long-term effects.

As part of the planning process for each of these Projects, Enbridge Gas has and will retain an external consulting firm to undertake an Environmental Study of the construction and operation of the Project. The Environmental Study as required by the Ontario Energy Board's (OEB) *"Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)"*.

Enbridge Gas' preliminary work on the Projects has identified the following potential authorizations:

Provincial approvals:

- Ontario Energy Board
- Ministry of Natural Resources and Forestry
- Ministry of Environment, Conservation and Parks
- Ministry of Heritage, Sport, Tourism and Culture Industries

Municipal approvals:

- County of Lambton
- Township of St. Clair

Other approvals:

- St. Clair Region Conservation Authority
- Hydro One Networks Inc.

We would like to consult with your community on these proposed Projects. We are interested in your community's feedback, including any suggestions or proposals on avoiding, minimizing or mitigating any potential adverse impacts these Projects may have on your Aboriginal or treaty rights.

Enbridge acknowledges that capacity support may be required to enable you to engage in timely technical reviews of documents, participation in field work associated with the Projects, and to allow for meaningful consultation. Consistent with our approach on all projects, we are prepared to provide capacity funding to support your team's engagement in relation to the Projects.



Kevin Berube  
Kevin.Berube@enbridge.com  
(416)-666-67454

Enbridge  
500 Consumers Rd  
North York, ON  
Canada, M2J 1P8

Enbridge Gas has been delegated the procedural aspects for consultation by the Ministry of Energy on behalf of Ontario. Ministry officials are also available should you wish to contact them directly with any questions or concerns. Please contact:

For 2021/2022 Storage Enhancement Project Part 2,

Rosalind Ashe, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[rosalind.ashe@ontario.ca](mailto:rosalind.ashe@ontario.ca)

For Coveny and Kimball-Colinville Well Drilling Project,

Jonathon Wilkinson, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[Jonathon.Wilkinson@ontario.ca](mailto:Jonathon.Wilkinson@ontario.ca)

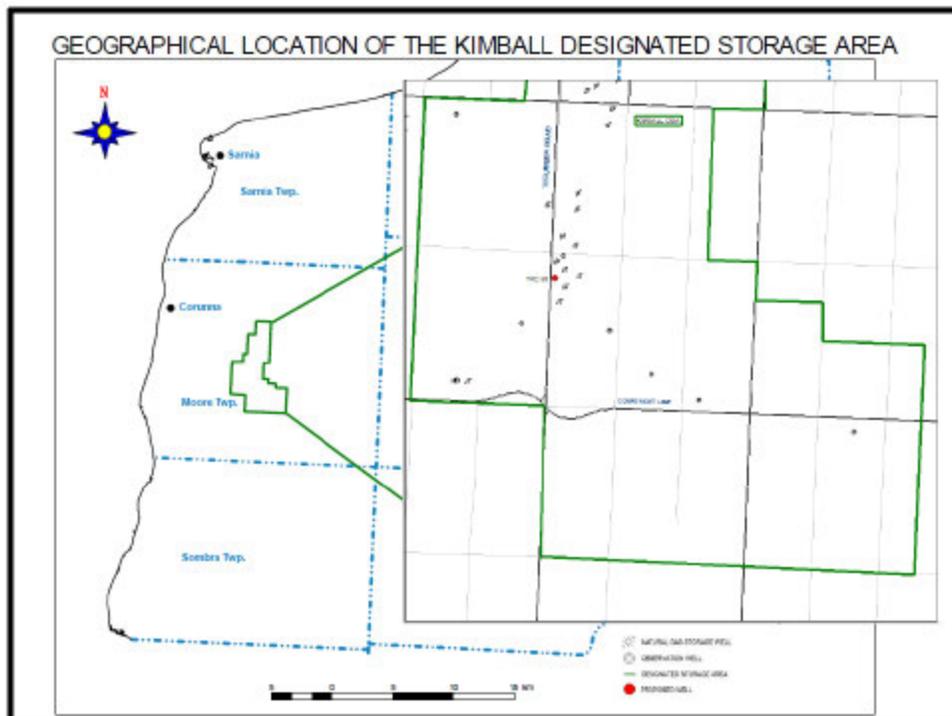
We would like to set up a meeting to discuss these Projects with you to provide you with an opportunity to express any questions or concerns you have. Please feel free to contact me at [kevin.berube@enbridge.com](mailto:kevin.berube@enbridge.com) or 416-666-6754 so we can set up a time to meet. You may also provide me with any feedback you may have regarding the Projects in writing by October 22, 2021, if possible.

Many thanks,



Kevin Berube  
Senior Advisor, Community & Indigenous Engagement, Eastern Region  
Enbridge Inc.  
416-666-6754

2022 Storage Enhancement Project



**From:** [Kevin Berube](#)  
**To:** [REDACTED]  
**Subject:** Project Updates  
**Date:** Friday, October 15, 2021 12:56:31 PM

---

Boozhoo [REDACTED]

I was able to go to Oneida yesterday. Sorry I missed you as you were out of the office. I dropped off project information on the Dawn Corunna project, the 2022 Storage Enhancement project and the Coveny and Kimball-Colinville Well Drilling project. If you have any questions about any of these projects please do not hesitate to contact me.

[REDACTED]

Meegwetch [REDACTED]

Kevin



## Storage Enhancement - Lateral Pipelines

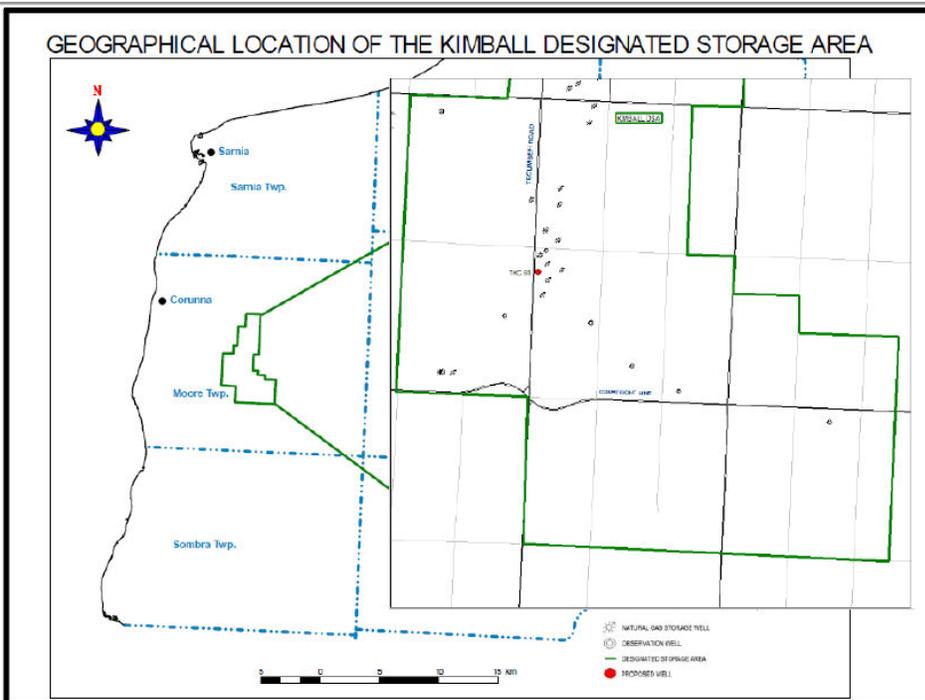
### 2022 Storage Enhancement Project

- Involves drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- TKC 69 will require approximately 85 metres of 10” lateral pipeline to connect to the main Kimball-Colinville gathering line.

### Coveny and Kimball-Colinville Well Drilling Project

- Involves drilling a new injection/withdrawal well (TKC 68) in the LEG Kimball-Colinville Storage Pool in May/June 2022
- TKC 68 will require approximately 120 metres of 10” lateral pipeline to connect to the main Kimball-Colinville gathering line.

6



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## 2022 Storage Enhancement



Species at Risk Potentially Present in Project Area:

### **2 Species of Conservation Concern**

- Short-eared Owl
- Wood Thrush

### **6 SARS**

- Spoon-leaved Moss
- Bobolink
- Eastern Meadowlark
- Butler's Gartersnake
- Spiny Softshell

8

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## Mitigation for SARS and SOCC



- A field investigation for 2022 Storage Enhancement has occurred and TKC 69 is located in a rotational agricultural field and is not suitable SAR habitat.
- Species of Conservation Concern and SAR are not anticipated to be impacted by project activities.
- General mitigation and protective measures for potential impacts on wildlife, wildlife habitat, and SAR are:
  - Speed limits lowered where field investigations identify specific wildlife concerns.
  - Equipment and vehicles yield to wildlife.
  - Fencing erected around deep excavations to prevent wildlife entrapment.
  - The contractor 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.

10



**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Cc:** [Matthew Chegahno](#); [Wilkinson, Jonathon \(ENDM\)](#); [Ashe, Rosalind \(ENDM\)](#)  
**Subject:** Project Notification: Lateral pipelines  
**Date:** Tuesday, June 8, 2021 4:01:00 PM  
**Attachments:** [UGS Well Work Notification Letter - Walpole Island First Nation.pdf](#)

---

Good afternoon [REDACTED]

Before I get into the business part of this email, I wanted to express my deepest sympathies and sorrows to the survivors, families, and Walpole Island First Nation community members affected by the devastating discovery of the unmarked graves at the former residential school in British Columbia. I can only imagine that the discovery has resurfaced memories, emotions and pain for so many in your Nation. Reconciliation is about sharing the truth, building understanding and supporting those who suffered, and continue to suffer, through this shared reality. To stay silent is the same behavior that allowed these 215 children to be lost to history for so long. I am continuing to educate myself and my children on the residential school system, and consistently look for opportunities, as a visitor to these lands, to learn more about the Indigenous Nations who are stewards of these places and spaces.

Enbridge Gas is currently conducting a review of its gas storage and reservoir system and has identified the potential need to enhance some assets in order to maintain the safe and reliable operation of Enbridge Gas's systems and continue to meet the firm demands of Enbridge Gas's customers.

We currently have two proposed projects we would like to discuss with you as we are interested in your community's feedback, including any suggestions or proposals on avoiding, minimizing or mitigating any potential adverse impacts these Projects may have on your Aboriginal or treaty rights. Please find attached the Project Notification letter which also contains the maps within it.

I know that you were taking time off in June and I'm not sure of your return date. I look forward to meeting with you about this upon your return.

Many thanks and hope you are well,  
Lauren



Enbridge Inc.  
109 Commissioners Road West,  
London, ON  
N6A4P1

[REDACTED]  
Walpole Island First Nation  
117 Tahgahoning, R.R. 3  
Bkejwanong, ON  
N8A 4K9

June 7, 2021

Dear [REDACTED]

**Re: 2021-2024 Enbridge Gas Storage Well & Reservoir Projects**

Enbridge Gas Inc. (Enbridge Gas) is currently conducting a review of its gas storage and reservoir system and has identified the potential need to replace and/or enhance some assets in order to maintain the safe and reliable operation of Enbridge Gas's systems and continue to meet the firm demands of Enbridge Gas's customers.

The following two (2) proposed projects may include all or some of the following:

**2021/2022 Storage Enhancement Project Part 2**

- Involves drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- Involves the installation of approximately 125 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

**Coveny and Kimball-Colinville Well Drilling Project**

- Involves drilling a new injection/withdrawal well (TKC 68) in the LEG Kimball-Colinville Storage Pool in May/June 2022
- TKC 68 will require approximately 120 metres of 10" lateral pipeline to connect to the main Kimball-Colinville gathering line.

Collectively referred to as the "**Projects**".



Enbridge Inc  
109 Commissioners Road West,  
London, ON  
N6A4P1

The area in which these Projects are to be constructed is rural agricultural and is either owned by Enbridge Gas or Enbridge Gas has the right to enter through a Gas Storage Lease. It is expected that the majority of adverse environmental and/or socio-economic effects will be construction related. These effects are expected to be temporary and transitory. The Projects will also be located underground once construction is complete, further limiting the potential for any long-term effects.

As part of the planning process for each of these Projects, Enbridge Gas has and will retain an external consulting firm to undertake an Environmental Study of the construction and operation of the Project. The Environmental Study as required by the Ontario Energy Board's (OEB) *"Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)"*.

Enbridge Gas' preliminary work on the Projects has identified the following potential authorizations:

Provincial approvals:

- Ontario Energy Board
- Ministry of Natural Resources and Forestry
- Ministry of Environment, Conservation and Parks
- Ministry of Heritage, Sport, Tourism and Culture Industries

Municipal approvals:

- County of Lambton
- Township of St. Clair

Other approvals:

- St. Clair Region Conservation Authority
- Hydro One Networks Inc.

We would like to consult with your community on these proposed Projects. We are interested in your community's feedback, including any suggestions or proposals on avoiding, minimizing or mitigating any potential adverse impacts these Projects may have on your Aboriginal or treaty rights.

Enbridge acknowledges that capacity support may be required to enable you to engage in timely technical reviews of documents, participation in field work associated with the Projects, and to allow for meaningful consultation. Consistent with our approach on all projects, we are prepared to provide capacity funding to support your team's engagement in relation to the Projects.



Enbridge Inc  
109 Commissioners Road West,  
London, ON  
N6A4P1

Enbridge Gas has been delegated the procedural aspects for consultation by the Ministry of Energy on behalf of Ontario. Ministry officials are also available should you wish to contact them directly with any questions or concerns. Please contact:

For 2021/2022 Storage Enhancement Project Part 2,

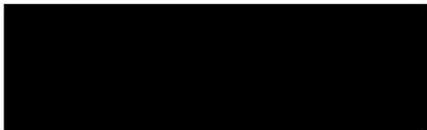
Rosalind Ashe, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[rosalind.ashe@ontario.ca](mailto:rosalind.ashe@ontario.ca)

For Coveny and Kimball-Colinville Well Drilling Project,

Jonathon Wilkinson, Senior Advisor  
Indigenous Energy Policy, Ministry of Energy, Northern Development and Mines  
[Jonathon.Wilkinson@ontario.ca](mailto:Jonathon.Wilkinson@ontario.ca)

We would like to set up a meeting to discuss these Projects with you to provide you with an opportunity to express any questions or concerns you have. Please feel free to contact me at [lauren.whitwham@enbridge.com](mailto:lauren.whitwham@enbridge.com) or 519-852-3474 so we can set up a time to meet. You may also provide me with any feedback you may have regarding the Projects in writing by July 7, 2021, if possible.

Many thanks,

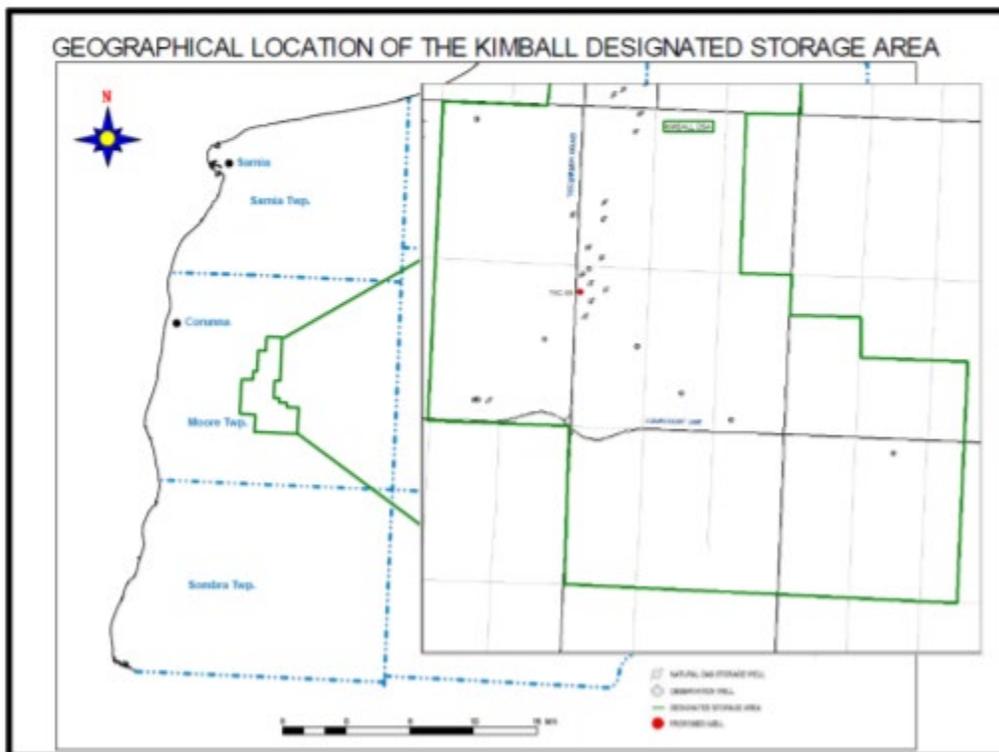


Lauren Whitwham  
Senior Advisor, Community & Indigenous Engagement, Eastern Region  
Enbridge Inc.  
519-852-3474  
[Lauren.whitwham@enbridge.com](mailto:Lauren.whitwham@enbridge.com)



Enbridge Inc  
109 Commissioners Road West,  
London, ON  
N6A4P1

### 2022 Storage Enhancement Project



Attachment 5.2

**From:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>

**Sent:** July 8, 2021 9:39 AM

**To:** [REDACTED]@wifn.org>

**Subject:** Enbridge Project Notifications

Good morning [REDACTED]

I hope that this finds you well and enjoying the warm summer weather. Right now we are getting a good thunder storm in London and my vegetable garden is happy.

I wanted to touch base with you as I noticed that [REDACTED] out of office has been extended to August. I have a couple of Enbridge project notifications to send and I was wondering if there is someone backfilling her role in her absence? If so, would you be able to provide me with the contact?

If I should hold off until [REDACTED] return in August, I'm happy to do so.

I appreciate your assistance.

Thanks and take care,

Lauren

**From:** [REDACTED]  
**To:** [Lauren Whitwham](#)  
**Cc:** [REDACTED]  
**Subject:** [External] RE: Enbridge Project Notifications  
**Date:** Thursday, July 8, 2021 3:31:25 PM

---

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Yes, please send the notifications to [REDACTED] I have copied them on this message.

Miigwech,

[REDACTED]

[REDACTED]

Chief Executive Officer

Walpole Island First Nation

519-627-1481, ext 255

c. 226-626-7686

[REDACTED]@wifn.org

---

**From:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>  
**Sent:** Tuesday, July 13, 2021 10:35 AM  
**To:** [REDACTED]@wifn.org; [REDACTED]@wifn.org  
**Cc:** Matthew Chegahno <matthew.chegahno@enbridge.com>; [REDACTED]  
[REDACTED]@wifn.org  
**Subject:** RE: Enbridge proposed project: Panhandle Transmission System

Hi [REDACTED],

I'm off this week however, would be happy to meet next week to provide some project updates.

Would Thursday after 12 or anytime on Friday work for you? It would allow me a chance to get some slides pulled together with information on the current and proposed projects and their status.

I could send out the Teams invite once we set a date.

Thanks

Lauren

---

**From:** [REDACTED]  
**To:** [Lauren Whitwham](mailto:Lauren.Whitwham@enbridge.com)  
**Subject:** [External] Re: Enbridge proposed project: Panhandle Transmission System  
**Date:** Tuesday, July 13, 2021 10:40:31 AM  
**Attachments:** [image006.png](#)

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Friday July 23rd works for me.

[REDACTED]  
Nin.da.waab.jig  
Walpole Island First Nation



d: 519.627.1389  
g: 519.627.1475 ext 101  
c: 519.784.4499  
f: 519.627.1530  
location: 2185 River Rd, Walpole Island



## Storage Enhancement - Lateral Pipelines

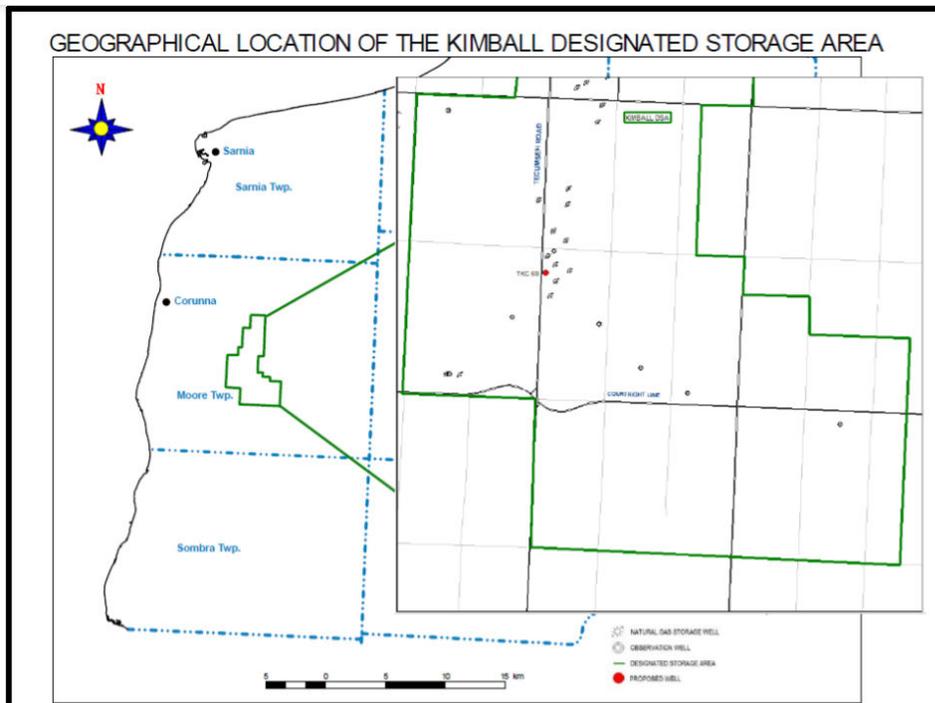
### 2022 Storage Enhancement Project Part 2

- Involves drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- Involves the installation of approximately 125 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

### Coveny and Kimball-Colinville Well Drilling Project

- Involves drilling a new injection/withdrawal well (TKC 68) in the LEG Kimball-Colinville Storage Pool in May/June 2022
- TKC 68 will require approximately 120 metres of 10" lateral pipeline to connect to the main Kimball-Colinville gathering line.

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Attachment 5.5

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** Notice of Study Commencement- 2022 Storage Enhancement  
**Date:** Thursday, July 29, 2021 2:21:00 PM  
**Attachments:** [Walpole Island NOC 2022 Storage.pdf](#)

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Good afternoon,

Further to my email on June 8, 2021, attached is the Enbridge/Stantec Notice of Study Commencement letter for the 2022 Storage Enhancement Project.

When the environmental report is complete, we will forward it onto you for your review and also reach out for a meeting to discuss. Please let me know what you might need in terms of capacity funding for this project.

If you have any questions or concerns about the project, feel free to reach out to me.

Hope all is well!

Thanks,  
Lauren



July 29, 2021

[REDACTED]  
Project Review Coordinator  
Bkejwanong (Walpole Island) First Nation  
117 Tahgahoning, R.R. 3  
Wallaceburg ON N8A 4K9  
Sent Via Email: [REDACTED]@wifn.org

**Reference: Enbridge Gas Inc. Proposed 2022 Storage Enhancement Project,  
Notice of Study Commencement**

Dear [REDACTED]

I am writing to advise you of the *2022 Storage Enhancement Project* (the Project) and to begin engagement on the proposed work.

To enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County, Enbridge Gas Inc. (Enbridge Gas) is proposing to undertake construction at the Kimball-Colinville Storage Pool – a designated storage area (DSA) as defined in s. 36.1(1)(a) of the *Ontario Energy Board Act* (OEB Act). The Project will involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, a 85 metre Nominal Pipe Size (NPS) 10 inch lateral pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

Attached please find a map detailing the Project location.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. 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)".

The Study will examine and determine, from an environmental and socio-economic perspective, the impacts of the Project. Once the Environmental Report is complete, Enbridge Gas will apply to the Ontario Energy Board (OEB) for approval to construct. This Study is being conducted in accordance with the OEB's *Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (2016).

It is anticipated that the Environmental Report for the study will be completed in Summer 2021, after which Enbridge Gas will file an application for the Project to the OEB. The OEB's review and approval is required before the proposed Project can proceed. If approved, the Project is currently anticipated to begin Spring 2022.

July 23, 2021

Page 2 of 2

Reference: Enbridge Gas Inc. Proposed 2022 Storage Enhancement Project,  
Notice of Study Commencement

As an Indigenous community with a potential interest in the vicinity of the pipeline route, we are inviting Bkejwanong (Walpole Island) First Nation to provide comments and feedback regarding the Project. We are also seeking information about areas that may be culturally significant to your community in the vicinity of the pipeline route and information about potential effects that the Project may have on asserted or established Aboriginal and treaty rights. Stantec is presently compiling an environmental, socio-economic, and archaeological/cultural heritage inventory of the Project location. We would welcome your feedback and comments regarding the proposed Project as we undertake the requisite environmental study.

As you know, Enbridge Gas is committed to meaningful engagement with Indigenous communities. As such, we would be interested in holding a conference call with the Bkejwanong (Walpole Island) First Nation consultation office to share Project related information, should you wish. If you have any questions, would like to provide feedback or share knowledge or would be interested in setting up a briefing on this Project please feel free to contact me directly.

We kindly request that any initial input and comments regarding the Project are provided by your community by **August 13, 2021**. Please let us know if you are unable to respond by this date but are interested in participating in the consultation and engagement process for the Project.

If you have any questions or want to discuss the Project, please feel free to contact me at any time. We look forward to engaging with you to ensure your community's interests are being considered and represented.

Respectfully,

  
**Lauren Whitwham**  
ENBRIDGE GAS INC.  
Sr. Advisor, Community & Indigenous Engagement  
519-852-3474  
lauren.whitwham@enbridge.com

Attachment: Map of Project Area

c. Evan Tomek, Sr. Analyst, Environment, Enbridge Gas  
Mark Knight, Project Manager, Stantec Consulting Ltd.

Attachment 5.6

---

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Subject:** Environmental Report: 2022 Storage Enhancement Project  
**Date:** Thursday, August 26, 2021 10:46:17 AM  
**Attachments:** [Environmental Review 2022 Storage Enhancement WIFN.pdf](#)

---

Good morning [REDACTED]

The Environmental Report for the 2022 Storage Enhancement Project is now complete and available for your review.

We let you know about this of this project on June 6, 2021. This project will involve:

- drilling a storage well, TKC 69, in Kimball-Colinville Storage Pool in May/June 2022.
- installation of approximately 85 metres of 10" lateral pipeline from TKC 69 to the main Kimball-Colinville gathering pipeline upon completion of drilling activities.

We are happy to provide capacity funding for the environmental report review and I look forward to receiving the quote and drafting up the capacity funding letter agreement to ensure these costs are covered by Enbridge.

Please find the information on how to access the Environmental Report here:

[Link to ER](#)

**Login Information**

**Browser link:** <https://tmpsftp.stantec.com>

**FTP Client Hostname:** tmpsftp.stantec.com **Port:** 22 (can be used within an FTP client to view and transfer files and folders; e.g., FileZilla)

**Login name:** s0902121436

**Password:** 9518079

We have a two other projects that are at the same stage in the process and would like to present on all three in early October, once all the environmental reports have been completed. If you had a date for early October available, please let me know as I can start scheduling it out.

If you have any questions or concerns, please feel free to reach out at any point.

Thanks so much and hope all is well.

Lauren



August 23, 2021

Bkejwanong (Walpole Island) First Nation  
117 Tahgahoning, R.R. 3  
Wallaceburg, ON N8A 4K9

**Reference: Enbridge Gas Inc. – 2022 Storage Enhancement Project**

Dear [REDACTED]

Enbridge Gas Inc. (Enbridge Gas) has identified the need to enhance the capacity and deliverability of their existing Enbridge Gas storage operations in Lambton County. The 2022 Storage Enhancement Project (the Project) will involve increasing the Maximum Operating Pressure (MOP) of the Dow Moore and Payne Storage Pools – two designated storage areas (DSAs) as defined in s.36.1(1)(a) of the *Ontario Energy Board Act*. To complete wellhead upgrades and pressure testing of wells at the Payne Storage Pool Project location, temporary steel plates will be used upon access to the sites' natural gas storage wells. No other temporary or permanent access road or structure will be installed at the Dow Moore Storage Pool Project location.

The Project will also involve drilling for a new natural gas storage well (TKC 69) in the Kimball-Colinville Storage Pool DSA. The Project will commence with the construction of a temporary gravel drilling pad that will be approximately 8100 square metres. Upon completion of drilling activities, approximately 85 metres of Nominal Pipe Size (NPS) 10-inch pipeline will be installed from the well to the Kimball-Colinville Storage Pool gathering system and a permanent gravel pad will be constructed around the well. The permanent well pad will be approximately 60 square metres. A permanent access laneway to the well will also be installed.

Enbridge Gas retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study of the construction and operation of the Project. The Environmental Study is intended to 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)".

August 23, 2021  
[REDACTED]

Page 2 of 2

Reference: Enbridge Gas Inc. – 2022 Storage Enhancement Project

An Environmental Report (ER), summarizing the results of the Environmental Study, is enclosed for your review. Please forward any comments you may have regarding the ER and Project to the undersigned. Your comments would be appreciated by **October 4, 2021**. We look forward to engaging with you to ensure your community's interests are being considered and represented.

Respectfully,

[REDACTED]

**Lauren Whitwham**  
*ENBRIDGE GAS INC.*  
Sr. Advisor, Community & Indigenous Engagement  
Public Affairs and Communications  
519-852-3474  
Lauren.Whitwham@enbridge.com

Attachment: 2022 Storage Enhancement Project

c. Evan Tomek, Sr. Analyst, Environment, Enbridge Gas  
Mark Knight, Project Manager, Stantec Consulting Ltd.

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Cc:**  
**Subject:** Meeting to discuss Dawn Corunna Project and gathering lines projects  
**Date:** Friday, September 10, 2021 1:54:00 PM  
**Attachments:** [UGS Well Work Notification Letter - Walpole Island First Nation.pdf](#)  
[Walpole Island DC Notification.pdf](#)

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Hi [REDACTED]

Happy Friday!

I would like to set up a meeting with you and [REDACTED] the week of October 5 (if [REDACTED] has returned) or the week of October 11 to review three of our projects.

We would like to review the Dawn Corunna Project as well as the 2022 Storage Enhancement and the Coveny and Kimball-Colinville Well Drilling Project.

In terms of environmental reports, the 2022 Storage Enhancement ER was sent on August 26. The ER for the Dawn Corunna Project should be sent out in the next few weeks and the Coveny and Kimball Colinville ER will be finalized soon.

Would you be able to provide some dates that work best for you?

Thanks so much,  
Lauren

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**From:** Lauren Whitwham <Lauren.Whitwham@enbridge.com>  
**Sent:** Wednesday, October 6, 2021 2:51 PM  
**To:** [REDACTED]@wifn.org>  
**Subject:** FW: Enbridge Gas Inc. Dawn-Corunna Project - Environmental Report

Hi [REDACTED]

Hope this finds you well and that you enjoyed your time away.

I just wanted to bring this to your attention as I can get the link re-sent to you if it expires. Below is the environmental review for the EGI Dawn Corunna Project.

Currently, there are three projects that will require an ER review. 2022 Storage Enhancement, Dawn Corunna and Coveny and Kimball Colinville which will go out on Friday.

Please let us know if your third party reviewer has a quote (including your time) for the technical review of these docs.

Thanks and hope to connect soon,

**From:** [REDACTED]  
**To:** [Lauren Whitwham](#)  
**Subject:** [External] Re: Enbridge Gas Inc. Dawn-Corunna Project - Environmental Report  
**Date:** Thursday, October 7, 2021 2:56:27 PM

**EXTERNAL: PLEASE PROCEED WITH CAUTION.**

This e-mail has originated from outside of the organization. Do not respond, click on links or open attachments unless you recognize the sender or know the content is safe.

Hi Lauren

I'll be out of the country for a week. I've asked [REDACTED] to forward to you our cost estimate for the 2022 Storage Enhancement Project.

[REDACTED]

**From:** [Lauren Whitwham](#)  
**To:** [REDACTED]  
**Bcc:** [Lauren Whitwham](#)  
**Subject:** Capacity Funding agreements: 2022 Storage and Admin support  
**Date:** Tuesday, October 19, 2021 9:47:00 AM  
**Attachments:** [Capacity Funding Letter Walpole Island.pdf](#)  
[Funding Admin role WIFN October 2021.pdf](#)

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Good morning,

Chilly morning!

I have attached two capacity funding letters for your review.

The first is for the 2022 Storage technical review. I have put in there that you will invoice us however, if you would prefer we pay the costs up front based on the quote, we can do that to make things simpler.

[REDACTED]

Happy to take/set up a call to discuss both letters and agreements. Let me know if you have any questions or concerns.

Thanks and have a good day.  
Lauren



Enbridge Gas Inc.  
109 Commissioners Rd. W  
London, ON  
N6A4P1

October 19, 2021

[REDACTED]  
Walpole Island First Nation  
2185 River Rd N.  
Wallaceburg, ON  
N8A 4K9

Greetings [REDACTED]

**Re: Enbridge Gas Proposed 2022 Storage Enhancement Project**

Thank you for providing Enbridge Gas Inc. ("Enbridge") with a budget and workplan for Walpole Island First Nation's consultant, Neegan Burnside Ltd to provide technical review services on Walpole Island First Nation's behalf for the 2022 Storage Enhancement Project ("Project").

Enbridge has reviewed the budget and workplan, received on October 5, 2021, and we are pleased to provide Walpole Island First Nation with capacity funding in the amount estimated to complete the review. If additional hours are needed to review the Project information, we ask that Walpole Island First Nation reach out for approval prior to the work being completed.

Enbridge and Walpole Island First Nation acknowledge that the Budget and Workplan is estimated at \$ [REDACTED] to complete the technical review of the draft Environmental Report for the Project and to provide feedback to assist Enbridge in avoiding and mitigating any impacts the Project may have on Walpole Island First Nation's rights and interests.

Walpole Island First Nation will invoice Enbridge following completion of the work, up to the amount estimated above and Enbridge will provide payment to Walpole Island First Nation within 60 days of receiving the invoice. Please direct the invoice to:

Enbridge Gas Inc.  
109 Commissioners Road W  
London, ON  
N6A 4P1  
Attn: Lauren Whitwham  
Lauren.whitwham@enbridge.com

We look forward to continuing to build and enhance our relationship and to support meaningful consultation on the Project.

If Walpole Island First Nation agrees to accept the above terms, please return a signed copy of this letter to my attention.

We look forward to hearing from you.

Sincerely,



Lauren Whitwham  
Senior Advisor, Community and Indigenous Engagement  
Enbridge Inc.

Walpole Island First Nation agrees to accept this offer:

\_\_\_\_\_  
Authorized signatory for Walpole Island First Nation

Date: \_\_\_\_\_

Name (print): \_\_\_\_\_