

500 Consumers Road
North York, Ontario M2J 1P8
PO Box 650
Scarborough ON M1K 5E3

Stephanie Allman
Regulatory Coordinator
Telephone: (416) 495-5499
Fax: (416) 495-6072
Email: EGDRRegulatoryProceedings@enbridge.com



June 26, 2014

VIA COURIER AND EMAIL

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, ON M4P 1E4

Re: Enbridge Gas Distribution Inc. ("Enbridge")
EB-2012-0382 Durham York Energy Centre
Conditions of Approval - Interim Monitoring Report

In the Ontario Energy Board's Decision issued on March 28, 2013, the Conditions of Approval required Enbridge to file the Interim Monitoring Report for the project 6 months after the in-service date. The final in-service date for the Durham York Energy Centre was November 21, 2013 and requires Enbridge to file the Interim Monitoring Report by May 21, 2014. On April 10, 2014 the Board granted Enbridge's request to file the Interim Monitoring Report by June 30, 2014.

Enclosed please find the interim monitoring report for the project.

Any future developments will be communicated to the Board.

If you have any questions, please contact the undersigned.

Yours truly,

(Original Signed)

Stephanie Allman
Regulatory Coordinator

cc: Zora Crnojacki, OPCC Chair
Pascal Duguay, Manager, Applications, Ontario Energy Board (via courier and email)

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**ENBRIDGE GAS DISTRIBUTION INC.
POST-CONSTRUCTION
ENVIRONMENTAL MONITORING REPORT NO.1**

**DURHAM YORK ENERGY CENTRE PIPELINE
EB-2012-0382**

Prepared by
Enbridge Gas Distribution Inc.
June 24, 2014

1.0 Introduction

In March of 2013 the Ontario Energy Board (“Board”) under docket number EB-2012-0382 granted Enbridge Gas Distribution Inc. (“Enbridge”) Leave to Construct on two sections of pipe. One section is of NPS 8 (8-inch outer diameter) in Bowmanville, Ontario (Section 1) which is to reinforce the existing distribution network. The second section is of nominal pipe size (NPS) 6 (6-inch outer diameter) (Section 2) and is a service in order to provide distribution services to the Durham York Energy Centre (“DYEC”) Facility in Courtice, Ontario and ancillary facilities. Prior and subsequent to obtaining approval, Enbridge conducted the following studies to select a pipeline route, identify potential impacts resulting from construction, and prepare mitigative measures to minimize environmental and socio-economic impacts.

<u>Report Title</u>	<u>Conducted by:</u>	<u>Date</u>
Pipeline to Supply the Durham York Energy Centre Environmental Report	Stantec Consulting Ltd.	September 2012
Foundation Investigation and Design Report Highway 401 Pipeline Crossing Proposed Pipeline Installation to supply the Durham York Energy Centre Clarington, ON	Stantec Consulting Ltd.	August 2013
Stage 1 Archeological Assessment Proposed Pipeline to Serve the Durham York Energy Centre	Stantec Consulting Ltd.	August 16, 2012
Geotechnical Investigation Proposed Pipeline Installation Durham York Energy Centre Darlington Creek and C.P.R. Crossings Clarington, ON	Stantec Consulting Ltd.	March 2013

Construction of the DYEC Pipeline began on June 10, 2013. Section 2 was fully constructed and energized on October 21, 2013 while Section 1 was fully constructed and energized on November 21, 2013.

This report has been prepared in accordance with Board EB-2012-0382 Board Staff Proposed Conditions of Approval as described below:

3.1 Both during and after construction, Enbridge shall monitor the impacts of

construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. Enbridge shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying each action.

3.2 The interim monitoring report shall confirm Enbridge adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.

3.3 The final monitoring report shall describe the condition of any rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and any recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

This report is limited to items that have been identified prior to June 9, 2014. Items addressed after this date will be identified in the final Post-Construction Environmental Monitoring Report. This report will summarize actual construction procedures and identify any significant deviations from proposed construction activities.

2.0 Project Description

The pipeline project was constructed to reinforce the existing natural gas distribution network as well as to serve the Durham York Energy Centre (“DYEC”) located in Courtice, Ontario.

The pipeline project is comprised of two sections, each at its own location. Section 1 is comprised of nominal pipe size (NPS) 8 (8-inch outer diameter) and is located in Bomanville, Ontario. It begins at the intersection of Gaud Gate and Old Scugog Road, travels north on Regional Road 57 and terminates at the intersection of Concession Road 4 and Old Scugog Road, where it ties in to an existing NPS 8 pipeline. The pipeline is 2 kilometers (km) in length. Section 2 is comprised of NPS 6 (6-inch outer diameter) and is located in Courtice, Ontario. It begins at Bloor Street and Solina Road and terminates at the DYEC facility, on the west side of Osborne Road (72 Osborne Road). The portion of Section 2 that was installed below Highway 401 was increased to a diameter of NPS 8 and continues as NPS 8 to the DYEC facility. The pipeline is approximately 3.6 kilometers (km) in length. Appendix A shows the constructed pipeline within a regional context.

3.0 Environmental Inspection

In order to ensure that environmental commitments were honoured and that the best industry practices were used, a full time Chief Inspector was onsite. In general, the duties of the Chief Inspector included the following items:

- provide advice to the Project Manager, Construction Inspectors, and all construction personnel regarding compliance with environmental legislation, regulations and industry standards;
- provide advice regarding adherence to environmental specifications and commitments made in the previously mentioned documents and to regulatory agencies, including the Board;
- provide advice on erosion protection measures to be taken in sensitive locations in vicinity of watercourse crossing;
- act as a liaison with environmental regulators, government agencies and interest groups;
- provide immediate advice regarding spill prevention and contingency; and,
- ensure appropriate waste disposal of any hazardous construction wastes.

An Enbridge Environment, Health and Safety ("EHS") Specialist also conducted routine inspections of the ongoing construction to identify environmental issues which needed to be addressed and communicated these to the Project Manager.

4.0 Construction Effects and Mitigation Measures

Construction effects and mitigation measures which were implemented to minimize the potential effects from the construction of the Durham York Energy Centre Pipeline are summarized in Table 1. All activities were conducted in adherence to the contract documentation and Enbridge Construction Policies and Procedures.

Table 1
Construction Effects and Mitigation Measures

Activity	Duration	Potential Effect	Mitigation Measures
Vegetation Cover	Throughout Construction (June 10, 2013 to November 21, 2013)	Permanent removal of vegetation. Aesthetic degradation. Changes in surface drainage patterns affecting amount of water available. Changes to sunlight or wind exposure regimes.	All trees on the road allowance adjacent to roadways were identified prior to construction. Limits of work area marked to minimize encroachment into adjacent agricultural or vegetated areas. Majority of construction completed within existing road allowance.
Topsoil Handling	Throughout Construction	Disruption of surface and subsurface soils. Soil mixing may result in loss of productivity.	Care was taken to minimize mixing of subsoils. Topsoil was replaced on surface during restoration.
Watercourse Crossing	Throughout Construction	Disruption of watercourse through siltation and sedimentation. Erosion of channel banks and loss of vegetation cover. Contamination of surface water. Interruption of subsurface drainage along pipeline trench.	Crossing of the Darlington Creek and Bomanville Creek were completed by directional drill. Watercourse crossing permits were obtained from the Central Lake Ontario Conservation Authority (CLOCA). Sediment fencing installed to prevent sedimentation and siltation. A geotechnical assessment was completed to assist in developing crossing profiles.

Table 1**Construction Effects and Mitigation Measures (Continued)**

Activity	Duration	Potential Effect	Mitigation Measures
Traffic Control	Throughout Construction	Exposure of construction crews to vehicular traffic.	Contractor ensured MTO Book 7 traffic control plan has been completed and has been set up in accordance with the prescribed Traffic Layout.
Road Crossings	Throughout Construction	Restricted access to businesses and residences.	Several road crossings, including Baseline Road, McKnight Road, Courtice Court, Highway 401, South Service Road, Old Scugog Road and Concession Road 4 were completed by directional drill or open cut. Warning signs and barricades set up to increase visibility and prevent public access.
Noise	Throughout Construction	Disturbances to sensitive receptors (i.e. residents, seniors' homes, schools).	Construction equipment conformed to guidelines for sound and emission levels.
Archaeological Monitoring	Throughout Construction	Disturbance and potential destruction of archaeological artifacts.	Stantec conducted a Stage 1 Assessment prior to construction to identify areas of high potential for artifacts. Construction within limits of ROW will minimize potential for encountering archaeological artifacts. No artifacts were encountered.
Trenching and Excavation	Throughout Construction	Open trenches present a hazard to vehicular and pedestrian traffic. Restricts access. Sedimentation into roadside ditches.	Protective barricades (i.e., snow fence, sediment fence, jersey barriers, and straw bales) were erected around trenches and excavations during construction activities.
Utility Crossings	Throughout Construction	Minimum distance separation from buried or above-ground services may not provide sufficient room within a road right-of-way (R.O.W.) for the installation of a gas pipeline; damage to utilities may inconvenience landowners.	In accordance with Enbridge Policies and Procedures, locates were obtained prior to any excavation work. Warning signs posted in vicinity of overhead power lines.

Table 1**Construction Effects and Mitigation Measures (Continued)**

Activity	Duration	Potential Effect	Mitigation Measures
Spills	Throughout Construction	Contamination of air, soil, surface water or ground water. Inconvenience to landowners and public	As required, contractor had spill containment kits at the project site. There was one reportable spill during construction which occurred at Darlington Creek between Bloor Street and Baseline Road on Solina Road. Approximately 30 L of bentonite (drilling mud) was released in Darlington Creek as well as on the banks. Silt fence and straw bales were set up to contain the bentonite. A vacuum truck cleaned up the bentonite.
Hydrostatic Testing	Section 2 – September 11, 2013 Section 2 – October 7, 2013 ¹ Section 1 – November 4, 2013	Uncontrolled discharge of water could cause erosion, sedimentation and contamination of surface water supplies.	For Section 2, a contractor was obtained to bring water to the site in a frac tank; discharge water was pumped back into the frac tank and removed from site. For Section 1, a contractor was obtained to bring water to site using water trucks; water was then discharged through a filter bag and straw bales into the bar ditch. No significant adverse environmental effects resulted from the hydrostatic testing and dewatering procedures.
Pipe Energizing	Section 2 October 21, 2013 Section 1 November 21, 2013	Inconvenience and/or negative health effects to nearby landowners and the public.	Energizing was completed in accordance with Enbridge Policies and Procedures.

¹ In the letter to the Board dated Nov 26, 2013, the date for Hydrostatic Testing was erroneously entered as October 9, 2013.

Clean-Up	Throughout Construction	Restores the pipeline easement to pre-construction conditions.	Clean-up activities were conducted in accordance with the Enbridge Construction and Maintenance Manual. Remaining restoration of the road allowance along the route to be completed by Enbridge. Results of the clean-up program will be examined again in the spring of 2015.
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5.0 Residual Issues

Overall, construction activities were carried out with a high level of respect for the environment.

Since portions of the pipeline Right-Of-Way ("R.O.W") are located within the road allowance, there may, in the future, be some degradation caused by vehicular traffic and littering that is not a result of construction.

The following issues are noted at the time of completion of this report (June 10, 2014) for the Durham York Energy Centre Pipeline. These issues will need to be addressed prior to the final monitoring of the pipeline route.

5.1 Vegetation

There are numerous trees in the road allowance where the pipeline was installed. Portions of this road allowance and easement were open cut. The trees were monitored and appear to be in good health. Enbridge will continue to periodically monitor these trees but it does not foresee future problems.

5.2 Restoration and Revegetation

Vegetation has re-established along portions of the road allowance where it was disturbed due to construction. However, a significant number of sections will require additional restoration and revegetation. Due to the rocky nature of the soil, more excavations were required in order to accomplish horizontal directional drilling. This led

to an increased number of areas that require restoration and revegetation, which include:

- Approx. 450 meters (m) south of South Service Road on west side of Osborne Road
- Approx. 300m south of South Service Road on west and east side of Osborne Road
- Approx. 150m south of South Service Road on west side of Osborne Road
- Approx. 200m south of Baseline Road on west side of McKnight Road
- Approx. 100m south of Baseline Road on west side of McKnight Road
- South side of Baseline Road across from Hancock Road
- Across from 1892 Baseline Road on the south side
- Across from 1898 Baseline Road on the south side
- Approx. 40m east of 1898 Baseline Road on the south side
- Approx. 150m east of 1898 Baseline Road on the south side
- Approx. 200m north of 1480 Solina Road on the west side
- Approx. 150m north of 1387 Solina Road
- Approx. 180m north of 1387 Solina Road
- Approx. 200m north of 1387 Solina Road on the west side
- North West corner of Bloor Street and Solina Road
- North side of Gaud Gate at Regional Road 57
- West side of Regional Road 57 at Gaud Gate
- North East corner of Old Scugog Road and Concession Road 4
- West side of Old Scugog Road at Concession Road 4
- North West corner of Concession Road 4 and Regional Road 57
- Approx. 200m south of Concession Road 4 on Regional Road 57
- 3784 Regional Road 57
- North of 3690 Regional Road 57
- Approx. 170m south of 3690 Regional Road 57
- Approx. 300m south of 3690 Regional Road 57
- Approx. 200m north of Gaud Gate on Regional Road 57

These sections will require monitoring over the next year to identify the success of revegetation efforts and to identify areas that will require further efforts.

5.3 Erosion Control Devices

Erosion control devices such as silt fences and straw bales have been installed where required to control any erosion and sedimentation concerns identified. The straw bales at the following locations require either repair or replacement with coir logs:

- North west corner of Bloor Street and Solina Road
- Approx. 200 m south of Concession Road 4 and Regional Road 57

5.4 Watercourse Crossing

Erosion control devices such as silt fences and straw bale check dams have been installed where required to control any erosion and sedimentation concerns identified. Straw bales should be repaired or replaced with coir logs at the Bomanville Creek Crossing (near 3784 Regional Road 57).

5.5 Soil Settlement and Erosion

No soil settlement issues were identified.

Erosion, evidenced by rills and gullies in the bank and ditch of the road allowance, has occurred along several sections of the pipeline route (refer to locations in Section 5.2). The erosion is very minimal and issues will be resolved using topsoil, seed and erosion control matting.

6.0 Landowner Comments

Three formal complaints resulting from construction were submitted to Enbridge on July 22, 2013, January 20, 2014 and April 2, 2014 while one formal complaint resulting from construction was submitted to Enbridge's contractor on August 14, 2014.

Details of complaints and the actions taken are recorded in the Landowner Comments Log in Appendix C.

7.0 Summary

This Interim Post-Construction Environmental Monitoring Report has been prepared in accordance with the OEB Decision Docket No.EB-2012-0382. It documents construction and clean-up activities conducted in the summer and fall of 2013. In general, measures implemented during construction and clean-up have been moderately successful. The outstanding issues will be addressed in the Final Post-Construction Environmental Monitoring Report that will be prepared in the spring of 2015. This report will document continued remediation activities if needed, and address additional issues that may arise.

APPENDIX A
PIPELINE ROUTE MAP

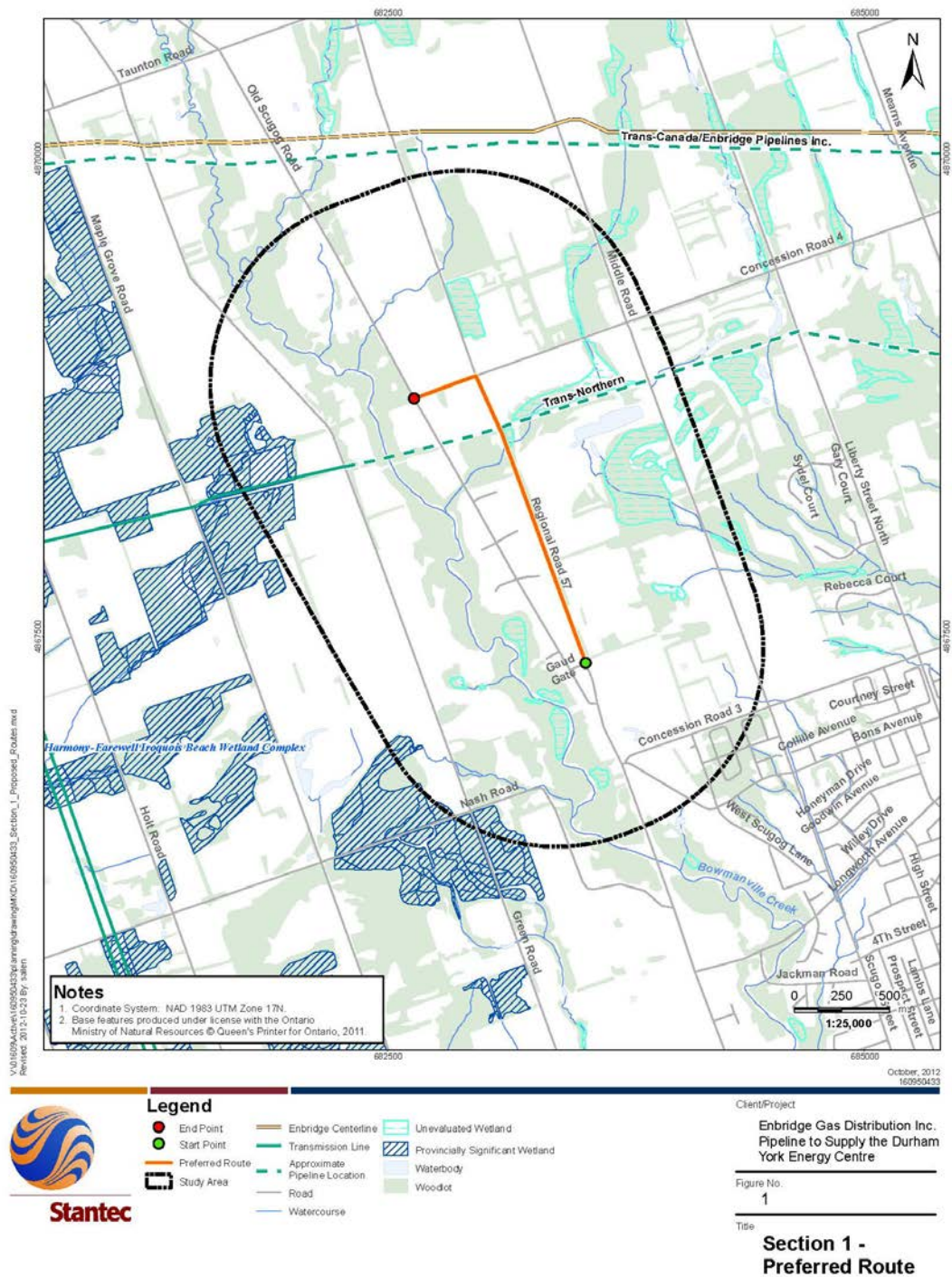


Figure 1: Section 1 - Map of Durham York Energy Centre Pipeline

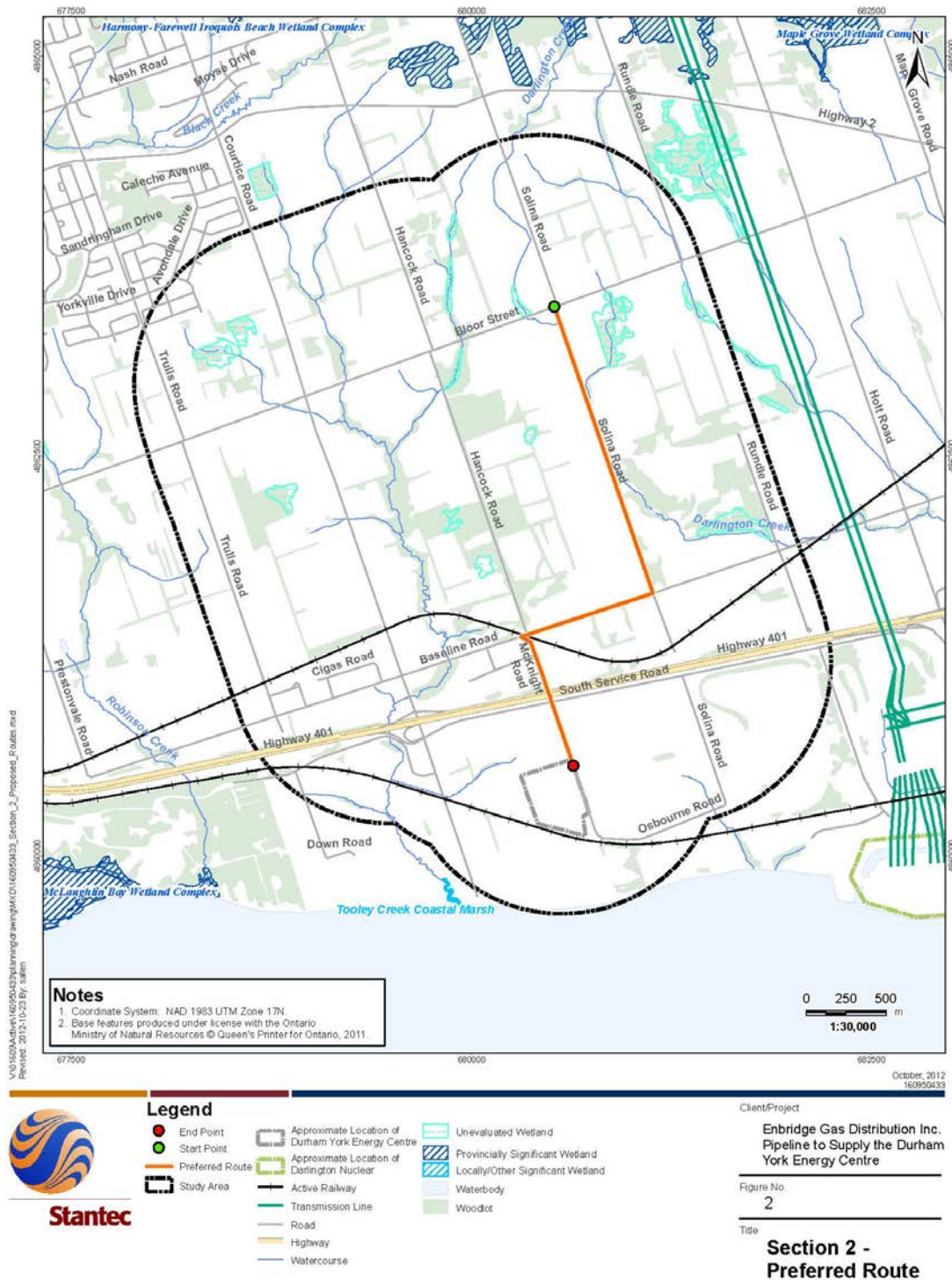


Figure 2: Section 2 - Map of Durham York Energy Centre Pipeline

APPENDIX B

**PHOTO LOG
(June 9, 2014)**



Photo 1: Approx. 450m south of South Service Road on west side of Osborne Road



Photo 2: Approx. 300m south of South Service Road on west side of Osborne Road



Photo 1: Approx. 300m south of South Service Road on east side of Osborne Road



Photo 2: Approx. 150m south of South Service Road on west side of Osborne Road



Photo 3: Approx. 200m south of Baseline Road on west side of McKnight Road



Photo 4: Approx. 100m south of Baseline Road on east side of McKnight Road



Photo 5: Approx. 100m south of Baseline Road on west side of McKnight Road



Photo 6: South side of Baseline Road across from Hancock Road



Photo 7: Approx. 50m east of Hancock Road on south side of Baseline Road



Photo 8: Across from 1892 Baseline Road on the south side



Photo 9: Approx. 40m east of 1898 Baseline Road on the south side



Photo 10: Approx. 150m east of 1898 Baseline Road on the south side



Photo 11: Approx. 100m north of Baseline Road on west side of Solina Road



Photo 12: 1184 Solina Road



Photo 13: Approx. 200m north of 1480 Solina Road on west side (Darlington Creek)



Photo 14: Approx. 150m north of 1387 Solina Road



Photo 15: Approx. 180m north of 1387 Solina Road



Photo 16: Approx. 200m north of 1387 Solina Road on the west side



Photo 17: North West corner of Bloor Street and Solina Road



Photo 18: North side of Gaud Gate at Regional Road 57



Photo 19: West side of Regional Road 57 at Gaud Gate



Photo 20: North East corner and East side of Old Scugog Road at Concession Road 4



Photo 21: North West corner of Concession Road 4 and Regional Road 57



Photo 22: Approx. 200m south of Concession Road 4 on Regional Road 57



Photo 23: 3784 Regional Road 57



Photo 24: 3784 Regional Road 57



Photo 25: North of 3690 Regional Road 57



Photo 26: Approx. 170m south of 3690 Regional Road 57



Photo 27: Approx. 300m south of 3690 Regional Road 57



Photo 28: Approx. 200m north of Gaud Gate on Regional Road 57

APPENDIX C
LANDOWNER COMMENTS LOG

Table 2

Summary of Comments and Actions Taken

Date	Description	Actions Taken & Underlying Cause
July 22, 2013	Land owners at northwest corner of Bloor Street and Solina Road requested Enbridge/Aecon to stop work and vacate their property.	Enbridge/Aecon had an agreement with the renter of the land to use a portion of the property for construction. The renter did not indicate they did not have the authority to grant Enbridge/Aecon access. The land owners made the request for Enbridge/Aecon to stop work until a legal agreement was signed. A Temporary Working Agreement was negotiated with the land owners and construction commenced on the afternoon of July 24, 2013.
August 14, 2013	A tree of high sentimental value was cut down by mistake by the surveyors outside of 3784 Regional Road 57. The excavation was also close to a newly planted row of cedars.	In the short time between finding out the significance of the tree and the surveyors arriving on site, the tree was not clearly marked and the surveyors were not notified. Enbridge/Aecon worked with the land owners to replace the tree and protect the cedars over the course of the construction outside their property. A replacement tree was located at a nearby nursery, however a Canadian Tire gift certificate was negotiated in the end. The cedars were protected and where damaged, they were replaced.
January 20, 2014	A resident called regarding higher levels of water in his basement than normal. He was inquiring as to whether construction in the area could have caused it.	It was determined that it is unlikely the construction (combination of large tie-in pit and HDD), which was approximately 250m from the house, caused seepage into the basement.
April 2, 2014	Municipality of Clarington, Operations Supervisor, Clint Peters, advised of a checkerboard sign that was too close to the road (at Old Scugog Rd and Concession Rd 4). The sign needs to be relocated approximately another 4 feet to the west away from the road.	Information sent to Aecon. Waiting for confirmation that sign has been relocated. An update will be provided on this comment when the final monitoring report is submitted in 2015.