

March 26, 2012

**By RESS & Courier**

Mr. Neil McKay,  
Manager, Facilities  
Ontario Energy Board  
Suite 2700, 2300 Yonge Street,  
Toronto, Ontario  
M4P 1E4

Dear Mr. McKay:

**Re: Union Gas Limited  
Trenton Area Reinforcement Project  
Board File # EB-2010-0329**

Pursuant to Condition 3.1 of the Board's Conditions of Approval for the above-noted project, please find enclosed herein four copies of Union's Interim Monitoring Report.

Sincerely,



Mary Jane Patrick  
Administrative Analyst, Regulatory Projects  
Encl.

cc: Z. Crnojacki (Chair, OPCC)  
A. Meyer

# **TRENTON AREA REINFORCEMENT PROJECT**

## **INTERIM MONITORING REPORT**

Prepared by: Union Gas Limited  
Environmental Planning  
March 2012

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## **1.0 INTRODUCTION**

This Interim Monitoring Report is provided in compliance with the Ontario Energy Board (“Board”) Order EB-2010-0329 granting Union Gas Limited (“Union”) “Leave to Construct” approximately 11.7 km of Nominal Pipe Size (NPS) 6 inch diameter and 1.2 km of NPS 8 diameter natural gas pipeline in the City of Quinte west, County of Hastings..

The pipeline commenced at Union’s Trenton Border Station on Glenn Miller Road and proceeded northeast across private land for approximately 1.5 km to Stickles Road. The pipeline then turned southeast on the west side of the road for approximately 1.7 km to Johnstown Road where it turns northeast on the north side of the road for approximately 0.2 km to St Hilaire Road. At St. Hilaire the pipeline proceeds southeast on the east side of the road for approximately 1.1 km to the District Regulating Station. From the station the NPS 8 inch pipeline remains on the east side of St. Hilaire and proceeds southeast for approximately 1.2 km to Meyer’s Creek Road where the pipeline splits into two NPS 6 inch pipelines. The northwest NPS 6 pipeline runs northwest on the south side of Hamilton Road for approximately 1.2 km then turns southeast on R.C.A.F. Road for approximately 1.2 km where it ties into the existing Trenton system. The northeast NPS 6 pipeline runs on the south side of Meyer’s Road for approximately 2.3 km then turns southeast on the west side of White’s Road for approximately 2.5 km until it ties into the Trenton system. A map of the pipeline route is included in Appendix A.

The requirements for and details of this report are outlined in the specific conditions issued by the Board in its Order dated February 28, 2011 as listed below. The Conditions of Approval can be found in Appendix B.

Accordingly, the purpose of this Interim Monitoring Report is to fulfill these conditions.

### **1.0 Condition 1.1**

Union Gas Limited (“Union”) shall construct the facilities and restore the land in accordance with its application and evidence filed in EB-2010-0329 except as modified by this Order and these Conditions of Approval.

**Condition 1.3**

Union Gas shall implement all the recommendations of the Environmental Report filed in the pre-filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee (“OPCC”) review.

**Condition 1.4**

Union Gas shall advise the Board’s designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union shall not make such change without prior approval of the Board or its designated representative. In the event of an emergency, the Board shall be informed immediately after the fact.

**2.0 Condition 2.4**

Union Gas shall furnish the Board’s designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board’s Order.

**Condition 2.7**

Union shall keep Alderville First Nation apprised of any archaeological findings, burial sites or environmental impacts, should any occur during the construction of the facilities and restoration of the lands as described in this application. If an archaeological or potential archaeological find is made then Union shall cease construction or restoration activities until such time as the finding can be assessed.

**3.0 Condition 3.1**

Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file four copies of both an interim and 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. Union Gas 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 such actions.

### **Condition 3.2**

The interim monitoring report shall confirm Union Gas's 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.

### **4.0 Condition 4.1**

Union Gas shall offer the form of easement agreement approved by the Board to each landowner, as may be required, along the route of the proposed work.

### **5.0 Condition 5.1**

Union Gas shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approval, permit, licences, and certificates upon the Board's request.

## **2.0 BACKGROUND**

Union was granted approval to construct the Trenton Area Reinforcement Project on February 28, 2011. Construction was initiated on April 28, 2011 with the pipeline placed into service on September 29, 2011 and cleanup for the year completed on November 10, 2011. Construction progressed from the tie in point at Union's Trenton Border Station in an easterly then southerly direction with the following order of operations: tree removal, stringing, welding, joint coating, directional drilling, trenching, lowering-in, tie-ins, backfilling, testing and clean-up.

Union will return to the right-of-way in spring 2012 to complete the following activities: repair any subsidence on the right-of-way, ensure there is adequate stability and re-vegetation on all watercourse crossings, perform a general overview of the right-of-way and complete any additional clean-up that may be required.

### **3.0 POTENTIAL IMPACTS AND MITIGATION**

#### **3.1 Condition 1.1**

Union Gas Limited (“Union”) shall construct the facilities and restore the land in accordance with its application and evidence filed in EB-2010-0329 except as modified by this Order and these Conditions of Approval.

Union has complied with all conditions imposed by the Board during construction of the pipeline and has restored the land according to the evidence in support of its application.

#### **3.2 Condition 1.3**

Except as modified by this Order, Union Gas shall implement all the recommendations of The Environmental Study Report filed in the pre filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee (“OPCC”) review.

Union has implemented all recommendations and mitigation measures outlined in the Environmental Study Report (ER) along with all directives identified by the OPCC.

#### **3.3 Condition 1.4**

Union Gas shall advise the Board’s designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union Gas shall not make such change without prior approval of the Board or it’s designated

representative. In the event of an emergency, the Board shall be informed immediately after the fact.

There were no changes to construction or restoration procedures during this project.

### **3.4 Condition 2.4**

Union Gas shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board's Order.

This Interim Monitoring report shall confirm that the work has been performed according to the Board's Order.

### **3.5 Condition 3.1**

Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file four copies of both an interim and 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 eighteen months of the in-service date. Union Gas 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 such actions.

#### **3.1.1 Report Circulation**

Four (4) copies of this Interim Monitoring Report are provided to the Board.

#### **3.1.2 Landowner Concerns**

Union's complaint tracking system, which identifies the current status of landowner complaints received as a result of pipeline construction, was/is in effect.



A complaint is identified as a concern raised by a landowner, which has not been resolved to the landowner's satisfaction within three (3) working days. There were no complaints entered into the complaint tracking system.

During construction, issues that were minor in nature were raised to Union and their contractor. These were dealt with by Union or the Contractor in an expeditious manner.

The final monitoring report will address any outstanding issues if they should arise. Union will continue to monitor the state of the land and environment and will address any additional landowner concerns, if they should arise.

### **3.5      Condition 3.2**

The interim monitoring report shall confirm Union Gas's 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.

In fulfilment of Condition 3.2, Table 1 summarizes the construction effects and general mitigation measures carried out during construction. All mitigation techniques used throughout construction will also be implemented during cleanup activities as required.

#### **3.2.1   Monitoring Programs**

##### **3.2.1.1   Archaeological Assessment**

Azimuth Environmental Consulting Inc. retained the services of Adams Heritage to carry out a Stage 1 archaeological background study in September 2009. The study indicated that during the nineteenth century, significant historical development occurred along the frontage of many of the roadways within the study area. Although in many areas development of the full width of the road right of way had perhaps

destroyed any archaeological potential within these areas, there still remained the possibility that small areas with archaeological potential may have escaped disturbance and a Stage 2 assessment was recommended.

The Stage 2 assessment was completed in April of 2010 with archaeology testing concentrated along the hydro corridor between Glenn Miller Road and Stickles Road due to the areas of previously undisturbed land. The remainder of the pipeline route followed existing roads within road allowance and had already been significantly disturbed through ditching. Testing was conducted however in areas within the road allowance which exhibited archaeological potential and where natural ground surfaces remain. No evidence of archaeological sites were encountered and no artifacts were recovered.

#### 3.2.1.3 Tree Removal/Replacement

It was necessary to remove approximately 0.2 hectares of woodlot along the hydro corridor on the northern portion of the pipeline right-of-way. The majority of the trees in this area were removed and utilized by the landowner in the winter of 2009. The Environmental Inspector was on site to indicate the cut zone and marked for removal only those trees necessary for the installation of the pipeline. The Environmental Inspector was also on site during the pruning operations along the road allowances to determine and control the amount of material removed. As part of Unions Tree Replacement Program, 1700 trees will be planted by the Hastings Stewardship Council, a division of the Ontario Ministry of Natural Resources, within the same geographic area in the spring of 2012.

#### 3.2.1.4 Water Well Monitoring

A water well monitoring program was initiated as recommended in the ER. Union retained the services of Stantec Consulting Ltd. to undertake an independent residential/private well monitoring program prior to construction activity to establish baseline ground water conditions.

All residents located within 100 m of the proposed pipeline were provided a notification letter detailing the construction work along the pipeline, potential risk of well interference and the proposed monitoring program. The letter also included contact information for Stantec and Union Gas. Residents who were interested in participating were included in the monitoring program. Stantec completed well monitoring on April 15, May 5, and May 20, 2011 at 14 residential homes along the pipeline route.

Water samples were analyzed for general inorganic water quality parameters with the results compared to the Ontario Drinking Water Standards (ODWS), Maximum Acceptable Concentrations (MAC) which have been established by the Ontario Ministry of the Environment. Upon receiving the results Stantec notified the residence regarding the water quality and any exceedances of the MAC. None of the exceedances of the parameters were a health-related risk under the ODWS.

The water quality results from the testing were summarized in individual letters to the respective residents, which also included contact information for the Hastings and Prince Edward Counties Public Health units for any follow up questions. To date there have been no water well complaints received due to construction.

#### 3.2.1.5 Watercourse Monitoring

Union implemented a monitoring program for all eleven (11) watercourse crossings along the pipeline route. The horizontal directional drill method was used to cross 10 watercourses and one (1) watercourse was crossed using the dam and pump method. All of the watercourses were crossed using methods approved by the Lower Trent Conservation Authority.

Watercourses were protected prior to, during and following construction by installing sediment fencing, straw bales and erosion control matting. Disturbed areas adjacent to the watercourses were seeded immediately following the installation of the pipeline.

Watercourses that were susceptible to erosion were checked after excessive rainfall to verify the effectiveness of the sediment control devices. These watercourses will be reviewed for stability and vegetation re-establishment in the spring of 2012 and any necessary mitigation will be undertaken at this time.

#### **4.0     Condition 4.1**

Union Gas shall offer the form of easement agreement approved by the Board to each landowner, as may be required, along the route of the proposed work.

All landowners affected by construction have received the same easement agreement as approved by the Board.

#### **5.0     Condition 5.1**

Union Gas shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approval, permit, licences, and certificates upon the Board's request.

Union Gas obtained the following environmental permits for construction:

##### **Lower Trent Conservation Authority - Watercourse Crossings**

- For Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Ontario Regulation 148/06.
- Application for Permission Permit No. F0018/10

## **6.0 SUMMARY**

This Interim Monitoring Report has been prepared as per conditions in the Board Order EB-2010-0329. The report provides an outline of Unions' compliance with the commitments of its witnesses, the measures implemented during construction to minimize disturbance to the environment and a description of Unions' monitoring programs. It is anticipated that these measures will effectively eliminate any long-term impacts to the environment.

A review of the pipeline route will be undertaken in the spring of 2012 to determine if any additional clean-up will be required. Should additional clean-up be required, it will be completed as soon as conditions allow in spring 2011.

A Final Monitoring Report will be prepared to evaluate the success of the measures and if necessary outline areas in need of additional restoration.

## **“Table 1”**

### **Potential Impacts and Mitigation Measures**

**TABLE 1: MITIGATION SUMMARY**

<b>Issue</b>	<b>Potential Impact</b>	<b>Proposed Mitigation</b>
a) Archaeology	Disturbance to cultural heritage resources.	<ul style="list-style-type: none"> <li>• Prior to any activities associated with the project, an archaeological survey was completed and concluded that the pipeline corridor was free from archaeological concern. No artifacts were found during construction.</li> </ul>
b) Trees	Removal / Replacement	<ul style="list-style-type: none"> <li>• Only those trees necessary were removed. The majority of the trees along the road allowance were trimmed to allow for working room.</li> </ul>
c) Water Wells	Disruption to water supply	<ul style="list-style-type: none"> <li>• A water well monitoring program was initiated prior to the start of pipeline construction.</li> <li>• To date no water well complaints have been received.</li> </ul>
d) Landowner Concerns	Disruption to landowners and tenants	<ul style="list-style-type: none"> <li>• Union provided the landowners/tenants with the telephone numbers of Company personnel.</li> <li>• A Landowner Relations Program was established to track complaints during construction.</li> <li>• To date there have been no complaints entered into the complaint tracking system.</li> </ul>
e) Paved Driveways and Roadways	Disruption to local traffic, landowners and tenants	<ul style="list-style-type: none"> <li>• All paved roadways and driveways were bored if practical.</li> <li>• If it was not possible to bore driveways and roads, steel plates were on site to provide access to landowners and tenants.</li> <li>• Union maintained one lane of traffic open if possible.</li> <li>• Traffic controls were implemented as required.</li> <li>• Driveways were repaired as soon as possible.</li> </ul>
f) Front Yards	Disruption to landowners and tenants	<ul style="list-style-type: none"> <li>• Landowners and tenants were notified before construction.</li> <li>• Restored lawns to original condition.</li> </ul>
g) Public Safety	Public safety concerns	<ul style="list-style-type: none"> <li>• Company inspectors ensured public safety on construction site.</li> <li>• Ensured proper signage and flag persons if required.</li> </ul>
h) Commercial/Retail Businesses	Disruption to businesses	<ul style="list-style-type: none"> <li>• Ensured access at all times.</li> <li>• Restored area as soon as possible after construction.</li> <li>• Scheduled construction with owners or managers.</li> </ul>
i) Construction Noise	Disturbance to landowners and tenants	<ul style="list-style-type: none"> <li>• Construction was carried out during daylight hours whenever possible.</li> <li>• Ensured equipment was properly muffled.</li> </ul>

Issue	Potential Impact	Proposed Mitigation
j) Construction Equipment	Disruption to landowners and tenants	<ul style="list-style-type: none"> <li>• Equipment was stored well off road shoulders or in a nearby yard when not in use.</li> </ul>
k) Traffic	Disruption to local citizens	<ul style="list-style-type: none"> <li>• At least one lane of traffic was maintained at all times.</li> <li>• Flag persons and warning devices were used to notify traffic of the construction zone in accordance with Ministry of Transportation standards.</li> </ul>
l) Fuel Storage and Handling	Improper fuel storage and handling may cause spillage and possible contamination of soil.	<ul style="list-style-type: none"> <li>• Fuel was not stored near watercourses (i.e. Within 100 metres)</li> <li>• Spill clean-up materials were stored on site and available in the event of a spill. Spills or leakage were to be reported to the appropriate authority immediately (Ministry of the Environment Spills Action Centre at 1-800-268-6060)</li> <li>• No reportable spills were recorded during construction.</li> </ul>



# **Appendix A**

## **Location Map**

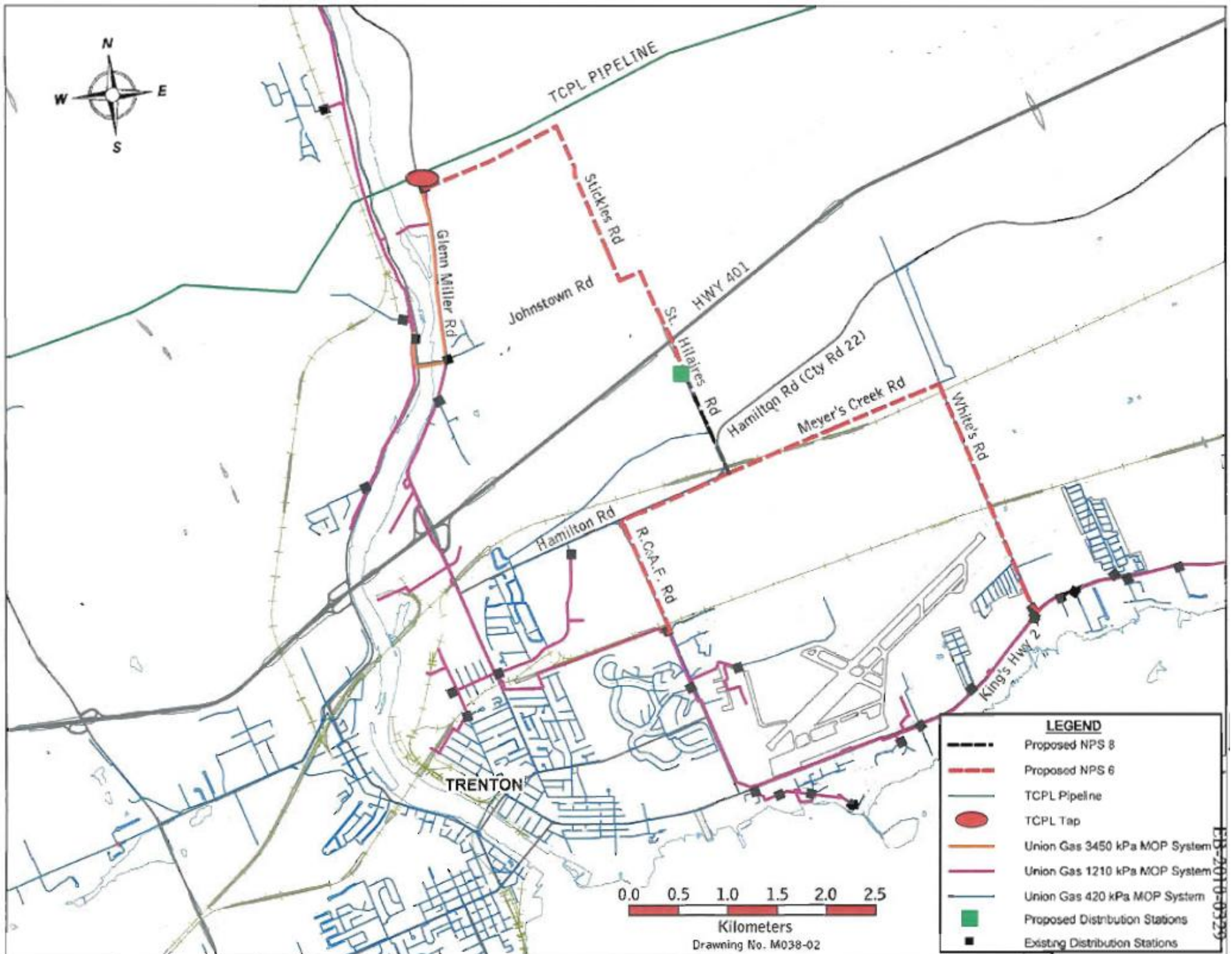


# GENERAL LOCATION MAP

## TRENTON AREA REINFORCEMENT PROJECT







## **Appendix B**

### **Conditions of Approval**

Union Gas Limited  
Leave to Construct Application

Conditions of Approval

**1 General Requirements**

- 1.1 Union Gas Limited ("Union") shall construct the facilities and restore the land in accordance with its application and the evidence filed in EB-2010-0329 except as modified by this Order and these Conditions of Approval.
- 1.2 Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate by December 31, 2011, unless construction has commenced prior to that date.
- 1.3 Union shall implement all the recommendations of the Environmental Report filed in the pre-filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee ("OPCC") review.
- 1.4 Union shall advise the Board's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union shall not make such change without prior approval of the Board or its designated representative. In the event of an emergency, the Board shall be informed immediately after the fact.
- 1.5 Within 15 months of the final in-service date, Union shall file with the Board secretary a Post Construction Financial Report. The Report shall indicate:
  - a) the actual capital costs of the project and an explanation for any significant variances from the estimates filed in this proceeding.
  - b) the actual capital costs for the project borne by Union and the actual costs contributed towards construction by the Department of National Defence including the method and the actual cost inputs used to determine the final amount of the contribution by the Department of National Defence.

**2 Project and Communications Requirements**

- 2.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Natural Gas Applications.



- 2.2 Union shall designate a person as project engineer and shall provide the name of the individual to the Board's designated representative. The project engineer will be responsible for the fulfillment of the Conditions of Approval on the construction site. Union shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven days of the Board's Order being issued.
- 2.3 Union shall give the Board's designated representative and the Chair of the OPCC ten days written notice in advance of the commencement of the construction.
- 2.4 Union shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board's Order.
- 2.5 Union shall file with the Board's designated representative notice of the date on which the installed pipelines were tested, within one month after the final test date.
- 2.6 Union shall file with the Board's designated representative notice of the date on written confirmation of the completion of construction. A copy of the confirmation shall be provided to the Chair of the OPCC.
- 2.7 Union shall keep Alderville First Nation apprised of any archaeological findings, burial sites or any environmental impacts, should any occur during the construction of the facilities and restoration of the lands as described in this application. If an archaeological or potential archaeological find is made then Union shall cease construction or restoration activities until such time as the findings can be assessed.

### **3 Monitoring and Reporting Requirements**

- 3.1 Both during and after construction, Union 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. Union 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 such actions.
- 3.2 The interim monitoring report shall confirm Union's 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 any mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

#### **4 Easement Agreements**

- 4.1 Union shall offer the form of agreement approved by the Board to each landowner, as may be required, along the route of the proposed work.

#### **5 Other Approvals and Agreements**

- 5.1 Union shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approvals, permits, licences, and certificates upon the Board's request.

## **Appendix C**

### **Photograph Inventory**





In some areas along the road allowance, over hanging branches limited the amount of working room for heavy equipment.



Prior to the start of construction and before the avian nesting period, branch trimming work was undertaken allowing for ample work space to manoeuvre the construction equipment without removing the tree or causing damage to the remaining vegetation.





Signs were erected in the vicinity of watercourses to ensure their protection during refuelling operations.



When necessary traffic was limited to one lane. Proper signage and flag persons were used to control traffic flow during these periods.





Along the northern portion of the right of way on agricultural land, once the separation between the topsoil and subsoil is established by the Environmental Inspector, a bulldozer was used to separate the two layers.



Following the installation of the pipeline, the topsoil is replaced and the area was cultivated by the tenant farmer to relieve any residual compaction.





The majority of the project involved the installation of the pipeline within road allowance. In most cases the road surface was used as temporary working room, thus causing less damage to the natural vegetation.



Upon completion of the pipeline installation, the area was seeded and successfully re-vegetated in this instance within two months.





One watercourse was crossed using the dam and pump method. Prior to construction silt fence and straw bales were placed along the banks to protect against sediments entering during topsoil stripping.



Immediately following the installation of the pipeline the area was seeded, covered with straw and the silt fences re-established to protect against erosion. The watercourse will be inspected in the spring of 2013 to ensure adequate re-vegetation has established.