

February 20, 2015

BY COURIER & RESS

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

Dear Ms. Walli:

RE: Union Gas Limited ("Union") Sudbury NPS10 Replacement EB-2015-0042

Union hereby requests an Order granting leave to construct approximately 700 metres of NPS12 natural gas pipeline pursuant to s. 90(1) of the Ontario Energy Board Act, 1998, S.O. 1998 c. 15 Sch. B (the "Act"). A package of supporting material is attached.

This pipeline is needed to replace two sections of the Sudbury system which must be replaced for integrity and class location issues.

Union further requests an exemption, pursuant to s. 95 of the Act, from any requirement to hold a hearing pursuant to the requirements of s. 90(1) of the Act.

Replacement of the existing pipeline would not require Ontario Energy Board leave to construct approval, if the existing pipe was removed and a new pipeline was constructed in the existing easement. However, as the sections of pipeline to be replaced are being up-sized, the project meets the requirements of s. 90(1) of the Act, requiring leave to construct.

Commencement of construction of the proposed pipeline is scheduled for May 2015.

In Union's view, there are a number of reasons why this case warrants an exemption including:

- 1. Unions pipeline integrity program has demonstrated a need for the pipeline replacement;
- 2. The directly affected private landowners have not identified any issues with the project.
- 3. The alternative to the proposed project is to complete separate individual investigative digs where the anomalies have been identified.

- 4. Union has completed an environmental screening for the project. If the proposed mitigation measures are followed, there will be no long term significant environmental impacts as a result of this project;
- 5. In order to ensure that there is no disruption of services to customers, construction is to be completed by November 2015.

If you require additional information, please contact Mark Murray, Manager, Regulatory Projects, Union Gas Limited at 519-436-4601.

Yours truly,

[original signed by]

Mark Murray Manager, Regulatory Projects and Lands Acquisition :sb Encl.

cc: Pascale Duguay, Manager Facilities Applications Zora Crnojacki, Project Advisor

SUDBURY NPS10 REPLACEMENT PROJECT

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Project Summary

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- 2 1. Union Gas Limited ("Union"), pursuant to Section 90.(1) of the Ontario Energy Board Act,
- requests approval from the Ontario Energy Board ("OEB") for leave to construct
- 4 approximately 700 metres of NPS12 hydrocarbon (natural gas) pipeline ("Proposed
- 5 Pipeline"), to replace two sections of the existing Sudbury lateral NPS10 Line located in the
- 6 City of Greater Sudbury (the "Project"). The location of the Proposed Project is shown on
- 7 Schedule 1.
- 8 2. The NPS10 Sudbury Lateral commences in North Bay and terminates in Espanola. The
- 9 Sudbury Lateral was predominantly constructed in 1958. Union is proposing to replace and
- upsize two short sections of the Sudbury lateral to address class location changes, integrity
- issues and some future growth requirements.
- 12 3. Union completes property and population reviews of its pipelines for class location
- compliance. This review has identified several locations along the identified existing stretches
- of the Sudbury lateral that need to be replaced to meet the current requirements. This line is
- also inspected periodically as part of Union's Integrity Management Program. Results of
- scheduled inspections and associated investigative digs over the past 12 years have identified
- multiple integrity issues that could pose safety and security of supply concerns if not
- addressed. From these two perspectives, the replacement of the proposed sections of the
- Sudbury Lateral is the most effective way of managing its ongoing safety and reliability.
- 20 4. As part of the replacement, Union is proposing to increase the size of this portion of the
- Sudbury Lateral from the current NPS 10 diameter pipeline to an NPS 12 diameter pipeline.
- The increase in pipeline size will provide some additional capacity for future growth on the

- Sudbury system. Union anticipates this incremental capacity will help to serve future
- demands for Industrial/Commercial/Residential customers in the Sudbury area.
- 3 5. The cost of the Project is approximately \$2 M.
- 4 6. Union has discussed the Project with the directly affected landowners along the route of the
- 5 pipeline and no issues have been identified.
- 6 7. Union has completed an Environmental Screening for the Project. The Screening did not
- 7 identify any long term significant environmental impacts as a result of the Project.
- 8. Union is proposing to replace this pipeline during the 2015 summer construction season. In
- order to accommodate this, Union respectfully requests Ontario Energy Board approval by
- 10 May 2015.

Description of Existing Sudbury System

- 9. Sudbury currently receives gas from two pipelines ("Sudbury Lateral System") that both
- originate from the TCPL pipeline system in the North Bay area. The Sudbury Lateral
- System extends for a total distance of approximately 211 kilometers from North Bay to
- Espanola and services the entire Sudbury District along with numerous communities along
- the route.
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- 18 10. The Sudbury Lateral System consists of a NPS10 line which interconnects with TCPL in the
- 19 City of North Bay and an NPS12 line which extends from TCPL in the Marten River area,
- 20 north of the City of North Bay.

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1 11. The original NPS 10 line was installed in 1958 with the intent to provide natural gas service

to Sudbury as well as other communities located between North Bay and Sudbury.

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4 12. As a result of continued growth in the area, between 1972 and 1987, the NPS 10 line

was looped in phases with an NPS 12 pipeline which extends from a TCPL interconnect at

Marten River to the northwest end of Sudbury.

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8 13. The design day for the Sudbury Lateral System is a 52 degree day. A 52 degree day is

Union's standard design day calculation and in this case corresponds to an effective daily

average outdoor temperature of minus 34 degrees Celsius. This is the Union Gas standard

for the Sudbury temperature zone.

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14. A schematic of the Sudbury System can be found at Schedule 2.

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Background

16 **Integrity**

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15. Since 2002, Union has had an extensive pipeline maintenance and integrity management

program in place that includes the regular monitoring of pipelines for corrosion, leaks or other

potential damage to ensure its pipelines remain in safe operating condition.

21 16. As part of this program, Union regularly conducts inline assessments of its pipelines using

inline inspection tools to determine the condition of the pipelines. Based on the results of

these assessments, Union takes appropriate mitigation action to address any integrity issues

- 2 that are found.
- 3 17. The Pipeline was initially inspected using inline inspection tools in 2002, and subsequent
- 4 inspections were completed in 2006 and 2014. Investigative digs were also completed on the
- 5 Pipeline subsequent to the inline inspections, and anomalies were removed from the Pipeline.
- The inspections completed in the past identified metal loss at a number of locations that need
- 7 to be further investigated to address the potential defects.
- 8
 9 18. Based on Union's experience with this pipeline and given its overall condition and proximity
- to built-up areas, replacement of the these sections of the pipeline was deemed the most
- effective action to manage and ensure the long term integrity of the pipeline.
- 12 19. If the Project is delayed, integrity concerns will become more serious as the risk of a potential
- failure increases.

Class Location

- 14 15
- 16 20. At the time of the original construction of the NPS 10 Sudbury Line in 1958, the population,
- land use density and the number of dwellings were such that the pipeline was designed for a
- 18 Class 1 location. Since this initial construction, land use and population density along sections
- of the NPS 10 Sudbury Line have changed, resulting in change to class locations and the
- original design of the pipe has to be upgraded.
- 21. The pipe design depends on which Class Location it is located within. To determine Class
- Location, CSA Z662-11 uses a classification system that takes into account land use and
- 23 population density. The classifications are as follows:

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a. Class 1 areas consist of 10 or fewer dwellings;

b. Class 2 areas consist of 11 to 45 dwellings, or a building occupied by 20 or more

persons during normal use such as playgrounds, recreational areas, or other places of

public assembly as well as industrial installations;

c. Class 3 areas consist of 46 or more dwellings.

d. Class 4 contains a prevalence of buildings intended for human occupancy with 4 or

more stories above ground.

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22. The Class Location boundaries are determined by a sliding boundary 1.6 km long by 400

meter wide centered over the pipeline. This method covers existing development. This is

supplemented with information for future development through discussions with landowners,

and municipalities. The pipeline may be designed to accommodate a higher Class Location to

be compatible with future development.

13 23. Since this initial construction, land use and population density have changed such that the

Proposed Pipeline will be constructed in compliance with the requirements of CSA Z662-11

Standard in accordance with the Code Adoption Document under Ontario Regulation 2010/01.

The Proposed Pipeline will be designed to meet Class 3 requirements.

17 24. Based on Union's experience with this pipeline and given its overall condition and proximity

to built-up areas, the proposed Project was deemed the most effective action to manage and

ensure the long term integrity of the pipeline and class location design compliance.

Proposed Facilities

25. Union is proposing to replace two sections of the NPS 10 Sudbury Line:



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Section one is 250 meters long and located near the Falconbridge Road and Maley
 Drive in the City of Sudbury, ("Section One") and

 Section two is 450 meters long and located between LaSalle Road and Frood Road in the City of Sudbury, ("Section Two").

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- 6 26. A map showing the Proposed Pipeline can be found at Schedule 1.
- 7 Alternatives
- 8 27. To address the integrity issues and class location issues with the Sudbury Line, Union considered two additional options:
 - (a) Size for size replacement of the Sudbury Line; and
 - (b) Replacement of individual sections of the pipeline identified as not meeting integrity or complying with class location requirements.
- Option (a) was not selected as it would not serve the forecasted growth in the City of Greater

 Sudbury. Option (b) was eliminated as a result of inefficiencies related to the individual

 replacements required to meet all integrity and class location requirements.
- 16 29. Based upon this analysis, Union decided the proposed Project is the preferred method to address these concerns.

18 19

Project Costs and Economics

20 30. The estimated Project costs for the project are approximately \$2 M. A detailed breakdown of these costs can be found at Schedule 3.

1 31. A Discounted Cash Flow report has not been completed for this Project as the Project is

underpinned by the integrity and class location requirements and there are no new contracts

associated with this Project.

Design and Construction

5 32. The existing pipeline will be removed and the Proposed Pipeline installed in the existing

6 easement.

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7 33. The design and pipe specifications are outlined in Schedule 4. All the design specifications

are in accordance with the Ontario Regulations 210/01 under the Technical Standards and

Safety Act 2000, Oil and Gas Pipeline Systems. This is the regulation governing the

installation of pipelines in the Province of Ontario.

11 34. The current class location for the Proposed Pipeline includes Class 1, 2 and 3. In

consideration for future potential development along the route, the entire length of the

Proposed Pipeline will be designed for Class 3 location requirements.

14 35. The Proposed Pipeline has an outside diameter of 323.9 mm and a minimum wall thickness of

5.6 mm. The pipe is to be manufactured by the electric resistance weld process and will have

minimum specified minimum yield strength of 359 MPa. This pipe will be manufactured to

the CSA Z245.1-07 Steel Line Pipe Standard for Pipeline Systems and Materials. This

pipeline will have a design maximum operating pressure of 3723 kPa.

19 36. The Proposed Pipeline will be hydrostatically tested in accordance with the Ontario

20 Regulation requirements.

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1 37. The minimum depth of cover will be in accordance with Clause 4.11 of the CSA Code

Z662-11. Additional depth greater than the planned depth of 0.8 meters will be provided to

accommodate existing or planned facilities.

4 38. Material is readily available for this Project.

39. Schedule 5 indicates the proposed construction schedule which is scheduled to commence in

6 May 2015 and be completed by the end of August 2015.

7 40. Abandonment of portions of the existing pipeline will be completed in compliance with TSSA

guidelines. The TSSA abandonment guidelines can be found at Schedule 6.

9 41. Schedule 7 describes the general techniques and methods of construction that will be

employed in the construction of the Proposed Pipeline. This schedule details the following

activities; locating, clearing and grading, removal of existing pipe, stringing of new pipe,

trenching, welding, burying, tie-ins, cleaning and testing and restoration. Union's construction

procedures have been continually updated and refined in order to mitigate potential

environmental effects related to pipeline construction and be responsive to landowner

concerns.

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Landowners

17 42. To construct the Proposed Pipeline, Union plans to utilize its existing easements. No new

permanent land rights are required.

19 43. Section One will be constructed on lands owned by a private landowner using Union's

existing rights, of the City of Greater Sudbury and cross under the Canadian National Railway

21 ("CN").

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1 44. Union will require temporary land use from a private landowner who did not identify any

2 issues with the Project and has provided a letter of non-objection which can be found at

Schedule 8 and the City of Greater Sudbury. Union will follow its standard practice for the

CN crossing and has applied for permission to complete the crossing. Union has discussed the

Project with the City of Greater Sudbury and they have not identified any issues with the

6 Project.

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7 45. Section Two impacts lands controlled by the City of Greater Sudbury. This includes both the

road allowance form LaSalle Road and other lands owned by the City of Greater Sudbury.

9 No issues have been identified.

10 46. All construction within existing roads will be completed following Union's Franchise

Agreement with the City of Greater of Sudbury.

12 47. Union will require crossing permits or agreements with the City of Greater Sudbury,

Conservation Sudbury, CN, and Hydro One.

14 48. No landowner issues have been identified.

15 49. Schedule 9 are maps that shows the running line of the Proposed Pipeline and the land rights

required for the pipeline.

50. Schedule 10 lists the temporary land use rights required to construct the Proposed Pipeline.

18 51. Union will require temporary land rights to complete construction of the Proposed Pipeline.

19 52. Temporary land use agreements are usually required for a period of two years. This allows

Union the opportunity to return in the year following construction to perform further clean-up

and remediation work as may be required.

1 53. At the conclusion of construction, Union will seek a full and final release from each of the

directly affected landowner. This full and final release will include compensation for any

damages caused or attributed to the pipeline construction.

4 54. Union has assigned a Lands Agent to address any landowner issues with this Project during

5 construction.

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6 55. After construction, negotiations with landowners will continue, where necessary, to settle any

damages that were not foreseen or compensated for, prior to construction.

Environmental

9 56. As the majority of the pipeline will be removed and a new pipeline installed in the same

location, the full route selection was not completed.

11 57. Union completed an Environmental Screening for the Project. A copy of the Environmental

Screening can be found at Schedule 11.

13 58. Union will implement a program dealing with environmental inspection. This program will

ensure that the recommendations in the Screening are followed.

15 59. An inspector trained in environmental issues will monitor construction activities and ensure

that all activities comply with the mitigation measures found in the Screening.

17 60. Union has discussed the project with the Conservation Sudbury and the Ministry of Natural

Resources and will continue to work with them throughout the project to secure any necessary

permits. Union expects to obtain the necessary permits and authorizations prior to

20 construction.

1 61. With respect to watercourses, Union will adhere to the agreement with the Department of

2 Fisheries and Oceans – Ontario great Lakes Area (DFO- OGLA/UGL AGREEMENT 2088).

Under the agreement Union conducts watercourse crossings using a specific set of conditions

and mitigation measures without DFO review. There is one watercourse associated with the

Project that will be crossed using the directional drill or dam and pump method. The necessary

permits will be obtained from Conservation Sudbury.

First Nation and Métis Nation

8 62. Union has a long standing practice of consulting with Métis and First Nations, and has

programs in place whereby Union works with them to ensure they are aware of Union's

projects and have the opportunity to participate in both the planning and construction phases

of the project.

63. Union has an extensive data base and knowledge of First Nations and Métis organizations in

Ontario and consults with the Tribal organizations and the data bases of the Ministry of

Natural Resources, Ministry of Aboriginal Affairs and Aboriginal Affairs and Northern

Development Canada to ensure consultation is carried out with the most appropriate groups.

64. Union has signed a General Relationship Agreement with the Métis Nation of Ontario which

describes Union's commitments to the Métis when planning and constructing pipeline

projects.

65. The following First Nations and Métis were notified by letter regarding the Project.

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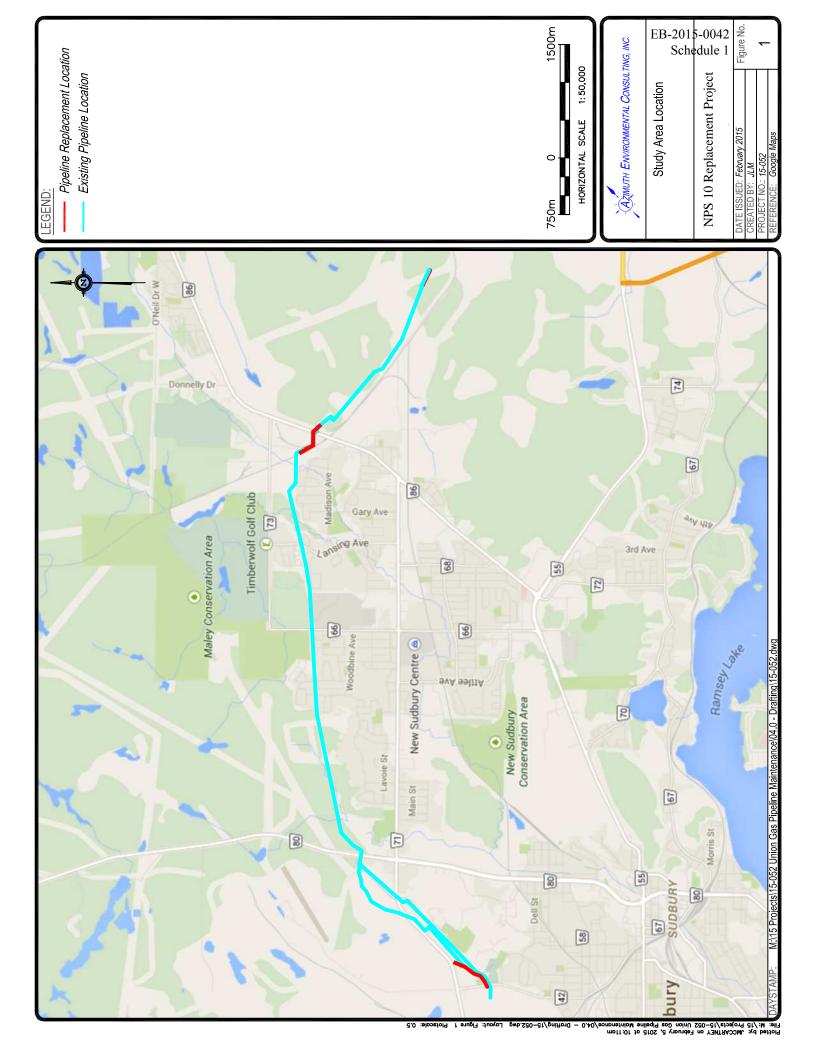
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Chief Ted Roque	Wahnapitaie First Nation
Chief Steve Miller	Whitefish First Nation
Councillor Juliette Denis	Region 5 Métis Nation of Ontario
Steve Sarrazin	LRC Coordinator Sudbury Métis Nation of Ontario

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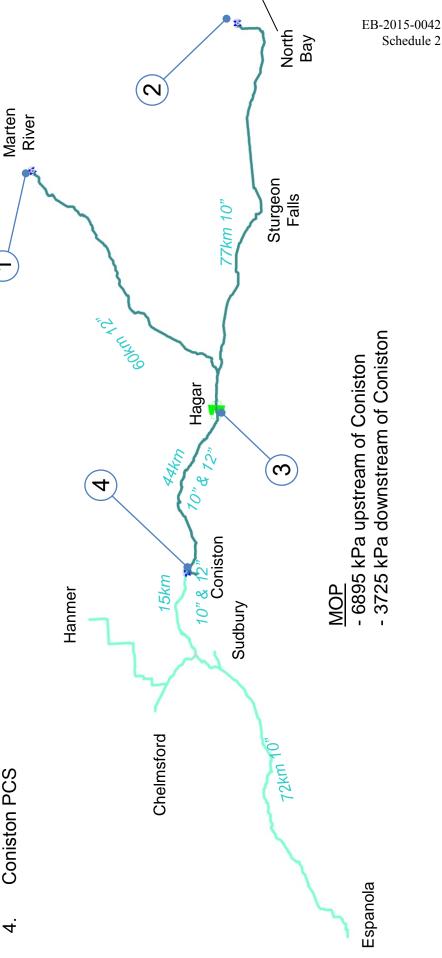
- 2 66. Union will continue to meet and consult with the First Nations and the Métis organizations 3 noted above.
- During construction, Union has inspectors in the field who are available to First Nation's and Métis organization as a primary contact to discuss and review any issues that may arise during construction.
- When Union completes the necessary archaeological assessments for the project Union will consult with and provide the result of the surveys to any First Nations or Métis upon their request.



Sudbury System Overview



- Marten River Control Valves
- North Bay Control Valves
- Hagar LNG Facility
- Coniston PCS



TOTAL ESTIMATED PIPELINE CAPITAL COSTS SUDBURY NPS 10 REPLACEMENT PROJECT

Pipeline and Equipment		
NPS 12 Steel Pipe, Coated 700.0 metres	\$ 83,250	
Valves, Fittings and Miscellaneous Material	\$ 55,000	
Total Pipeline and Equipment		\$ 138,250
Construction and Labour		
Lay 700.0 metres of NPS 12 Steel Pipe Miscellaneous Contract Labour	\$ 1,221,727	
Company Labour, Inspection, X-Ray, Construction Survey, Legal, Environmental, Archeology, and Permitting	\$ 319,640	
Easements, Lands, Damages & Regulatory	\$ 130,400	
Total Construction and Labour		\$ 1,671,767
Subtotal Estimated Pipeline Capital Costs - 2015 Construction		\$ 1,810,017
Contingencies 10%		\$ 181,002
Interest During Construction 1.5%		\$ 32,500
Total Estimated Pipeline Capital Costs - 2015 Construction		\$ 2,023,519

Sudbury Integrity

DESIGN AND PIPE SPECIFICATIONS

Design Specifications: NPS 12

Class Location (existing) - Class 1, 2 and Class 3

Design Class Location - Class 3

Design Factor - 0.8

Location Factor (General) - 0.700

Location Factor (Roads/Railways) - 0.625

Location Factor (Stations) - 0.625

Maximum Design Pressure - 3723 kPa

Maximum Operating Pressure - 3723 kPa (current)

Test Medium - Water
Test Pressure - 5212 kPa
Valves/Fittings - PN 100
Minimum Depth of Cover - 1.2 m

Pipe Specifications:

Size - NPS 12
Outside Diameter - 323.9 mm
Wall Thickness - 5.6 mm
Grade - 359 MPa

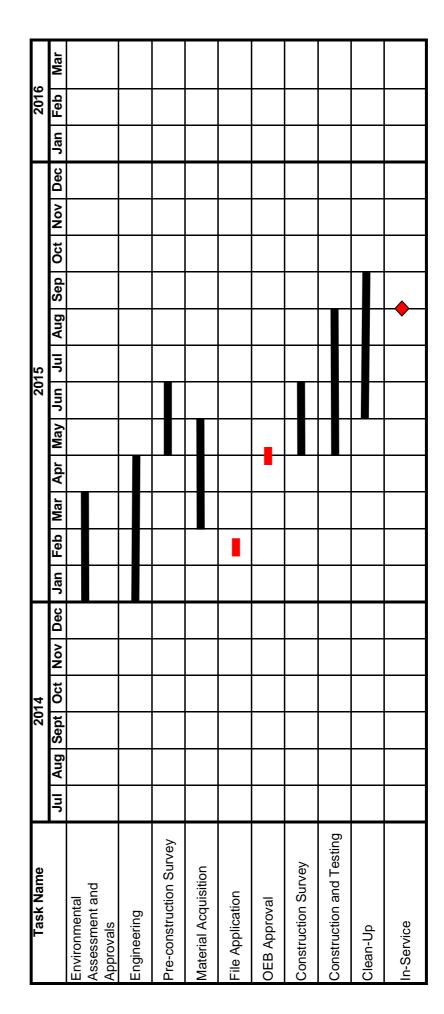
Type - Electric Resistance Weld
Description - C.S.A. Standard Z245.1-07

Category - Cat. I, M5C

Coating - Yellow Jacket, Dual Layer FBE

% SMYS - 30%

Sudbury Replacement Pipeline Construction Schedule





PIPELINE ABANDONMENT CHECKLIST

PLANNING

- 1. Has subsidence been considered for pipelines having a diameter greater than 323.9 mm (12 inches)?
- 2. Has the pipeline company notified the landowners and proper authorities (municipalities, MOE, MTO, MNR, etc.) of the abandonment?
- 3. Have abandonment procedures for crossings been agreed upon by utilities (road, railway, pipelines, etc.) and authorities responsible for rivers and streams crossed by the pipeline?
- 4. Has consideration been given to the effect of drainage in the area surrounding the abandoned pipeline, which may act as a conduit for ground water after the pipe is perforated by corrosion?
- 5. Has consideration been given to the removal of all the aboveground facilities?
- 6. Has consideration been given to any hazards posed to people, equipment, wildlife or livestock by any apparatus left in place above or underground?

IMPLEMENTATION

- 1. Has the abandoned pipeline been physically isolated from the live pipeline?
- 2. Has the pipeline been drained of all fluids and adequately cleaned to prevent ground water contamination from hydrocarbon residue on the pipe wall after the pipe is perforated by corrosion?
- 3. Have all aboveground facilities been removed and has consideration been given to removing underground facilities such as anode beds and tanks?

LIABILITY/RISK MANAGEMENT

- 1. Does the pipeline company have a contingency plan to remedy any contamination caused by the abandoned pipeline?
- 2. Has consideration been given to conducting post-abandonment surveillance programs?
- 3. Has consideration been given to maintaining signage after the pipeline is abandoned?
- 4. Has consideration been given to providing a locate service after the pipeline is abandoned?

GENERAL TECHNIQUES AND METHODS OF CONSTRUCTION

- 1. Union Gas Limited ("Union") will provide its own inspection staff to enforce Union's construction specifications and *Ontario Regulation 210/01 under the Technical Standards and Safety Act 2000, Oil and Gas Pipeline Systems*.
- Pipeline construction is divided into several crews that create a mobile assembly line. Each crew performs a different function, with a finished product left behind when the last crew has completed its work.
- 3. Union's contract specifications require the contractor to erect safety barricades, fences, signs or flashers, or to use flag persons as may be appropriate, around any excavation across or along a road.
- 4. It is Union's policy to restore the areas affected by the construction of the pipeline to "as close to original condition" as possible. As a guide to show the "original condition" of the area, photos and/or a video will be taken before any work commences. When the clean-up is completed, the approval of the landowner or appropriate government authority is obtained.
- 5. Construction of the pipeline includes the following activities:

Locating Running Line

6. Union establishes the location where the pipeline is to be installed ("the running line"). For pipelines within road allowances, the adjacent property lines are identified and the running line is set at a specified distance from the property line. For pipelines located on private easement, the easement is surveyed and the running line is set at the specified distance from the edge of the easement. The distance from the start of the pipeline (or other suitable point) is marked on the pipeline stakes and the drawings.

Clearing and Grading

7. The right-of-way is prepared for the construction of the pipeline. When required, bushes, trees and crops are removed and the ground leveled. When required, the topsoil is stripped and stored, and/or sod is lifted.

Removing Existing Pipeline

8. The existing trench is excavated exposing the existing pipeline. The spoil material is placed onto the easement, separate from the topsoil. The majority of the existing NPS 10 pipeline will be removed from the trench, cut into sections and trucked off site. The trench is then backfilled.

Abandoning Existing Pipeline

9. The existing pipe within road allowance and in environmentally sensitive areas can be abandoned in place. The abandoned sections are capped and filled with grout, a low density concrete.

Stringing

10. The joints of pipe are laid end-to-end on supports that keep the pipe off the ground to prevent damage to the pipe coating.

Welding

11. The pipe is welded/fused into manageable lengths. The welds in steel pipe are radiographically inspected and the welds are coated.

Burving

12. Pipe may be buried using either the trench method or the trenchless method. All utilities that will be crossed or paralleled by the pipeline are located by the appropriate utility prior to installing the pipeline. Prior to trenching, all such utilities will be hand-located or hydro vacuumed.

Trench Method: Trenching is done by using a trenching machine or hoe excavator depending upon the ground conditions. Provisions are made to allow residents access to their property, as required. All drainage tiles that are cut during the trench excavation are flagged to signify that a repair is required. All tiles are measured and recorded as to size, depth, type and quality. This information is kept on file with Union. If a repair is necessary in the future, Union will have an accurate method of locating the tile. Next, the pipe is lowered into the trench. For steel pipe, the pipe coating is tested using a high voltage electrical tester as the pipe is lowered into the trench. All defects in the coating are repaired before the pipe is lowered in. Next, if the soil that was excavated from the trench is suitable for backfill, it is backfilled. If the soil is not suitable for

backfill the trench is backfilled with suitable material such as sand. After the trench is backfilled, drainage tile is repaired.

Rock Excavation: Rock in solid beds or masses will be removed by "Hoe Ram", where practical. Where rock that is too hard to "Hoe Ram" is encountered, blasting will be permitted in accordance to Union's construction procedures and the *Canadian Explosives Act*. The contractor shall obtain all necessary permits and shall comply with all legal requirements in connection with the use, storage and transportation of explosives.

Trenchless Method: Trenchless methods are alternate methods used to install pipelines under railways, roads, sidewalks, trees and environmentally sensitive areas. The trenchless method proposed for the NPS 12 pipeline is directional drilling. This method involves setting up a receiving hole and an exit hole, drilling a pilot hole on the design path, reaming the pilot hole larger by passing a cutting tool and pulling the pipe back through the bored hole.

Tie-Ins

13. The sections of pipelines that have been buried using either the trench or trenchless method are joined together (tied-in).

Cleaning and Testing

14. To complete the construction, the pipeline is cleaned, tested in accordance with Union's specifications using water.

Restoration

15. The final activity is the restoration. The work area is leveled, the sod is replaced in lawn areas and other grassed areas are re-seeded. Where required, concrete, asphalt and gravel are replaced to return the areas to as close to the original conditions as possible.

From: Rade Brujic

Sent: February-12-15 1:00 PM

To: Rodger, Chantelle

Subject: Re: UGL, Temp. Land Use & Access

I am in support of your project and agree to provide all land rights required to construct your pipe line .

Rade

Sent from my iPhone

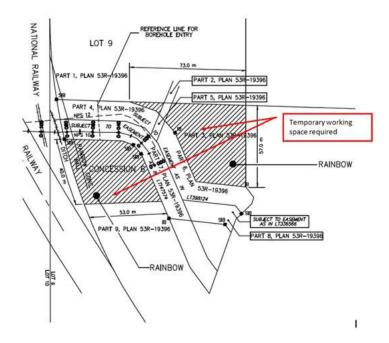
On 2015-02-11, at 11:21 AM, "Rodger, Chantelle" < CRRodger@uniongas.com > wrote:

Hello Rade,

Thank you for your email yesterday. Further to the meeting yourself, Johanna Sanchez and I had, we will be submitting an Application to the OEB in regards to this project. As part of our Application, it would be a benefit to have an email from you stating that you are "in support of the project and agree to provide all land rights required to construct and maintain the pipeline".

For your reference, below is a drawing setting out the temporary working space required, the pipeline within our easements and the borehole entry point.

Are you opposed to providing me with an email as above mentioned prior to your return to the office?



Regards,

Chantelle Rodger

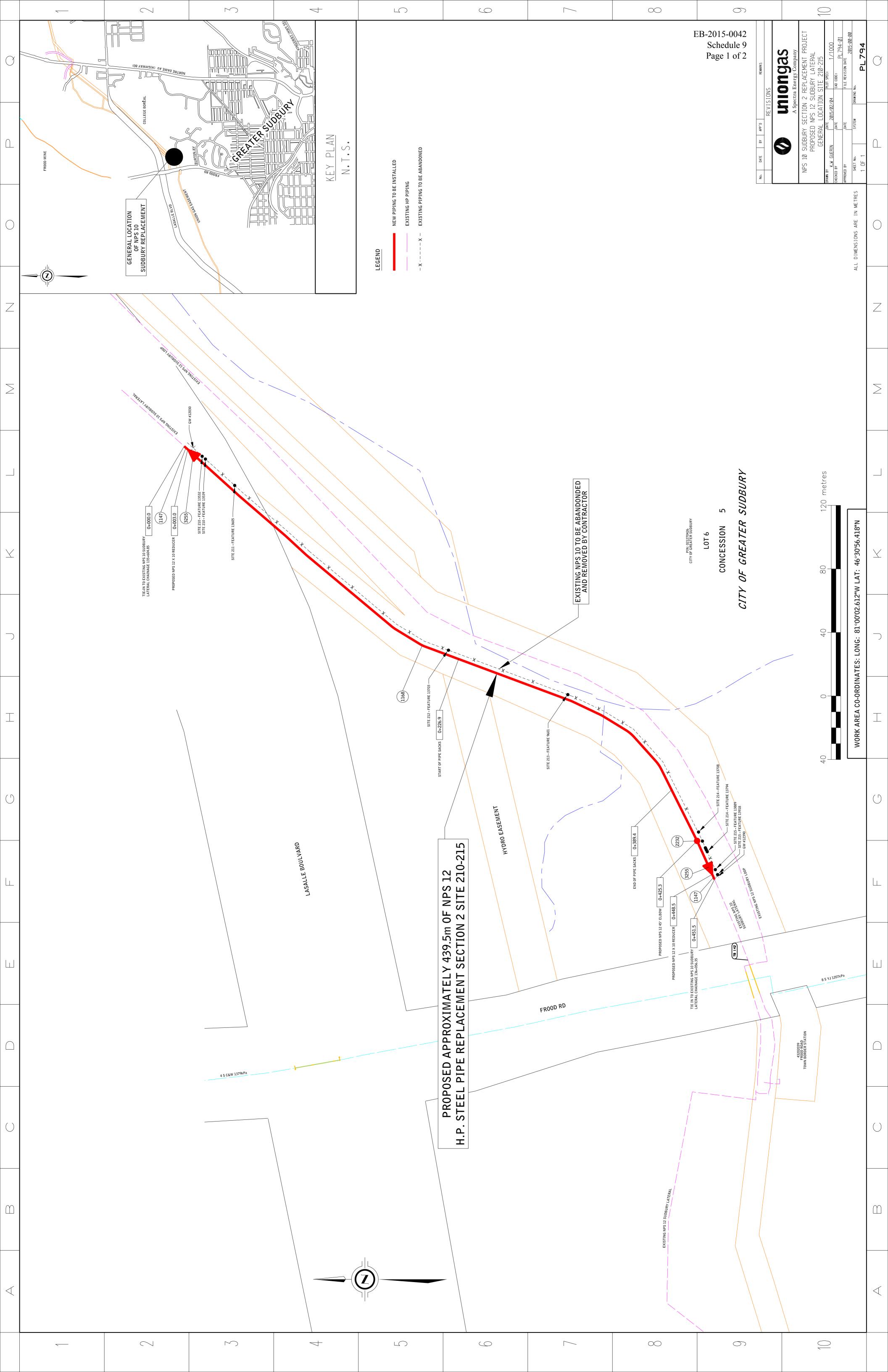
Associate Land Agent Union Gas Limited | A Spectra Energy Company

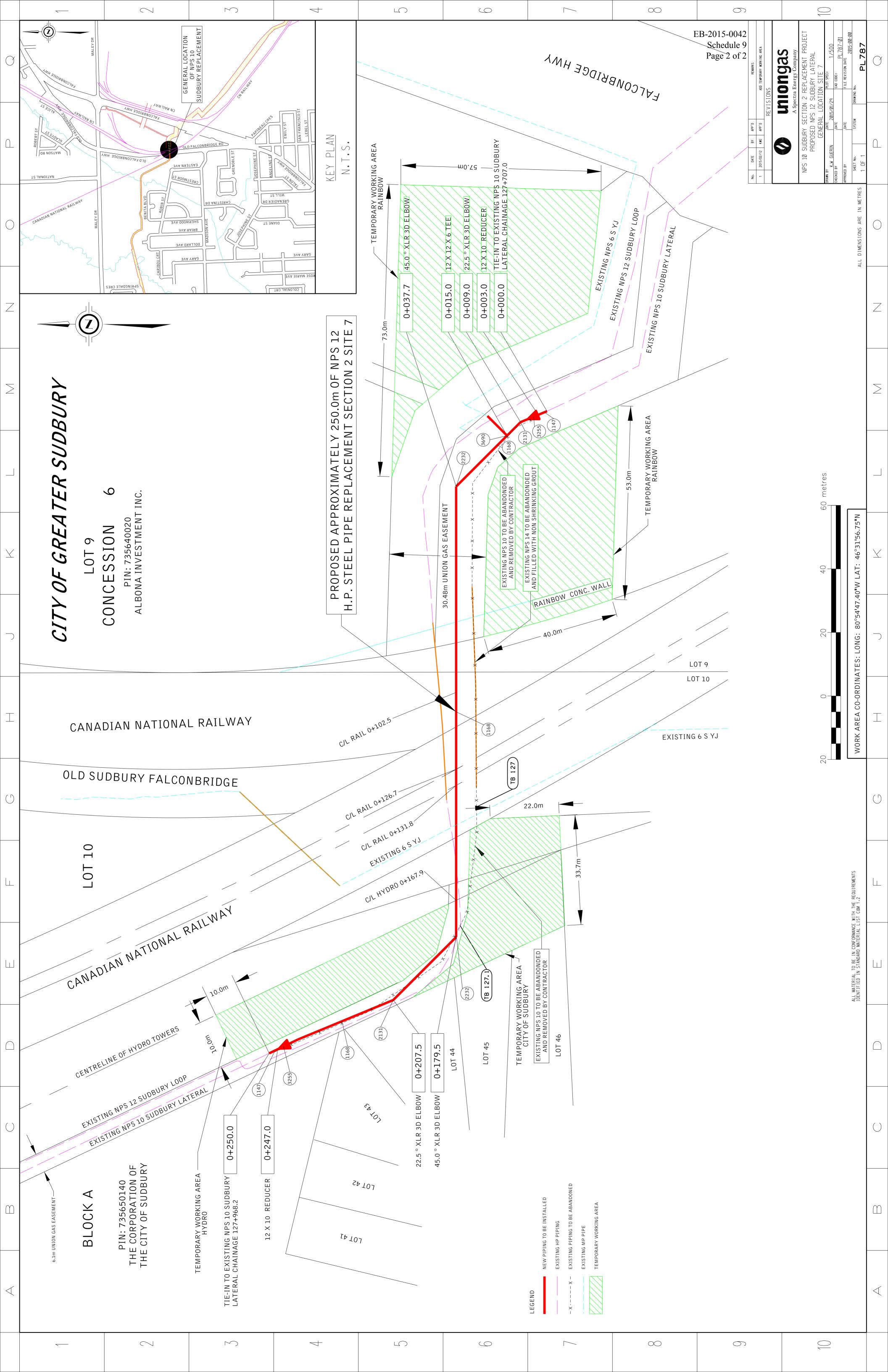
36 Charles Street East | P.O. Box 3040 | North Bay, ON P1B 8K7 Tel: 1-705-474-8483 Ext. 5176048 | 1-888-401-6791 Ext. 5176048

Fax: 1-705-474-4717 Cell: 1-705-491-5348

Email: crrodger@uniongas.com | www.uniongas.com |

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FILE NO. NAME & ADDR	ESS	PROPERTY DESCRIPTION	PERMANENT EASEMENT Dimensions (Metres) Area Length Width (Hectares)	TEMPORARY EASEMENT <u>Dimensions (Metres) Area Length Width</u> (Hectares)	MORTGAGE, LIEN/LEASE, EASEMENT (M) (L) (E)
T380-069	Albona Investments (Rainbow Concrete) 2477 Maley Drive Sudbury, ON P2A 4R7	PIN 73564-0020 Pel 45401 Sec Ses Sro; Pt Lt 9 Con 6 Neelon Pt 1 To 15 53R8738; S/T Lt147574(Partially Released Under Lt336565), Lt154139, Lt179385, Lt336566, Lt398124, Lt489032; Greater Sudbury		73 x 57 53 x 40	(e) Hydro One Networks Inc.
T380-071	The Corporation of the City of Sudbury 200 Brady Street Sudbury, ON P3A PIN 73565-0931 SP3 Pcl 18051A Sec. 15P3	PIN 73565-0931 Pcl 18051A Sec Ses; Pt Lt 10 Con 6 Neelon As In Lt122563; S/T Lt147324, Lt77666, Lt79444, Lt86480, Lt86481: Greater Sudbury		10 x 67 IRR 22 x 37 IRR	
T380-071	The Corporation of the City of Sudbury 200 Brady Street Sudbury, ON P3A 5P3			80 x 10 IRR 47 x 33.7 IRR	(e) Hydro One Networks Inc.
	Hydro One Networks Inc. 185 Clegg Road Markham, ON L6G 1B7	PIN 73565-0795 PCL 12630 SEC SES; PT LT 10 CON 6 NEELON AS IN LT71302; S/T LT156335, LT460787; CREATER SUIDBURY		10 x 10	(e) The Regional Municipality of Sudbury
	The Canadian Northern Ontario Railway Company		Permit		
Section Two - LaSalle Road to Frood Road	od Road				
FILE NO.	NAME & ADDRESS	PROPERTY DESCRIPTION	PERMANENT EASEMENT Dimensions (Metres) Area Length Width (Hectares)	TEMPORARY EASEMENT <u>Dimensions (Metres) Area Length Width</u> (Hectares)	MORTGAGE, LIEN/LEASE, EASEMENT (M) (L) (E)
T384-017	The Corporation of the City of Sudbury 200 Brady Street Sudbury, ON P3A 5P3	PIN 02127-0426 Firstly: Sto Part Lot 5 Con 5 Township Of Mckim Being Parts 3, 4, 13, 14, 15, 16 And 17 On Plan 53R15280; *** Subject To Easement Over Parts 14 And 16 As In Lt165019; Subject To Easement Over Parts 13, 14 And 15As In Lt448769; *** Together With A Rights Of Way Over Parts 9, 10, 11, 12 And 18 Plan 53R15280; *** City Of Sudbury ### Secondly: Sto Of Part Lot 6 Con 5, Township Of Mckim Being Parts 1, 2, 3, 4, 5, 6, 7, 8,9, 10, 11, 12, 13, 14, 15 And 16 On Plan 53R8297; *** Subject To Ea Sement Over Parts 4, 6, 8 And 12 As In Lt147574; Subject To Easement Over Part 1 As In Lt284256; Subject To Easement Over Parts 6, 14, 15, 16 And 17 As In Lt448769; Subject To Easement Over Parts 0, 13, 14 And 5 Plan 53R11635 As In Lt633625; Subject To Easement Over Part 6 Plan 53R11635 As In Lt633625; Subject To Easement Over Part 6 Plan 53R11635 As In Lt633625; Subject To Easement In Gross Over As In Lt803051; Subject To An Easement In Gross Over Part 1, 2, 3, 4,5&6 53R20222 As In Sd276161 City Of Greater Sudbury			(e) Nickel District Conservation Authority



Environmental Checklist

The Project Originator is responsible for reviewing and completing the following checklist to determine if the project should be forwarded to EH&S Planning for their review. When completing this form, please <u>ensure</u> that a Description of Feature is given and that the Proposed Mitigation is identified for those features marked YES in the Impacted column.

Project Name: NPS 10 Replacement Project Number:

Project

Date: 2015-02-02
Project Originator: North Bay District

Project Description: Replace two sections of the NPS 10 inch Sudbury Lateral Line with new

NPS 12 inch within the existing trench.

Feature and Description	Impacted Yes/No	Proposed Mitigation
Water Course Crossings Description: Crossings see attached	Yes	See sections 3.44 and 3.45 C&M Manual for mitigation. Adhere to SCR and permit requirements
drawings for locations 1 Watercourse Crossing/ Work in Vicinity		If possible use Horizontal Directional Drill method following the Generic Sediment Control Plan - Horizontal Directional Drill
		If HDD is not feasable use Dam and Pump method following the Union Gas/DFO endored Generic Sediment Control Plan - Dam and Pump
		Watercourse crossing permits will be obtained from Conservation Sudbury
Social Impacts Description: Construction in road	Yes	See sections 18.7 and 18.8 of the C&M manual for mitigation
allowance Traffic, Dust, Noise		Union will adhere to the municipal traffic control guidelines.
		Dust will be controld using water as necessary.
		Construction will proceed during daylight hours. All equipment will provided with proper muffler to mitigate noise concerns.
Land use Designations Description:	No	·
Agricultural Resources Description:	No	See sections 3.46 and 3.25 C&M Manual for mitigation
Vegetation and Wildlife Habitat Description: Working Within a Possible Wetland Area	Yes	Screen for Species at Risk. Work with Ministry of Natural Resources and Conservation Sudbury to mitigate any concerns. Acquire permit from Conservation Sudbury.

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Water Wells and Hydrology Description:	No	Municipal water source
Heritage Resources Description:	No	
Geological Resources and Minerals Description: Possible Bedrock	Yes	Use hoe-ram to remove additional material from existing trench. If blasting necessary, follow Unions Rock Excavation Specification 3.10
Additional Concerns Description:	No	

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