

April 6, 2016

BY RESS

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Union Gas Limited (“Union”)
Leamington Expansion Project
EB-2016-0013**

Enclosed please find Union’s *Updated* Application and pre-filed evidence for the above-noted project, this is to update Schedule 12 Environmental Report Pages 6 and 48.

In the event that you have any questions on the above or would like to discuss in more detail, please do not hesitate to contact me.

Yours truly,

[original signed by]

W.T. (Bill) Wachsmuth, RPF
Senior Administrator, Regulatory Projects
:sb
Attach.

cc: L. Gluck
M. Millar

January 14, 2016

BY COURIER & RESS

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Union Gas Limited (“Union”)
Leamington Expansion Project
EB-2016-0013**

Enclosed please find two copies of Union’s Application and pre-filed evidence for the above-noted project.

In the event that you have any questions on the above or would like to discuss in more detail, please do not hesitate to contact me.

Yours truly,

[original signed by]

W.T. (Bill) Wachsmuth, RPF
Senior Administrator, Regulatory Projects
:sb
Attach.

cc: P. Duguay
Z. Crnojacki

ONTARIO ENERGY BOARD

IN THE MATTER OF The Ontario Energy Board Act,
1998, S.O. 1998, c.15, Schedule B, and in particular, s.90
thereof;

AND IN THE MATTER OF an Application by Union Gas
Limited for an Order granting leave to construct a natural
gas pipeline and ancillary facilities in the Municipality of
Leamington, in the County of Essex.

UNION GAS LIMITED

1. Union Gas Limited (the “Applicant”) hereby applies to the Ontario Energy Board (the “Board”), pursuant to Section 90(1) of the Ontario Energy Board Act (the “Act”), for an Order granting leave to construct approximately 6.7 kilometres of NPS 12, 250 metre of NPS 16 and 60 metres of NPS 8 natural gas pipeline (the “Proposed Pipeline”), in the Municipality of Leamington, in the County of Essex.
2. Attached hereto as Schedule “A” is a map showing the general location of the proposed pipeline and the municipalities, highways, railways, utility lines and navigable waters through, under, over, upon or across which the proposed pipeline will pass.
3. The construction of the Proposed Pipeline will allow the Applicant to serve the growing greenhouse market in the Municipality of Leamington.
4. The Applicant requests that this Application be dealt with in accordance with Section 34 of the Board’s Rules of Practice and Procedure for written hearings.

5. The Applicant now therefore applies to the Board for an Order granting leave to construct the proposed pipeline as described above.

Dated at Municipality of Chatham-Kent this 14th day of January, 2016.

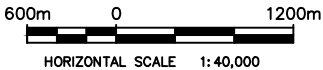
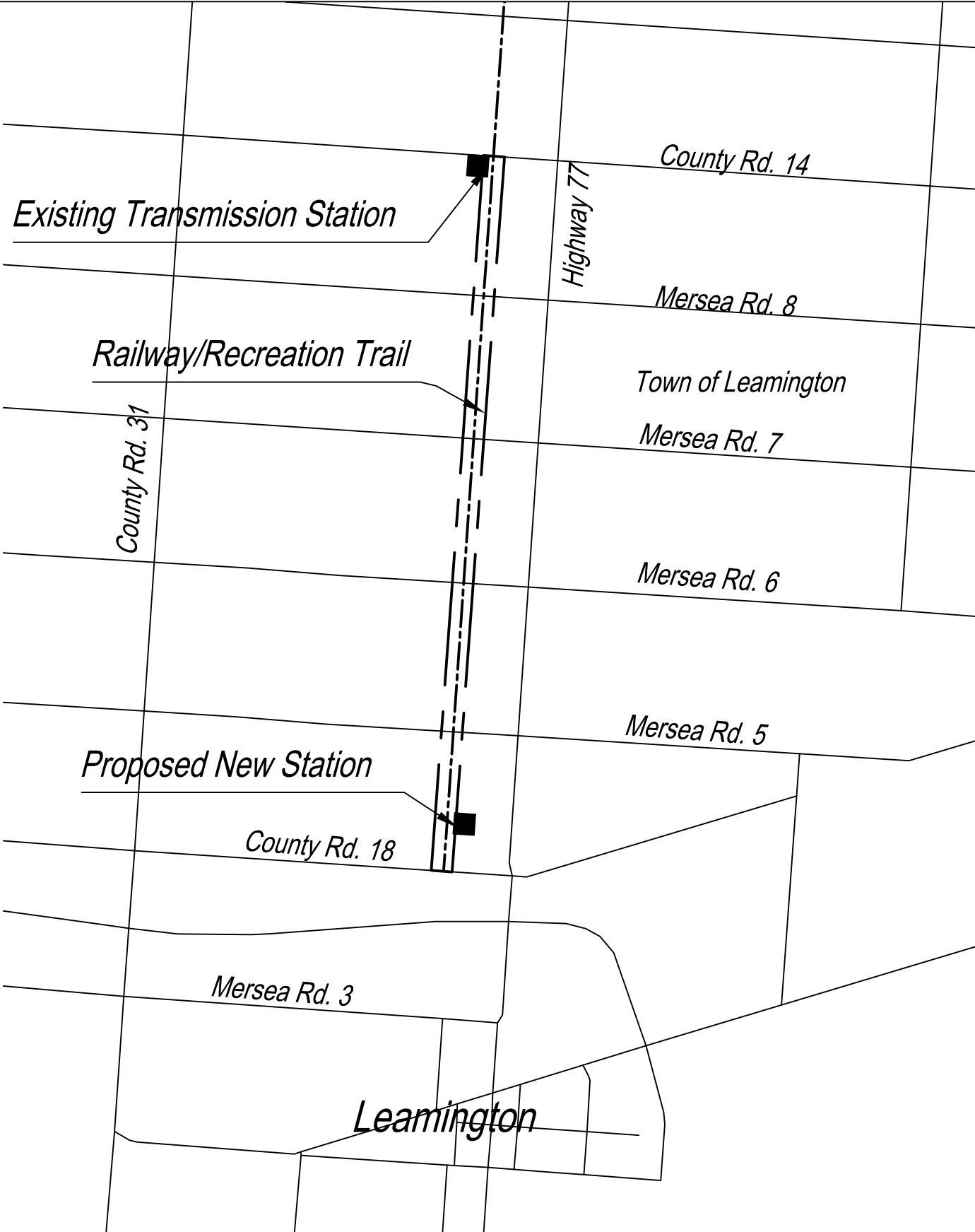
[Originally Signed By]

Per: W.T. (Bill) Wachsmuth, RPF
Senior Administrator
Regulatory Projects

Comments respecting this Application should be directed to:

W.T. (Bill) Wachsmuth, RPF
Senior Administrator, Regulatory Projects
Union Gas Limited
50 Keil Drive North
Chatham, Ontario
N7M 5M1
Telephone: (519) 436-5457
Facsimile: (519) 436-4641

Town of Leamington Phase II Pipeline Project



LEGEND:
--- Proposed Pipeline Route

Leamington Expansion Pipeline Project

Applications

Leave to Construct

Prefiled Evidence

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PROJECT SUMMARY

1. In response to requests for additional natural gas distribution service from greenhouse growers in the Leamington, Kingsville, Mersea Township and Gosfield South areas (“Project Area”) and to ensure the continued efficient operation of the Union Gas Limited (“Union”) pipeline system, Union is seeking an Order under Section 90(1) of the Ontario Energy Board Act for leave to construct approximately 6.7 kilometers of NPS 12 natural gas pipeline, 250 metres of NPS 16 natural gas pipeline and 60 metres of NPS 8 natural gas pipeline (“Proposed Facilities”), in the Municipality of Leamington.
2. The Proposed Facilities will provide 51,900 m³/hour of additional capacity to the Project Area. Union has entered into negotiations with the customers who had successful bids during the expression of interest, for capacity to serve their greenhouse operations. Union expects to have signed contracts with these growers by February 29, 2016.
3. The total capital costs of the Proposed Facilities, including all pipeline and station costs, are estimated to be approximately \$12,344,000.
4. An economic analysis has been completed for the Project. This analysis shows that the Proposed Facilities have a positive profitability index.
5. Union developed this Project to recover the Capital Costs associated with the Project through the revenue generated by the Project consistent with past Board decisions.
6. An Environmental Report (“ER”) has been prepared for the Proposed Facilities. The ER concludes that there will be no significant environmental impacts associated with construction of the Proposed Facilities given Union’s standard construction procedures and the mitigation measures recommended in the ER.
7. Union has discussed the Project with all directly affected landowners. These landowners have not identified any concerns with the Project. Union expects to have all the necessary land rights in place by March 2016.
8. The contracted customers require natural gas service for November 1, 2016. Union plans to construct the Proposed Facilities during the summer 2016 season in order to allow construction

of the pipeline during favourable weather conditions. Therefore, Union respectfully requests the timely approval of this application by June 2016.

NEED FOR PIPELINE

MARKET REQUIREMENTS

Overview

9. Union has received a number of requests for new firm gas distribution service and requests for conversion of existing interruptible natural gas distribution service to firm, from greenhouse growers in the Leamington, Kingsville, Mersea and Gosfield South Township area.

10. These requests have come from new greenhouse operations and from growers who want to switch from interruptible to firm natural gas service.

11. Schedule 1 provides letters of support from the Corporation of the Municipality of Leamington and from the Ontario Greenhouse Vegetable Growers.

12. Union is proposing to recover the project costs from each customer who was successful in the expression of interest process based on the total amount of capacity that the customer contracts from the Proposed Facilities.

13. In EB-2012-0431 (Leamington Phase 1) the cost of the facilities was allocated to customers based on a standard hourly consumption per acre of greenhouse. For this Application the cost is allocated based on an hourly consumption where the customer selects the usage per hour that meets their needs. Allocating the costs based on m³/hour provides the customer with a more accurate indication of the capital cost associated with their operations, earlier on in the process.

14. To determine the “Hourly Allocation Factor” Union divided a preliminary estimate of the Capital Costs of the Proposed Facilities by the firm capacity per hour provided by the Proposed Facilities. This is \$11.8 million / 51,900m³/hour = \$230 /m³/hour (rounded). Additional information on the Hourly Allocation Factor can be found at Paragraph 45.

15. Union included in the expression of interest package an estimated cost of \$230/m³/hour. This number is then multiplied by the total capacity that the customer requires. This determined each customer's total contribution.
16. The customer may elect to pay the total cost up front as aid to construct or the customer may elect to sign a long-term contract or a Letter of Agreement. If the customer elects to sign a long-term contract or a Letter of Agreement, the projected future revenue will reduce or eliminate the aid to construct payment.
17. In order to determine the level of interest in natural gas service, Union held an expression of interest to allow customers to express their interest in natural gas service. A copy of the expression of interest package can be found at Schedule 2.
18. As part of the expression of interest process Union placed advertisements in local newspapers and held customer meetings. The expression of interest was very well received, and provided Union with a clear understanding of the demand for natural gas service in the Project Area.
19. The proposed capacity provides for 51,900 m³/hour. Initially there were 62 customers with 73 bids into the expression of interest for firm capacity. The 62 customers bid for a total capacity of 129,097 m³/hour. As the bids exceeded the capacity available, Union prorated the available capacity. This resulted in each customer being offered approximately 40% of the capacity they had requested.
20. Forty-four customers at 55 different sites accepted offers for the prorated capacity. The prorated capacity that was not accepted was offered (pro rata) to the remaining customers. This increased the remaining customers' prorated capacity to approximately 44%.
21. Letters of indemnity were signed in November and December 2015 to confirm the volumes each customer has accepted. The letters of indemnity will form the basis of the contracts to be signed with the customers. Contracts are expected to be signed by February 29, 2016.
22. If any customers do not sign a contract a third proration exercise will be completed.
23. Schedule 3 provides a listing of the customers who have signed letters of indemnity and the volumes assigned to them.

24. Union was not able to satisfy all of requested capacity from the expressions of interest due to limited capacity on the pipeline system that feeds the Proposed Facilities. Union is in the process of reviewing additional projects to reinforce the pipeline system which supplies the Proposed Facilities.

25. Union will follow its new business guidelines regarding connections to Union's distribution system.

FACILITIES PLANNING

Existing Facilities

26. The Leamington and Kingsville pipeline system consists of two distinct components. There is a high pressure system and a local distribution network. The high pressure system is supplied by Union's NPS 20 Panhandle Line and operates at a maximum operating pressure (MOP) of 6040 kPag. Downstream of this high pressure system is the local distribution network which provides natural gas service to the customers in the Leamington and Kingsville area. The local distribution network consists of a 1900 kPag MOP system and a 420 kPag MOP system.

27. There are three high pressure pipelines that serve the Leamington and Kingsville local distribution network. The NPS 6 Essex Line was constructed in 1958, the NPS 8 North Leamington Line was constructed in 1968, and the NPS 8 Leamington North Reinforcement Line ("Mersea Line") was constructed in 1997.

28. The existing Leamington and Kingsville high pressure system is shown on Schedule 4. The local distribution network is shown on Schedule 5.

29. Due to tremendously strong growth in the greenhouse market in the Leamington and Kingsville area over the past couple of years, the high pressure system is currently at capacity on a peak day. Union is not able to connect any additional firm customers to the local distribution network without reinforcement of the high pressure system.

Proposed Facilities

30. Union is seeking approval for an Order to leave to construct for approximately 6.7 km of NPS 12 natural gas pipeline, 250 metres of NPS 16 natural gas pipeline and 60 metres of NPS 8 natural gas pipeline. These facilities would loop the existing North Leamington Line from the County Road 14 Station to County Road 18. The proposed pipeline will be constructed on the abandoned railroad corridor. The NPS 8 pipeline will connect the existing North Leamington Line to the new County Road 18 Station. A map showing the location of these facilities can be found at Schedule 15.

31. As the purpose of the Proposed Facilities is to provide more gas to the local distribution network, there will be no customers attached directly to the Proposed Facilities.

32. There will be modifications at the County Road 14 Station, Comber Transmission Station and a new Station will be constructed north of County Road 18.

33. The proposed pipeline is designed to a maximum operating pressure of 6040 kPag. The firm capacity created by this Project is 51,900 m³/hour.

34. Customers who were successful in the expression of interest process will be attached to the local distribution network. There may be some additional pipeline and station facilities required to attach these customers to the local distribution network. Facilities required to connect new greenhouse customers are typically smaller diameter plastic and steel pipelines that do not require a leave to construct application. These individual facilities are reviewed on a customer by customer basis as per the new business attachment guidelines.

Alternatives Considered

35. As this is a continuation of the Leamington Phase I Project (EB-2012-0431) no other alternatives were considered except to extend the NPS 12 pipeline further south from County Road 14.

PROJECT COSTS AND ECONOMICS

Project Costs

36. The total estimated capital cost for all the facilities required for the Project including pipeline and stations is as follows:

Total Pipeline Cost (including Environmental cost)	\$8,537,000
Total Station Cost	\$3,807,000
Total Project Cost	\$12,344,000

37. The total estimated capital pipeline and station costs can be found at Schedules 6 and 7 respectively.

38. The estimated total capital cost of the project includes contingencies and interest during construction (“IDC”).

39. The estimated material cost of the pipeline of \$1,473,000 covers the costs of all pipe, valves, fittings, coatings, miscellaneous items and stores overheads. Estimated costs for all materials are based on past experience and recent manufacturer quotes. The stores overheads cover all warehousing and handling costs of the materials.

40. The estimated costs of construction and labour of \$5,868,000 covers the installation of the pipeline, valving facilities and land acquisition. The construction and labour cost estimate is based on Union’s experience with construction of similar projects.

41. The estimated costs associated with environmental measures are included in the total pipeline capital costs shown in Schedule 6. These costs are identified as pre construction-related, construction related, and post-construction related. The estimated total environmental costs are \$93,000.

Project Economics

42. To assess the economics of the Proposed Facilities Union has employed an economics feasibility test consistent with the Board’s recommendation in the E.B.O. 188 Report on Natural Gas System Expansion (“EBO 188”).

43. Customers awarded capacity in the expression of interest process will be attached to the local distribution network downstream of the Proposed Facilities. The feasibility test for each of these customers is based on the incremental revenue from the customer compared to:
- (a) their proportional cost of the Proposed Facilities allocated at \$ 230/m³/hour; plus
 - (b) the distribution facilities costs specific to the customer.
44. The figure \$ 230/m³/hour was calculated as the estimated capital cost of Proposed Facilities divided by the firm capacity per hour provided by the Proposed Facilities. This was \$11.8 million/51,900m³/hour = \$230/m³/hour (the rounded “Hourly Allocation Factor”).
45. The figure of \$ 11.8 million was estimated at the time of the expression of interest process was initiated. With refined and updated information, the current estimated cost of the Proposed Facilities is \$ 12.3 million. Using the same methodology the Hourly Allocation Factor would be \$ 237/m³/hour. For purposes of individual customer economics, the Hourly Allocation Factor of \$ 230/m³/ hour is not being revised.
46. Each of the 44 customers serving 55 different sites selected their own hourly requirement through the expression of interest process. These hourly requirements range from a low of 60 m³/hour to a high of 2700 m³/hour (each of these rounded for illustrative purposes).
47. The DCF analysis found at Schedule 8 is based on a total capital cost of \$ 14.0 million which is the sum of the capital cost of \$12.3 million for the Proposed Facilities plus \$ 1.7 million as the sum of the estimated cost of the individual distribution facilities to connect the customers. The DCF shows a PI of 1.11 and a NPV of \$ 1.5 million using a revenue term of 10 years.
48. The DCF parameters are summarized in Schedule 9.
49. The base case term of 10 years is conservative given the economic life of the assets and the current and future demand for new gas service in the market area. Union submits that this project is economically feasible and in the public interest.

PIPELINE DESIGN AND CONSTRUCTION

Construction Matters

50. Between County Road 14 and County Road 18 the majority of the pipeline will be constructed in an abandoned rail corridor.

51. The prime construction contractor will mobilize to the area. Access roads will be constructed to gain entry to the working area. It will be necessary to clear and grade both the easement and temporary land use areas. Topsoil will be stored in the temporary land use areas. Clearing along road allowance will also be required. Stringing trucks will deliver the NPS 8, NPS 12 and NPS 16 pipe. The pipeline will then be welded, x-rayed, coated. Bending will take place if required. The trenching crew will excavate a new trench. Spoil will be placed, separate from the topsoil. The welded pipe will be lowered into the trench. Sand-padding will be installed as needed given the ground conditions. The trench will be backfilled. Watercourse crossings will be directionally drilled. All roads crossings will be horizontally drilled if possible. Welding crews will complete all tie-ins of trenched, open-cut and bored sections. The continuous pipeline will then be cleaned, hydrostatically tested and dried. Final tie-ins will be completed at the stations and the pipeline placed into service. Final clean up of the easement and the road allowance will be completed.

52. The Proposed Facilities will be constructed using Union's standard practices and procedures and will be in compliance with the mitigation measures identified in the ER.

53. Material is readily available for the project and Union foresees no problem in obtaining contractors to complete the proposed construction. Construction contract documents will be prepared at a later date. The ER will be included as part of the contract documents.

54. Permits, approvals and authorizations are pending from the Municipality of Leamington and Hydro One. Union expects to receive all approvals prior to construction.

Construction Schedule

55. Schedule 10 provides the proposed construction schedule for the project. Construction of the Proposed Facilities is expected to begin in June 2016 in order to meet the requested in-service date for commissioning in November 2016 and to construct the pipeline summer weather conditions.

Design and Pipe Specifications

56. Design, installation and testing of the natural gas pipelines are in accordance with the requirements of Ontario Regulation 210/01, Oil and Gas Pipeline Systems under the Technical Standards and Safety Act 2000. This regulation governs the installation of pipelines in the Province of Ontario. The minimum design and pipe specifications for the proposed NPS 8, NPS 12 and NPS 16 pipelines are outlined in Schedule 11.

57. The Ontario regulations include a classification system on land use and population density to determine the appropriate design factors.

58. A Class 1 location contains ten or fewer dwellings intended for human occupancy within a 200 m wide strip of land on either side of the centerline of any continuous 1.6 km length of pipeline.

59. A Class 2 location contains more than ten but fewer than 46 dwellings intended for human occupancy within a 200 m wide strip of land on either side of the centerline of any continuous 1.6 km length of pipeline. Further, a Class 2 location is designated to contain the following:

- a. A building that is occupied by 20 or more persons during normal use;
- b. A small, well-defined outside area that is occupied by 20 or more persons during normal use such as a playground, recreation area, outdoor theatre, or other place of public assembly; or
- c. An industrial installation such as a chemical plant or hazardous substance storage area, where release of products from a pipeline could cause the industrial installation to produce a dangerous or environmentally hazardous condition.

60. A Class 3 location contains more than 46 dwellings intended for human occupancy within a 200 m wide strip of land on either side of the centerline of any continuous 1.6 km length of pipeline.
61. The proposed NPS8, NPS 12 and NPS 16 pipeline is located within Class 2 locations. The pipeline is designed to meet the requirements of Class 3 locations in areas where the potential for such development exists.
62. The MOP for the proposed NPS 8 pipeline is 6040 kPag and will have an outside diameter of 219.1 millimeters. The MOP for the proposed NPS 12 pipeline is 6040 kPag and will have an outside diameter of 323.9 millimeters. The MOP for the proposed NPS 16 pipeline is 3450 kPag and will have an outside diameter of 406.4 millimeters.
63. The minimum depth of cover specified is 1.2 metres to the top of the pipe. Additional depth will be provided to accommodate existing or planned underground facilities, or in specific areas in compliance with the applicable regulated standards.

ENVIRONMENTAL MATTERS

64. Azimuth Environmental Consulting Inc. prepared an ER for the proposed pipeline dated November 2015. The results of the ER indicate that the location of the proposed pipeline is environmentally acceptable. Union believes that by following its standard construction practices and adhering to the mitigation measures identified in the ER, construction of this project will have negligible impacts on the environment. No significant cumulative effects are anticipated from development of the proposed pipeline. A copy of the ER can be found at Schedule 12.
65. The ER was prepared in accordance with the Board's document "Environmental Guidelines for Locating, Constructing and Operating Hydrocarbon Pipelines in Ontario" [2011].
66. The objectives of the ER were to:
 - a. Define a study boundary in the area of the proposed pipeline and review environmental conditions within this area;

- b. Undertake detailed environmental studies of the proposed route and assess the potential environmental effects of construction and operating a pipeline along this route;
- c. Record the concerns of Provincial ministries, municipalities, conservation authorities, First Nations and Métis organizations and landowners along the proposed route;
- d. Recommend mitigation measures which minimize any adverse environmental impacts of pipeline construction; and
- e. Provide pipeline contractors and the environmental inspector involved in the construction of the pipeline with general and site-specific guidelines for environmental protection that supplement Union's construction specifications.

67. Letters were delivered to all directly affected landowners along the preliminary preferred route. Letters were forwarded by mail to inform landowners of the project and of the Information Session. Also, at the same time letters were forwarded to environmental agencies, municipalities, First Nations and Métis, to inform them of the project and of the Information Session.

68. To solicit input from the general public with respect to the project, a Notice of Information Session was published in two local papers. The Information Session, which identified a preliminary preferred route along with potential mitigation measures, was held on September 16, 2015 at the Leamington Recreation Complex in Leamington, Ontario. The Session was attended by two members of the public. Discussions with attendees did not result in the identification of any concerns with the preliminary preferred route.

69. A copy of the ER was submitted to the Ontario Pipeline Coordination Committee ("OPCC") on December 9, 2015. Also, a copy of the ER was sent to local municipalities, the Essex Region Conservation Authority, First Nations, Métis and upon request to interested parties. Directly affected landowners received a copy of the Executive Summary and will be provided a copy of the ER upon request. A summary of the comments and Union's response to concerns from agencies and interested parties will be filed, when received, as Schedule 13.

70. The total estimated environmental mitigation costs associated with the construction of the Proposed Facilities are identified in Schedule 14. These costs are identified as pre-construction

1 related, construction-related and post-construction related. The estimated total environmental
2 costs are \$93,000.

3 71. There are nine drain crossings associated with the construction of this project. Union has
4 obtained all necessary permits associated with these crossings prior to construction from the
5 Essex Region Conservation Authority.

6 72. When the project is constructed, the most up-to-date construction specifications will be
7 followed.

8 73. Union will ensure that the recommendations in the ER, commitments and the conditions of
9 approval are followed. An environmental inspector will monitor construction activities and
10 ensure that all activities comply with all conditions of approval.

11 74. The results of the ER indicate that the environmental and socio-economic effects associated
12 with construction of the project are generally short-term in nature and minimal. There are no
13 significant cumulative effects as a result of this pipeline construction.

15 **LAND MATTERS**

16 ***Land Requirements***

17 75. The Proposed Facilities will be constructed on private easement lands, road allowances and an
18 abandoned railway corridor owned by the Municipality of Leamington.

19 76. Union will be required to obtain the necessary crossing permits or agreements with local
20 Municipalities, Conservation Authority, and other utilities along the pipeline route.

21 77. Union will require a fee simple land purchases for the Stations at County Road 14 and 18.
22 Union has met with these landowners and option agreements have been signed for these
23 properties.

24 78. Union has met with all of the directly affected landowners along the proposed pipeline route.

25 79. Union will require temporary land use agreements for construction of the Proposed Pipeline.
26 Union has all of the necessary temporary land use agreements in place.

80. Union is negotiating with the Municipality of Leamington for the use of the abandoned railway corridor. Union expects to have this signed agreement in place in the first quarter of 2016.

81. Schedule 15 is a map that shows the running line of the pipeline and the permanent and temporary land rights required for the pipeline.

Pipeline-Related Easement Requirements

82. Schedule 16 lists the names and addresses and identifies the permanent and temporary land use rights required to construct the proposed pipeline.

83. Union's form of easement is attached as Schedule 17. This form will be offered to all new landowners where permanent easements are required. This easement agreement covers the installation, operation and maintenance of one pipeline. The main restrictions imposed upon the individual landowner by having this easement is that the landowner cannot erect buildings or privacy fencing in the easement.

84. 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. Union will offer a form of Temporary Land Use Agreement previously approved by the Board and utilized by Union in the past on similar pipeline projects.

85. At the conclusion of construction, Union will seek a Full and Final Release from each of the directly affected landowners. This Full and Final Release will include compensation for any damages caused or attributed to the pipeline construction.

Landowner Issues

86. Union has implemented a comprehensive program to provide landowners, tenants, and other interested persons with information regarding the proposed pipeline. Project information was distributed through correspondence and meetings with the public.

87. For over a decade Union has had in place a comprehensive Landowner Relations program which has proven successful on other projects. Union's Complaint Resolution System will be used in this project to record, monitor, and ensure follow-up on any complaint or issue received

1 by Union related to the construction. This process assists in resolving complaints and tracking
2 the fulfillment of commitments. A process chart and explanatory notes that describe the
3 Complaint Resolution System are found in Schedule 18. Union will conduct pre-construction
4 and post-construction interviews to capture any concerns (so that they can be resolved, if at all
5 possible) and document specific landowner concerns and comments (so that they can be
6 considered in the planning of future projects).

- 7 88. After construction, negotiations with landowners will continue, where necessary, to settle any
8 damages that were not foreseen or compensated for, prior to construction.

9
10 **FIRST NATION AND MÉTIS CONSULTATION**

- 11 89. Union has a long standing practice of consulting with Métis and First Nations, and has
12 programs in place whereby Union works with them to ensure they are aware of Union's projects
13 and have the opportunity to participate in both the planning and construction phases of the
14 project.

- 15 90. Union has an extensive data base and knowledge of First Nations and Métis organizations in
16 Ontario and consults with the Tribal organizations and the data bases of the Ministry of
17 Aboriginal Affairs and Northern Development Canada and Provincial
18 Ministry of Energy to ensure consultation is carried out with the most appropriate groups.

- 19 91. Union has signed a General Relationship Agreement with the Métis Nation of Ontario which
20 describes Union's commitments to the Métis when planning and constructing pipeline projects.

- 21 92. The following First Nations and Métis were notified about the project.

Title	First Name	Last Name	First Nation or Métis Nation
Director Lands Resource and Consultation	Aly	Alibhai	Métis Nation of Ontario
Chief	Sherri	Doxtator	Oneida First Nation
Chief	Roger	Thomas	Munsee-Delaware First Nation
Chief	Leslee	Whiteye	Chippewa of the Thames First Nation
Consultation Manager	Rolanda	Elijah	Chippewa of the Thames First Nation
Chief	Thomas	Bressette	Kettle and Stony Point First Nations
Consultation Manager	Lorraine	George	Kettle and Stony Point First Nations
Chief	Chris	Plain	Aamjiwnaang First Nation
Environmental Coordinator	Sharilyn	Johnston	Aamjiwnaang First Nation
Chief	Dan	Miskokomon	Walpole Island First Nation
Consultation Manager	Dean	Jacobs	Walpole Island First Nation
Chief	Louise	Hillier	Caldwell First Nation
Chief	Greg	Peters	Delaware Nation
Consultation Manager	Robin	King	Delaware Nation
Chief	Louise	Hillier	Caldwell First Nation

93. The consultation included:

July 21, 2015: Union provided an email notification to the First Nations and Métis regarding the scope and need for the project.

August 26, 2015: Union provided a letter notifying the First Nations and Métis that the Environmental Process will begin using Azimuth Environmental Consulting and of the upcoming Information session being held on September 26, 2015.

94. Formal Copies of the correspondence that were sent to the First Nations and Métis groups can be found in Schedule 19.

95. To date, no issues have been brought forward regarding the project. Due to the location and specifics of the project Union is not expecting issues to be brought forward by the First Nations or Métis for the project.

96. During construction, Union has inspectors in the field who are available to First Nations and Métis organization as a primary contact to discuss and review any issues that may arise during construction.

97. 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.



THE CORPORATION OF THE MUNICIPALITY OF LEAMINGTON

EB-2016-0013

Schedule 1

Page 1 of 2

111 Erie Street North, Leamington, ON, Canada N8H 2Z9

Telephone (519) 326-5761 • Fax (519) 326-2481

www.learmington.ca

OFFICE OF THE MAYOR

John Paterson

Email: jpaterson@learmington.ca

October 28, 2015

Union Gas Limited
3840 Rhodes Drive
Windsor, ON
N9A 6N7

Attn: Andrea Seguin, District Manager, Windsor/Chatham

Dear Mrs. Seguin,

RE: Leamington Expansion Project

Leamington is very supportive of Union Gas' Leamington Expansion Project and is encouraged that Union Gas Ltd. has applied to the Ontario Energy Board for a Leave to Construct for the pipeline.

The Municipality relies heavily on the greenhouse sector which contributes significantly to employment in the region. The sector has expanded dramatically in the last five years and this growth is expected to continue as the sector works to address market demands. In order to keep pace with this expansion, the new pipeline is essential. It will allow the greenhouse sector to operate effectively within the municipality.

The Municipality has enjoyed a long and extremely amicable relationship with Union Gas and appreciates their efforts to provide the best, most cost effective and modern service delivery to our businesses and residents.

We look forward to the completion of this very important project.

Yours truly,

John Paterson
Mayor

JP/kms

File: T:\CAO\CAO 2015\Mayor 2015\ct-Union Gas-Leamington Expansion Project-102815.doc



Ontario Greenhouse Vegetable Growers
32 Seneca Road
Leamington, Ontario
N8H 5H7
(519) 326-2604 / 1-800-265-6926
(519) 326-7842 Fax
www.ontariogreenhouse.com

November 19, 2015

Attention: Mr. Patrick Boyer
Manager, Greenhouse, REM, Wholesale Markets
Union Gas Ltd
P.O. Box 2001
Chatham, Ontario, N7M 5M1

Re: Union Gas Leamington Pipeline Expansion Project

Dear Mr. Boyer:

On behalf of the Ontario Greenhouse Vegetable Growers (OGVG), I am writing to indicate our support for the aforementioned Union Gas Leamington Pipeline Expansion project, with a proposed in-service date of November 2016.

OGVG represents 211 greenhouse vegetable growers in Ontario who are responsible for 2,553 acres of greenhouse tomato, pepper, and cucumber production in the province. The majority of this acreage, 2,259 acres, is located in Essex, Chatham-Kent and Lambton counties. Ontario's greenhouse sector has a consistent track record of growth, expanding at 5.7% annualized over the past 7 years. We expect this growth will continue into the future and predict the sector could grow by 700 acres over the next 5 years, contributing an additional \$380 million to the Ontario economy and supporting nearly 3,000 jobs.

In order for this growth and development to be realized sufficient access to natural gas infrastructure will be required. Currently, resources in the Essex region are at capacity and an expansion of service will be necessary in order to support further economic development in the region. Furthermore, many growers in the Essex region are on interruptible service contracts as firm service is not currently available. Increased access to firm service, such as will be provided by this and future expansions, will greatly add to the stability of production economics as growers will not be required to purchase alternative fuel during periods of peak market demand.

With this in mind, the Ontario greenhouse growers are strongly in support of this expansion project and look forward to an ongoing positive relationship with both Union Gas and the Ontario Energy Board.

Yours truly,

A handwritten signature in black ink, appearing to read "Rick Seguin", is written over a light blue horizontal line.

Rick Seguin
General Manager, OGVG

Union Gas Limited
Expression of Interest for
Leamington Expansion Project

July 29, 2015

To serve a growing demand for natural gas in the Leamington area, Union Gas is proposing to expand the existing capacity by continuing the 12 inch diameter pipeline from the Union Gas station located along County Road 14, south to County Road 18 to a new Union Gas station (see attached map).

The "*Leamington Expansion Project*" will provide approximately 51,900 m³/hour of additional firm capacity to serve customers.

Union Gas is pleased to announce an expression of interest for Firm distribution service on the proposed new pipeline, beginning as early as November 2016.

Development of this project is contingent on sufficient market support and approval of the project by the Ontario Energy Board (OEB).

Proposed Services:

Capacity would be available for the following services, depending on market support:

- 1) New Firm distribution service; and***
- 2) Conversion of existing interruptible distribution service to Firm service***

This offering does not include the individual customer specific costs that are required to serve customers such as station costs, service lateral costs and extensions. This offering is only for the facilities shown in the attached map.

This Open Season closes at **12:00 p.m. EDT on August 21, 2015.**

1. Service Description and Details:

Term:

As this expansion project requires a significant capital investment and is being constructed during a period of changing gas supply dynamics, the term of these agreements is to be a minimum of one year contractual commitments, up to 10 year commitments; and/or upfront payment for capacity. The facilities, rates and services included in this Expression of Interest will be subject to OEB approval.

2. Submitting an Expression of interest

If you wish to participate in the ***Leamington Expansion Project***, please complete, sign and return the Expression of Interest via email or fax to:

ATTN: Leamington Expansion Project
Email: LEP@uniongas.com
Fax: 519-436-4645

Completed forms must be returned on or before 12 p.m. EDT on August 21, 2015

Expression of Interest Process:

This Expression of Interest is being offered to assist Union Gas with determining facility design requirements to meet market needs. Union Gas will acknowledge customers bid in writing or e-mail on or before 4 p.m. EDT on August 31, 2015. Union Gas in its sole discretion reserves the right to reject any and all proposals received.

The returned forms will be time stamped by the date on the fax or e-mail date.

If one of the services mentioned above is sold out, and capacity is still available for the other services, Union Gas reserves the right to contact the next customer in line based on the received faxed date and time to offer this customer one of the unsold services. If all of the services mentioned above are sold out, Union Gas reserves the right to prorate the capacity amongst the successful participants.

Any suggested contractual Condition(s) Precedent that the Customer proposes should be clearly articulated and attached to the bid form and will be considered during the capacity allocation process.

Union Gas anticipates allocating capacity to successful bidders no later than September 14, 2015. Successful bidders will be bound to the confirmed quantities provided on the Letter of Indemnity that will be executed on or before November 16, 2015. Customers will be required to execute a Union Gas Distribution Contract on or before February 29, 2016.

If you have any questions about the *Leamington Expansion Project*, please contact:

Ryan Organ, Account Manager, Greenhouse Markets, (519) 436-4676;
rorgan@uniongas.com

John Squazzin, Account Manager, Greenhouse Markets, (519) 436-5478;
jsquazzi@uniongas.com

Andy Duquette, Account Manager, Greenhouse Markets, (519) 436-5298;
aduquette@uniongas.com

Expression of Interest BID FORM**Page 1 of 1**

Please complete, sign and return this Expression of Interest Bid Form on or before 12:00 p.m. EDT on August 21, 2015, via email or fax to:

ATTN: Leamington Expansion Project**Email:** LEP@uniongas.com**or Fax:** 519-436-4645

The purpose of the Leamington Expansion Project is for Union Gas to determine the facility design requirements to support market needs. Union Gas will determine whether or not to proceed with offering any of the services defined in the Leamington Expansion Project based on the assessment of the results from this Expressions of Interest by signing and returning this Distribution Service Bid Form.

Customers may submit one bid form. Please indicate your requirements below:

Expression of Interest Bid:

New Firm natural gas needs - An increase of existing firm gas needs at your current location (i.e. new equipment, new processes), or a new firm gas load as a result of a new build.

New Firm Distribution Service; requesting _____ m³/hour (estimate: \$230/m³/hour)

Start Date ☐ **Nov 1, 2016** or _____ (mm/dd/year)

Conversion from interruptible gas distribution service – The amount of FIRM distribution service you need net of any existing firm distribution service.

☐ Conversion of Interruptible distribution service to Firm distribution service; requesting _____ m³/hour (estimate: \$230/m³/hour)

Start Date: ☐ **Nov 1, 2016** or _____ (mm/dd/year)

TOTAL (New Firm + Conversion) _____ m³/hour

Customer's Condition(s) Precedence:

Dated this _____ day of _____ 2015

CUSTOMER LEGAL NAME _____

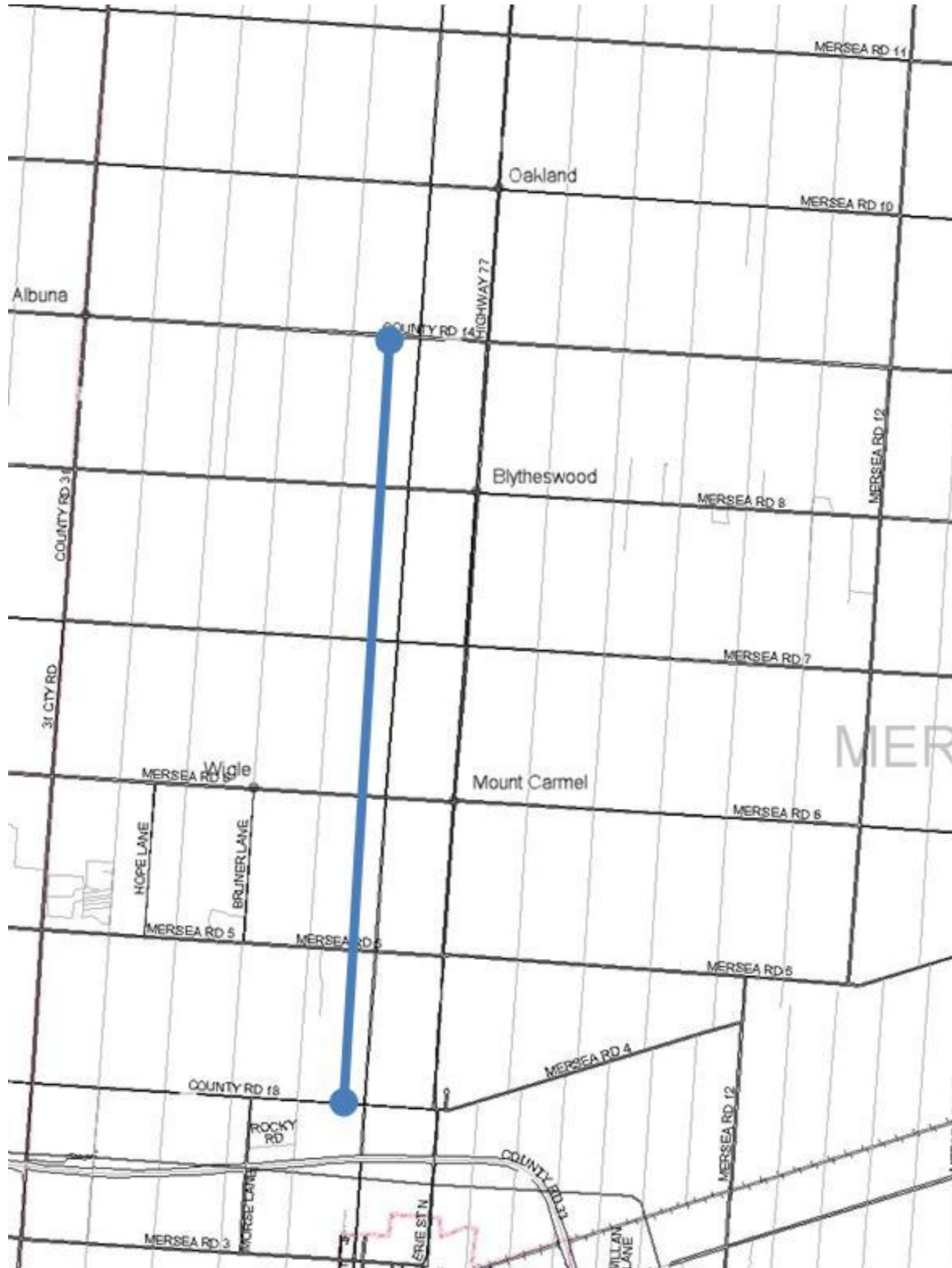
By: _____

Signature: _____

E-mail: _____

Name: _____

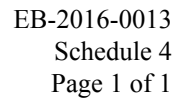
Phone: _____



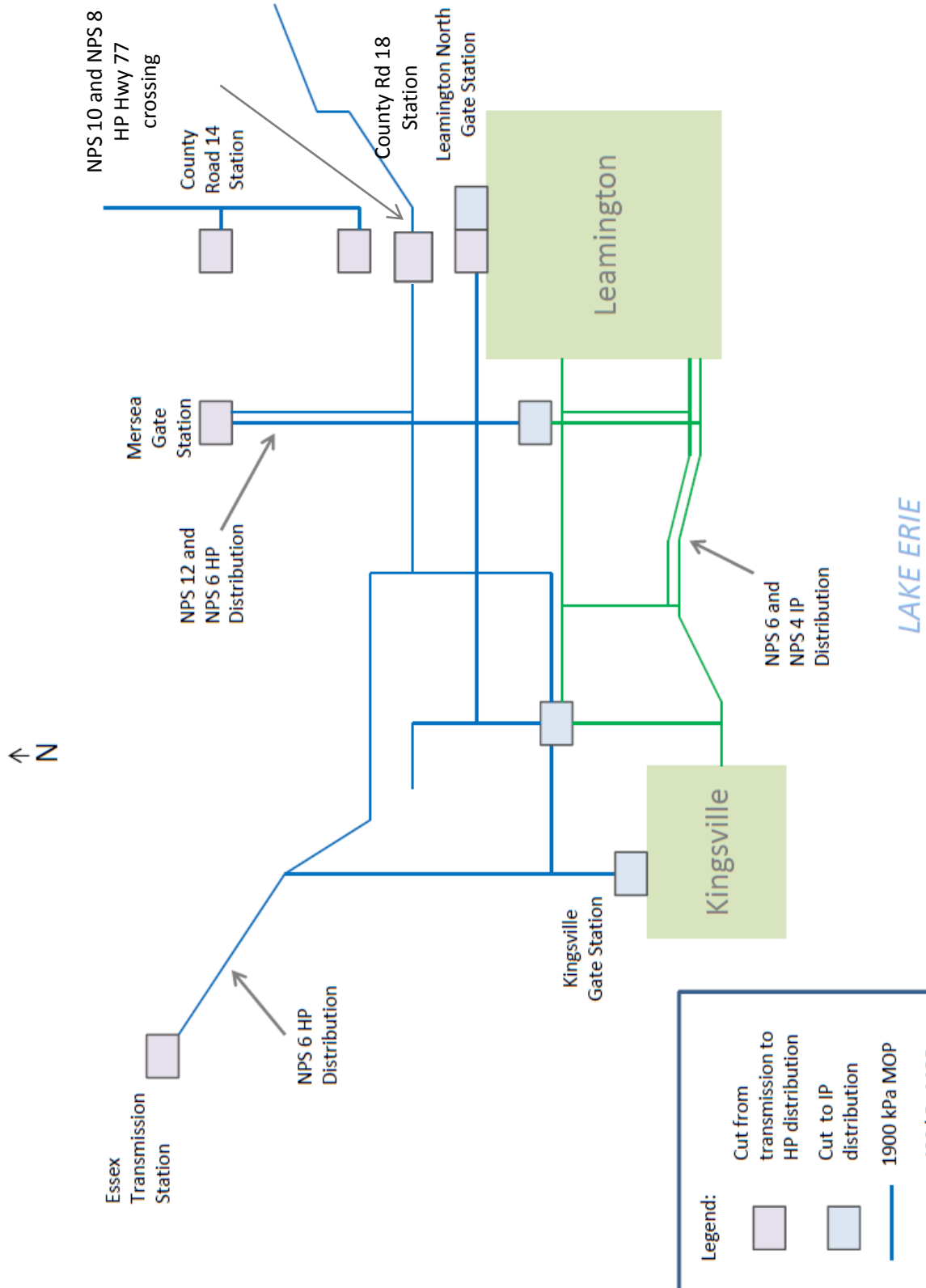
Listing of Customers Receiving Service

<u>Customer No.</u>	<u>Committed</u>	
	<u>New Firm Capacity</u> (m3/hr)	<u>Conversion of Interruptible to Firm Capacity</u> (m3/hr)
1	451	-
2	-	767
3	1,229	-
4	79	604
5	118	838
6	228	910
7	182	1,001
8	-	1,821
9	-	505
10	-	467
11	-	1,238
12	-	779
13	-	533
14	-	1,366
15	-	1,639
16	-	1,832
17	-	426
18	-	501
19	-	642
20	-	228
21	-	421
22	-	1,128
23	419	-
24	-	581
25	-	384
26	-	501
27	-	478
28	182	546
29	-	2,804
30	-	2,622
31	-	758
32	205	-
33	208	612
34	1,630	3,150
35	-	546
36	983	-
37	-	666
38	-	402
39	-	778
40	-	910
41	225	-
42	-	1,388
43	-	273
44	888	-
45	-	364
46	-	862
47	-	1,803
48	91	546
49	65	322
50	-	1,357
51	171	-
52	455	-
53	1,973	-
54	364	1,093
55	-	364
Total m3/hour	10,145	41,755

Panhandle Schematic



EXISTING LOCAL DISTRIBUTION NETWORK



Leamington Expansion Pipeline Project

Total Estimated Pipeline Capital Costs

Pipeline and Equipment		
NPS 8 / NPS 12 / NPS 16 Steel Pipe, Coated 7,000 metres	\$979,000	
Valves, Fittings and Miscellaneous Material	\$475,000	
Stores Overhead – Valves, Fittings and Misc. Material	\$19,000	
Total Pipeline and Equipment		\$1,473,000
Construction and Labour		
Lay 7,000 metres of NPS 8 / NPS 12 / NPS 16 Steel Pipe		
Welding, Boring, Trenching, and Testing	\$3,918,000	
Company Labour, X-Ray, Construction Survey, Legal		
Mill Inspection and Consultants	\$1,184,000	
Easements, Lands, Damages & Regulatory	\$766,000	
Total Construction and Labour		\$5,868,000
Total Pipeline Equipment and Construction and Labour		\$7,341,000
Contingency	\$1,101,000	
Interest During Construction	\$95,000	
Total Estimated Pipeline Capital Costs – 2016 Construction		\$8,537,000
Includes the Estimated Environmental Costs Identified in Schedule 14.		

Leamington Expansion Pipeline Project

Total Estimated Station Capital Costs

Station Equipment	\$678,000	
Construction and Labour	\$2,029,000	
Lands	\$565,000	
Total Station Equipment and Construction and Labour		\$3,272,000
Contingency	\$491,000	
Interest During Construction	\$44,000	
Total Estimated Station Capital Costs – 2016 Construction		\$3,807,000

Project NPV 1,538

<u>Profitability Index</u>										
By Year PI	0.12	0.25	0.38	0.51	0.62	0.73	0.84	0.93	1.02	1.11
Project PI	1.11									

**Leamington Expansion Pipeline Project
(Project Specific DCF Analysis)**

**Stage 1 DCF - Listing of Key Input
Parameters, Values and Assumptions
(\$000'S)**

Discounting Assumptions

Project Time Horizon

10 years commencing at facilities in-service date of
01 Nov 16

Discount Rate

Incremental after-tax weighted average
cost of capital of 5.10%

**Key DCF Input Parameters,
Values and Assumptions**

Net Cash Inflow:

Incremental Distribution Revenue:

M4, M5, M7 and General Service rates

EB-2015-0340 Effective January 1, 2016

Estimated year 1 property tax

Operating and Maintenance Expense

Estimated incremental cost

Incremental Tax Expenses:

Municipal Tax

Income Tax Rate

Estimated incremental cost
26.5%

CCA Rates:

CCA Classes:

Eligible Capital Expenditure (ECE)

Class 51 (Distribution Mains)

Class 51 (Distribution Services)

Class 51 (Measuring & Regulating Equipment)

Class 49 (Transmission Pipe)

Class 8 Transmission (Measuring & Regulating Equipment)

Declining balance depreciation rates by CCA class:

7%

6%

6%

6%

8%

20%

Cash Outflow:

Incremental Capital Costs Attributed

Refer to Schedule 6 and 7

Change in Working Capital

5.0513% applied to O&M

2015 LEAMINGTON EXPANSION PHASE II PROJECT PROJECT SCHEDULE

[illegible]

Leamington Expansion Pipeline Project

DESIGN AND PIPE SPECIFICATIONS

Design Specifications: NPS 12

Class Location (existing)	-	Class 1, 2
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	-	6040 kPa
Maximum Operating Pressure	-	6040 kPa
Test Medium	-	Water
Test Pressure	-	8456 kPa
Valves/Fittings	-	PN 100
Minimum Depth of Cover	-	1.2 m

Pipe Specifications: NPS 12

Size	-	NPS-12
Outside Diameter	-	323.9 mm
Wall Thickness	-	7.1 mm
Grade	-	359 MPa
Type	-	Electric Resistance Weld
Description	-	C.S.A. Standard Z245.1-14
Category	-	Cat. I, M5C
Coating	-	Fusion Bond Epoxy
% SMYS	-	38%

Design Specifications: NPS 8

Class Location (existing)	-	Class 1, 2
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	-	6040 kPa
Maximum Operating Pressure	-	6040 kPa
Test Medium	-	Water
Test Pressure	-	8456 kPa
Valves/Fittings	-	PN 100

Minimum Depth of Cover	-	1.2 m
------------------------	---	-------

Pipe Specifications: NPS 8

Size	-	NPS-8
Outside Diameter	-	219.1 mm
Wall Thickness	-	6.35 mm
Grade	-	359 MPa
Type	-	Electric Resistance Weld
Description	-	C.S.A. Standard Z245.1-14
Category	-	Cat. I, M5C
Coating	-	Yellow Jacket
% SMYS	-	29%

Design Specifications: NPS 16

Class Location (existing)	-	Class 1, 2
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	-	3450 kPa
Maximum Operating Pressure	-	3450 kPa
Test Medium	-	Water
Test Pressure	-	4830 kPa
Valves/Fittings	-	PN 50
Minimum Depth of Cover	-	1.2 m

Pipe Specifications: NPS 16

Size	-	NPS-16
Outside Diameter	-	406.4 mm
Wall Thickness	-	7.9 mm
Grade	-	359 MPa
Type	-	Electric Resistance Weld
Description	-	C.S.A. Standard Z245.1-14
Category	-	Cat. I, M5C
Coating	-	Fusion Bond Epoxy
% SMYS	-	25%



Leamington Phase II Pipeline Project

Environmental Report

Prepared for:
Union Gas Limited

Prepared by:
Azimuth Environmental
Consulting, Inc.

November 2015

AEC 15-151



EXECUTIVE SUMMARY

Introduction

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of approximately 6.7 kilometres of a new NPS 12 inch natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250m of a new NPS 16 inch natural gas pipeline will be built to connect to the existing 10 inch and NPS 8 inch pipelines on County Road 18. To connect an existing NPS 8 inch natural gas pipeline to the new station, approximately 60 metres of new NPS 8 inch pipeline will also be required. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville area. Construction is proposed to begin in the spring/summer of 2016.

In 2012, Union Gas obtained approval from the Ontario Energy Board to construct Phase I of the Leamington Expansion Project. The project included the installation of 8.5 kilometers of an NPS 12 inch natural gas pipeline from the existing Union Gas Comber Station located on Rochester Townline Road just south of County Road 46 to the existing Union Gas station located along County Road 14. The southern portion of the approved route included 3.2 km of an abandon railway right-of-way owned by the Town of Leamington that ended at the existing station at County Road 14. The pipeline was successfully constructed in 2013. This Environmental Report for Phase II of this project is a continuation of the Phase I project to complete the reinforcement of the Leamington area natural gas supply using the abandon railway/ recreation trail alignment.

Azimuth Environmental Consulting Inc. (Azimuth) was retained to undertake a route selection study and impact assessment in compliance with or meeting the intent of the Ontario Energy Board's, *Environmental Guidelines For The Location, Construction and Operation of Hydrocarbon Pipelines And Facilities In Ontario, Fifth Edition, May 2003*. This report documents the environmental assessment process undertaken by Union Gas and Azimuth Environmental to identify the preferred pipeline route alignment and the detailed impact mitigation study along the route.



Due to the availability of the abandoned railway/recreational trail for routing the pipeline no alternative routes were considered. Any alternative route beyond the abandoned railway/recreational trail within the municipality would have utilized road allowances or agricultural land. This would result in potential indirect impacts to adjacent residences, traffic disruption and direct impact on agricultural land. Given use of the railway/trail avoided all these types of impacts it was evident any other alternative would be eliminated during the evaluation process so the identification of alternatives for this project was not required to complete the study in accordance with the OEB guidelines. Depending on the nature and complexity of the alternatives and their impacts, the OEB permits carrying out the planning process may lead to the selection of one preferred alternative. The preferred route is shown on Figures 1-3.

Environmental Setting

The entire study area is intensively cultivated Class 2 agricultural land with extensive subsurface systematic drainage. The Leamington area has numerous large greenhouse operations that grow vegetables year round.

The watercourses are municipal drains that facilitate drainage of the agricultural land for cultivation. All existing crossing along the railway are via culverts. Background fisheries information was available on the watercourses and the species present indicated a warm water system.

There are no designated significant wetlands or environmentally sensitive features directly affected by the preferred route. One woodlot of designated significance, the Andrew Murray O'Neil Memorial Woods Conservation Area is located adjacent to the railway/trail located south of Mersea Road 5. The deciduous woodlot contains Carolinian species as well as native species such as Oaks, Hickories, Basswood, Pine, Elm and Black Walnut.

The study area is located in County of Essex and in the Municipality of Leamington all of which permit natural gas pipelines in all land use designations.



Public/Agency Consultation

The public consultation program for this project involved provincial and municipal government consultation, contact with First Nations and Métis Nation and adjacent property owners. Two members of the public attended the Public Information Session which was held in the Leamington Kinsmen Recreation Complex from 5:00 – 8:00p.m. on September 16th, 2015. The public notice was placed in the Essex Free Press on September 3, 2015 and The Southpoint Sun on September 2, 2015. No member of the public or government agency or the Municipality of Leamington expressed opposition to the preferred route.

Pipeline Route Selection

The identification of preferred route utilized land use and environmental data information and the route selection criteria to review reasonable routing opportunities within the study area. Consultation with the Municipality of Leamington confirmed the availability of the abandoned railway/recreational trail for the proposed pipeline. This provided the opportunity to construct the pipeline within an existing right-of-way resulting in the ability to minimize the effect on the adjacent private properties and associated agricultural land.

Based on the ability to minimize impacts associated with the use of agricultural land or road allowances the abandoned railway/recreational trail was selected as the preferred pipeline route (see Figures 1-3) for the following reasons:

- Provides the opportunity to use the abandoned railway/recreational trail for the pipeline construction for the entire route, (6.9km);
- Avoids creation of a pipeline easement on agricultural land;
- Ability to avoid disturbance to any residences;
- Avoids all forested areas;
- Route location does not conflict with comments from public, provincial ministries and the Municipality of Leamington; and
- Technically acceptable for Union Gas.



Impact Management Along Preferred Pipeline Route

An assessment of the preferred route was undertaken to assess the potential impacts, and recommend mitigation measures. No significant environmental or land use impacts along the preferred route were identified that could not be readily mitigated through application of Union's standard construction specifications.

The preferred route does not conflict with any current provincial policy regarding land use planning. Construction and operation of the preferred route will not adversely impact any environmental or land use features protected under the existing provincial planning policies.

Conclusions

Based on consultation with the public, government agencies and the affected municipality, the preferred route represents a minimal impact on the environment, land use and the community through use of an existing abandoned railway/recreational trail.

The preferred route location will not adversely affect the adjacent land use and has no long-term adverse environmental or socio-economic effects on the community. The affected municipality has not identified any concerns with the proposed pipeline construction or the preferred route. Two members of the public attended the Public Information Centre one of which was an adjacent affected property owner and the other an interested individual from the area. Neither person indicated any concerns with the preferred route.



LEGEND:

- Proposed Phase II Pipeline Route
- - - Abandoned Railway/Recreational Trail

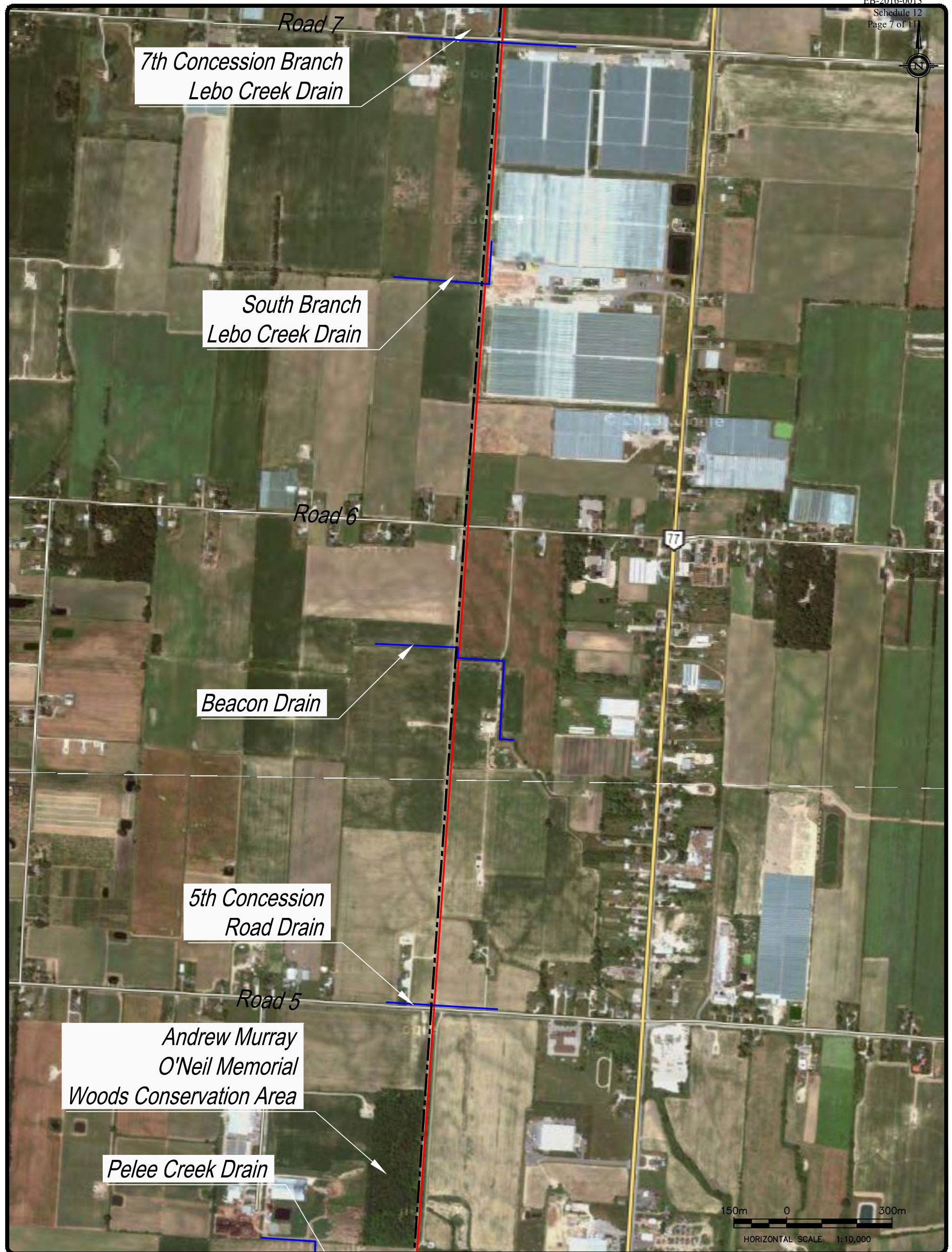


AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Proposed Route Location

Leamington Phase II

DATE ISSUED:	November 2015	Figure No. 1
CREATED BY:	JLM	
PROJECT NO.:	15-151	
REFERENCE:	First Base Solutions	



LEGEND:

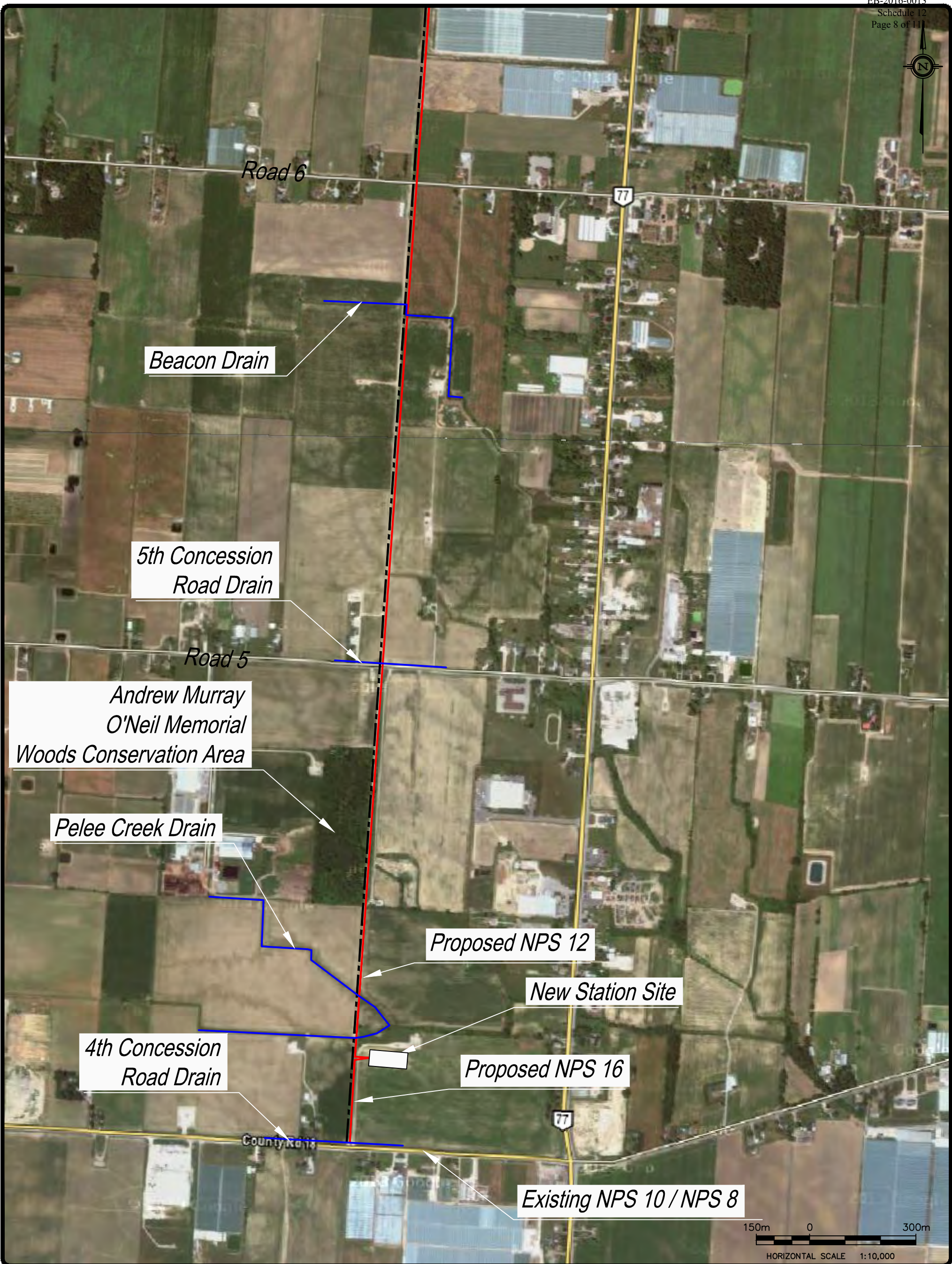
- Proposed Phase II Pipeline Route
- - - Abandoned Railway/Recreational Trail



Proposed Route Location

Leamington Phase II

DATE ISSUED:	November 2015	Figure No. 2
CREATED BY:	JLM	
PROJECT NO.:	15-151	
REFERENCE:	First Base Solutions	



LEGEND:

- Proposed Phase II Pipeline Route
- - - Abandoned Railway/Recreational Trail



Proposed Route Location

Leamington Phase II

DATE ISSUED:	November 2015	Figure No. 3
CREATED BY:	JLM	
PROJECT NO.:	15-151	
REFERENCE:	First Base Solutions	



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1.0 INTRODUCTION

1.1 Description of the Proposed Facility

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of approximately 6.7 kilometres of a new NPS 12 inch natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250m of a new NPS 10 inch natural gas pipeline will be built to connect to the existing 10 inch and NPS 8 inch pipelines on County Road 18. To connect an existing NPS 8 inch natural gas pipeline to the new station, approximately 60 metres of a new NPS 8 inch pipeline will also be required. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville area. Construction is proposed to begin in the spring/summer of 2016. The proposed facility location is shown on Figures 1 – 3.

The study area is located in the County of Essex in the Municipality of Leamington.

This report addressed the route selection process, agency and public consultation, the environmental implications of the preferred route as it relates to the potential effects on the adjacent natural heritage features and agricultural land use. The route selection study and impact assessment has been undertaken in compliance with or meeting the intent of the Ontario Energy Board's, *Environmental Guidelines For The Location, Construction and Operation of Hydrocarbon Pipelines And Facilities In Ontario, Fifth Edition, May 2003*.

1.2 Purpose of the Report

In 2012, Union Gas obtained approval from the Ontario Energy Board to construct Phase I of the Leamington Expansion Project. The project included the installation of 8.5 kilometers of an NPS 12 inch natural gas pipeline from the existing Union Gas Comber Station located on Rochester Townline Road just south of County Road 46 to the existing Union Gas station located along County Road 14. The southern portion of the approved route included 3.2 km of an abandon railway right-of-way owned by the Town of

Leamington that ended at the existing station at County Road 14. The pipeline was successfully constructed in 2013. This Environmental Report for Phase II of this project is a continuation of the Phase I project to complete the reinforcement of the Leamington area natural gas supply using the abandon railway/ recreation trail alignment.

This report documents Phase II of the Leamington Expansion Project route selection process undertaken by Union Gas to meet the natural gas requirements of the Leamington area. The report presents the process undertaken by Union Gas and Azimuth Environmental to identify the preferred route alignment and the detailed impact mitigation study along the route. The report documents the planning process that will result in the submission of an Environmental Report to the Ontario Energy Board.

1.3 Organization of the Report

The report has been organized to address the pipeline route selection process. The pipeline will utilize an existing station at the start and terminus of the project will require the construction of a new station. The route selection process was done by Azimuth to assess the routing options between the existing station at County Road 14 and the proposed new station at County Road 18. The public consultation component of the study solicited comments on all aspects of the route selection process.

Section 2, Study Approach, presents the route selection and impact assessment methodology.

Section 3, Environmental Setting, describes the land use and environmental conditions throughout the study area.

Section 4, Proposed Facilities, describes the proposed pipeline facilities for the project.

Section 5, Public/Agency Consultation, presents the consultation process used for the route selection process.

Section 6, Route Selection Process, describes the process used to identify the preferred pipeline route and the potential impacts.

Section 7, Pipeline Construction, Operations and Maintenance, discusses construction procedures, operations and maintenance and the associated potential impacts and mitigations.

Section 8, Impact Management Preferred Route, presents the detailed impact assessment associated with the preferred pipeline route.

Section 9, Monitoring/Compliance, provides a summary of the monitoring and compliance activities that will be undertaken during construction.

Section 10, Cumulative Impact Assessment, addresses the potential cumulative impact for the pipeline.

Section 11, Conclusion, provides a summary of the conclusions regarding the environmental implications of the proposed pipelines.

2.0 STUDY APPROACH

Our study approach was undertaken in accordance with the OEB guidelines. A land use and environmental review of the study area was completed to identify constraints and opportunities to assist with the identification of a preferred pipeline route. Provincial agencies, First Nations, Métis Nation, affected municipalities and the local conservation authority was contacted to request background data and obtain their concerns. Based on this information and a review of the routing opportunities in the area the preferred route was selected with the objective of minimizing the overall environmental and socio-economic impacts. The preferred route was reviewed with the potentially affected public and the aforementioned agencies to identify any concerns. Following selection of the preferred route more detailed field study was completed along the route to define the potential impacts, recommend appropriate mitigation/restoration measures and identify permitting requirements associated with watercourses and other environmental features.

With regard to the alternative pipeline routes it was the decision of Azimuth Environmental and Union Gas (the study team) that the abandoned railway bed/recreational trail in the study area provided the most reasonable routing opportunity. The study area is agricultural with the exception of one woodlot; therefore the homogeneity of the land use provided limited differentiation for route identification and reinforced the benefit of using the municipally owned existing railway/trail property. The extensive agricultural land use in the study area supported limiting route identification to the railway/trail land use to minimize potential agricultural impacts.

For the purposes of this report the term “railway” simply refers to placement of the pipeline within the municipally owned railway property within the grassed area between the limestone trail that has been placed on the former railway track location for the walking trail and the fenced property limits. Union will acquire the necessary land rights for the pipeline easement within the former railway property from the Municipality of Leamington.

3.0 ENVIRONMENTAL SETTING

3.1 Study Area Boundary

During the delineation of the engineering requirements for the study Union Gas staff contacted the Municipality of Leamington to determine the availability of the railway property for placement of the pipeline. This option provided obvious routing benefits being adjacent to the existing station at County Road 14 and providing a direct route to the location where the natural gas supply would be connected to the existing distribution system. Once the Municipality confirmed their intention to grant an easement on the railway property the consideration of other routing options became unnecessary because any other route would be more circuitous resulting in greater potential impacts and higher costs with the added pipeline length. Azimuth reviewed the surrounding land uses and natural heritage features and confirmed the environmental benefit of the railway option. Therefore no formal study area was defined and all assessment focused on the railway lands.

3.2 Physical Environment

3.2.1 Physiographic and Geologic Conditions

The local and regional geology is characterized by Tavistock Till (Huron Lobe), which primary consists of clayey silt to silt with a moderate to high stone content (Barnett, P.J., 1991). In some areas, this till is overlain by glaciolacustrine deposits of similar material (silty clay to silt).

Bedrock within this region primarily consists of grey to brown, fossiliferous, medium to thick-bedded Limestones, Dolostones and Shales of the Dundee Formation (Middle Devonian period). Bedrock in the local area is typically found between 30 to 60 metres below ground surface (Ontario Geological Survey, 1991).

3.2.2 Agriculture

The study area contains areas that are intensively cultivated cash crops (e.g., soybeans, winter wheat, corn, field tomatoes). The Canada Land Inventory mapping identified the area as predominately Class 2 soils due to limitations to drainage. The area has extensive subsurface drainage systems and municipal drains to correct poor drainage limitations. These drainage improvements, combined with the favourable soil fertility and climate, make these lands very productive for crop production.

The soils are predominately clay sand, clay, fine sandy loam and sandy loam textured soils. Brookston Clay Sand is predominant along the route with areas of Berrien Sandy Loam, Caistor Clay and Tuscola Fine Sandy Loam. Crops grown in the study area were limited to specialty field vegetable crops and soybeans and large greenhouse operations are located adjacent to the route. All the lands are tile drained that discharge the excess water to the area municipal drains to maintain drainage.

Temporary work areas will be required on the adjacent agricultural land. Union Gas has developed construction procedures for mitigating agricultural impacts (compaction, soil mixing) to ensure the productivity of the affected agricultural lands are maintained after construction. The ability to use the railway lands for the proposed pipeline will minimize impacts to the agricultural operations along the route.

3.2.3 Aggregates

The study area has no aggregate reserves or active extraction operations.

3.2.4 Petroleum

The Ministry of Natural Resources and Forestry (MNR) has identified the existence of known petroleum wells outside the railway property. Use of the railway lands will avoid any disruption to petroleum wells. Given the inaccuracy of the abandon well data Union Gas will investigate the available records to ensure no wells are affected during the detailed engineering for the preferred route where temporary work areas on the agricultural land is required.

3.3 Biological Environment

3.3.1 Surface Water Hydrology and Fisheries

Typically, watercourses within Essex County are warm water systems that have been highly channelized to create sufficient slope for agricultural field drainage (Stantec, 2006). Watercourses in the area provide habitat for a mixture of warm water species including Johnny Darter, Emerald Shiner, Common Shiner, Flathead Minnow, White Bass, White Sucker, White Crappie, Yellow Perch, Yellow Bullhead, Channel Catfish, Common Carp, Brown Bullhead, Pumpkinseed and Green Sunfish (ESCA, MNR, DFO, 2005).

Essex region has six species of fish designated at risk under the provincial Endangered Species Act: Channel Darter, Lake Chubsucker, Pugnose Shiner, Spotted Gar, Spotted Sucker and Warmouth.

3.3.2 Vegetation

The lands within the study area are intensively cultivated and there are very limited forested areas present. Essex County provides habitat for many Carolinian species due to the moderate climate. The railway/trail represents a disturbed right-of-way (ROW) with minimal woody vegetation within the ROW limits. Woody species found along the edges of the ROW include: American Elm (*Ulmus american*) Staghorn Sumac (*Rhus typhina*), Gray dogwood (*Cornus racemosa*), Trembling Aspen (*Populus tremuloides*), Manitoba Maple (*Acer negundo*), Virginia Creeper (*Parthenocissus quinquefolia*), Pagoda Dogwood (*Cornus alternifolia*), Black Raspberry (*Rubus occidentalis*), Osage Orange

(*Maclura pomifera*), American Bittersweet (*elastrus scandens*), Riverbank Grape (*Vitis riparia*), Black Walnut (*Juglans nigra*) and Willow (*Salix spp*).

Herbaceous species found within the maintained grassed area each side of the limestone trail include: Jewelweed (*Impatiens capensis*), Chicory (*Cichorium intybus*), Wild Carrot (*Daucus carota*), Red Clover (*Trifolium pratense*), Reed Canary Grass (*Phalaris arundinacea*), Butter and Eggs Toadflax (*Linaria vulgaris*) and Pale Smartweed (*Persicaria lapathifolium*).

The railway/trail passes beside the Andrew Murray O'Neil Memorial Woods which is a mixed Carolinian forest containing species such as Oaks, Hickories, Basswood, Pine, Elm and Black Walnut. The woodlot is a Conservation Area with a walking trail that is connected to the abandoned railway/trail. ERCA indicated the woodlot is significant wildlife habitat and may contain Species at Risk.

All forested areas are designated by the Municipality of Leamington as Natural Environment, with no further delineation as to the significance of the individual features.

No vegetative Species at Risk were identified with the ROW.

3.3.3 Wetlands

There are no provincially significant wetlands in the study area based on consultation with the Ministry of Natural Resources.

3.3.4 Wildlife

The Andrew Murray O'Neil Memorial Woods would have the potential to provide wildlife habitat. The MNR has identified the following Species At Risk as being found in Essex County: Barn Swallow, Eastern Foxsnake and Turtles.

3.3.5 Area of Natural and Scientific Interest

There are no designated areas of natural and scientific interest in proximity to the route.

3.3.6 Species At Risk

The Ministry of Natural Resources as identified 247 listed S1, S2 or S3 species for the Essex area. These species are generally all Carolinian species that could have been found in the area prior to development of the intensive agricultural land use and would be expected to have habitat present further south in the United States. The intensive nature of the adjacent agricultural production and the disturbed habitat found within the railway is not expected to provide critical habitat for the Species at Risk. The species reported as Species at Risk occurring in the surrounding area are: Eastern Flowering Dogwood, American Chestnut, Climbing Prairie Rose, Barn Swallow, Eastern Foxsnake, Turtles, Channel Darter, Lake Chubsucker, Pugnose Shiner, Spotted Gar, Spotted Sucker and Warmouth.

The Ministry of Natural Resources and Forestry has been contacted to obtain current SAR information. At the time this report was prepared no response had been provided.

3.4 Cultural Environment

3.4.1 Archaeology/Heritage

In accordance with the Ministry of Tourism, Culture and Sport requirements with regard to potential impacts to both archaeological features and built heritage/cultural heritage landscapes that may be protected under the Ontario Heritage Act Ontario Regulation 10/06 a screening was undertaken to determine if potential heritage features could be impacted. The screening checklist was completed using windshield survey of the structures and landscape characteristics in the study area. Based on the nature of the proposed development (i.e. buried natural gas pipeline within an abandoned railway bed rehabilitated to be a recreation trail) and completion of the screening checklist (copy appended) it was determined no assessment of the built heritage / cultural heritage landscape or archaeology was required. Construction of the pipeline would affect only highly disturbed railway lands. Given there will be no direct or indirect affect on any structures or buildings, nor will any trees be removed or topographic changes be made, we concluded there will be no potential change to the built heritage or cultural heritage landscape or any potential impact to archaeological resources.

3.4.2 Socio-economic Structure

The preferred route falls within the Municipality of Leamington within the County of Essex. Socio-economic activities in the area involve predominately agriculture. Greenhouse operations are common throughout the area and required natural gas for a heat source to provide year round specialty crop production.

There is no development that would be adversely disrupted by the proposed pipeline construction. The Municipality of Leamington staff has indicated they support the use of the municipally owned abandoned railway as the preferred route and support expansion of the greenhouse industry.

Leamington public works and engineering staff will be consulted during detailed engineering regarding the most appropriate location for the pipeline within the railway property. Union Gas is aware of the municipality's concerns and will be contacting them during detailed design.

3.4.3 Land Use Planning

The preferred route is located in the Municipality of Leamington. Based on our review of the current Official Plan (OP) the route does not affect any designated natural heritage features or any proposed land uses. The applicable Official Plan land use schedules for the municipality are appended.

The Municipality of Leamington Schedule E Roads shows the entire railway/trail.

Natural heritage concerns include the floodplain and watercourse crossings that would be regulated under Ontario Regulation 158/06 by the Essex Region Conservation Authority (ERCA). Nine creek/drain crossings will be required along the preferred route. The crossings are shown on aerials of the route location in Figures 1-3. A permit will be obtained from ERCA in accordance with the Regulation by Union Gas prior to construction.

3.4.4 Utilities

Utilities in the area are limited to natural gas transmission/distribution lines, Bell phone lines, municipal water lines and rural distribution lines for electricity that serve the area

residents and communities. Union Gas has an existing NPS 8 natural gas pipeline adjacent to the existing railway/trail west property line. The development of natural gas pipelines and related facilities are permitted in any land use designation provided that the development satisfies applicable Provincial and/or Federal legislation.

4.0 PROPOSED FACILITIES

The pipeline will include an NPS 12 inch (323.9mm), a 10 inch (273.1mm) and a NPS 8 inch (219.1mm) steel pipeline. The pipelines are designed and manufactured using conservative factors of safety and in accordance with the provincial Technical Standards and Safety Authority (TSSA) requirements. Before being put into service the pipeline will undergo a hydrostatic pressure test in excess of the operating pressure to confirm the strength of the pipe and check for any leaks. Welds are radiographically inspected to ensure that there are no defects. A pipeline inspector is on site at all times to oversee construction of the pipe to ensure it is constructed to CSA code and Union Gas construction and maintenance procedures. The entire construction process is performed to Union Gas specifications and in compliance with regulatory standards. This includes depth of cover, proper backfill material and techniques, proper coating to prevent corrosion, and proper handling of the pipe to prevent damage. A cathodic protection system is placed on the pipeline to prevent corrosion from occurring during operation.

5.0 PUBLIC/AGENCY CONSULTATION

The public consultation program for this project involved provincial and municipal government consultation and contact with indirectly and directly affected property owners. Letters were sent to the affected municipalities and the provincial ministries, First Nations and Métis Nation notifying them of the study and requesting their input and applicable land use and environmental information. Letters were sent to notify them of the project and solicit their input and associated environmental, land use, technical or socio-economic data that may affect the preferred route and inviting them to the Public Information Centre (PIC). None of the agencies contacted or the public indicated any opposition to the preferred route or suggested any other routing alternatives.

Public and government consultation for this project included the following:

- Announcing the preferred route and requesting that Provincial ministries, First Nations, Métis Nation and municipal government, identify their concerns, provide applicable land use and environmental information and their comments;
- Liaison with aforementioned contacts, as required to identify potential constraints along the preferred route;
- Letter to all provincial ministries, First Nations, Métis Nation and municipal governments soliciting their comments on the preferred route, with an invitation to the PIC on September 16th, 2015;
- A newsletter explaining the project, the environmental assessment process, presenting the preferred route and project team contacts to address any questions that was available at the PIC; and
- September 16th, 2015 an advertised PIC was held in the Leamington Kinsmen Recreation Complex in Leamington, to discuss the route selection process, the preferred route and the rationale for its selection and address adjacent property owners concerns.

Copies of the public consultation materials are provided in the appendices.

Two members of the public attended the PIC. It was held in the Leamington Kinsmen Recreation Complex in Leamington from 5:00 – 8:00p.m. on September 16th, 2015. The public notice for the PIC was placed in the Essex Free Press on September 3, 2015 and The Southpoint Sun on September 2, 2015 (copies appended). These newspapers were selected to advertise the public consultation event because of the circulation area encompassed the entire area in proximity to the preferred route and the Town of Leamington confirmed the papers are used for municipal public notices. A newsletter and comment form was provided as a handout to the attendee at the PIC (copy appended). A number of information panels were prepared (copy appended) for the attendee to review in an effort to educate them on the route selection process and construction practices and to discuss their concerns. Union Gas staff was present to discuss the regulatory process, construction practices and land acquisition/easement/compensation issues for the pipeline.

Discussions with the one adjacent property owner who attended the public session did not result in the identification of any concerns with the preliminary preferred route location. Union Gas staff was available to provide answers to all his questions. The two attendee at the event had members of the project team explain proposed location for the pipeline

within the railways and what would be involved if a temporary work area was required on the adjacent landowners farm. No responses to the newspaper advertisement in the form of email or phone calls were received.

Table 1 (appended) presents the comments received from the ministry/municipal contacts and the actions taken and comments in response to concerns. Consultation was undertaken by Union Gas staff responsible for liaison with all First Nations and Métis Nation interested in the preferred route

6.0 ROUTE SELECTION PROCESS

6.1 Pipeline Routing Criteria

During the 2012 Phase I study for reinforcing the natural gas supply to Leamington area the Municipality of Leamington was approached regarding the use of the railway. At that time Hydro One was proposing to use the railway for a transmission line which limited the availability of the lands for a pipeline. Union Gas contacted the Municipality during this project again regarding the availability of the railway lands and Leamington staff confirmed Hydro One no longer had an interest in the lands. Given the environmental, socioeconomic, engineering and cost benefits of direct route on disturbed non-agricultural land owned by the Municipality it was the decision of Azimuth Environmental and Union Gas (the study team) that the abandoned railway bed/recreational trail provided the most reasonable routing opportunity. The surrounding lands are predominately agricultural therefore the homogeneity of the land use provided limited differentiation for alternative route identification and reinforced the benefit of using the municipally owned existing railway/trail property. The extensive agricultural land use in the study area supported limiting route identification to the railway/trail to minimize potential agricultural impacts.

The Ontario Energy Board (OEB) environmental guidelines require proponents to follow a decision-making process for the identification, evaluation and comparison of alternative routes, and to have regard for environmental, land use, socio-economic, heritage and pipeline engineering and construction requirements. The guidelines permit proponents to scope the environmental assessment process when clearly superior route options are available and the selection and evaluation of alternative routes would not benefit the assessment process. The ability to use the railway lands clearly met this policy and as a

result the study focused on the railway as the preferred alternative for all external consultation.

6.2 Identification of Potential Environmental Effects and Mitigation Measures

The preferred route affects an abandoned railway that has been restored to recreational trail. The trail is comprised of a 3m wide limestone screening base with the adjacent lands in maintained grasses. At a few locations there are trees and shrubs adjacent to the property line and associated with the drainage/watercourse feature crossings. Figures 1-3 shows the route location on aerial photography which shows the location and extent of the vegetation along the railway

The Municipality of Leamington staff have indicated support for the use of the railway lands. Staff will be consulted regarding utilities and municipal drain crossings during detailed design.

No designated significant wetland, Areas of Natural and Scientific Interest, significant valleylands or major watercourses are present in the area. One woodlot managed by the Essex Region Conservation Authority which is considered significant wildlife habitat and potential Species at Risk habitat is located adjacent to the railway. The remaining adjacent lands are predominately intensively cultivated agricultural land with large greenhouse operations.

6.2.1 Potential Environmental Effects

Potential impacts on the natural environment are minimal with the use of railway lands. The lands are maintained by the municipality, mowing the grassed areas adjacent to the limestone trail. Municipal drains cross the railway and they are maintained to facilitate the tile drainage of the surrounding agricultural land.

The construction of the pipeline will not require the removal of any structures. Limited tree removal or branch pruning may be required for trees along the property line depending on the proximity of the pipeline to the property limits. Union is contacting the adjacent landowners along the preferred route where temporary construction easements may be required and to discuss their concerns. All effects on rural residences in

proximity to the railway are indirect because the route location is within the railway lands limiting impacts to nuisance effects (e.g., dust, noise, traffic) during construction. This is not expected to be a significant issue with the residents due to the regular operation of agricultural equipment in the area that would create similar nuisance effects. Traffic disruption management would not be a significant issue due to the low traffic volumes on the rural road network and the proposal currently is to directional drilling under roads to avoid traffic disruption. Temporary easements for construction may be required on agricultural land adjacent to the railway depending on the final location of the pipeline. Affected property owners will be compensated for the temporary easement and the lands will be restored to the preconstruction condition.

Potential impacts on any watercourse/municipal drain crossings are limited to temporary disturbance associated with construction. All watercourses will be crossed using the horizontal directional drill method (HDD) used by Union Gas along with the associated sediment control and restoration measures have all been reviewed and endorsed by the Department of Fisheries and Oceans as acceptable construction methods. All required permits will be obtained from the Essex Region Conservation Authority prior to construction.

6.2.2 Possible Mitigation/Restoration Measures

In order to define the extent of the potential environmental impacts, the possible mitigation and restoration measures must be identified to determine the net environmental effects.

Mitigation and restoration measures will be completed in accordance with established procedures as outlined in the Ontario Energy Board, *Environmental Guidelines For Locating, Constructing and Operating Hydrocarbon Pipelines in Ontario, 2003, Fifth Edition*. Union Gas has developed operating and construction practices, in consultation with the approval agencies (e.g., Department of Fisheries and Oceans, Ontario Ministry of Natural Resources and Forestry, Ministry of the Environment, conservation authorities) that effectively mitigate and restore disturbances to the affected lands during construction. This information and project experience was used to help define the possible mitigation measures that could be applied to minimize the potential impacts. Union Gas construction procedures detailing the standard methods of construction on agricultural land for clearing, watercourse crossings, topsoil conservation, grading, trenching, tile repair, and cleanup will be applied to the construction and restoration

phases of the project. These procedures will be adhered to during construction unless modified in specific conditions to minimize any environmental impacts, in consultation with the environmental inspector and notification of the property owner. In the case of watercourse crossings, consultation would be with the Essex Region Conservation Authority (ERCA). Prior to the crossings Union Gas will perform a self-assessment of the water crossings using DFO criteria to determine if the crossing may cause serious harm to fish. ERCA would be contacted to obtain the required permit for the crossing under their regulation.

The following summarizes information from Unions' construction practices and regulatory agencies regarding general mitigation/restoration measures applied for all project.

Backfilling

Backfill material shall be of good quality and approved by Union Gas. If applicable roads and driveways shall be backfilled to design specifications. Topsoil shall be returned to areas from which it was removed in a satisfactory condition.

Agricultural Areas

Agricultural lands could be potentially affected by any of the alternative routes that parallel the road allowances due to the elevated design of the adjacent road allowances and the potential need for temporary easement if the pipeline is located at the edge of the road allowance in proximity to the property line. In addition there is one cross-country alternative on agricultural land. The agricultural land shall be returned to production in a timely fashion. Subsoil shall be piled in a manner to prevent mixing with topsoil. Surface drainage shall be restored to pre-construction conditions. Union Gas's wet soil shutdown practice will be adhered to if it is necessary to work on agricultural lands.

Trees

It is anticipated that if necessary, trees removal will be minimal however limited branch pruning may be undertaken. The use of HDD at all watercourses, road crossings and along the woodlot will enable tree removal to be kept to a minimum. All cutting and removal of trees shall be carried out in accordance with company specifications.

Specimen trees within and adjacent to the road allowance shall be flagged and protected.
. Use of the rail/trail property will enable tree removal to be minimal or not necessary.

Archaeological Sites

Measures will be taken immediately to protect sites where unforeseen archaeological or paleontological sites are excavated. Areas of archaeological significance are limited to areas the agricultural lands in the study area. The existing rights-of-way are highly disturbed and as a result do not require a Stage II archaeological assessment. The contractor shall cease activities immediately and avoid damage to the site until a licensed archaeologist has assessed it.

Rural Residential Areas

Disturbance to residents during construction shall be minimized. Construction equipment will be properly muffled and dust will be controlled as required using water. Standard traffic guidelines will be followed at road crossing locations. Routing opportunities exist to use road allowances with only a limited number of residences in proximity to the road allowance. Most of the rural residences are in proximity to the road allowance are associated with farmsteads and residents would be accustomed to large equipment operation.

6.3 Evaluation of Alternative Routes

A review of potential alternative routes was undertaken to determine the routing options having regard for features affected, public and agency concerns, and the technical and engineering requirements for pipeline construction. The ability to use of the railway provides the opportunity to use areas of existing disturbance with minimal to no affect on the adjacent land uses. Past experience with route selection studies has shown the optimization of existing linear corridors where existing infrastructure are present is good planning in that is consolidates the impacts to a compatible land use. The railway provides this routing opportunity so there was no reason to pursue other alternatives given no comparable corridor existed between the existing station and the proposed station required to supply the natural gas.

Concerns raised by the municipality and government ministries during project notification with the presentation of the preferred route were integrated into the proposed

mitigation and detailed design. Letters received from the municipality and government agencies are appended and the comments are summarized in Table 1. Use of the railway with the endorsement of the Municipality of Leamington has resulted in the majority of the ministries contacted choosing not to respond due to the lack of any significant issues related to their mandate.

The ability to mitigate impacts through the application of established Union Gas construction and maintenance procedures affects route selection. Impacting a sensitive resource or significant public concern is a less significant issue if mitigation measures are readily available to return the affected area to its pre-construction condition. Therefore, the ability to mitigate impacts assists in assessing the post-construction impacts and the inherent significance of the impact in the route selection and evaluation.

7.0 PIPELINE CONSTRUCTION, OPERATIONS AND MAINTENANCE

The following section provides a brief description of the construction, maintenance and operation activities for the natural gas pipeline.

7.1 Construction Procedures

The following is a stepwise procedure that is generally followed by Union Gas during construction of a gas pipeline. This section presents the basic construction procedures applied to all projects and have not been revised to reflect the specific conditions on this project. Generally these procedures apply to all projects; the exception for this project is that it uses the railway right-of-way and no tree or brush removal is expected to be required.

It is anticipated that construction of the pipeline will be divided amongst several crews; each crew performing similar functions at different locations along the pipeline. Company (Union Gas) Inspectors will ensure each crew follows the Company's construction specifications.

Disturbance to residents during construction shall be minimized. Construction equipment will be properly muffled and dust will be controlled as required using water. Measures

will be implemented to provide for safe traffic movement and pedestrian safety during construction at road crossing locations.

To minimize disruption to traffic movement and provide a safe working environment for the construction workforce a traffic plan will be prepared by Union in accordance their construction practices and standards, and in consultation with the affected municipality's engineering departments. The traffic plan will address issues such as work area signage, safety cone placement, lane restrictions/closures, use of flag persons to control vehicle movement, pedestrian safety, barriers, driveway access, and personal protective equipment.

In the event a temporary work area may be required on the adjacent private lands prior to the entry of any of the contractor's work forces on private property, the Company Land Relations Agent will contact each landowner and adjacent property owner to discuss the issues that could arise from the construction of the pipeline. The Land Relations Agent establishes in consultation with the landowner/adjacent property; whether access is required across the trench; where excess subsoil shall be placed; and answers any questions they may have regarding the construction and the proposed construction schedule.

The Lands Agent will be available to assist in maintaining good relations throughout construction and operation of the proposed pipeline. Concerns expressed during construction by residents in the area of the preferred route should be addressed in an expeditious and courteous manner. Area residents will be supplied with a contact number should any questions or concerns arise.

The first crew to enter the property is the pipeline contractor's clearing crew, which braces and cuts all fences crossing the right-of-way and installs any required temporary gates. This crew clears sufficient brush and trees on and adjacent to the road allowance and/or right-of-way to permit construction of the pipeline. If trees must be removed it is done in consultation with the landowner with a Union Gas representative present, however on this project very limited tree or brush removal is expected.

The grading crew constructs approaches through road allowance to allow equipment onto the working side of the right-of-way. If on agricultural lands, the grading crew strips a

certain depth of topsoil with bulldozers and graders so that it will not be mixed with the subsoil that will be removed from the trench.

Pipe is then laid on wooden skids on the working side of the right-of-way adjacent to the proposed trench area by the stringing crew.

The contractor, by use of hoe excavator or wheel trencher, will excavate a trench the width of which approximates the diameter of the pipeline plus 0.3 metres, depending on ground conditions at the time. It is at this time that plugs, accesses, laneways and driveways are left in the trench, where requested by the landowner. All utilities that will be crossed or paralleled by the pipeline will be located prior to trenching.

The general construction specifications instruct the contractor to erect safety barricades, fences, signs or flashers or to use flag persons around any excavation, across or along a road allowance/right-of-way that will be left overnight or for an extended period of time.

Concurrent to trenching, the contractor may have a Horizontal Directional Drilling (HDD) crew to install the pipe underneath certain road crossings, watercourse crossings or other crossings that cannot be open cut, if soil/rock conditions permit. The directional drilling operation involves the use of a drill rig at an entry point. This rig begins by drilling a small diameter pilot hole using technology that allows the drill head to be steered and tracked from the surface. This pilot hole is enlarged by pulling back increasing larger reaming heads. On the final back ream, the carrier pipe is attached using a swivel which isolates the pipe from the rotation of the drill and reamer. The carrier pipe is pulled through the bore path and exits adjacent to the rig. This technique causes very little disruption to surface activity.

Next, the pipe between roads, accesses, laneways and streams is welded into one continuous length. The welded joints are radiographically inspected as per code and then coated and lowered into the trench. After sections of pipe are lowered into the trench and padded with soils, the native material will be backfilled into the trench by an excavator.

The tie-in crew is responsible for the installation of pipe across accesses, laneways, plugs and driveways to minimize the length of time that these accesses are out of service to the

landowner. The tie-in crew is also responsible for the pipeline installation at most watercourse crossings.

The clean-up crew is the final crew on the property. The clean-up crew will also repair fences, pick up debris, re-seed the trail sides and sensitive areas such as ditch banks and stream crossings.

When the clean-up is completed, the affected landowner is asked by a Company representative to sign a clean-up acknowledgement form if satisfied with the clean-up. This form in no way releases the Company from its obligations for compensation for damages and/or further clean up as required due to erosion or subsidence directly related to pipeline construction.

Union Gas will provide its own inspections staff to enforce Union's construction specifications and the applicable provincial regulations made under the Energy Act for Gas Pipeline Systems. Portions of the study area are located within a regulated floodplain; as a result a permit will be required from the Essex Region Conservation Authority (ERCA) to construct facilities within the floodplain.

7.2 Operation and Maintenance

Pipeline operation will consist of natural gas flowing through the pipeline between the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. Once the pipeline has been put into service, the following activities are undertaken to patrol and maintain the pipeline:

- A line survey will be conducted on the pipeline on an annual basis. These patrols serve to detect the presence or absence of structures or activities which could damage the pipeline;
- A review of erosion-prone sites along the pipeline;
- Reoccurring in-line inspection for anomalies, as required; and
- Review of operating conditions of pipeline facilities such as valve sites.

7.3 Potential Impacts/Mitigation

Impacts are generally limited to the construction activities and the associated physical disturbance of the right-of-way soils, vegetation and land uses. No natural heritage features or habitat for Species At Risk will be affected. Once the pipeline construction is complete, the railway vegetation can regenerate. Union Gas has established mitigation and restoration practices that can effectively minimize impacts. The recreational trail will be reestablished along the length of the railway to the satisfaction of the Municipality of Leamington.

8.0 IMPACT MANAGEMENT PREFERRED ROUTE

This section of the report identifies the environmental and land use features affected along the preferred pipeline route; assesses the potential impacts, and recommends mitigation measures to manage the impact. The evaluation of potential impacts has regard for the nature of the potential impact and the ability to mitigate or reduce the impact through application of mitigation measures during construction. The net impact or impact after application of the mitigation measures depends on the sensitivity of the environment affected and the nature of the proposed mitigation in the Union Gas construction specifications. Through the assessment of potential impacts having regard for the ability to mitigate an impact it enables Azimuth to provide a reasonable prediction of the expected impact on the features along the preferred route.

Potential disturbance to natural environmental features along the preferred route is limited to watercourse/drain crossings as shown on Figures 1-3. Limited tree removal is expected and the remainder of the vegetation is grasses and herbaceous weeds within the railway lands. Photographs of the route are appended which show the lack of natural environmental features along the route.

The proposed pipeline is to be located within grassed area between the limestone trail and the fenced property limits. The exact location will be determined during detailed design therefore for the purposes of the impact assessment the term “railway” simply refers to placement of the pipeline within the abandoned railway property limits under a legal agreement with the Town of Leamington.

Following construction the recreational trail will be re-established. Union will consult with the Municipality of Leamington staff during detailed design to discuss the operation of recreational trail during construction to ensure public safety.

In the event a temporary work area is require on the adjacent agricultural land following construction the land shall be returned to production in a timely fashion. Subsoil shall be piled in a manner to prevent mixing with topsoil. Surface drainage shall be restored to pre-construction conditions. Union Gas' wet soil shutdown practice will be adhered to if it is necessary to work on agricultural lands. A Company Representative will liaise with the affected farmers to ensure their concerns are addressed during construction and the lands are restored in accordance with Union Gas' restoration practices for agricultural land.

During the consultation process government agencies were asked to provide land use and environmental data applicable to the preferred route. The responses received from these agencies were integrated into the impact assessment. Table 1 provides an overview of the individual agency responses and copies of the correspondence received is appended in the Environmental Report under Agency Consultation and First Nation/Métis Nation Consultation.

8.1 Preferred Route Refinement

Upon confirmation of the preferred route it was reviewed during detailed engineering to determine which side of the abandoned railway would be used. The factors used in selecting the preferred location included but are not limited to the following:

- Ease of construction;
- Municipality's concerns;
- Width of the abandoned railway and the proximity of the adjacent agricultural land; and
- Location of existing or proposed infrastructure/utilities.

8.2 Physical Environment

8.2.1 Physiography and Topography

Trench excavation will occur in the railway overburden. Construction of the 12-inch pipeline with a minimum of 1.2m of cover will not impact the physiography or topography along the route. The right-of-way will be graded as close to the pre-construction grades as possible. Appropriate measures such as silt fence, check dams, erosion control matting or seeding will be taken in accordance with Union Gas construction specifications and Environmental Inspector recommendations to stabilize exposed soils. The flat topography and clay based soils are not conducive to significant erosion, as a result standard erosion control practices should be sufficient (e.g., silt fence).

8.2.2 Soils

The majority of the soils are predominately clay sand, clay, fine sandy loam and sandy loam. Erosion control measures (e.g., silt fence, straw bale, check dams) should be used and be regularly inspected and maintained to ensure they are working properly during construction.

8.2.3 Petroleum

MNR indicated their Ministry's data may not be current and they will not confirm the accuracy of the well locations. If wells are unexpectedly encountered during construction the MNR Petroleum Operations Section will be contacted to ensure the appropriate actions are taken.

8.2.4 Ground Water

Wells adjacent to the railway in the rural area are private and generally set back away from the work area in proximity to the residences or structure beyond the railway property. Construction of the pipeline is not anticipated to have any effect on the private wells in the vicinity of the proposed pipeline. The excavation of the trench for the pipeline within the overburden will not potentially adversely impact ground water resources supplying area wells. In most areas, the ground water table is below the excavation depth so that the pipeline will have no impact on the water table.

Based on the depth and nature of the surficial overburden there is no expectation of any impact on area ground water resources or adjacent wells. Data provided by the Essex Region Source Protection Report (May 2011) indicates the majority of the residents water supply is from municipal water treatment plants that take water from Lake Erie. Union Gas will implement their standard well monitoring program that involves retaining the services of a qualified hydrogeologist to review the local hydrogeological conditions and determine the need for a well monitoring program that may include pre-construction well monitoring. The pre-construction well condition information will generally include static water levels, well depths, water quality testing to confirm potability using provincial standards and statements from the property owner on adequacy of their supply. Landowners participating in the well monitoring program will receive a letter detailing their results. If it is shown a well has been adversely impacted by the construction it is the responsibility of Union Gas to provide a temporary or permanent water supply. The Ministry of the Environment and Climate Change (MOECC) has been forwarded the preferred route and has provided no comment to date.

Union Gas construction and operations procedures require protection measures be taken to protect ground and surface water resources. In the event of a spill construction/operations staff are trained in remedial measures and have established protocols that include contacting the MOECC immediately and controlling and cleaning up potential contaminants.

8.2.5 Watercourses/Municipal Drains

Nine regulated watercourse/municipal drains will be crossed with the preferred route. Union will obtain all required permitting for the crossings. Union is proposing to directionally drill to avoid any disturbance to the feature or its function.

8.2.6 Hydrostatic Testing

Sufficient water volumes may not be available in the municipal drains for hydrostatic testing, if the water quality is acceptable. Typically in an area without adequate volumes of surface water for hydrostatic testing water is trucked in. We expect in this area the water will be trucked in for the testing.

Withdraw of test water from a natural source will require a Permit to Take Water from the Ministry of the Environment and Climate Change should volumes exceed 50,000 litres per day.

Compliance with the Union Specification for Typical Hydrostatic Test Water Discharge, with regard to the energy dissipater systems (e.g. dissipation tubs, ponding water prior to discharge to watercourses) will provide adequate erosion and sedimentation controls. Discharge into a municipal drain is recommended because they are large enough to manage the flow and the only other option is discharge to agricultural land that is drained by subsurface tile/pumping systems which could be an adverse impact. The existing water quality in the municipal drains could potentially be impacted by agricultural runoff (e.g., fertilizers, pesticides). Azimuth recommends if water is trucked in for testing that it be the same or a higher quality than the water in the receiving watercourse/waterbody to ensure no additional impacts on water quality result from the testing. If a municipal chlorinated water supply is used, water would be retained to permit the chlorine to dissipate prior to discharge to a watercourse. Water pumps used for the testing should be contained within a berm and/or underlain by plastic or impermeable material to contain any potential fuel spill or leak.

8.2.7 Contaminated Soils

There is no expectation that any contaminated soils will be present along the preferred route. The area has been historically agricultural, lacking any industrial commercial development that could discharge sufficient levels of contamination to create a concern. Given the municipal water line has been constructed in the abandoned railway discussions with the Municipality of Leamington determined no contaminated soils were found during installation of the water line. Any contaminated soils found during construction would be managed in accordance with the Environmental Protection Act and Regulation 347.

Spills of materials that could potentially result in an environmental impact will be reported to the MOECC Spills Action Centre and clean-up and disposed of in accordance with MOECC requirements.

Union Gas requires pipeline contractors to obtain a Generator Registration Number and they are responsible for the manifesting of any waste materials.

8.2.8 Accidental Spills

During construction, an accidental spill of construction fluids may occur. Fluids may include fuels, lubricating oils and grease, as well as hydraulic fluids. Upon release of a hydrocarbon based construction fluid, Union Gas would immediately determine the magnitude and extent of the spill and rapidly take measures to contain it. Release of sediments would also be treated as a potential spill depending on the magnitude and extent. All spills would be immediately reported to the Chief Inspector, Environmental Inspector and Union Gas' environmental department. If necessary, the MOECC Spills Action Centre would be notified at 1-800-268-6060. Appropriate spill containment apparatus and absorbent material would be available on site, especially near water or sensitive wells (shallow, sandy) and staff would be trained in their use.

8.3 Biological Environment

Field studies undertaken by Azimuth in September 2015 along the preferred route. The highly disturbed habitat within the abandoned railway did not contain species of conservation, nor are any reported in the area of the preferred route. Limited trees or shrub vegetation will be affected by the construction. No further assessment of the terrestrial habitat along the preferred route is recommended.

8.3.1 Fisheries

The MNRF and ERCA did not identify any Species At Risk fish species found in the watercourses along the preferred route. Nine watercourse/municipal drain crossings will be required along the preferred route. All are proposed to be directionally drilled to avoid any disturbance to the watercourse and the associated aquatic and riparian habitat.

The watercourses and municipal drains are capable of providing warm water fish habitat and as such are protected from any harmful alteration by the Federal *Fisheries Act* (Fisheries and Oceans, 1989). Functioning as warm water habitat we expect the warm water fisheries timing window for construction to occur between March 31 to July 1 will be applied. Implementation of appropriate erosion and sediment control for work in proximity to watercourses should be implemented to ensure no harmful alteration or destruction of fish habitat.

8.3.2 Wetlands

There are no wetlands affected by the preferred route.

8.3.3 Vegetation

Construction will occur within the abandoned railway lands. The ditches within the railway are composed of grasses, weedy herbaceous vegetation and woody vegetation. The woody vegetation in the right-of-way is very limited. No significant trees or shrubs were identified for removal along the route. Vegetation disturbance will generally be limited to the grassed areas adjacent to the limestone trail.

No specimen trees were present within the railway lands. If tree removal is required following the detailed engineering design Union will assess the affected trees with regard to Species At Risk and work with the affected property owner or municipality regarding replacement. Prior to construction in proximity to the Andrew Murray O'Neil Memorial Woods Conservation Area Union Gas will discuss the construction activities with the ERCA to obtain their concerns to ensure protection of the woodlot.

If required, woody vegetation removal should be restricted from occurring between April 30 to August 1, in accordance with the Migratory Bird Convention Act and Migratory Bird Regulations, to avoid impacting bird nests and eggs. If project scheduling requires the removal of individual trees or shrubs during the nesting period Azimuth recommends a qualified ornithologist assess them for evidence of nesting activity prior to removal to avoid any potential loss of active nests.

8.3.4 Wildlife Habitat

Wildlife habitat in the study area is primarily limited to mammals and birds that may inhabit the railway grassy habitat or individual trees and shrubs within or adjacent to the railway. Construction of the pipeline will not change the habitat conditions post construction.

8.3.5 Species At Risk

There is no expectation the project will impact critical habitat for Species At Risk based on the habitat requirements and review of field conditions by an Azimuth ecologist. The

pipeline is located within the existing disturbed rights-of-way. The project will not affect any areas that contain any natural forest, prairie habitat or watercourses and associated riparian habitat. The watercourse/municipal drain crossings will utilize HDD to avoid any disturbance to the feature. MNRF will be consulted regarding the appropriate measures to protect Species At Risk prior to construction. If a Species At Risk is observed during construction MNRF will be contacted to inform them of the species observed and the protection measures undertaken.

8.4 Social Impact Management

The preferred route does not conflict with the Municipality of Leamington Official Plan and utilities are permitted throughout the municipality.

Discussions with the adjacent property owner during the PIC did not result in the identification of any social impacts that could not be mitigated through application of the Union specifications for pipeline construction. Union Gas staff present at the PIC provided details on construction practices and obtaining temporary easements from property owners.

Most of the rural residences are in proximity to the railway are on residential lots or associated with farmsteads. Disturbance to these residents during construction shall be minimized. Construction equipment will be properly muffled and dust will be controlled as required using water. Measures will be implemented to provide for safe traffic movement and pedestrian safety during construction.

To minimize disruption to traffic movement and provide a safe working environment for the construction workforce a traffic plan will be prepared by Union in accordance their construction practices and standards, and in consultation with the affected municipality's engineering departments. The traffic plan will address issues such as work area signage, safety cone placement, lane restrictions/closures, use of flag persons to control vehicle movement, pedestrian safety, barriers, driveway access, and personal protective equipment. Dust control measures, if required, will be implemented to minimize potential impacts on adjacent residences and businesses.

During detailed design Union will consult with the Municipality of Leamington staff regarding use of the recreational trail during construction to ensure public safety and the appropriate trail restoration measures post construction.

Placement of the pipeline within the railway will not adversely impact the continued use of adjacent private property. The social impact on the community will be limited to potential short-term inconvenience from traffic disruption during construction and construction beside the adjacent businesses and residences along the railway.

Consultation with Municipality of Leamington staff confirmed generally no opposition to placing the pipeline within or adjacent to the road allowance or within the abandoned railway, subject to review of the detailed engineering design. Union has committed to consultation with the municipality during detailed design.

To minimize inconveniences brought on by excessive noise, all engines associated with construction vehicles should be equipped with mufflers. Where possible, noise levels arising from equipment should be below the maximum acceptable limits at the residence. Construction activities that could create noise should be restricted to daylight hours and adhere to any local noise by-laws. If construction activities must be carried out which may cause excessive noise outside of these time frames, adjacent residents, businesses and the appropriate municipality should be notified.

Occasional disruption at construction access locations can be minimized by providing advance notice to local police, posting construction signs to warn of oncoming motorists of construction activities.

The construction of the pipeline will benefit the area economically by providing greater future capability to supply the growing demand for natural gas in the greenhouse industry in the Leamington area.

8.5 Archaeology and Heritage Resources

The railway is a disturbed area and lacks any historic structures. Based on application of the Ministry of Tourism, Culture and Sport (former Ministry of Tourism and Culture) checklist for environmental assessments no assessment of the built heritage and cultural

heritage landscapes or archaeological resources is required (copy appended). The pipeline will not affect any built structures or alter any aspect of the landscape, therefore it will have no potentially adverse impact on these heritage features. The disturbed nature of the railway lands would result in the loss of any archaeological resources.

Measures will be taken immediately to protect sites where unforeseen archaeological sites are excavated. The contractor shall cease activities immediately and avoid damage to the site until a licensed archaeologist has assessed it.

8.6 Agriculture

Adherence to the Union Gas construction practices for agricultural land will mitigate the impacts should a temporary work area be required on the adjacent agricultural land. The clay sand, clay, fine sandy loam and sandy loam based soils are susceptible to potential soil compaction and rutting under wet soil conditions. Union Gas' wet soil shutdown practice will be adhered to if site condition requires it to minimize impacts at the time of construction.

At the initiation of the construction the contractor will strip the topsoil placing it adjacent to the work area and will ensure proper separation between the topsoil and subsoil during construction. Following completion of the pipeline installation the work area sub soils will be graded and the topsoil will be placed back on the work area and graded to match the pre-construction condition. The topsoil stripping and restoration will be done under the supervision of an Environmental Inspector to ensure the disturbed area is returned to the pre-construction condition.

Soybean cyst nematode is a small plant-parasitic round worm that feeds on and reproduces within the root adversely impacting the plant health. Union Gas tests the cultivated agricultural soils along the route for the presence of the nematode. If present, all equipment is cleaned with a high pressure washer to avoid the transport of the cyst nematode beyond the infected fields.

Prior to construction Union Gas will confirm the exact location of all subsurface tile drainage within the affected agricultural fields. Where the route crosses a systematic drainage system the headers and/or tile runs they will be located and remedial action will

be taken to correct potential drainage problems during construction. Following construction the drainage system will be repaired to the satisfaction of the landowner.

8.7 Land Use

The affected municipality's Official Plans indicates that utilities are a permitted land use in all land use designations.

Placing the pipeline in the railway right-of-way has been endorsed by the Municipality of Leamington. Union Gas staff are working with the Municipality during detailed design to confirm the location and avoid interference with the existing infrastructure

Leamington staff will be contacted during detailed design to determine how the recreational trail will be addressed during construction and how the trail is to be restored post-construction. The focus of the trail management during construction will be to ensure public safety.

The preferred route does not conflict with any current provincial policy regarding land use planning. Construction and operation of the preferred route will not adversely impact any environmental or land use features protected under the existing provincial planning policies.

8.8 Land Claims

Correspondence was sent to the Chippewas of Kettle and Stoney Point First Nation, Aamjiwnaang First Nation, Walpole First Nation, Caldwell First Nation, Delaware Nation, the Métis Nation of Ontario, Chippewas of the Thames First Nation, Munsee-Delaware First Nation and the Oneida First Nation soliciting their input and concerns on the project.

During the project Union contacted each First Nation. At the time this report was prepared we have had no response to our request for information or our request for comments on the preliminary preferred route by any of the aforementioned First Nations or Métis Nation. Union will continue to consult with First Nations and Métis Nation as required throughout the project.

9.0 MONITORING/COMPLIANCE

Discussions with the regulatory agencies during the project did not identify any specific concerns for which post-construction monitoring was requested.

It is our recommendation that an Environmental Inspector be assigned to this project throughout the duration of the construction to ensure that all personnel associated with the project are aware of the Municipality's concerns and takes the appropriate measures (i.e. soil erosion and sediment control) to mitigate impacts and restore the railway to pre-construction conditions as possible. The Environmental Inspector's responsibilities will be to ensure the recommendations of this report and commitments to the Municipality and temporary work area property owners regarding mitigative and restoration measures are carried out and comply with the Union Gas specifications for construction.

Any wastes that accumulate on the construction site must be properly disposed of in accordance with the Environmental Protection Act requirements. All recyclable materials should be recycled, where possible. Hazardous wastes must be transported by a licensed waste hauler to a registered disposal site. Temporary on-site storage of hazardous material should be done in secure containers in designated locations away from environmentally sensitive features (e.g. watercourses, wells). Measures should be in place to contain and cleanup potential spills on-site and in a timely fashion.

Construction equipment should be in good working condition and have the appropriate mufflers to ensure compliance with the MOECC sound level guidelines define in the Model Municipal Noise By-Law. In special circumstances (e.g. hydrostatic testing, road crossings) construction hours may be extended to shorten the duration of the disturbance.

Prior to construction any area with the potential for contaminated soils will be tested to determine the nature and concentration of the contaminants within the work area. If contaminants are found in excess of MOECC standards for the affected land use, all excavated material that would be classified as a waste will be removed from the site and disposed of at a MOECC licensed landfill site. All management of waste materials will be done in accordance with applicable federal and provincial statutes/guidelines.

Union Gas will obtain all necessary permits from the affected municipality, affected utilities, transportation authorities and all involved government ministries and agencies.

10.0 CUMULATIVE IMPACT ASSESSMENT

Cumulative impact assessment evaluates the potential changes to the environmental conditions that could result from an individual project, that when combined with the potential environmental impacts from other projects or land use activities in the study area could combine to have an additive or cumulative impact. Cumulative effects may include both biophysical (e.g., direct effects on natural areas) and socio-economic (e.g., community or economic changes) effects. The area is an agriculturally based land use and socio-economic community that utilizes natural gas to heat the greenhouses which represent a significant agri-business in the area. Therefore the cumulative impact assessment must determine if the construction and operation of the natural gas pipeline and associated facilities could have a significant additive impact on the existing agricultural operations.

The expansion of the natural gas supply in the Leamington area will reinforce the future growth of the greenhouse industry through providing a reliable heating source. Facilitating this economic growth and potential increased employment opportunities will benefit the area municipalities and their residents. This is a significant socioeconomic benefit to the greenhouse industry and the businesses that provide goods and services to greenhouse operators.

The Municipality of Leamington has established a recreational trail for area residents on the abandoned railway. Construction of the pipeline is expected to temporarily close the trail. This temporary disruption to the trail is not considered a significant impact to the users given the relatively short duration of the construction activity, and the observed limited use of the trail by residents.

The directly affected landowners are compensated for all temporary work areas on the property and the temporarily affected agricultural lands are restored to crop production. The pipeline route was selected to locate the pipeline within railway right-of-way. Placement of the pipeline in the abandoned railway eliminates potential impacts to private landowners and has no adverse economic impact on the Municipality.

Based on the ability to restore the affected lands to the pre-development use, financially compensate affected landowners for all temporary disturbances and utilize railway for utility placement there are no significant cumulative effects anticipated from the construction and operation of the proposed natural gas pipeline and the associated facilities for the Leamington Phase II Pipeline Project.

11.0 CONCLUSION

Based on consultation with the property owners, government agencies and the affected municipality, it is clear that the preferred route is acceptable and represents a minimal impact on the environment, land use and the community.

The preferred route location will not adversely affect the adjacent land use and has no long-term adverse environmental or socio-economic effects on the community. The affected Municipality of Leamington has not identified any concerns with the proposed project, and will continue to be consulted during detailed design. The public and government agencies contacted have not identified any opposition to the preferred route. No significant natural heritage features or Species At Risk will be affected by the proposed route. Reinforcing the natural gas supply to the Leamington area will benefit the greenhouse industry by maintaining a secure gas supply for future growth.

12.0 REFERENCES

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- Chapman, L.J., and D.F. Putnam, 1984: The Physiography of Southern Ontario. Ontario Ministry of Natural Resources, Ontario Geological Survey, Special Volume 2. 270 p.
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- Fisheries and Oceans Canada. 1985. Federal Fisheries Act.
- Municipality of Leamington. 2008. Official Plan.
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- Natural Heritage Information Centre (NHIC) internet web page. 2009. Government of Ontario, Ministry of Natural Resources (www.mnr.on.ca/MNR/nhic).
- New Direction Archaeology Ltd. 2012, Stage 1 Archaeological Assessment of the Union Gas Pipeline Lots 13-17 and 25-29, Concession 7, Lots 17 and 25-30, Concession 8, Lots 1 and 2, Concession 10, Lots 1 and 2, Concession 11, Lakeshore Township Lots 1-5, Concession 10, Lots 1-6, Concession 11, Municipality of Leamington, County of Essex.
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- Ontario Ministry of Agriculture, Food and Rural Affairs, 1939, Soil Map County of Essex, Soil Survey Report No. 11.



LEGEND:

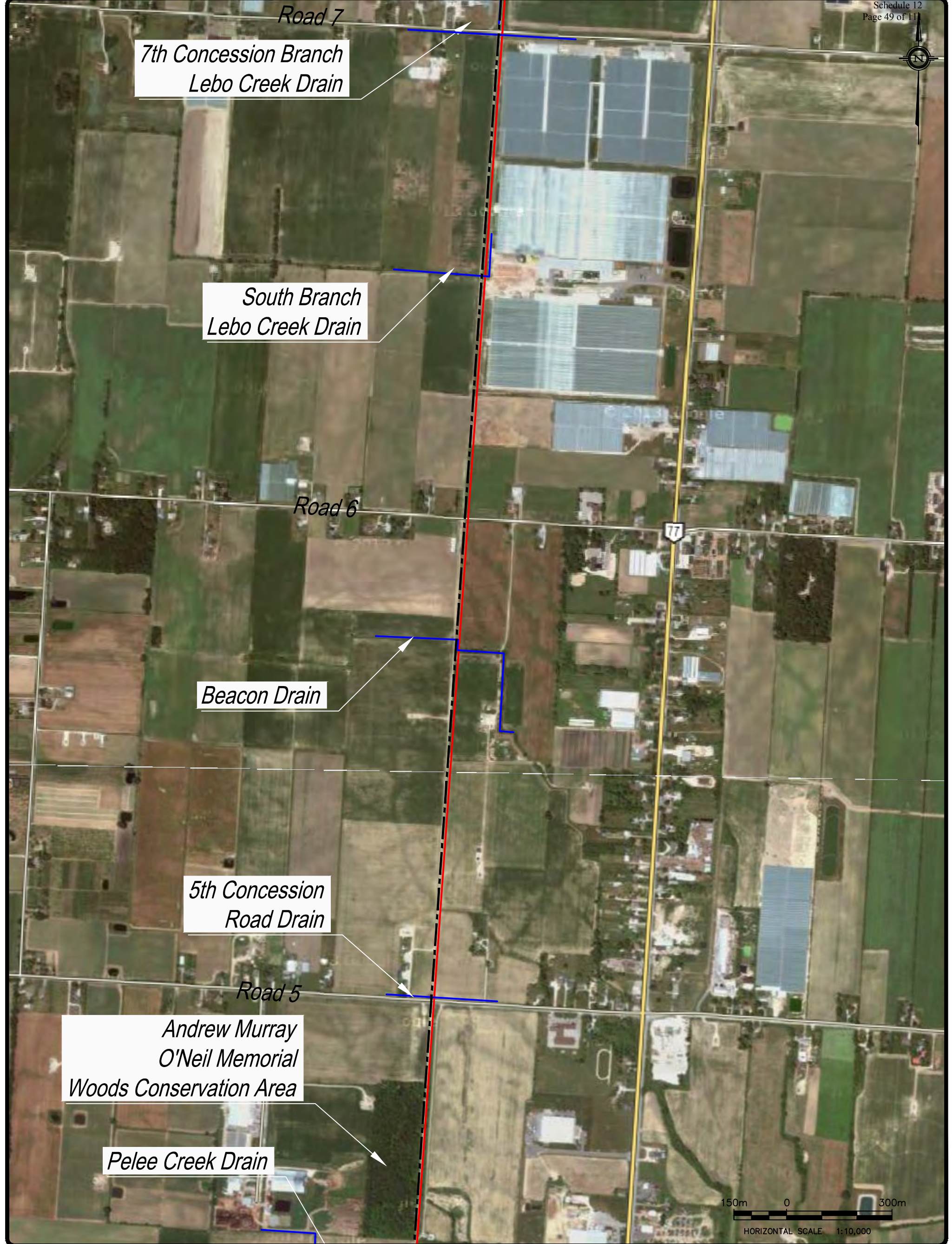
- Proposed Phase II Pipeline Route
- - - Abandoned Railway/Recreational Trail



Proposed Route Location

Leamington Phase II

DATE ISSUED:	November 2015	Figure No. 1
CREATED BY:	JLM	
PROJECT NO.:	15-151	
REFERENCE:	First Base Solutions	



LEGEND:

- Proposed Phase II Pipeline Route
- - - Abandoned Railway/Recreational Trail

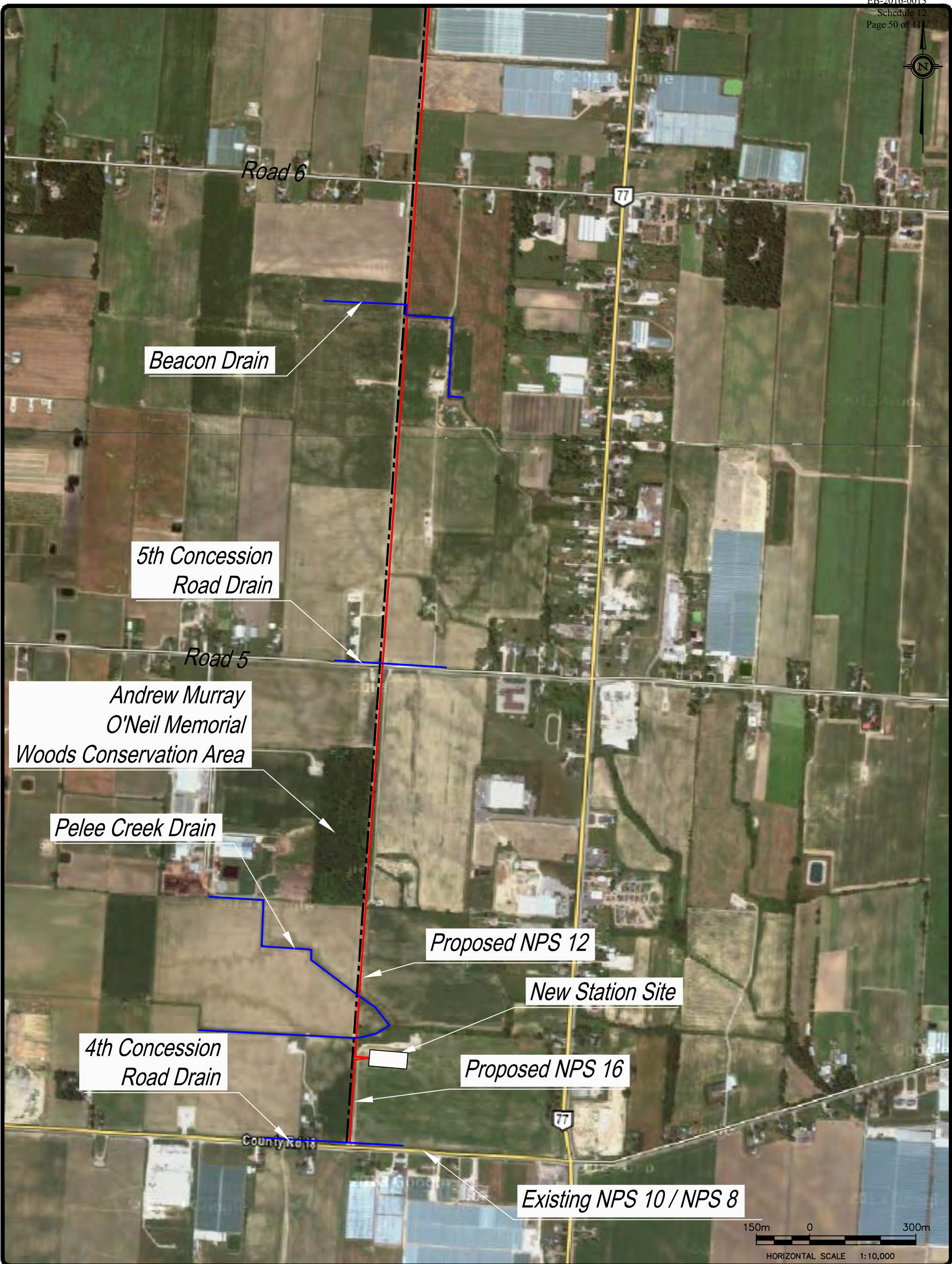


AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Proposed Route Location

Leamington Phase II

DATE ISSUED:	November 2015
CREATED BY:	JLM
PROJECT NO.:	15-151
REFERENCE:	First Base Solutions



LEGEND:

- Proposed Phase II Pipeline Route
- - - Abandoned Railway/Recreational Trail



AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Proposed Route Location

Leamington Phase II

DATE ISSUED:	November 2015	Figure No. 3
CREATED BY:	JLM	
PROJECT NO.:	15-151	
REFERENCE:	First Base Solutions	



Table 1: Summary of Agency Comments

Contact	Project Notification/Preferred Route Identification	Action Taken and Comments Regarding Agency Concerns
County of Essex	No comment received.	No action required.
Municipality of Leamington	Supported the use of the abandoned railway/recreational trail for preferred route during initial consultation with Union Gas staff.	Liaise with staff during detailed design to confirm route location.
Essex Region Conservation Authority	Identified woodlot as significant wildlife habitat and potential containing Species at Risk.	Obtain the required permits for drain crossings and consult on construction activities adjacent to Andrew Murray O’Neil Memorial Woods Conservation Area.
Indian and Northern Affairs Canada	No comment received.	No action required.
Chippewas of Kettle and Stoney Point First Nation	No comment received.	No action required.
Aamjiwnaang First Nation	No comment received.	No action required.
Walpole First Nation	No comment received.	No action required.
Caldwell First Nation	No comment received.	No action required.
Moravian of the Thames	No comment received.	No action required.
Métis Consultation Unit	No comment received.	No action required.
Chippewas of the Thames First Nation	No comment received.	No action required.
Munsee-Delaware First Nation	No comment received.	No action required.
Oneida First Nation	No comment received.	No action required.
Ministry of Municipal Affairs and Housing	No comment received.	No action required.
Ministry of Agriculture, Food and Rural Affairs	No comment received.	No action required.
Ministry of Tourism, Culture and Sport	No comment received.	No action required.
Ontario Realty Corporation	No comment received.	No action required.
Ministry of the Environment and Climate Change	No comment received.	No action required.
Technical Standards & Safety Association	No comment received.	No action required.
Ministry of Transportation	No comment received.	No action required.

APPENDICES

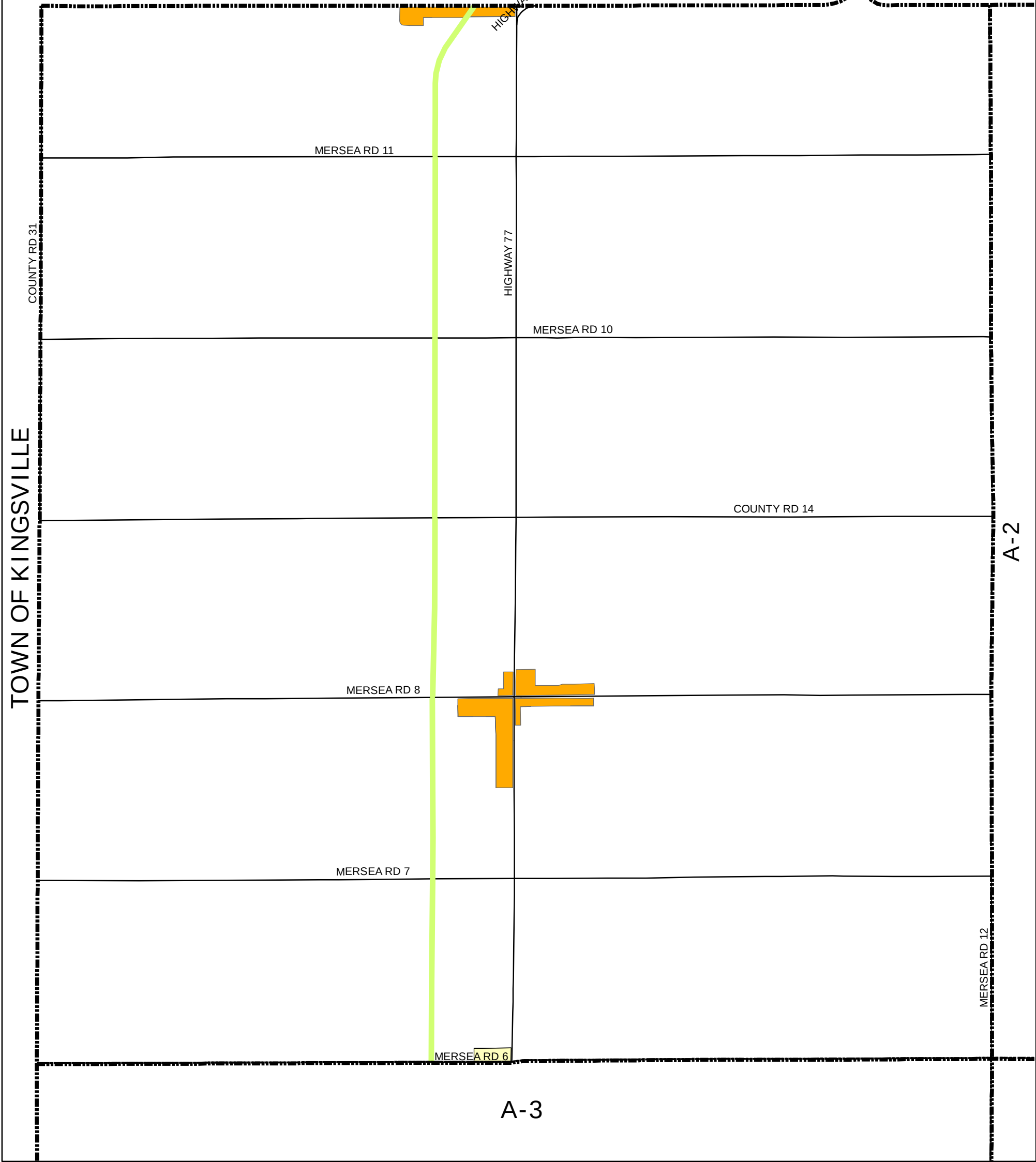
Appendix A:	Municipal Planning Information
Appendix B:	Agency and Municipal Consultation
Appendix C:	Built Heritage/Cultural Heritage Landscape/Archaeology Screening
Appendix D:	Photographs
Appendix E:	Public Consultation
Appendix F:	Union Gas Erosion and Sedimentation Control Standards

APPENDIX A

Municipal Planning Information

TOWN OF LAKESHORE

TOWN OF KINGSVILLE

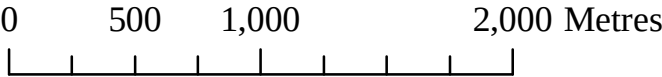


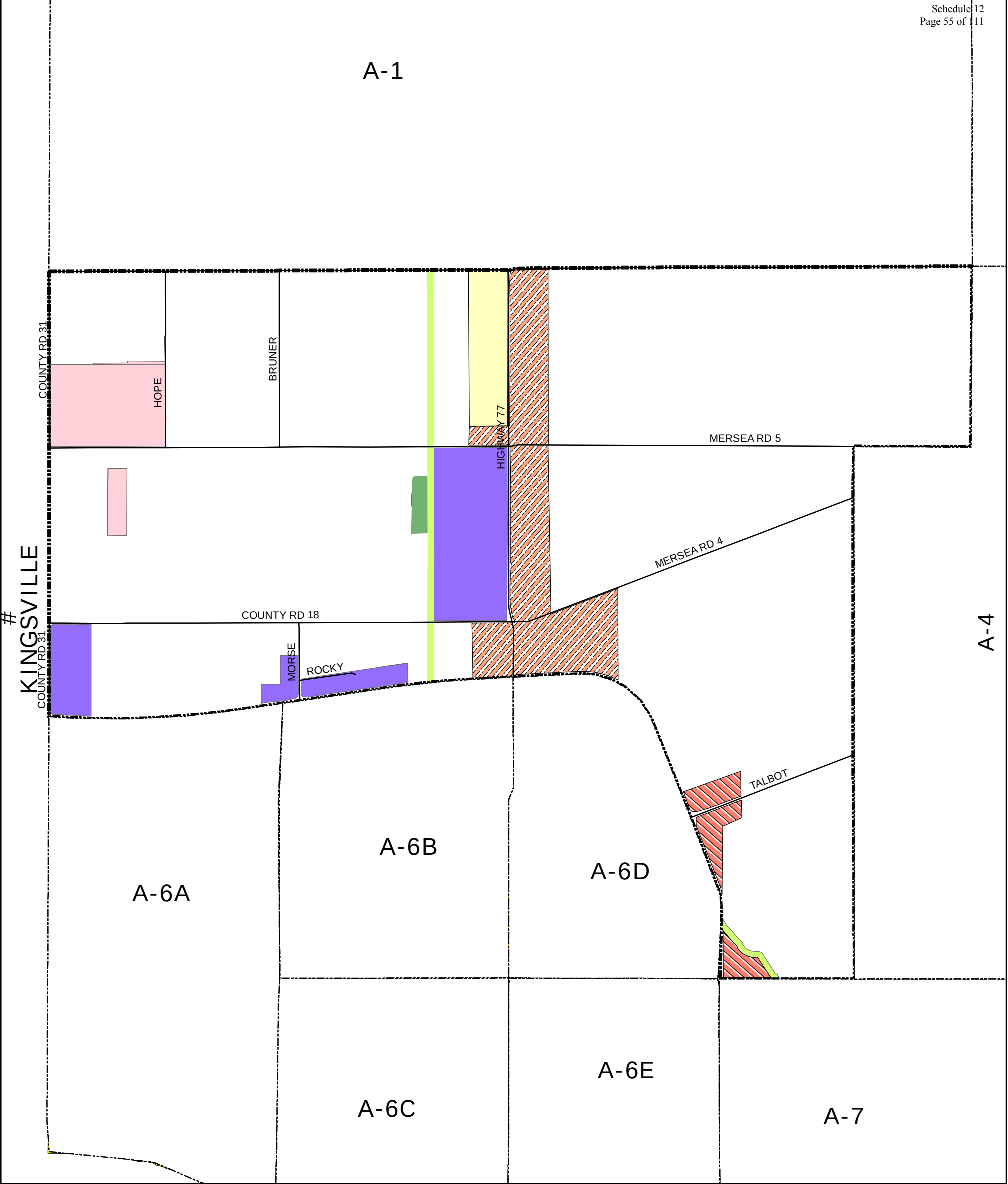
- OTHER LAND USES**
- AGRICULTURAL
 - RURAL RESIDENTIAL
 - HAMLET
 - OPEN SPACE AND RECREATION



SCHEDULE "A-1"
OFFICIAL PLAN
MUNICIPALITY OF
LEAMINGTON

LAND USE PLAN





EMPLOYMENT LANDS

-  EASTERN COMMERCIAL DISTRICT
-  HIGHWAY 77 CORRIDOR COMMERCIAL DISTRICT
-  BUSINESS PARK

NATURAL FEATURES AND AREAS

-  NATURAL ENVIRONMENT

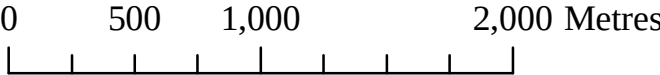
OTHER LAND USES

-  AGRICULTURAL
-  RURAL RESIDENTIAL
-  RECREATIONAL COMMERCIAL
-  OPEN SPACE RECREATIONAL



**SCHEDULE "A-3"
OFFICIAL PLAN
MUNICIPALITY OF
LEAMINGTON**

LAND USE PLAN



P:\Leamington\PLANNING\ModifiedOP2006 Maps\AdoptedOP-Schedule B.mxd



APPENDIX B

Agency and Municipal Consultation



August 25, 2015

AEC 15-151

Ministry of the Environment
London Resource, 733 Exeter Road
London, ON N6E 1L3

Attention: Angela Whitely - District Supervisor

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Ms. Whitely :

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to an existing 10-inch and 6-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

The study area is located in the County of Essex in the Municipality of Leamington. Please see attached map Figure 1.

A Public Information Centre regarding the proposed project is scheduled to be held at the **Leamington Kinsmen Recreation Complex at 249 Sherk Street in Leamington on September 16th 2015 between the hours of 5:00 - 8:00 pm.** . A notice will be placed in local newspapers and First Nations, Métis Nation, interested agencies and directly affected landowners will be informed by mail.

We are requesting that your agency provide any relevant environmental or socioeconomic information which in your opinion should be included in the assessment of alternative pipeline routes. Information regarding other proposed developments in the



study area for incorporation into the ER as a component of a cumulative effects assessment is also requested.

Your agency's response would be appreciated by September 18th, 2015. If your agency has no concerns regarding the proposed project and/or its construction and you do not require any further correspondence regarding the project please indicate that in writing to the undersigned.

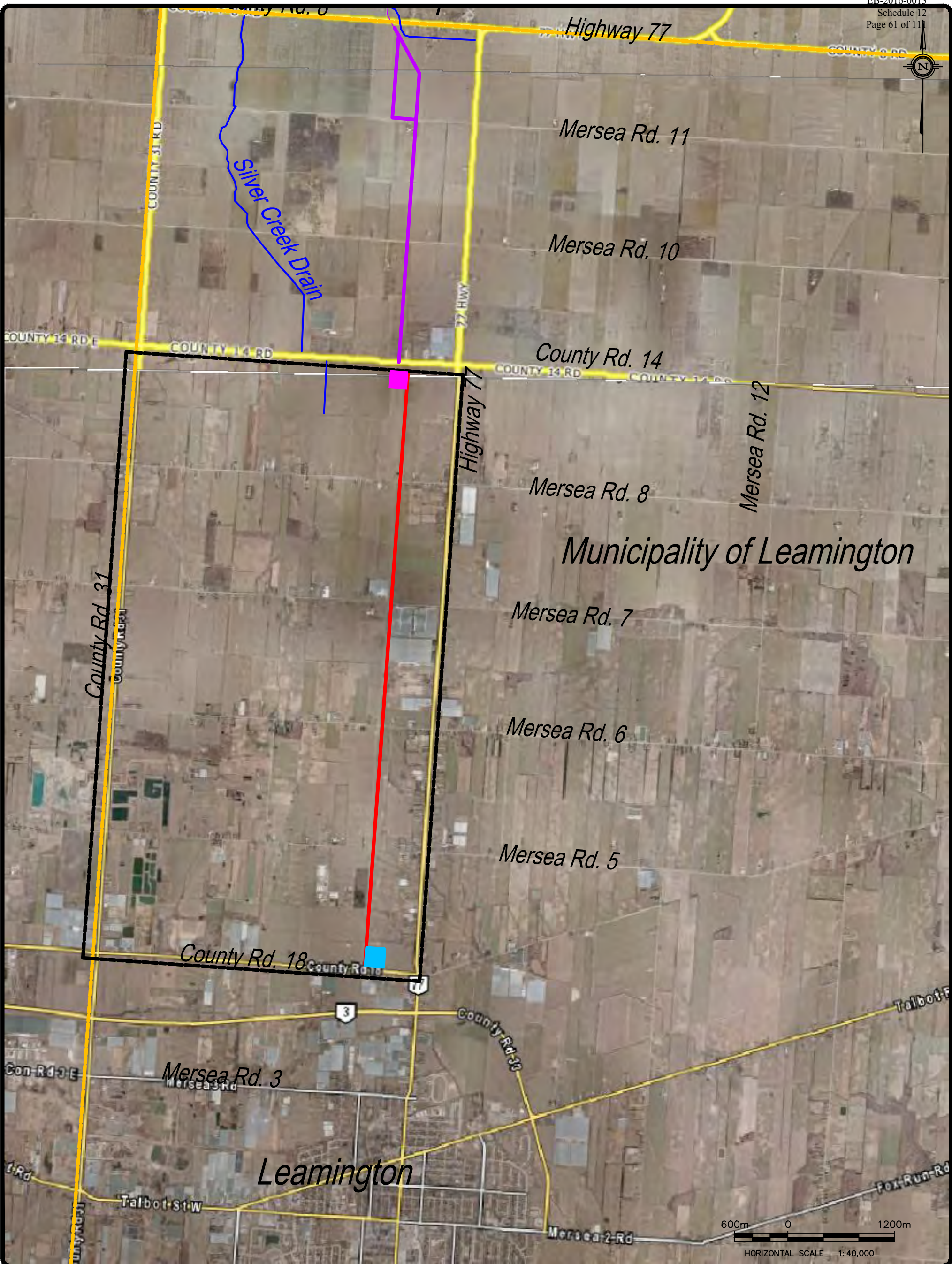
If you have any questions, please contact me at (705) 721-8451 or by email at paul@azimuthenvironmental.com. Thank you for your cooperation.

Yours truly,

AZIMUTH ENVIRONMENTAL CONSULTING, INC.

A handwritten signature in blue ink that reads 'Paul Neals'. The signature is fluid and cursive, with the first and last names clearly legible.

Paul Neals, B.Sc.Agr.
Vice-President
Attach.



LEGEND:

- Phase I Pipeline (2013)
- Proposed Phase II Pipeline Route
- Study Area
- Municipal Boundaries
- Existing County Road 14 Station
- Proposed Station

DAYSTAMP: M:\15 Projects\15-151 Union Gas Phase II Leamington Line\4.0 - Drafting\15-151.dwg

Plotted by: JMCARNEY on August 25, 2015 at 1:55pm
File: M:\15 Projects\15-151 Union Gas Phase II Leamington Line\4.0 - Drafting\15-151.dwg Layout: Figure 1 Plot scale: 1

**AZIMUTH ENVIRONMENTAL CONSULTING, INC.**

Study Area/
Proposed Route Location

Leamington Phase II

DATE ISSUED: July 2015	Figure No. 1
CREATED BY: JLM	
PROJECT NO.: 15-151	
REFERENCE: First Base Solutions	

Government Agency Contacts (including OPEC members) September, 2015

Title	FirstName	LastName	JobTitle	Company	Address1	Address2	City	Province	PostalCode
Mrs.	Tracey	Pillon-Abbs	Director of Community and Development Services	Municipality of Leamington	111 Erie Street North		Leamington	ON	N8H 2Z9
Mr.	Ken	Brown	Manager of Public Works	Municipality of Leamington	111 Erie Street North		Leamington	ON	N8H 2Z9
Mr.	Peter	Neufeld	Chief Administrative Officer	Municipality of Leamington	111 Erie Street North		Leamington	ON	N8H 2Z9
Mr.	John	Pilmer	Engineering Technologist	Municipality of Leamington	111 Erie Street North		Leamington	ON	N8H 2Z9
Mr.	Brian	Gregg	Chief Administrative Officer	County of Essex	360 Fairview Avenue West		Essex	ON	N8M 1Y6
Mr	Tom	Bateman	County Engineer	County of Essex	360 Fairview Avenue West		Essex	ON	N8M 1Y6
Mr.	William	King	Manager Planning Services	County of Essex	360 Fairview Avenue West		Essex	ON	N8M 1Y6
Mr.	Drew	Crinklaw	Rural Planner Southwestern Ontario	Ministry of Agriculture, Food and Rural Affairs	360 Fairview Avenue West		Essex	ON	N8M 1Y6
Ms.	Shari	Prowse	Archaeology Review Officer	Ministry of Tourism, Culture and Sport	London Resource	667 Exeter Road	London	ON	N6E 1L3
Mr.	Rick	Visser	Senior Technician, Lands	Ministry of Natural Resources and Forestry	900 Highbury Ave.		London	ON	N5Y 1A4
Mr.	James	Corcoran	Head – Planning and Design	Ministry of Transportation	P.O Box 1168	870 Richmond Street West	Chatham-Kent	ON	N7M 5J5
Mr.	Richard	Wyma	General Manager	Essex Region Conservation Authority	London Resource	659 Exeter Road.	London	ON	N6E 1L3
Mr.	Anil	Wijesooriya	General Manager, Planning Survey and Appraisal Professional Services	Ontario Realty Corporation	360 Fairview Avenue West	Suite 311	Essex	ON	N8M 1Y6
					1 Dundas Street West	Suite 2000	Toronto	ON	M5G 2L5
Mr	Rob	Wrigley	District Manager	Ontario Ministry of the Environment and Climate Change	London Resource	733 Exeter Road	London	ON	N6E 1L3
Mr.	Craig	Newton	Environmental Planner,	Ontario Ministry of	London Resource	733 Exeter	London	ON	N6E 1L3

Government Agency Contacts (including OPCC members) September, 2015

Title	FirstName	LastName	JobTitle	Company	Address1	Address2	City	Province	PostalCode
			Technical Support Section	the Environment and Climate Change		Road			
Ms.	Tammie	Ryall	Planner –Community Planning and Development	Ministry of Municipal Affairs and Housing	London Resource	2 nd Floor, 659 Exeter Road	London	ON	N6E 1L3
Ms.	Angela	Whitely	District Supervisor	Ontario Ministry of the Environment and Climate Change	London Resource	733 Exeter Road	London	ON	N6E 1L3
Mr.	Sing-Gin	Louie	Advisor	Ministry of Energy	Oil and Gas Section	3 rd Floor, 880 Bay St.	Toronto	ON	M7A 2C1
Ms.	Donna	Mundie	Land Use Policy Specialist	Ministry of Agriculture, Food and Rural Affairs	3rd Floor, 1 Stone Rd W		Guelph	ON	N1G 4Y2
Mr.	Doug	Peeling	Senior Planner & Policy Adviser	Ministry of Transportation	Garden City Tower	2nd Flr, 301 St Paul St.	St. Catharines	ON	L2R7R4
Ms.	Sally	Renwick	A/Team Leader – Environmental Planning	Ministry of Natural Resources and Forestry (OPCC)	Land Use and Environmental Planning Section	300 Water St	Peterborough	ON	K9J 8M5
Mr.	Goran	Ciric	Provincial Planning Policy Branch	Ministry of Municipal Affairs and Housing	777 Bay Street (OPCC)	14 th Floor	Toronto	ON	M5G 2E5
Mr.	Chris	Schiler	Manager, Culture Services Unit	Ministry of Tourism, Culture and Sport (OPCC)	400 University Avenue	4 th Floor	Toronto	ON	M7A 2R9
Mr.	Oscar	Alonso		Technical Standards and Safety Authority	3300 Bloor Street West	4 th Floor	Etobicoke	ON	M8X 2X4
				Ontario Energy Board (OPCC)	P.O. Box 2319	2300 Yonge Street, 26 th Floor	Toronto	ON	M4P 1E4

From: [Mike Jones](#)
To: [Paul Neals](#)
Subject: Environmental Report - AEC 15-151
Date: Tuesday, October 13, 2015 2:11:54 PM
Attachments: [image001.png](#)
[Notice 20150901_ZIMUTH ENVIRONMENTAL.pdf](#)
[image003.png](#)

From: Corinne Chiasson [mailto:CChiasson@erca.org]
Sent: October-09-15 9:06 AM
To: info
Subject: Environmental Report - AEC 15-151

Good morning Mr. Neals:

The Essex Region Conservation Authority has had an opportunity to review your request for information regarding: Environmental Report Commencement – Union Gas Limited, Leamington Line Phase II Pipeline Project. We understand that the project will include the construction of a 12 inch diameter natural gas pipeline between County Road 14 and County Road 18, located to the west of Highway 77 along the abandoned railway/recreational trail.

We therefore provide the following information for your consideration.

We note that the project study area identified will pass through several areas that are subject to our Development, Interference with Wetlands and Alteration to Shorelines or Watercourse Regulations under Section 28 of the Conservation Authorities Act (Ontario Regulation No. 158/06). These specific sites are located along the intersecting areas of the abandoned rail trail and regulated municipal drains. The intersecting regulated drains are identified as the following (starting from the north extent of the study area to the southern extent): 4th Concession Rd Drain, Pelee Creek Drain, 5th Concession Drain, Beacom Drain, South, Middle and North Branches of the Lebo Creek Drain, Hooker Drain & Extension Drain, and the 9th Concession Road Branch Drain. Please note that any works undertaken within the vicinity of these drains would require a permit approval from this office prior to any site alteration commencing. This information is readily available in a digital map format on our website: www.erca.org under the tab programs and services, GIS and Interactive Mapping.

The subject study area identified between the intersecting roads of Mersea Road 5 on the north and Mersea Road 4 on the south, is located directly adjacent to a natural heritage feature that is identified as a significant woodlot, significant wildlife habitat, and may contain habitat of Species at Risk and/or Endangered Species. As per Section 2.1.7 of the PPS, 2014 – “Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements. “ All species listed as endangered or threatened (aquatic species, plants, mammals, birds, reptiles, amphibians, etc.) as well as their related habitats, are protected under the provincial *Endangered Species Act*. It is the proponent’s responsibility to exercise due diligence in ensuring that all issues related to the provincial *Endangered Species Act* and its regulations have been addressed. Inquiries regarding the applicability of the *Endangered Species Act* to the property should be made to Aylmer District office

of the OMNR (E-mail: ESAScreeningRequest.AylmerDistrict@ontario.ca). Attached is a copy of the MNRF Technical Memorandum: Species At Risk Screening Process.

The Essex Region Conservation Authority produced an Essex Region Natural Heritage Systems Study (ERNHSS, 2013) which is available at <http://erca.org/resource-info/resources/>. This report details a proposed consideration for the establishment of a natural heritage system in the region and may be useful information to incorporate into the Environmental Review. If you are interested in obtaining the data for this study in the vicinity of the study area please contact Tom Dufour, Geomatics Technician, directly at tdufour@erca.org.

Additionally the above noted significant woodlot is owned by Highline Produce Limited, and is maintained as a Conservation Area by the Essex Region Conservation Authority. For further information regarding this specific property or prior to any construction and/or site alteration activities adjacent to the Highline Produce Woods, please contact Kevin Money, Director of Conservation Services at 776-5209 ext. 351.

If further information is required please don't hesitate to contact Mr. Mike Nelson, Watershed Planner at 519-776-5209 ext. 347, or myself at the contact information below.

Hope you have a good day,

CORINNE CHIASSON

Resource Planner

Essex Region Conservation Authority

360 Fairview Avenue West, Suite 311 · Essex, Ontario · N8M 1Y6

P. 519-776-5209 ext. 330 · cchiasson@erca.org · www.erca.org



Environmental Assessments & Approvals



August 25, 2015

AEC 15-151

Essex Region Conservation Authority
360 Fairview Avenue West
Essex, ON N8M 1Y6

Attention: Richard Wyma - General Manager

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Mr. Wyma:

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to an existing 10-inch and 6-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

The study area is located in the County of Essex in the Municipality of Leamington. Please see attached map Figure 1.

A Public Information Centre regarding the proposed project is scheduled to be held at the **Leamington Kinsmen Recreation Complex at 249 Sherk Street in Leamington on September 16th 2015 between the hours of 5:00 - 8:00 pm.** A notice will be placed in local newspapers and First Nations, Métis Nation, interested agencies and directly affected landowners will be informed by mail.

We are requesting that your agency provide any relevant environmental or socioeconomic information which in your opinion should be included in the assessment of alternative pipeline routes. Information regarding other proposed developments in the



study area for incorporation into the ER as a component of a cumulative effects assessment is also requested.

Your agency's response would be appreciated by September 18th, 2015. If your agency has no concerns regarding the proposed project and/or its construction and you do not require any further correspondence regarding the project please indicate that in writing to the undersigned.

If you have any questions, please contact me at (705) 721-8451 or by email at paul@azimuthenvironmental.com. Thank you for your cooperation.

Yours truly,

AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Paul Neals, B.Sc.Agr.
Vice-President
Attach.



LEGEND:

- Phase I Pipeline (2013)
- Proposed Phase II Pipeline Route
- Study Area
- Municipal Boundaries
- Existing County Road 14 Station
- Proposed Station

DAYSTAMP: M:\15 Projects\15-151 Union Gas Phase II Leamington Line\4.0 - Drafting\15-151.dwg
 Plotted by: JLM on August 26, 2015 at 1:00pm
 File: M:\15 Projects\15-151 Union Gas Phase II Leamington Line\4.0 - Drafting\15-151.dwg Layout: Phase I PlotScale: 1

AXIMUTH ENVIRONMENTAL CONSULTING, INC.

Study Area/
Proposed Route Location

Leamington Phase II

DATE ISSUED:	July 2015	Figure No.
CREATED BY:	JLM	1
PROJECT NO.:	15-151	
REFERENCE:	First Base Solutions	

**Ministry of Tourism,
Culture and Sport**

Culture Services Unit
Programs and Services Branch
401 Bay Street, Suite 1700
Toronto ON M7A 0A7
Tel: 416 314 7145
Fax: 416 212 1802

**Ministère du Tourisme,
de la Culture et du Sport**

Unité des services culturels
Direction des programmes et des services
401, rue Bay, Bureau 1700
Toronto ON M7A 0A7
Tél: 416 314 7145
Téléc: 416 212 1802



October 28, 2015 (EMAIL ONLY)

Paul Neals
Azimuth Environmental Consulting Inc.
85 Bayfield Street
Barrie, ON L4M 3A7
E: Paul@azimuthenvironmental.com

RE: MTCS file #: 0003788
Proponent: Union Gas
Subject: Notice of Commencement
Leamington Line Phase II Pipeline Project
Location: Municipality of Leamington, County of Essex, Ontario

Dear Paul Neals:

Thank you for providing the Ministry of Tourism, Culture and Sport (MTCS) with the Notice of Commencement for your project. MTCS's interest in this EA project relates to its mandate of conserving Ontario's cultural heritage, which includes:

- Archaeological resources, including land-based and marine;
- Built heritage resources, including bridges and monuments; and,
- Cultural heritage landscapes.

Under the EA process, the proponent is required to determine a project's potential impact on cultural heritage resources.

While some cultural heritage resources may have already been formally identified, others may be identified through screening and evaluation. Aboriginal communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Aboriginal communities includes a discussion about known or potential cultural heritage resources that are of value to these communities. Municipal Heritage Committees, historical societies and other local heritage organizations may also have knowledge that contributes to the identification of cultural heritage resources.

Archaeological Resources

Your EA project may impact archaeological resources and you should screen the project with the MTCS [Criteria for Evaluating Archaeological Potential](#) to determine if an archaeological assessment is needed. MTCS archaeological sites data are available at archaeology@ontario.ca. If your EA project area exhibits archaeological potential, then an archaeological assessment (AA) should be undertaken by an archaeologist licenced under the OHA, who is responsible for submitting the report directly to MTCS for review.

Built Heritage and Cultural Heritage Landscapes

The MTCS [Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes](#) should be completed to help determine whether your EA project may impact cultural heritage resources. The Clerks for the municipality of Leamington and County of Essex can provide information on property registered or designated under the *Ontario Heritage Act*. Municipal Heritage Planners can also provide information that will assist you in completing the checklist.

If potential or known heritage resources exist, MTCS recommends that a Heritage Impact Assessment (HIA), prepared by a qualified consultant, should be completed to assess potential project impacts. Our Ministry's [Info Sheet #5: Heritage Impact Assessments and Conservation Plans](#) outlines the scope of HIAs. Please send the HIA to MTCS, the Municipality of Leamington and the County of Essex for review, and make it available to local organizations or individuals who have expressed interest in heritage.

Environmental Assessment Reporting

All technical heritage studies and their recommendations are to be addressed and incorporated into EA projects. Please advise MTCS whether any technical heritage studies will be completed for your EA project, and provide them to MTCS before issuing a Notice of Completion. If your screening has identified no known or potential cultural heritage resources, or no impacts to these resources, please include the completed checklists and supporting documentation in the EA report or file.

Thank-you for consulting MTCS on this project: please continue to do so through the EA process, and contact me for any questions or clarification.

Sincerely,

Joseph Muller, RPP/MCIP
Heritage Planner
Joseph.Muller@Ontario.ca

Copied to: Leamington Expansion Plan

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. MTCS makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MTCS be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Please notify MTCS if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the Ontario Heritage Act and the Standards and Guidelines for Consultant Archaeologists.

If human remains are encountered, all activities must cease immediately and the local police as well as the Cemeteries Regulation Unit of the Ministry of Government and Consumer Services must be contacted. In situations where human remains are associated with archaeological resources, MTCS should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the Ontario Heritage Act.

APPENDIX C

Built Heritage/Cultural Heritage Landscape/Archaeology Screening



Ministry of Tourism,
Culture and Sport

Programs and Services Branch
401 Bay Street, Suite 1700
Toronto ON M7A 0A7

REA Checklist: Consideration of Potential for Archaeological Resources

Applies to: Applicants for a renewable energy approval (REA) under the *Environmental Protection Act* who opt to consider the potential for archaeological resources under subsection 21(3) of O. Reg. 359/09.

Screening Question

	Yes	No
1. Has the entire project location been subjected to recent, extensive and intensive ground disturbance? (Quarrying, landscaping involving deep land alterations, etc.) Note: Activities such as agricultural cultivation and gardening are not considered to be disturbances.	☒	☐
If you answered YES to the preceding question, an archaeological assessment is NOT required, and it is not necessary to fill out the remainder of the checklist. A summary of the information supporting recent disturbance must be included in the design and operations report.		
2. Are there any archaeological sites included in the records maintained by the ministry at or within 250 metres of the project location?	☐	☐
3. Is there Aboriginal or local knowledge of archaeological sites at or within 250 metres of the project location? Note: Aboriginal communities, municipal government, historical societies and local museums are all valuable sources of local knowledge.	☐	☐
4. Is there a water body at or within 250 metres of the project location? (Lake, river, permanent stream, intermittent stream, and/or seepage area.)	☐	☐
5. Is there a known burial site or cemetery at the project location or abutting any parcel of land on which the project is located?	☐	☐
6. Is the project location situated on a parcel of land that is a protected property described in Column 1 of the Table in section 19 of O. Reg. 359/09?*	☐	☐
7. Are there any rare, unusual or unique land formations at the project location? (Caves, mounds, cliffs, swales, raised sand or gravel ridges, etc.)	☐	☐
8. Are there areas of elevated topography at the project location? (Hills, plateaus, or glacial landforms such as drumlins or eskers, etc.)	☐	☐
9. Does the project location contain areas of sandy, well drained soil?	☐	☐
10. Are there indications of any early settlements at or within 250 metres of the project location? (Aboriginal trails, monuments, structures, fences, mills, historic roads, rail corridors, canals, etc.)	☐	☐

If **YES** to one or more of questions 2 -10 there is potential for archaeological resources at the project location.

If **uncertain** about the answer to one or more of the above questions, an archaeological assessment is advised as additional research is required to determine whether there is potential for archaeological resources at the project location.

If **NO** to all of questions 2 -10, there is low potential for archaeological resources at the project location. A summary of the information supporting consideration of potential for archaeological resources must be included in the design and operations report.

*If the project is located on a protected property, written authorization must be obtained from the appropriate body and submitted to the Ministry of the Environment as part of complete REA application under section 19 of O. Reg. 359/09.

REA Checklist: Consideration of Potential for Archaeological Resources

- Background -

Please refer to the Ministry of Tourism, Culture and Sport (MTCS) guide *Cultural Heritage Resources: An Information Bulletin for Projects Subject to Ontario Regulation 359/09 Renewable Energy Approvals* for further information on cultural heritage resources.

Regulation 359/09 requires the proponent to consult with the public, municipalities, and Aboriginal communities regarding the proposed project. Heritage and archaeological sites are of critical importance to First Nations, Inuit and Métis communities and they should be involved in the assessment process. For further guidance on engaging Aboriginal communities please refer to the Ministry of the Environment's *Draft Aboriginal Consultation Guide for Preparing a Renewable Energy Approval (REA) Application*.

1. Has the entire project location been subjected to recent, extensive and intensive ground disturbance?
(e.g. Quarrying, landscaping involving deep land alterations, etc.)

The proponent should consider whether there has been recent (post-1960), extensive (over all or most of the area), and intensive (thorough or complete) disturbance. Activities such as agricultural cultivation, gardening, minor grading and landscaping are not considered to be disturbances that affect archaeological potential.

Examples of deep disturbance are:

- Quarrying;
- Major landscaping involving grading below topsoil;
- Building footprints and associated construction area, where the building has deep foundations or a basement
- Infrastructure development such as sewer lines, gas lines, underground hydro lines, roads and any associated trenches, ditches, interchanges.

This information can generally be obtained through a site visit and should be documented through photographs, maps and detailed descriptions in the design and operations report. Where it cannot be clearly demonstrated through research and property inspection that there has been both intensive and extensive disturbance of an area, MTCS recommends hiring a consultant archaeologist to undertake a Stage 1 archaeological assessment.

2. Are there any archaeological sites included in the records maintained by the ministry at or within 250m of the project location?

The Ministry of Tourism, Culture and Sport maintains a database of archaeological sites reported to the ministry, this includes five sites designated by the ministry under Regulation 875 of the Revised Regulations of Ontario, 1990 (Archaeological Sites) made under the *Ontario Heritage Act*.

For information about archaeological sites which may be present at the project location contact the Archaeological Data Coordinator at archaeologicalsites@ontario.ca.

3. Is there Aboriginal or local knowledge of archaeological sites at or within 250m of the project location?

Note: Aboriginal communities, municipal government, historical societies and local museums are all valuable sources of local knowledge.

Aboriginal communities and municipal staff may have information about archaeological sites that are not included in the ministry database. Information about archaeological sites could be requested during Aboriginal engagement and public and municipal consultation. Please note that Aboriginal traditional knowledge may be considered sensitive.

Other sources of local knowledge may include: the property owner, local heritage organizations or the municipal heritage committee (MHC); and/or published local histories. A full list of MHCs is available on the MTCS website: <http://www.mtc.gov.on.ca/en/heritage/lacac.shtml>. The Ontario Historical Society's "Heritage Directory" has a list of heritage societies and organizations in the province: www.ontariohistoricalsociety.ca/en/Start_Browsing_122.

Note: Local knowledge of past and present uses of the property may also help in determining whether there is potential for archaeological resources to be present (e.g. bird or animal migratory routes, logging locations, agricultural/berry extraction areas, resource extraction of minerals, chert outcrops, metals).

4. Is there a water body within 250m of the project location?

(Lake, river, permanent stream, intermittent stream, and/or seepage area.)

Water bodies are associated with past human occupations and use of the land. Approximately 80-90% of archaeological sites are found within 250m of water bodies (river, lake, stream, wetlands).

Information on water bodies can be obtained through a site visit, aerial photographs and/or 1:10,000 scale Ontario Base Maps (or equally detailed and scaled maps). Ontario Base Maps (OBM) is a series of maps that have been created and updated by the Ministry of Natural Resources since the 1980s. These and a number of other topographical maps have been made available on the Natural Resources Canada website: <http://atlas.nrcan.gc.ca/site/english/maps/topo/map>

Note: This definition of water body **does not** include man-made water bodies such as temporary channels for surface drainage, rock chutes and spillways, roadside ditches that do not contain a permanent or intermittent stream, temporarily ponded areas that are normally farmed, dugout ponds, or artificial bodies of water intended for the storage, treatment or recirculation of runoff from farm animal yards, manure storage facilities and sites and outdoor confinement areas.

5. Is there a known burial site or cemetery at the project location or abutting any parcel of land on which the project is located?

Information on known cemeteries and/or burial sites may be obtained from the Registrar of Cemeteries, Ministry of Consumer Services. The Cemeteries Regulation Unit maintains a database of registered cemeteries:

www.consumerbeware.mgs.gov.on.ca/esearch/cemeterySearch.do?eformsId=0

The Ontario Genealogical Society (OGS) has created a cemetery locator that includes records for all Ontario cemeteries, both existent and non-existent, cairns, family plots and burial registers, etc. This information is available on the OGS website:

<http://ogs.andornot.com/CemLocat.aspx>

Early cemeteries may also be marked in historical atlases. Digital versions of historic atlases are available on the Canadian County Atlas Digital Project website: <http://digital.library.mcgill.ca/countyatlas/SearchMapframes.php>

6. Is the project location situated on a parcel of land that is a protected property described in Column 1 of the Table in section 19 of O. Reg. 359/09?

A protected property located at the project location is a strong indication that there may be archaeological resources in the immediate area. Information about protected properties may be obtained from the Registrar at the Ontario Heritage Trust, the Local Land Registry Office, or Municipal Clerk.

Please consult column 2 of the Table in section 19 to determine which authority holds the necessary information.

7. Are there any rare, unusual or unique land formations at the project location?

(Caves, mounds, waterfalls, cliffs, swales, raised sand or gravel ridges, etc.)

Certain land formations, such as waterfalls, rock outcrops, rock faces, caverns, mounds, etc., were often important to past inhabitants as special or sacred places. This significance may be indicated by the presence of burials, structures, offerings, rock paintings or carvings, etc.

Past water bodies can also be an important indicator of archaeological potential. Past water bodies may be visible on the landscape in the form of features such as raised sand or gravel ridges, sharp drops in the terrain, clear dips or swales or even old cobble beaches. The local municipality may have GIS mapping or information about unique land formations and past water bodies at the project location and could be a helpful resource in answering this question.

Information on significant features, including past water bodies, could be requested during Aboriginal engagement and public and municipal consultation. Aboriginal communities may hold traditional knowledge about their past use or resources in the area. Please note that Aboriginal traditional knowledge may be considered sensitive.

Information on land formations may be obtained through a site visit, aerial photographs and/or 1:10,000 scale Ontario Base Maps (or equally detailed and scaled maps). Geological mapping will show glacial lake shorelines and other geological formations. Natural Resources Canada's website has made a number of topographical maps, including OBM, available:

<http://atlas.nrcan.gc.ca/site/english/maps/topo/map>.

8. Are there areas of elevated topography at the project location?
(Hills, plateaus, or glacial landforms such as drumlins or eskers, etc.)

Higher ground surrounded by low or level topography is commonly an indicator of past settlement and land use. Property containing eskers, drumlins, sizeable knolls, plateaus next to lowlands, or other such features is a strong indication of archaeological potential.

Information on areas of elevated topography may be obtained through a site inspection, aerial photographs and/or topographical maps. Ontario Base Maps and many other topographical maps can be obtained through Natural Resources Canada's website: <http://atlas.nrcan.gc.ca/site/english/maps/topo/map>.

9. Does the project location contain areas of sandy, well drained soil?

Sandy, well drained soil in areas that are otherwise characterized by heavy soil or rocky ground is commonly an indicator of archaeological potential.

Information on areas of sandy soil may be obtained through a site inspection or soil mapping which can be accessed at: <http://sis.agr.gc.ca/cansis/publications/surveys/on/index.html>.

10. Are there indications of any early settlements at or within 250m of the project location?
(Aboriginal trails, monuments, structures, fences, mills, historic roads, rail corridors, canals, etc.)

Information on historic features such as roads, rail corridors, farmsteads, historic industrial complexes could be requested during Aboriginal engagement and public and municipal consultation. Aboriginal communities may hold traditional knowledge about their past use or resources in the area. Please note that Aboriginal traditional knowledge may be considered sensitive.

Historical maps and/or historical atlases may also contain valuable information on early settlement patterns. The Archives of Ontario holds a large collection of historical maps and historical atlases: [http://ao.minisisinc.com/scripts/mwimain.dll?get&file=\[ARCHON\]search.htm](http://ao.minisisinc.com/scripts/mwimain.dll?get&file=[ARCHON]search.htm)

Municipal Heritage Committees (MHCs) or local heritage organizations may have information on early settlements or landscape features (e.g. fences, mill races, etc) that could reveal that the site has archaeological potential. A full list of MHCs is available on the MTCS website: <http://www.mtc.gov.on.ca/en/heritage/lacac.shtml>. The Ontario Historical Society's "Heritage Directory" has a list of heritage societies and organizations in the province: www.ontariohistoricalsociety.ca/en/Start_Browsing_122.



Ministry of Tourism,
Culture and Sport

Programs & Services Branch
401 Bay Street, Suite 1700
Toronto ON M7A 0A7

Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes A Checklist for the Non-Specialist

The purpose of the checklist is to determine:

- if a property(ies) or project area:
 - is a recognized heritage property
 - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including – but not limited to:
 - the main project area
 - temporary storage
 - staging and working areas
 - temporary roads and detours

Processes covered under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – [separate checklist](#)
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Property Name

Leamington Line Phase II Pipeline Project

Project or Property Location (upper and lower or single tier municipality)

Municipality of Leamington

Proponent Name

Union Gas

Proponent Contact Information

Norm Dumouchelle, Union Gas 1-866-949-1595 ext. 5236955#

Screening Questions

	Yes	No
1. Is there a pre-approved screening checklist, methodology or process in place?	☐	☒

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

Part A: Screening for known (or recognized) Cultural Heritage Value

	Yes	No
2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?	☐	☒

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

	Yes	No
3. Is the property (or project area):		
a. identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value?	☐	☒
b. a National Historic Site (or part of)?	☐	☒
c. designated under the <i>Heritage Railway Stations Protection Act</i> ?	☐	☒
d. designated under the <i>Heritage Lighthouse Protection Act</i> ?	☐	☒
e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	☐	☒
f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	☐	☒

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

Part B: Screening for Potential Cultural Heritage Value

	Yes	No
4. Does the property (or project area) contain a parcel of land that:		
a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque?	☐	☒
b. has or is adjacent to a known burial site and/or cemetery?	☐	☒
c. is in a Canadian Heritage River watershed?	☐	☒
d. contains buildings or structures that are 40 or more years old?	☐	☒

Part C: Other Considerations

	Yes	No
5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):		
a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	☐	☒
b. has a special association with a community, person or historical event?	☐	☒
c. contains or is part of a cultural heritage landscape?	☐	☒

If **Yes** to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If **No** to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act*, *Planning Act* processes
- maintained by the property owner, proponent or approval authority



Ministry of Tourism,
Culture and Sport
Programs and Services Branch
401 Bay Street, Suite 1700
Toronto ON M7A 0A7

REA Checklist: Consideration of Potential for Archaeological Resources

Applies to: Applicants for a renewable energy approval (REA) under the *Environmental Protection Act* who opt to consider the potential for archaeological resources under subsection 21(3) of O. Reg. 359/09.

Screening Question

	Yes	No
1. Has the entire project location been subjected to recent, extensive and intensive ground disturbance? (Quarrying, landscaping involving deep land alterations, etc.)	☒	☐
Note: Activities such as agricultural cultivation and gardening are not considered to be disturbances.		
If you answered YES to the preceding question, an archaeological assessment is NOT required, and it is not necessary to fill out the remainder of the checklist. A summary of the information supporting recent disturbance must be included in the design and operations report.		
2. Are there any archaeological sites included in the records maintained by the ministry at or within 250 metres of the project location?	☐	☐
3. Is there Aboriginal or local knowledge of archaeological sites at or within 250 metres of the project location?	☐	☐
Note: Aboriginal communities, municipal government, historical societies and local museums are all valuable sources of local knowledge.		
4. Is there a water body at or within 250 metres of the project location? (Lake, river, permanent stream, intermittent stream, and/or seepage area.)	☐	☐
5. Is there a known burial site or cemetery at the project location or abutting any parcel of land on which the project is located?	☐	☐
6. Is the project location situated on a parcel of land that is a protected property described in Column 1 of the Table in section 19 of O. Reg. 359/09?*	☐	☐
7. Are there any rare, unusual or unique land formations at the project location? (Caves, mounds, cliffs, swales, raised sand or gravel ridges, etc.)	☐	☐
8. Are there areas of elevated topography at the project location? (Hills, plateaus, or glacial landforms such as drumlins or eskers, etc.)	☐	☐
9. Does the project location contain areas of sandy, well drained soil?	☐	☐
10. Are there indications of any early settlements at or within 250 metres of the project location? (Aboriginal trails, monuments, structures, fences, mills, historic roads, rail corridors, canals, etc.)	☐	☐

If **YES** to one or more of questions 2 -10 there is potential for archaeological resources at the project location.

If **uncertain** about the answer to one or more of the above questions, an archaeological assessment is advised as additional research is required to determine whether there is potential for archaeological resources at the project location.

If **NO** to all of questions 2 -10, there is low potential for archaeological resources at the project location. A summary of the information supporting consideration of potential for archaeological resources must be included in the design and operations report.

*If the project is located on a protected property, written authorization must be obtained from the appropriate body and submitted to the Ministry of the Environment as part of complete REA application under section 19 of O. Reg. 359/09.

APPENDIX D

Photographs



Photograph 1. Looking south along railway trail from County Road 14.



Photograph 2. Looking south from Mersea Road 8

1



Photograph 3. Looking south from Mersea Road 7



Photograph 4. Looking south from north side of Mersea Road 5 to the Andrew Murray O'Neil Memorial Woods

2



Photograph 5. Treed fencerow on left and edge of Andrew Murray O'Neil Memorial Woods on right



Photograph 6. Proposed site for new station north of County Road 18.

3

APPENDIX E

Public Consultation



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Holy Name of Jesus Church
submitted by Therese Lecuyer

Note that starting on September 10 our Thursday evening Mass will begin at 6:30 pm to accommodate our RCIA program.

Rediscover your marriage by attending Retrouvaille, in London, from September 25-27. Visit www.retrouvaille.org for more information.

There is a Parish Golf Outing on Sept. 13 at Orchard View Golf Course. Contact Brian Bensette at 519-776-7828 to learn more.

A New Coats for Kids Pasta Dinner will be held on Sept. 13 at St. Mary's Hall in Maidstone. Visit the parish office or contact David Ducharme for tickets at 519-776-7828.

Life Teen - Grades 9-12, Mass at 7pm. Life night until 10pm. End summer with a summer BBQ, games and a bonfire at the Lapain's (561 County Rd. 34) Pick up at the Lapain's at 10pm.

EDGE & QUEST - Interested in helping with Quest (Gr. 3-5) & Edge (Gr. 6-8)? See Nick! Planning a meeting for the

beginning of the school year soon.

Fish Fry's are back - Friday, Sept. 25 at 4:30pm.

CWL meeting - Tuesday, Sept. 8 at 7pm. Guest speaker is Amy Becken from Libro Credit Union, speaking on Elder Abuse.

Congratulations to Alfons & Edna Brockman on their 60th anniversary and happy 80th birthday to Patricia Macpherson.

As I look forward to upcoming visits from my children and their families, I hope you all have a great week. God Bless.

Essex Retirees' Social Club

Membership meeting - All members are urged to come to our membership meeting and elections on Tuesday, Sept. 8 after our pot luck dinner.

Our "Anything Goes" Sale is Sept. 26. Anyone can rent a table and sell anything from crafts to garden produce and other items.

Roger Monchamp was the winner at Monday night Pepper. Debbie Monchamp, Louise Perrault. and Cecile St. Denis tied with most Peppers and Betty Fields was low. Dorothy Fields had high score at Tues. afternoon Pepper, Estelle had most Peppers and Louise Perrault was low. Floyd Cascadden had high score Wed. night. Margaret Beneteau had most Peppers and Judy Kelly was low.

Diana Dennis and Floyd Cascadden were the winners at Thursday night Bridge.

Salvation Army Essex Community Church News
submitted by Carolyn Barnett

Join us for Family Worship every Sunday at 11 a.m. On Sept. 6th our guest speakers will be Majors David and Beth Pearo. They oversee Pastoral Services in the Ontario Great Lakes Division. Please note that our monthly Potluck Luncheon after morning worship will be held on Sun. Sept. 13th .

Our regular programs are starting up. Messy Church meets on Thursday, Sept. 10,

from 6 p.m. – 8 p.m. Families of all ages are welcome to participate in a new way of experiencing church. Join us for a free family style meal, a contemporary worship time with a Bible Story and singing, followed by crafts and activities.

SA Connections starts on Tuesday, Sept. 15th from 10 a.m.- 1 p.m. Come out and meet new friends, relax and enjoy fellowship, fun, and a delicious free lunch.

Please continue to support those on our sick and shut-in list with your prayers, cards, calls and visits.

Cozy Corners - Bethel-Maidstone United
submitted by Bev Holland

All are welcome to our Sunday Worship Service at 10am with Pastor Linda Blair. Sunday School is at 10:15am.

September 12, Ruthven-Olinda Church is having a Broasted Chicken Dinner, from 4:30 - 7pm. All are welcome.

Sunday, September 13 is "Welcome Back Sunday." Sunday school begins for the childcare.

Tina continues to collect milk bags to make bed mats for Haiti. Your contribution to this project is much appreciated. There will be a fundraiser dinner for the Mission Project on September 14 at A-1 Restaurant.

Continued on Page 24

The Voice Of Experience

by Evelyn Couch

Heat Endurance

As I write this we are told we will have hot weather by the end of this week. This has not been a hot summer in my experience because we have not had very many 30 degree days.

I think back to my childhood when we never knew anyone who had air conditioning. We didn't need it because our house had double brick walls and was built on a stone foundation. The basement, or cellar- as we called it, was always cool.

What are double brick walls? There are two layers of brick with airspace between them. That made great insulation. To support that, the foundation had to be wide. This was another contributor to insulating the inside. That house is now about 150-years old. The last time I drove past the property the house appeared to be in excellent condition.

I do not remember the house being hot, but I remember clearly having to undress for bed in the cold. My room had a pipe from that huge furnace in the basement and I stood on the register over it and hurried. But the bed would be cold when I jumped in.

Yes, we had hot days and Dad would not make his horses work in the hottest hours of the day which he considered to be from noon until 2 p.m. standard time. I expect he was happy to not have to work during that time, but he was concerned about the horses. After all he did not want to lose one of them to heat exhaustion.

Daylight saving was unknown

Voice Of Inspiration

"You need to make time for your family no matter what happens in your life"

~ Matthew Quick, The Silver Linings Playbook

essex Notice to Residents of the Town of Essex

Fairview Avenue West Bike Path Naming

Council of the Town of Essex is seeking the submission of names for the new bike path being constructed on Fairview Avenue West in Essex Centre.

Persons interested in submitting suggestions in writing to the undersigned are requested to do so by Friday, September 11, 2015.

Cheryl A. Bondy, Clerk
Town of Essex
33 Talbot Street South
Essex, Ontario N8M 1A8
Email: cbondy@essex.ca
Fax: 519-776-8811

essex Notice to Residents of the Town of Essex

Council Meeting Dates

Regular Meetings of the Council of the Town of Essex are held in the County of Essex Civic Centre Council Chambers (2nd Floor), 360 Fairview Avenue West, Essex, Ontario commencing at 6:00 PM.

The following are the dates of the regular meetings for the balance of 2015:

- Tuesday, September 8
- Monday, September 21
- Monday, October 5
- Monday, October 19
- Monday, November 2
- Monday, November 16
- Monday, December 7
- Monday, December 21

All regular meetings are open to the public who are invited to attend.

If you wish to appear as a delegation before Council visit the Town's website at www.essex.ca to obtain the Delegation to Council Request Form.

Cheryl A. Bondy, Clerk
Town of Essex
33 Talbot Street South
Essex, Ontario N8M 1A8
Email: cbondy@essex.ca
Fax: 519-776-8811

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NOTICE OF INFORMATION SESSION

Union Gas Limited Leamington Line Phase II Pipeline Project



Union Gas is undertaking to reinforce the natural gas supply to the Leamington and Kingsville areas through the Leamington Line Phase II Pipeline Project.

The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to an existing 10-inch and 6-inch diameter pipeline on County Road 18.

Union Gas has engaged Azimuth Environmental Consulting to undertake an Environmental Report for the proposed pipeline. The report will detail the route selection process for the proposed pipeline and the environmental impact and mitigation measures associated with the construction and operation of the proposed facilities.

The proposed pipeline route has been identified and is shown on the adjacent map.

Azimuth and Union Gas invite you to a Public Information Session on **September 16, 2015 at the Leamington Kinsmen Recreation Complex, 249 Sherk Street, Leamington, between the hours of 5- 8 pm**. The purpose of the Public Information Session is to present all aspects of the project to affected landowners, the public, First Nations, Métis and government agencies and provide the opportunity for comment on this proposal. Representatives from Azimuth and Union Gas will be present to answer questions.

The final Environmental Report will be included in an application to the Ontario Energy Board whose approval is required before this project can proceed. If approved, construction is proposed to take place in the spring and summer of 2016.

For further information about the information session or specific details contact:

Paul Neals, Vice-President
Azimuth Environmental Consulting, Inc.
paul@azimuthenvironmental.com 705-721-8451 ext.209.

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se2-se9

GOLDEN ACRE FARMS is looking for greenhouse workers. \$11 per hour, 45 hours per week. Please email resume to: goldenacrefarmsinfo@gmail.com

se2-se9

GREENHOUSE WORKERS.
General labour at
\$11.00/hour. Heavy lifting
required, must work week-
ends. Send resumes to: P.O.
Box 520, Ruthven, Ontario
N0P 2G0 *aug26-se2*

aug26-se2

Armstrong Top Pack Ltd.
is hiring **50 permanent,**
full time vegetable packers
for its Leamington location
to start as soon as possible.

The wage rate is \$11.00
for 44.0 hours per week.

You should be able to lift up to 50 lbs. on a repetitive basis and be able to sort and pack fruits and vegetables in a fast paced environment.

No education or experience is required.

Apply in person from 9:00 to 5:00 at
500 County Road 18, Leamington,
N8H3V5 or by email jobs@toppack.ca

EMPLOYMENT WANTED

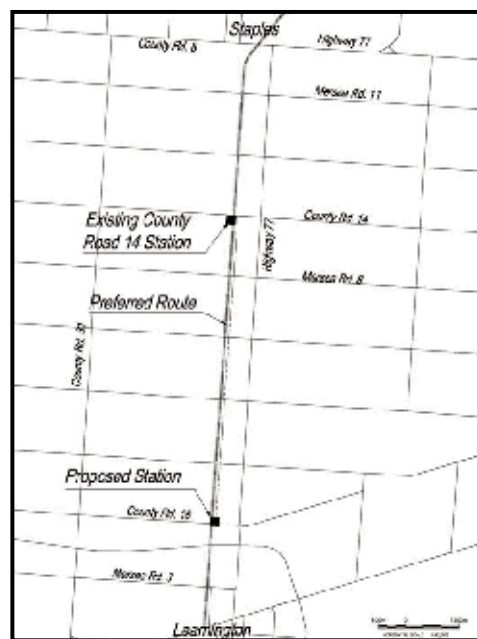
AVAILABLE TO WORK
full-time or part-time after-
noon shifts. Call Mark at
519-324-5879. *se2-30*

se2-30

NOTICES

NOTICE OF INFORMATION SESSION

Union Gas Limited Leamington Line Phase II Pipeline Project



Union Gas is undertaking to reinforce the natural gas supply to the Leamington and Kingsville areas through the Leamington Line Phase II Pipeline Project.

The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to an existing 10-inch and 6-inch diameter pipeline on County Road 18.



Union Gas has engaged Azimuth Environmental Consulting to undertake an Environmental Report for the proposed pipeline. The report will detail the route selection process for the proposed pipeline and the environmental impact and mitigation measures associated with the construction and operation of the proposed facilities.

The proposed pipeline route has been identified and is shown on the adjacent map. Azimuth and Union Gas invite you to a Public Information Session on **September 16, 2015 at the Leamington Kinsmen Recreation Complex, 249 Sherk Street, Leamington, between the hours of 5-8 pm.** The purpose of the Public Information Session is to present all aspects of the project to affected landowners, the public, First Nations, Métis and government agencies and provide the opportunity for comment on this proposal. Representatives from Azimuth and Union Gas will be present to answer questions.

The final Environmental Report will be included in an application to the Ontario Energy Board whose approval is required before this project can proceed. If approved, construction is proposed to take place in the spring and summer of 2016.

For further information about the information session or specific details contact:

Paul Neals, Vice-President

Azimuth Environmental Consulting, Inc.

paul@azimuthenvironmental.com 705-721-8451 ext.209.

**NOTICE TO CREDITORS AND OTHERS
IN THE ESTATE OF
JACK HYATT**

All persons having claims against the Estate of Jack Hyatt, formerly of Leamington, Ontario who passed away on or about the 4th day of July, 2015, are hereby notified to send in to the undersigned Personal Representative of the said deceased on or before the 14th day of September, 2015, full particulars of their claims, thereafter the undersigned will distribute the assets of the said Estate having regard only to the claims then filed.

DATED at Leamington, Ontario this 11th day of August, 2015.

Michael Berry

By his solicitors:

C. OWEN SPETTIGUE PROFESSIONAL CORPORATION,
Barrister and Solicitor, 57 Talbot Street East, P.O. Box 327,
Leamington, Ontario N8H 1L1

WORD SEARCH ANSWERS

[illegible]

SODUKU ANSWERS

2	5	4	8	7	6	3	9	1
1	3	6	4	2	9	7	5	8
9	8	7	3	1	5	2	4	6
7	6	3	2	8	4	9	1	5
4	1	9	5	6	7	8	2	3
5	2	8	9	3	1	6	7	4
6	7	2	1	5	8	4	3	9
3	9	5	6	4	2	1	8	7
8	4	1	7	9	3	5	6	2

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Union Gas Limited

Leamington Line Phase II Pipeline Project

THE PROJECT

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18 (a distance of approx. 6.7km). From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to an existing 10-inch and 6-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

The project team has reviewed and assessed potential pipeline route options during the initial planning stages and concluded using the abandoned railway/recreational trails was the most reasonable routing option. Therefore no other routing options on agricultural land or within the municipal road allowances was evaluated.

Azimuth Environmental Consulting (Azimuth) has been retained by Union Gas to undertake an Environmental Report (ER) for this project that will be included in an application for project approval for submission to the Ontario Energy Board (OEB) in the fall of 2015. The Ontario Energy Board is the body that regulates the energy sector in the province and whose review and approval is required before this project can proceed. Union Gas has reviewed the capacity of the current system and will require the new pipeline in service the fall of 2016 to meet the demand for natural gas. At the present time, Union Gas is working toward obtaining approval in the spring of 2016. If approved, construction could occur as early as the spring of 2016 depending upon when Union schedules construction and obtains all the necessary approvals.

We are now reviewing the selection of the preferred route with the public, government agencies, First Nations, Metis Nation, and the affected municipalities to obtain their input. Following this consultation, selection of the route location will be finalized having regard for the issues raised.



INFORMATION SESSION

This Information Session aims to provide interested and affected parties with an opportunity to review and comment on the preferred route. Input received at this Information Session will be used to confirm the preferred route. Input received will also be used to complete the ER along with associated site-specific protection and mitigation measures. The ER will be part of an application by Union Gas to the OEB expected in fall 2015.

ENVIRONMENTAL ASSESSMENT PROCESS

The OEB sets out guidelines for completing an ER in the document entitled Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines (2003). The ER process is a study designed to:

Collect natural environmental, socio-economic, and archaeological information as it pertains to the study area.

Consult with directly affected landowners, stakeholders, and the public to ensure awareness of the project and to address issues.

Consult with all relevant provincial and municipal agencies for information and comments.

Use the above information (along with consultation with the public and regulatory authorities) to confirm the location of the required facilities as well as to assess potential impacts and develop proposed mitigation requirements.

Prepare an ER that meets the current OEB guideline mentioned above.

Leamington Line Phase II Pipeline Project



Leamington Line Phase II Pipeline Project



LEGEND:

- Phase I Pipeline (2013)
- Proposed Phase II Pipeline Route
- Study Area
- Municipal Boundaries
- Existing County Road 14 Station
- Proposed Station



Study Area/
Proposed Route Location

Leamington Phase II

DATE ISSUED:	July 2015	Figure No.
CREATED BY:	JLM	
PROJECT NO.:	15-151	1
REFERENCE:	First Base Solutions	

DAYSTAMP: M:\15 Projects\15-151 Union Gas Phase II Leamington Line\4.0 - Drafting\15-151.dwg

Printed by: MCCORMICK on August 26, 2015 at 1:05pm
File: M:\15 Projects\15-151 Union Gas Phase II Leamington Line\4.0 - Drafting\15-151.dwg Layout: Figure 1 Plotcode: 1

LET US KNOW WHAT YOU'RE THINKING

We are interested in hearing your comments, addressing questions, and working with the communities and residents to address your concerns regarding the proposed pipeline project.

Our ongoing approach to public communications and consultation includes a mix of providing information on the project plans and receiving input from interested people through the Information Session, comment forms, and newsletters provided. One-on-one meetings can be arranged with individual property-owners or groups who may be directly affected by the proposed project to discuss project related details or concerns.

At the Information Session, we particularly want your input on the proposed preliminary preferred route, the study process, and any other interests you might have regarding this project. You may provide comments at any point in the ER process.

WHAT HAPPENS AFTER THE INFORMATION SESSION?

After the Information Session, Azimuth and Union Gas will review your comments and other input and use this information to help confirm the location of the preferred pipeline route.

Directly affected landowners will be contacted by Union Gas to obtain information about individual properties and their concerns related to the project.

The ER will outline the construction activities and mitigation measures that will be undertaken to reduce and control effects of the pipeline on the environment during and after construction.

WHAT'S NEXT?

- ◆ Completion of Environmental Report (fall 2015)
- ◆ Union Gas to file application with Ontario Energy Board (fall 2015)
- ◆ Ontario Energy Board review and decision (spring 2016)
- ◆ Pre-engineering field studies (2012—2015)
- ◆ Pipeline construction and cleanup (spring/summer 2016)
- ◆ Project in service (fall 2016)

CONTACT THE PROJECT TEAM

Please contact the following individuals if you have questions regarding the Leamington expansion Project:

Azimuth Environmental Consulting

Paul Neals, *Senior Environmental Planner*

85 Bayfield Street, Suite 400, Barrie, ON L4M 3A7

Phone: (705) 721-8451 (ext. 209) Please call collect.

Fax: (705) 721-8926

Email: paul@azimuthenvironmental.com

Lands Department

Jeffrey Fasoyiro, *Land Agent*

Union Gas Limited

50 Keil Drive, Chatham, ON N7M 5M1

Phone: (519) 436-4600 (ext. 5002912)

Email: BJFasoyiro@uniongas.com

Environmental Approvals

Norm Dumouchelle, *Environmental Planner*

Union Gas Limited

745 Richmond Street, Chatham, ON N7M 5J5

Phone: (866) 949-1595 (ext. 5236955)

Email: npdumouchelle@uniongas.com



Recreational trail south of Mersea Road 7

Welcome ^{to the} Union Gas Limited

Leamington Line Phase II Pipeline Project

INFORMATION SESSION

Project Overview

Union Gas is planning to supply the increased demand for natural gas by constructing a new 12 inch natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to an existing 10-inch and 6-inch diameter pipeline on County Road 18.

The project team has reviewed and assessed potential pipeline route options during the initial planning stages and concluded using the abandoned railway/recreational trails was the most reasonable routing option. Therefore no other routing options on agricultural land or within the municipal road allowances was evaluated.

Subject to obtaining Ontario Energy Board approval, construction is proposed to take place in the spring/summer of 2016 and is expected to take 3-4 months to complete. Azimuth Environmental Consulting Inc. (Azimuth) has been retained by Union Gas to prepare an Environmental Report (ER) for the planned construction and operation of the pipeline.

Union Gas – Leamington Line Phase II Pipeline Project

Ontario Energy Board Review and Approval Process

The Ontario Energy Board (OEB) is the body that regulates the natural gas industry in Ontario, in the public's interest. The OEB's approval is required before this pipeline can be constructed.

Union Gas is proposing to submit its application to the OEB in the fall of 2015. This application will include comprehensive information on the project including: the need for the project, facility alternatives, project costs and economics, pipeline design, pipeline construction, environmental mitigation measures, land requirements, and aboriginal consultation and engagement.

The OEB will then hold a public hearing to review the project. This will include notices in local newspapers, letters to directly affected landowners, the opportunity for the general public and landowners to ask questions and submit questions regarding the project, a formal hearing, and a written decision regarding the project.

If after this review the OEB finds the project is in the public interest it will approve construction of the pipeline. If the project is approved the OEB normally attaches conditions to the approval which Union Gas will comply with during the construction and restoration process.

Additional information about the OEB process and information about how to participate in the OEB hearing process can be found <http://www.ontarioenergyboard.ca>

Union Gas – Leamington Line Phase II Pipeline Project

Proposed Facilities

The proposed facilities would include:



- Approximately 6.7 km of 12 inch diameter pipeline to transport gas from Union's existing County Road 14 station to County Road 18.
- Construct a new station north of County Road 18.
- Facility upgrades to the existing County Road 14 Station.
- Installation of 250 metres of 16 inch diameter pipeline from the new station to connect to the existing 10 inch and 6 inch diameter pipelines on County Road 18.

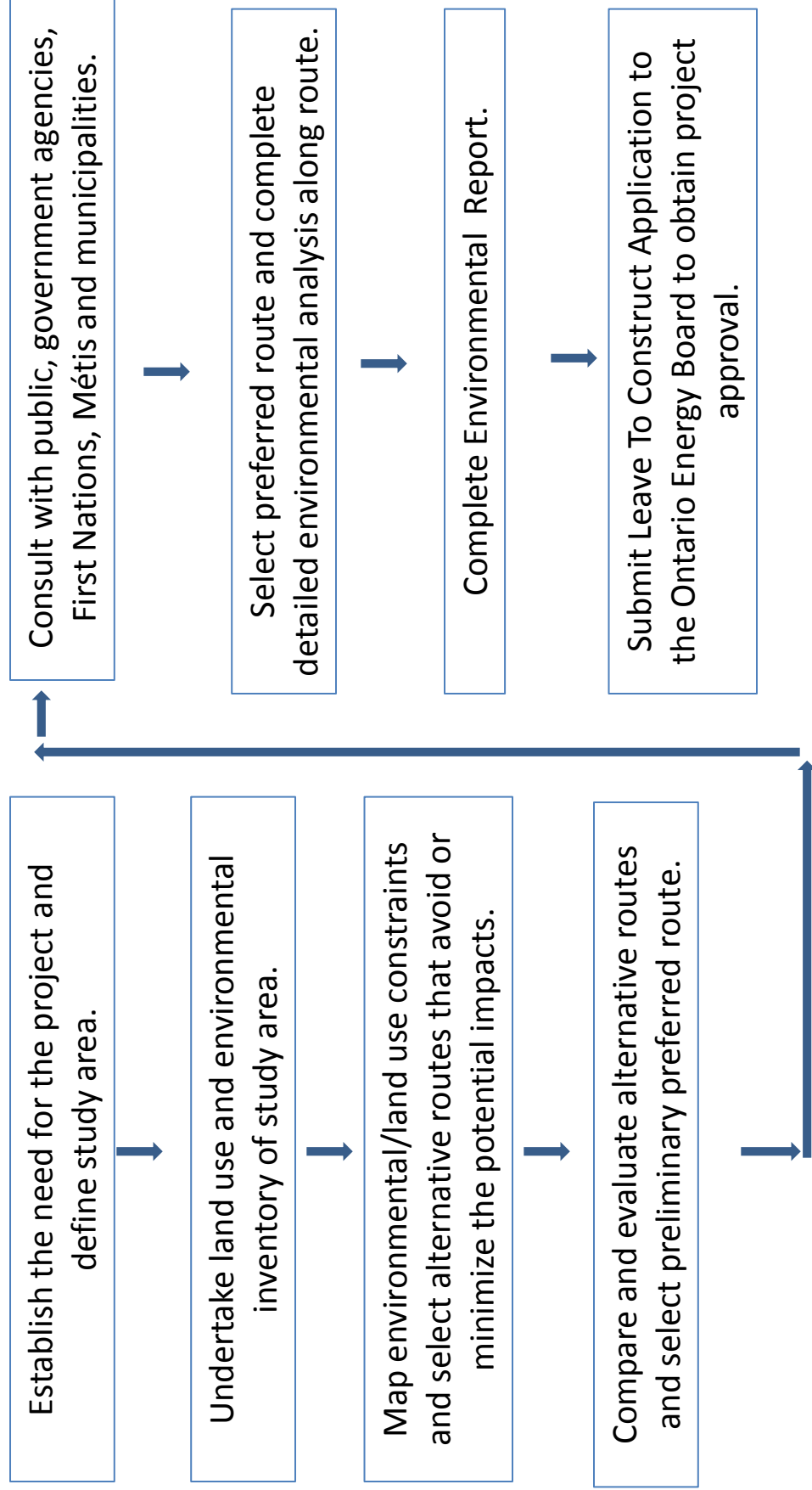
Consultation

Purpose of the Information Session is to:

- Provide information on the proposed natural gas facilities.
- Present where the facilities would be located.
- Discuss potential impacts that could occur during construction and operation.
- Identify what construction/restoration techniques can be applied to minimize impacts.
- Define what approvals must be obtained from the Ontario Energy Board and other government agencies before the project can go forward.
- Provide the opportunity for the public to question Union Gas staff and their consultant on all aspects of the project.
- Obtain feedback from the public regarding the project



Route Selection Process



Union Gas – Leamington Line Phase II Pipeline Project

Pipeline Location within Recreational Trail



Conceptual pipeline location within the grassed area adjacent to recreational trail

Project Schedule

- Completion of Environmental Report (fall 2015)
- File an application with the Ontario Energy Board (fall 2015)
- Ontario Energy Board review and decision (spring 2016)
- Pre-engineering field studies (2012 - 2015)
- Pipeline construction and cleanup (spring/summer 2016)
- Station construction (spring/summer 2016)
- Project in service (fall 2016)

Communication

Union Gas is committed to broad, open, inclusive communication. For Union Gas, consulting is about building better pipelines, facilities, and relationships. Union Gas has in place a comprehensive Landowner Relations Program that uses a dedicated **Landowner Relations Agent** and a **Complaint Resolution System**.

The Land Relations Agent:

- Provides direct contact and liaison between landowners and Union Gas contractor and engineering personnel.
- Is available to the landowner everyday that construction activities are being completed.
- Will address the concerns and questions of the landowner during construction.
- When requested we will conduct pre-construction and post-construction interviews to capture any concerns (so that they can be resolved, if at all possible) and comments (so that they can be considered in the planning of future projects). Our commitment to public awareness and 24 hour remote monitoring will add to safe pipeline operation.

The Complaint Resolution System:

- Is used to record, monitor, and ensure follow-up on any complaint or issue received by Union Gas to any construction activities.
- Assists in resolving complaints and tracking the fulfillment of commitments.

Union Gas – Leamington Line Phase II Pipeline Project

SAFETY IS OUR TOP PRIORITY

- Public safety is our highest priority and a core Company value.
- The pipeline and associated facilities will be designed, manufactured and installed according to strict safety standards and regulations.
- Employees are highly trained and daily safety briefings are an integral part of the construction process.
- During construction working hours, all workers and inspectors are vigilant in ensuring unauthorized people are kept out of the work area. Security fences and signage are erected around open trenches near road crossings.
- The new pipeline will be pressure tested prior to being placed in-service.
- Once construction is complete a comprehensive facility maintenance and integrity program will ensure the pipelines remain in safe operating condition. This includes regular monitoring for corrosion, leaks or any other potential damage.
- Landowners in proximity to the pipeline will be contacted regarding pipeline safety and emergency preparedness through our ongoing public awareness program.
- After construction, the pipeline location is marked with above ground “pipeline marker” sign.
- Union Gas has a century of experience in pipeline design and construction, and an enviable safety record.



Union Gas – Leamington Line Phase II Pipeline Project

Natural Environment

Union Gas is committed to minimizing the effects of its projects and operations on the environment. An integral part of this project is the completion of an Environmental Report for the natural gas pipeline. The Environmental Report to be included in the OEB application will outline the steps we will take to protect the affected natural environment, which may include:

- Timing construction to avoid potential harm to nesting migratory birds, spawning fish or endangered species.
- Erosion control measures to avoid sedimentation during watercourse crossings.
- Water Well Monitoring Program, to determine any changes in water well quality from baseline conditions.
- Spills Response Plan, outlining measures to be undertaken in the event of an accidental spill.
- Tree Replacement Program.



Eastern Fox Snake

All environmental mitigation and protection measures, including those noted above, will be outlined in an Environmental Report. During construction an Environmental Inspector will ensure compliance with these measures, environmental permits, approvals, laws, policies and other commitments.

Natural Environmental Surveys

The preferred route is reviewed by an independent environmental firm in order to identify potentially significant or sensitive natural features. If natural or heritage features could be affected the following studies are undertaken prior to construction.

Breeding birds, wildlife and vegetation:

These surveys would involve terrestrial ecologists recording their observations.

Archaeology: This survey will involve archaeologists conducting pedestrian surveys and test pitting where required to assess for the presence of artifacts. If archaeological resources are discovered, further assessment may be needed.

Watercourses: Will be crossed by directionally drilling under the feature to avoid any disturbance to the aquatic habitat.

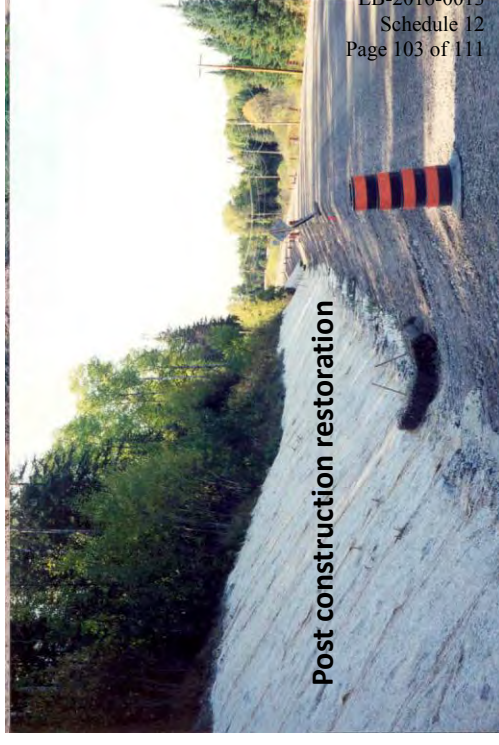


Snapping Turtle

Union Gas – Leamington Line Phase II Pipeline Project

Construction Practices To Minimize Environmental Impacts

- Construction will be scheduled during daylight hours from Mon. – Sat. where practical. Construction equipment will be equipped with appropriate mufflers.
- Security fences and signage will be erected around any open trenches near road crossings.
- Dust control measures will be implemented through monitoring and water application when necessary.
- Every effort will be made to avoid disturbing or removing landowner's trees. If a tree(s) is removed the landowner will be consulted on replacement.
- Monitoring of the effects during and after construction to ensure environmental protection measures were effective.



Union Gas – Leamington Line Phase II Pipeline Project

Construction Methods – Recreation Trail/Railway Corridor

On the recreation trail/ rail corridor Union Gas will implement the following measures comparable to road allowance construction to minimize impacts as a result of construction of the proposed facilities:

- Construction activities will remain with the fenced recreational trail/rail corridor.
- There will be no affect on access to homes and businesses.
- Traffic will be maintained at all times throughout construction at the road crossings.
- Impacts to crops are not anticipated during construction other than areas identified as temporary land use.
- Construction activities will utilize the recreational trail/railway corridor to the extent possible including approximately 3 metres of temporary land use (private land) along the length of the route.
- Following the installation of the pipeline, the recreational trail will restored to the preconstruction condition for public use.
- Public use of the recreational trail will be suspended for the duration of construction.



Construction Methods – Agricultural Land

If agricultural lands are used for a temporary work area Union Gas will implement the following measures to minimize impacts to soils as a result of construction of the proposed facilities:

- Test agricultural fields for Soybean Cyst Nematode.
- When working directly on agricultural land, suspend construction activities during wet soil conditions.
- Strip topsoil and stockpile during dry conditions.
- Maintain separation between topsoil and subsoil .
- Flag and repair broken drainage tile.
- Chisel plough or till soils to help relieve compaction.



Chisel Ploughing

Next Steps

- Review comments received on the preferred route.
- Respond to questions or information requests on Comment Forms or emails after the Information Session.
- Finalize the preliminary preferred route and complete the Environmental Report for submission to the Ontario Energy Board.
- Continue pre-engineering field studies and directly affected landowner consultation.

Leamington Line Phase II Pipeline Project

A Union Gas Project

Information Session

September 16, 2015

Public Comment Form

Please complete this comment form and leave in the comment form box or with Azimuth or Union Gas staff in attendance or return in the self addressed envelope provided.

1. What is your interest in this study?

Affected Landowner _____

Interested Citizen _____

Interest Group Member _____

Government Representative _____

Other (please specify) _____

2. Do you have any concerns regarding the location of any of the alternative pipeline routes?

3. Do you have any concerns regarding the selection of the preliminary preferred route and how it may affect your property?

(Please complete other side of form)

- 4. Do you have any concerns regarding the construction of the proposed pipeline?**

- 5. Do you have any other concerns about the project that you would like to bring to our attention?**

- 6. Do you want us to contact you to discuss your concerns?**

Yes _____ No, adequately addressed at meeting _____

If yes, please provide your full mailing address and telephone number so we can contact you.

Name - _____

Address - _____

Telephone - _____

- 7. Do you want to receive a copy of the Environmental Report that will be submitted to the Ontario Energy Board for review?**

Yes _____ No _____

(If yes ensure complete mailing address completed above)

- 8. Do you want the information on this comment form kept confidential?**

Yes _____ No _____

APPENDIX F

Union Gas Erosion and Sedimentation Control Standards

Generic Sediment Control Plan – Dam & Pump Crossing

This plan sets out the measures that will be taken by Union Gas Limited (company) and its contractors to control downstream sediment to the lowest level practically achievable during the construction of dam and pump type crossings. The conditions and techniques set out on this plan are to be followed unless approved otherwise by the Department of Fisheries and Oceans (DFO).

General Measures

The company must use materials, construction practices, mitigation techniques and monitoring of operations at every water crossing in order to prevent the unauthorized harmful alteration, disruption or destruction of fish habitat or the impairment of water quality. The following requirements apply to any permanent or intermittent waterbody (stream, river, pond) and areas adjacent to it.

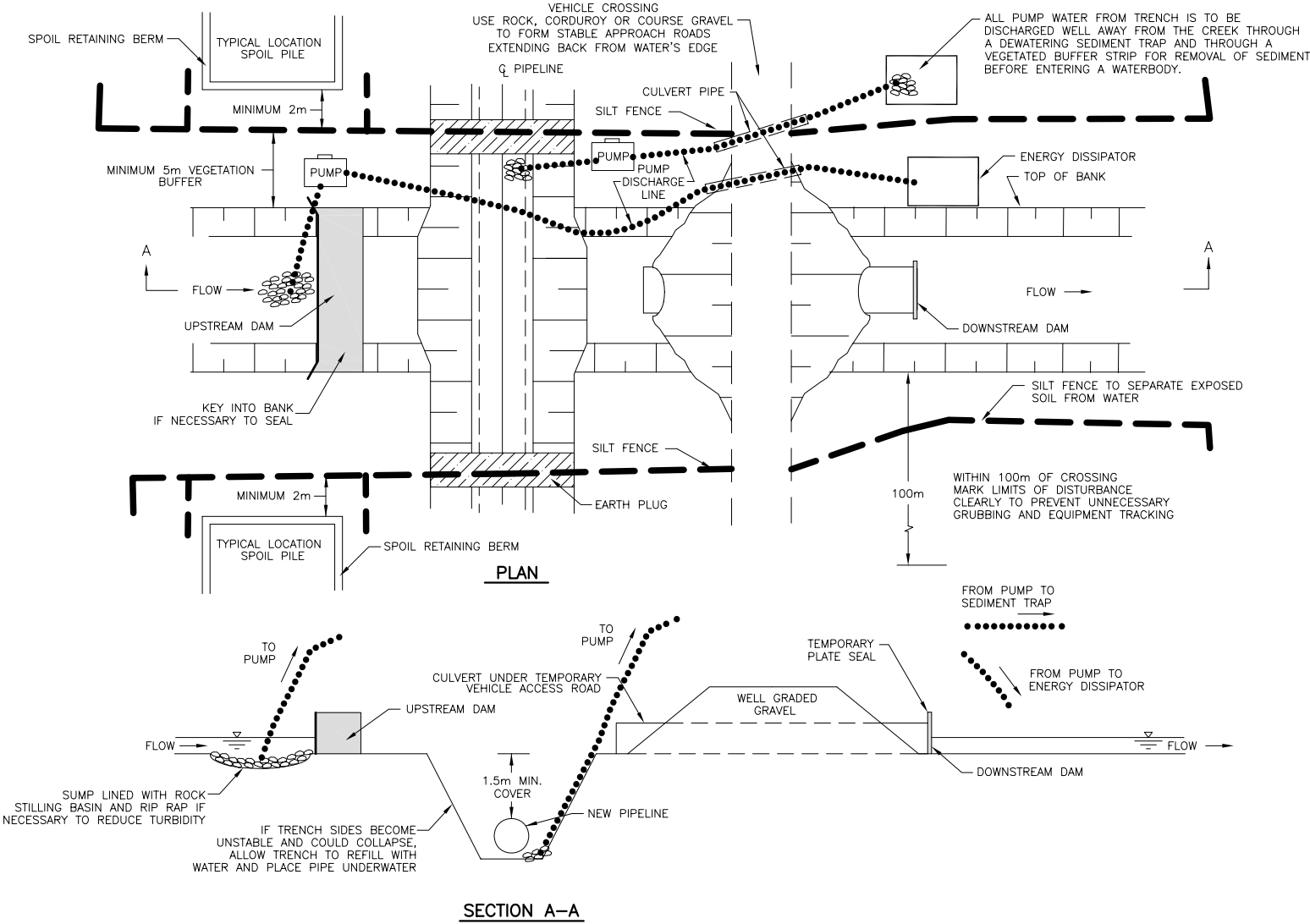
- * The company will adhere to all permits and approvals of federal and provincial agencies related to watercourse crossings.
- * The company will notify the appropriate federal or provincial agencies prior to commencement of a watercourse crossing in accordance with regulatory permit conditions.
- * In-stream work will occur during the appropriate time windows for the geographic region and for the fish species present unless otherwise permitted by the appropriate agencies.
- * Prior to removal of the low vegetative cover, effective mitigation techniques for erosion and sediment control must be in place to protect water quality. Limit the areal extent of disturbance to the minimum needed for construction and delay grubbing to immediately prior to grading operations.
- * All watercourses will require a minimal disturbance zone (MDZ) to be clearly marked with flagging prior to the commencement of clearing activities or any construction activity near the waterbody. This flagging will be set back a minimum of 5m from the waterbody and will be based on site specific conditions. Extra work area required at watercourse crossing will be situated away from the waterbody outside of the minimal disturbance zone (MDZ).
- * Materials removed or stockpiled during construction (e.g., excavated soil, backfill material) must be deposited in a manner to ensure sediment does not enter a waterbody. Appropriate erosion and sediment controls (e.g. revegetation, vegetated buffer strips, drainage control, sediment settling devices, and sediment fence or other appropriate mitigation measures) will be installed around spoil or stockpiles, to prevent sediment from stockpile runoff from entering a watercourse.
- * All vehicles, machinery and other construction equipment shall not enter the water. There must be no fording of any stream.
- * Except during construction of the crossing, the company will not obstruct any watercourse so as to impede the free movement of fish.
- * Flow shall be maintained at all times downstream of the watercrossing.
- * All exposed soil must be stabilized (e.g. graded to a stable slope and erosion control measures implemented) as quickly as possible to prevent erosion.
- * The company is to adhere to the Generic Sediment Control Plan For Temporary Vehicle Crossings.
- * All required materials (e.g., silt fencing, filter cloth, polyethylene liners, granular material, rip rap, dam materials) and installation equipment (e.g., pipe, flumes, pumps, pump hoses, generators, spares, energy dissipaters) will be on-site and in good working order prior to construction.
- * Prior to commencing watercourse crossings, local weather stations will be monitored to determine whether any precipitation is forecasted. In-stream activity will be delayed if flows are in flood stage and until weather conditions are favourable.
- * If there is any flow in the creek, the company is to install pumps to maintain streamflow around the blocked off section of channel. An energy dissipator is to be built to accept pump discharge and prevent streambed or streambank erosion.
- * Adequate pump capacity will be on site to handle anticipated water flows and any potential increases in flow during the construction period. Backup pumps with adequate capacity to handle 100% of the downstream flow must be on site and ready for immediate replacement, should the primary operating pump(s) fail.
- * Water intakes used in fish bearing waters will be screened in accordance with the DFO Freshwater Intake Fish Screening Guidelines (1995).
- * Fish recovery and transfer will be conducted prior to and during the isolation of flow and in accordance with permit regulations. See detailed construction sequence for timing of fish recovery operations.
- * In-stream activities in all watercourses (e.g., trenching, pipe installation, backfilling) will be completed in as short a time as possible to minimize disturbance to water quality, fish and fish habitat.
- * In situations where the crossing can be completed in one day, in-stream excavation will begin in the early morning to allow for same day installation.
- * Refueling and lubrication of equipment will be conducted in areas that will allow any accidental spill of deleterious substance to be disposed of in an approved location before it reaches any waterbody. Appropriate spill prevention kits shall be readily available on site.
- * The area around water crossings is to be regularly monitored and if erosion problems develop, immediate action is to be taken with appropriate treatments and completed as quickly as possible. Accumulated sediment is to be removed regularly.
- * Revegetation must be completed as quickly as possible. Revegetate any disturbed areas by planting and seeding preferably native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.
- * The company will be held responsible for implementation of this plan.
- * All use of silt fence, rock check dams and dewatering traps shall be constructed/installed in accordance to the most up to date company specifications and drawings. Where these mitigation measures are not sufficient to prevent sediment from entering the waterbody, additional mitigation measures will be implemented to prevent sediment from entering the waterbody.

Contingency Plan

If unforeseen events (e.g., bedrock in trench, dam washout) cause the strategies set out in this plan to be insufficient or inappropriate to meet the objective, the company is expected to respond in a timely manner with all reasonable measures consistent with safety, to prevent, counteract or remedy any effects on fish or fish habitat that may result. DFO is to be notified as soon as practical.

Spill reporting procedures established by MOE shall be used to report any unexpected discharge of silt or sediment or other deleterious substance at the water crossing. The spill shall also be reported to the DFO as soon as possible in these circumstances.

If DFO determines that long term damage to fish habitat has occurred due to failure of this plan to control sediment, a restoration plan will be developed by the company, in consultation with and approval from DFO for implementation by the company.



Detailed Construction Sequence – Dam and Pump Crossings

In general terms, the following sequence of construction and mitigation measures will be followed at all "dam and pump" type water crossings.

1. Mark out and maintain limits of authorized work areas with fencing or flagging tape to avoid unnecessary disturbance of vegetation. Ensure equipment operators working on the crossing have been briefed about this plan and the measures needed to protect water quality. Install pre-work sediment control measures, including silt fences and measures to contain excavated spoil and backfill. All necessary equipment and materials to build the dams and to pump water must be on site or readily available prior to commencing in-water construction. Pipe shall be strung, welded and coated ready for installation prior to watercourse trenching.
2. Install pumps in natural pool upstream of the excavation. Excavate temporary sump within right-of-way if no natural pool exists. Check pump operation to equalize flow and ensure water intakes used in fish bearing waters are screened in accordance with DFO guidelines. Rip rap, stilling wells, filter cloth, gravel filters or other mitigation measures will be used at the upstream inlet of the pump to prevent suspension of sediment from pumping when necessary. Rip rap and rock check dams will be used when necessary to prevent scouring and erosion at the pump outlet. Pump discharge lines shall be installed to keep pumped water from coming into contact with soil on the construction site.
3. Dams are to be made of steel plate, inflatable rubber dam (aquadam), peastone bags, cobbles, well graded coarse gravel fill or rock fill and constructed so that sediment is not introduced to the waterbody. An impervious membrane is to be incorporated into the dam if necessary to control seepage flow. Dams may need keying into the banks and streambed. Install downstream dam only if needed to keep the trench area dry. Dewater the area between dams and for fish bearing streams, conduct fish salvage operations. All pump water is to be discharged well away from the creek and through a dewatering sediment trap for removal of sediment before entering the waterbody.
4. Excavate trench through plugs and streambed as quickly as possible, re-positioning discharge hose as necessary. Lower the pipe in the trench and backfill immediately. During this operation, try to maintain pumping as much as possible. The top 300 mm of trench backfill is to be clean rock, cobble material or native streambed material. The company is to use granular backfill if the native material is not suitable. Any excess material is to be disposed of above the high water mark in an approved location and stabilized to prevent reentry into the waterbody. Work is to be completed as quickly as possible.
5. Restore, stabilize and reclaim bed and banks of waterbody to preconstruction profiles and protected with erosion resistant material compatible with flow velocity (e.g., *do not use erosion control matting in the bankfull channel* coarse gravel or rip rap) to the maximum extent possible between dams. If rip rap material contains fines, the completed face is to be washed off and the turbid water pumped to the dewatering sediment trap. All construction material (e.g. dams, rip rap, spilled pea gravel from pea stone bags) not required to return the waterbody to preconstruction condition shall be removed from the site and stabilized above the high water mark in an approved location. Removal of all materials will be done in a manner that will not introduce sediment to the waterbody. The downstream dam shall be removed first. Keep pump running until normal flow is resumed. Complete bank trimming and erosion protection. If pea stone bags are used for the dams, place and remove by hand to avoid equipment breaking bags.
6. Site stabilization, which includes control of stormwater drainage using combinations of silt fences, erosion blankets, diversion berms and check dams etc., is to be completed within 10 days of trench backfilling. If stabilization is delayed, short term erosion control measures shall be used to prevent sediment entering the water. Material accumulated at silt fences is to be removed or stabilized in place. Silt fences are to be removed when the site is permanently stabilized.
7. Vegetate any disturbed areas by planting and seeding preferably native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.
8. If post-construction monitoring reveals erosion problems, remedial work is to be undertaken as quickly as possible.

EB-2016-0013
NOTE
Schedule 12
Page 111 of 111

Union Gas is responsible for implementation of appropriate sediment and erosion control to mitigate impacts to fish and fish habitat. Fisheries and Oceans Canada, Ontario–Great Lakes Area has reviewed Union Gas drawing, "GENERIC SEDMENT CONTROL PLAN, DAM AND PUMP WATER CROSSINGS" dated January 2008, and endorses its use as a guideline for implementation of erosion and sediment measures.

For more information on this plan, please contact:
Doug Schmidt,
Principal Environmental Planner,
Union Gas Limited,
1-800-571-8446, ext. 2895

DATE	REV NO	REVISION	BY	APPD	



uniongas
A Spectra Energy Company

PROJECT
UNION GAS LIMITED
CONSTRUCTION PROGRAM

LOCATION
ALL DAM AND PUMP WATER
CROSSINGS IN ONTARIO

DRAWING TITLE
GENERIC SEDIMENT CONTROL PLAN
DAM AND PUMP WATER CROSSINGS

SCALE	NTS	DATE	JAN. 1/08
FILE No.	PROJECT NO		
DRAWN GTH	CHECKED	DRAWING 2 of 3	REV 0

APPROVED

Summary of Comments

TO BE FILED WHEN RECEIVED

LEAMINGTON EXPANSION PIPELINE PROJECT

TOTAL ESTIMATED ENVIRONMENTAL COSTS

Pre-Construction

Environmental Assessment	\$	35,000
Archaeology		20,000
Soil Sampling		3,000
Hearing Costs (Environmental Consultant)		5,000
Surveys (fish, wildlife, plants)		7,000
Permits		<u>5,000</u>

Total Pre-Construction \$ **75,000**

Construction

Environmental Inspection	\$	5,000
Water Well Monitoring		<u>10,000</u>

Total Construction \$ **15,000**

Post Construction

Tree Replacement	\$	<u>3,000</u>
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Total Post Construction \$ **3,000**

Total Estimated Environmental Costs \$ **93,000**



[illegible]



File #	PIN	NAME & ADDRESS	PROPERTY DESCRIPTION	PERMANENT EASEMENT Dimensions (Metres) Area Width x Length Hectares	TEMPORARY EASEMENT Dimensions (Metres) Area Width x Length Hectares	MORTGAGE, LIEN/LEASE &/OR ENCUMBRANCES	REMARKS
Essex Road 14							
	75086-0191		PART LOT 5 CON 8 MERSEA DESIGNATED AS PART 1 PL 12R23292; LEAMINGTON				
	75086-0192		PART N1/2 LOT 5 CON 8, PART S1/2 LOT 5 CON 8 MERSEA AS IN R1268278 SAVE & EXCEPT PART 1 PL 12R23292; LEAMINGTON S/T R418263, R750580, R755807		7.5 x 9.05 0.007		
	75086-0148		PT N1/2 LT 6 CON 8 MERSEA; PT S1/2 LT 6 CON 8 MERSEA AS IN R1301193 EXCEPT R446066, R979083 S/T RESERVATIONS IN R1198184; S/T MS34739, MS36159; S/T EASEMENT AS IN MS36330; LEAMINGTON		8 x 1188.62 0.95		
	75086-0147		PT N1/2 LT 5 CON 8 MERSEA; PT S1/2 LT 5 CON 8 MERSEA PT 3 12R19206; LEAMINGTON	5 x 1355.69 0.68	7.24 x 1340.02 3 x 1345 20.11 x .213 0.43		
Marsea Road 8							
	75093-0262		PT LT 6, CON 7 AS IN R433666 SAVE & EXCEPT PTS 1 & 2, PL 12R22194, LEAMINGTON; S/T EASE MS36160 & R270142		8 x 685.66 0.55		
	75093-0341		PT N1/2 LT 6 CON 7 MERSEA; PT S1/2 LT 6 CON 7 MERSEA AS IN R1483224 EXCEPT PT 5 12R22915; S/T EASEMENT AS IN MS36167; LEAMINGTON		6 x 330.52 0.2		
	75093-0329		PT LT 6 CON 7 AS IN R1490005 SAVE & EXCEPT PARTS 1 & 2 ON EXP PLAN CE315937; LEAMINGTON S/T R270182, S/T EASEMENT AS IN MS36162. SUBJECT TO AN EASEMENT OVER PTS 1,2 AND 3 ON PL 12R25217 IN FAVOUR OF PT 1 ON PL 12R23817 AS IN CE565590		6 x 70 0.04		
	75093-0354		PART LOT 5 CON7 MERSEA DESIGNATED AS PART 2 PL 12R24841, PART 2 PL 12R8751; S/T R412651 SAE & EXCEPT PARTS 1 & 2 PL 12R21827 MUNICIPALITY OF LEAMINGTON		10 x 281.33 0.28		
	75093-0148		PT N1/2 LT 5 CON 7 MERSEA; PT S1/2 LT 5 CON 7 MERSEA PT 1 12R19203; LEAMINGTON	5 x 1373.11 0.69	7.24 x 1373.11 3 x 1373.11 0.99 0.41		
Marsea Road 7							
	75093-0257		PT LT 6, CON 6 MERSEA DESIGNATED AS PTS 26, 27, 28, 29, 30, 31, 12R21834; S/T MS36171 & MS36172; LEAMINGTON		15 x 15 8 x 363.88 0.02 0.29		
	75093-0271		PT LOT 6 CON 6 DESIGNATED AS PTS 4 - 12 PL 12R22810, SAVE AND EXCEPT PARTS 17,18 ON PL 12R22966; LEAMINGTON S/T MS36164, MS36168, MS36170, R249882 & R247716.		8 x 160.2 0.13		
	75093-0135		PT LT 5 CON 6 MERSEA PT 2 12R19203; LEAMINGTON	5 x 1389.25 0.69	7.24 x 1389.25 3 x 1389.25 1.01 0.42		
Marsea Road 6							
	75094-0185		PT LT 6 CON 5 MERSEA PT 2,3,12R3429, PT 2,12R7141; S/T R1391498, R1447319; S/T EASEMENT AS IN MS36161; LEAMINGTON		8 x 693.85 0.56		
	75094-0326		PT LT 6 CON 5 MERSEA PTS 1, 3, 4, 5, 6 TO 22 PL 12R22388; S/T R1041450, R1041451, S/T MS36328, R1391470, R1405360, R1419318, R1461789; S/T EASE OVER PTS 3 & 4 12R22388 IN FAVOUR OF PT 2 12R22388 AS IN CE190340; LEAMINGTON		8 x 686.87 0.55		
	75094-0190		PT LT 5 CON 5 MERSEA PT 3 TO 8 12R19203; LEAMINGTON	5 x 1383.24 0.69	7.24 x 1383.24 3 x 1383.24 1.00 0.42		
Marsea Road 5							
	75094-0177		PT LT 5 CON 4 MERSEA AS IN R795714; S/T R1391478; S/T R411874; LEAMINGTON		IRR x IRR 0.05		

	75094-0467		PART LOT 6 CON 4 MERSEA DESIGNATED AS PARTS 1, 2, 4, 6, 8 & 9 PL 12R10490 SAVE & EXCEPT PART 1 ON EXPROPRIATION PLAN CE315933; LEAMINGTON S/T INTEREST IN R1150142, S/T R1391481, S/T INTEREST IN R1238826; S/T R248393				8	x	166.8	0.13		
	75094-0527		PT LT 6 CON 4 MERSEA DESIGNATED AS PTS 1 & 2 ON PL 12R4180, PTS 3,5 AND 7 PL 12R10490, PTS 1,2 AND 3 ON PL 12R16122; SAVE AND EXCEPT PT 6 ON PL 12R22873 & PTS 4,5,6 AND 7 ON PL 12R25096, SAVE AND EXCEPT PT 1 ON PL 12R25329; SAVE AND EXCEPT PTS 1,2,3,4 AND 5 ON PL 12R25352; SUBJECT TO AN EASEMENT OVER PTS 1 TO 8 INCL. PL 12R20132 AS IN CE36796,S/T OIL AND GAS RIGHTS AS IN R1537693 & R1537694; TOGETHER WITH AN EASEMENT OVER PTS 5,6 & 7 ON PL 12R25096 AS IN CE528639; SUBJECT TO AN EASEMENT AS IN R1397479 MUNICIPALITY OF LEAMINGTON				8 8	x x	25.0 97.0	0.02 0.08		
	75094-0526		PT LT 6 CON 4 MERSEA DESIGNATED AS PTS 1,2,3,4 AND 5 ON PL 12R25352 MUNICIPALITY OF LEAMINGTON				8	x	200	0.016		
	75094-0174		PT LT 5 CON 4 MERSEA PT 2 12R13655; S/T R1317594, R1391473; S/T RESERVATION IN R1318132; S/T R421091; S/T CE7075; LEAMINGTON				9	x	8	0.07		
	75094-0176		PT LT 5 CON 4 MERSEA PT 1 TO 8 12R19204; LEAMINGTON	5	x	1372.04	7.24 3	x x	1372.04 1372.04	0.99 0.41		
Essex Road 18												
	75096-0063		PT LT 5-6 CON 3 MERSEA AS IN R1404644; LEAMINGTON				10	x	80	0.08		
	75096-0084		PT LT 5 CON 3 MERSEA; PT LT 5 CON 3 MERSEA (LEAMINGTON) PT 9 TO 11 12R19204; LEAMINGTON				15.25	x	80	0.012		



APPENDIX "C"

PIPELINE EASEMENT

Between (the "Easement")

(hereinafter called the "Transferor")

and

UNION GAS LIMITED

(hereinafter called the "Transferee")

This easement is an Easement in Gross

WHEREAS the Transferor is the owner in fee simple of those lands and premises more particularly described as: **PIN:** [Click here to enter text.](#) **Legal Description:** [Click here to enter text.](#) (hereinafter called the "Transferor's Lands").

The Transferor does hereby GRANT, CONVEY, TRANSFER AND CONFIRM unto the Transferee, its successors and assigns, to be used and enjoyed as appurtenant to all or any part of the lands, the right, liberty, privilege and easement on, over, in, under and/or through a strip of the Transferor's Lands more particularly described as: **Being Part of the PIN:** [Click here to enter text.](#) **Legal Description:** [Click here to enter text.](#) (hereinafter called the "Lands") to survey, lay, construct, maintain, brush, clear trees and vegetation, inspect, patrol, alter, remove, replace, reconstruct, repair, move, keep, use and/or operate one Pipeline for the transmission of Pipeline quality natural gas as defined in The Ontario Energy Board Act S.O. 1998 (hereinafter referred to as the "Pipeline") including therewith all such buried attachments, equipment and appliances for cathodic protection which the Transferee may deem necessary or convenient thereto, together with the right of ingress and egress at any and all times over and upon the Lands for its servants, agents, employees, those engaged in its business, contractors and subcontractors on foot and/or with vehicles, supplies, machinery and equipment for all purposes necessary or incidental to the exercise and enjoyment of the rights, liberty, privileges and easement hereby granted. The Parties hereto mutually covenant and agree each with the other as follows:

1. In consideration of the sum of **Dollars (\$)** of lawful money of Canada (hereinafter called the "Consideration"), which sum is payment in full for the rights and interest hereby granted and for the rights and interest, if any, acquired by the Transferee by expropriation, including in either or both cases payment in full for all such matters as injurious affection to remaining lands and the effect, if any, of registration on title of this document and where applicable, of the expropriation documents, subject to Clause 12 hereof to be paid by the Transferee to the Transferor within 90 days from the date of these presents or prior to the exercise by the Transferee of any of its rights hereunder other than the right to survey (whichever may be the earlier date), the rights, privileges and easement hereby granted shall continue in perpetuity or until the Transferee, with the express written consent of the Transferor, shall execute and deliver a surrender thereof . Prior to such surrender, the Transferee shall remove all debris as may have resulted from the Transferee's use of the Lands from the Lands and in all respects restore the Lands to its previous productivity and fertility so far as is reasonably possible , save and except for items in respect of which compensation is due under Clause 2, hereof. Transferor and Transferee hereby agree that nothing herein shall oblige Transferee to remove the Pipeline from the Lands as part of Transferee's obligation to restore the Lands.
2. The Transferee shall make to the Transferor (or the person or persons entitled thereto) due compensation for any damages to the Lands resulting from the exercise of any of the rights herein granted, and if the compensation is not agreed upon by the Transferee and the Transferor, it shall be determined by arbitration in the manner prescribed by the Expropriations Act, R.S.O. 1990, Chapter E-26 or any Act passed in amendment thereof or substitution therefore. Any gates, fences and tile drains curbs, gutters, asphalt paving, lockstone, patio tiles interfered with by the Transferee shall be restored by the Transferee at its expense as closely as reasonably possible to the condition and function in which they existed immediately prior to such interference by the Transferee and in

the case of tile drains, such restoration shall be performed in accordance with good drainage practice and applicable government regulations.

3. The Pipeline (including attachments, equipment and appliances for cathodic protection but excluding valves, take-offs and fencing installed under Clause 9 hereof) shall be laid to such a depth that upon completion of installation it will not obstruct the natural surface run-off from the Lands nor ordinary cultivation of the Lands nor any tile drainage system existing in the Lands at the time of installation of the Pipeline nor any planned tile drainage system to be laid in the Lands in accordance with standard drainage practice, if the Transferee is given at least thirty (30) days notice of such planned system prior to the installation of the Pipeline; provided that the Transferee may leave the Pipeline exposed in crossing a ditch, stream, gorge or similar object where approval has been obtained from the Ontario Energy Board or other Provincial Board or authority having jurisdiction in the premises. The Transferee agrees to make reasonable efforts to accommodate the planning and installation of future tile drainage systems following installation of the Pipeline so as not to obstruct or interfere with such tile installation.
4. As soon as reasonably possible after the construction of the Pipeline, the Transferee shall level the Lands and unless otherwise agreed to by the Transferor, shall remove all debris as may have resulted from the Transferee's use of the Lands therefrom and in all respects restore the Lands to its previous productivity and fertility so far as is reasonably possible, save and except for items in respect of which compensation is due under Clause 2 hereof.
5. It is further agreed that the Transferee shall assume all liability and obligations for any and all loss, damage or injury, (including death) to persons or property that would not have happened but for this Easement or anything done or maintained by the Transferee hereunder or intended so to be and the Transferee shall at all times indemnify and save harmless the Transferor from and against all such loss, damage or injury and all actions, suits, proceedings, costs, charges, damages, expenses, claims or demands arising therefrom or connected therewith provided that the Transferee shall not be liable under the Clause to the extent to which such loss, damage or injury is caused or contributed to by the gross negligence or wilful misconduct of the Transferor.
6. In the event that the Transferee fails to comply with any of the requirements set out in Clause 2, 3, or 4 hereof within a reasonable time of the receipt of notice in writing from the Transferor setting forth the failure complained of, the Transferee shall compensate the Transferor (or the person or persons entitled thereto) for any damage, if any, necessarily resulting from such failure and the reasonable costs if any, incurred in the recovery of those damages.
7. Except in case of emergency, the Transferee shall not enter upon any of the Transferor's Lands, other than the Lands, without the consent of the Transferor. In case of emergency the right of entry upon the Transferor's Lands for ingress and egress to and from the Lands is hereby granted. The determination of what circumstances constitute an emergency, for purposes of this paragraph is within the absolute discretion of the Transferee, but is a situation in which the Transferee has a need to access the Pipeline in the public interest without notice to the Transferor, subject to the provisions of clause 2 herein. The Transferee will, within 72 hours of entry upon such lands, advise the Transferor of the said emergency circumstances and thereafter provide a written report to Transferor with respect to the resolution of the emergency situation. The Transferee shall restore the lands of the Transferor at its expense as closely as reasonably practicable to the condition in which they existed immediately prior to such interference by the Transferee and in the case of tile drains, such restoration shall be performed in accordance with good drainage practice.
8. The Transferor shall have the right to fully use and enjoy the Lands except for planting trees over the lesser of the Lands or a six (6) metre strip centered over the Pipeline, and except as may be necessary for any of the purposes hereby granted to the Transferee, provided that without the prior written consent of the Transferee, the Transferor shall not excavate, drill, install, erect or permit to be excavated, drilled, installed or erected in, on, over or through the Lands any pit, well, foundation, pavement, building, mobile homes or other structure or installation. Notwithstanding the foregoing the Transferee upon request shall consent to the Transferor erecting or repairing fences, hedges, pavement, lockstone constructing or repairing tile drains and domestic sewer pipes, water pipes, and utility pipes and constructing or repairing lanes, roads, driveways, pathways, and walks across, on and in the Lands or any portion or portions thereof, provided that before commencing any of the work referred to in this sentence the Transferor shall (a) give the Transferee at least (30) clear days notice in writing describing the work desired so as to enable the Transferee to evaluate and comment on the work proposed and to have a representative inspect the site and/or be present at any time or times during the performance of the work, (b) shall follow the instructions of such representative as to the performance of such work without damage to the Pipeline, (c) shall

exercise a high degree of care in carrying out any such work and, (d) shall perform any such work in such a manner as not to endanger or damage the Pipeline as may be required by the Transferee.

9. The rights, privileges and easement herein granted shall include the right to install, keep, use, operate, service, maintain, repair, remove and/or replace in, on and above the Lands any valves and/or take-offs subject to additional agreements and to fence in such valves and/or take-offs and to keep same fenced in, but for this right the Transferee shall pay to the Transferor (or the person or persons entitled thereto) such additional compensation as may be agreed upon and in default of agreement as may be settled by arbitration under the provisions of The Ontario Energy Board Act, S.O. 1998, or any Act passed in amendment thereof or substitution therefore. The Transferee shall keep down weeds on any lands removed from cultivation by reason of locating any valves and/or take-offs in the Lands.
10. Notwithstanding any rule of law or equity and even though the Pipeline and its appurtenances may become annexed or affixed to the realty, title thereto shall nevertheless remain in the Transferee.
11. Neither this Agreement nor anything herein contained nor anything done hereunder shall affect or prejudice the Transferee's rights to acquire the Lands or any other portion or portions of the Transferor's lands under the provisions of The Ontario Energy Board Act, S.O. 1998, or any other laws, which rights the Transferee may exercise at its discretion in the event of the Transferor being unable or unwilling for any reason to perform this Agreement or give to the Transferee a clear and unencumbered title to the easement herein granted.
12. The Transferor covenants that he has the right to convey this Easement notwithstanding any act on his part, that he will execute such further assurances of this Easement as may be requisite and which the Transferee may at its expense prepare and that the Transferee, performing and observing the covenants and conditions on its part to be performed, shall have quiet possession and enjoyment of the rights, privileges and easement hereby granted. If it shall appear that at the date hereof the Transferor is not the sole owner of the Lands, this Easement shall nevertheless bind the Transferor to the full extent of his interest therein and shall also extend to any after-acquired interest, but all moneys payable hereunder shall be paid to the Transferor only in the proportion that his interest in the Lands bears to the entire interest therein.
13. In the event that the Transferee fails to pay the consideration as hereinbefore provided, the Transferor shall have the right to declare this Easement cancelled after the expiration of 15 days from personal service upon the Manager, Land Services of the Transferee at its Executive Head Office in Chatham, Ontario, (or at such other point in Ontario as the Transferee may from time to time specify by notice in writing to the Transferor) of notice in writing of such default, unless during such 15 day period the Transferee shall pay the said consideration; upon failing to pay as aforesaid, the Transferee shall forthwith after the expiration of 15 days from the service of such notice execute and deliver to the Transferor at the expense of the Transferee, a valid and registrable release and discharge of this Easement.
14. All payments under these presents may be made either in cash or by cheque of the Transferee and may be made to the Transferor (or person or persons entitled thereto) either personally or by mail. All notices and mail sent pursuant to these presents shall be addressed to:

the Transferor at:

and to the Transferee at: Union Gas Limited
P.O. Box 2001
50 Keil Drive North
Chatham, Ontario N7M 5M1
Attention: Manager, Land Services

or to such other address in either case as the Transferor or the Transferee respectively may from time to time appoint in writing.

15. The rights, privileges and easement hereby granted are and shall be of the same force and effect as a covenant running with the Transferor's Land and this Easement, including all the covenants and conditions herein contained, shall extend to, be binding upon and inure to the benefit of the heirs, executors, administrators, successors and assigns of the Parties hereto respectively; and, wherever the singular or masculine is used it shall, where necessary, be construed as if the plural, or feminine or neuter had been used, as the case may be.

16. (a) The Transferee represents that it is registered for the purposes of the Harmonized Goods and Services Tax (hereinafter called “HST”) in accordance with the applicable provisions in that regard and pursuant to the Excise Tax Act, (R.S.C., 1985, c. E-15), (hereinafter called “Excise Tax Act”), as amended.
- (b) The Transferee covenants to deliver a Statutory Declaration, Undertaking and Indemnity confirming its HST registration number, which shall be conclusive evidence of such HST registration, and shall preclude the Transferor from collection of HST from the Transferee.
- (c) The Transferee shall undertake to self-assess the HST payable in respect of this transaction pursuant to subparagraphs 221(2) and 228(4) of the Excise Tax Act, and to remit and file a return in respect of HST owing as required under the said Act for the reporting period in which the HST in this transaction became payable.
- (d) The Transferee shall indemnify and save harmless the Transferor from and against any and all claims, liabilities, penalties, interest, costs and other legal expenses incurred, directly or indirectly, in connection with the assessment of HST payable in respect of the transaction contemplated by this Easement. The Transferee’s obligations under this Clause shall survive this Easement.
17. The Transferor hereby acknowledges that this Easement will be registered electronically.

DATED this day of Choose an item. 20

Signature (Transferor)
Insert name here
Print Name(s) (and position held if applicable)
Choose an item.
Enter Text here
Address (Transferor)

Signature (Transferor)
Insert name here
Print Name(s) (and position held if applicable)
Choose an item.
Enter Text here
Address (Transferor)

UNION GAS LIMITED

Signature (Transferee)
Insert name here, Choose an item.
Name & Title (Union Gas Limited)
I have authority to bind the Corporation.
Telephone Number (Union Gas Limited)

Municipality of Chatham-Kent

Province of Ontario

DECLARATION REQUIRED UNDER
SECTION [Choose an item.](#) OF THE PLANNING
ACT, R.S.O. 1990, as amended

I, [Click here to enter text.](#) , of the [Click here to enter text.](#), in the Province of Ontario.

DO SOLEMNLY DECLARE THAT

1. I am [Choose an item.](#) Lands Department of Union Gas Limited, the Transferee in the attached Grant of Easement and as such have knowledge of the matters herein deposed to.
2. The use of or right in the land described in the said Grant of Easement is being acquired by Union Gas Limited for the purpose of a [Choose an item.](#) line within the meaning of Part VI of the Ontario Energy Board Act, 1998.

AND I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath, and by virtue of The Canada Evidence Act.

DECLARED before me at the
[Click here to enter text.](#),
in the Province of Ontario

This day of [Choose an item.](#) 20

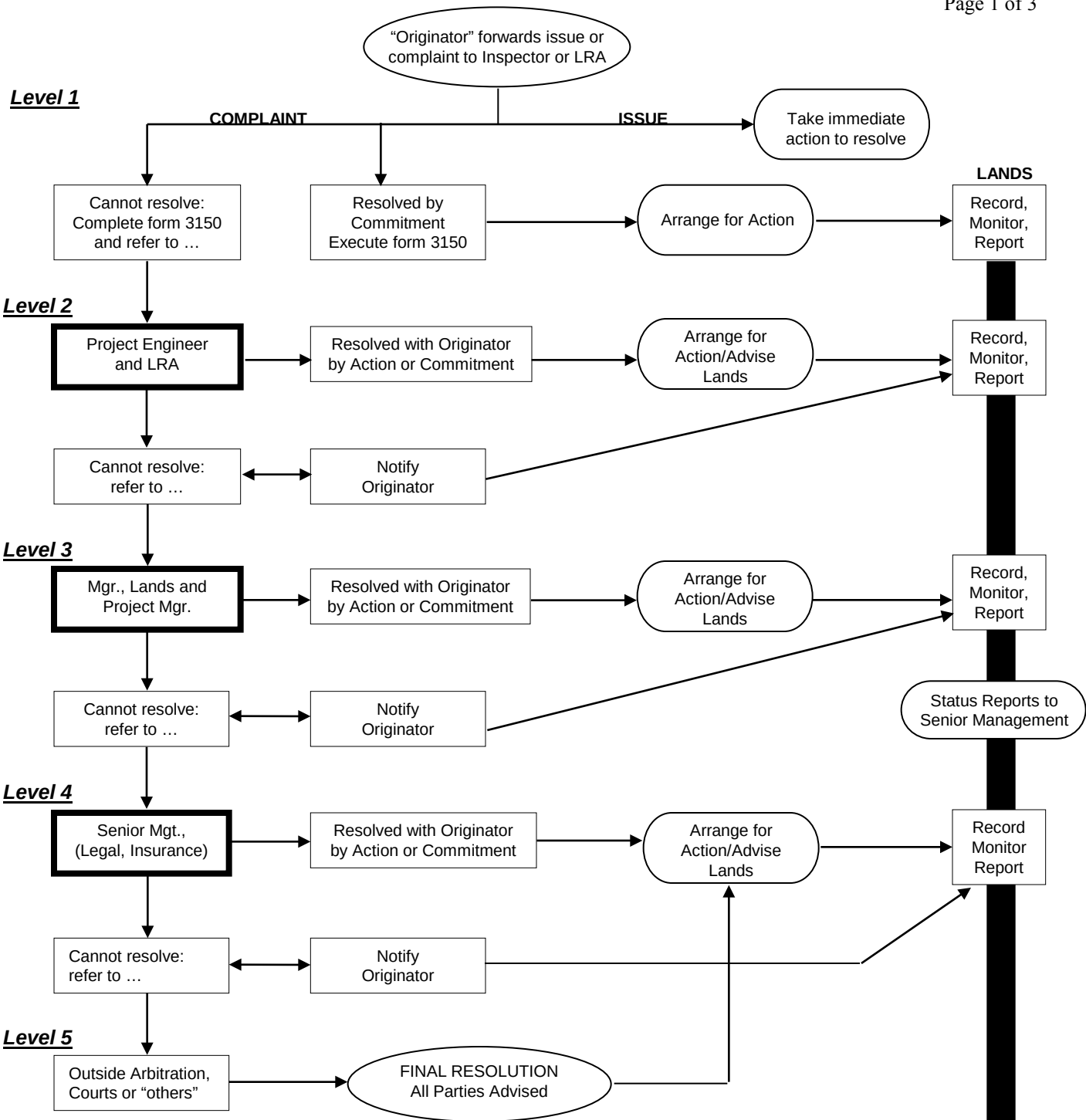
A Commissioner, etc.

Process Chart: Landowner Complaint Resolution System

EB-2016-0013

Schedule 18

Page 1 of 3



Notes:

1. "Originator" of complaint or issue may be landowner or company representative.
2. Parties indicated in heavy outlined boxes shall assume responsibility for actions subsequently required in the resolution process. Parties identified in brackets may only be required for resolution or specific technical concerns.
3. "L.R.A." refers to Landowner Relations Agent.
4. "Outside Arbitration" includes the Board of Negotiation, O.M.B. and O.E.B. "Others" refers to other regulatory bodies and tribunals.

LANDOWNER COMPLAINT RESOLUTION SYSTEM EXPLANATION OF PROCESS CHART

Key Definitions

Originator – The originator of a complaint or issue is the landowner or Union Gas personnel who initiates a complaint or issue by making it known to the Landowner Relations Agent or a company inspector.

Landowner Relations Agent (LRA) – A person assigned on a full time or part time basis to record, monitor, and ensure follow-up on any complaint or issue received by Union related to construction, to address questions and concerns of the landowners, and to act as a liaison between landowners and the contractor and engineering personnel.

Issue – A concern of a landowner which can be resolved within three (3) working days. Immediate action is taken to resolve such matters.

Complaint – A concern of a landowner which cannot be resolved within three (3) working days.

Commitment – If an issue or complaint is resolved at any level of the Complaint Resolution system through the efforts and liaison activities of the Landowner Relations Agent or other personnel, the resolution is recorded to ensure proper future follow-up.

Outside Arbitration – includes the Board of Negotiation, O.M.B., and O.E.B.

Others – refers to other regulatory bodies and tribunals

Levels of the Complaint Resolution System

Level 1: The LRA or company inspector receives issues or complaints, and the following can happen:

- a) Immediate action could be arranged by the LRA or inspector to resolve the issue or complaint; or
- b) A complaint can be resolved by a commitment in which case the LRA is responsible for arranging for the committed action and having the commitment recorded in the Complaint Resolution system; or
- c) If a complaint cannot be resolved through the efforts of the LRA or inspector, the applicable form (Form 3150) is completed and then recorded, and the complaint is referred to **Level 2**.

Level 2: The LRA and the Construction Supervisor work together to develop a resolution for the complaint, and the following can happen:

- a) the complaint may be resolved with the originator by action or commitment and the action or commitment is recorded in the Complaint Resolution System; or
- b) if the complaint cannot be resolved, the originator is notified, the non-resolution is recorded, and the complaint is referred to **Level 3**.

Level 3: The Manager, Lands and the Project Manager work together to develop a resolution for the complaint, and the following can happen:

- a) complaint may be resolved with the originator by action or commitment and the action or commitment is recorded in the Complaint Resolution System; or
- b) if the complaint cannot be resolved, the originator is notified, the non-resolution is recorded, and the complaint is referred to **Level 4**;

When complaints reach this level, status reports are generated through the Complaint Resolution System and are forwarded to Senior Management.

Level 4: Senior Management (with possible input from the Legal and Risk and Claims Departments) attempts to develop a resolution to the complaint, and the following can happen:

- a) the complaint may be resolved with the originator by action or commitment and the action or commitment is recorded in the Complaint Resolution System; or
- b) if the complaint cannot be resolved, the originator is notified, the non-resolution is recorded, and the complaint is referred to **Level 5**;

Level 5: Involves the resolution of a complaint by outside arbitration or others, and the following will happen:

A final resolution will occur, all parties will be advised, and any action required will be arranged by the LRA or other Lands Department personnel.

Note: the Complaint Resolution System is used to generate final reports to the Ontario Energy Board

August 26th, 2015

Attention: Métis Nation of Ontario
Aly Alibhai,
75 Sherbourne St Toronto Ontario, M5A 2P9

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Director Lands Resource and Consultation Aly Alibhai,

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to the existing 10-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

The study area is located in the County of Essex in the Municipality of Leamington. Please see attached map Figure 1.

To learn more a Public Information Centre regarding the proposed project is scheduled to be held at the **Leamington Kinsmen Recreation Complex**, 249 Sherk Street, Leamington, ON. on **September 16th 2015 between the hours of 5:00 - 8:00 pm**. The purpose of the Information Session is to present all aspects of the project and to provide you with an opportunity for comment on this proposal. Representatives from Union Gas and Azimuth will be present to answer questions.

We are requesting you provide any relevant environmental or socioeconomic information that in your opinion should be included in the assessment of the pipeline route. Information regarding other proposed developments in the study area for incorporation into the ER as a component of a cumulative effects assessment is also requested.

Your response would be appreciated by September 18, 2015. If you have no concerns regarding the proposed project and/or its construction and you do not require any further correspondence regarding the project please indicate that in writing to me.

If you have any questions, regarding the Project, please do not hesitate to contact me at JBonin@uniongas.com or 519-539-8509, extension 5021063.

Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Oneida First Nation
Sherri Doxtator,
2212 Elm St Southwold Ontario, N0L 2G0

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Chief Sherri Doxtator,

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to the existing 10-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Munsee-Delaware First Nation
Roger Thomas,
RR # 1, 289 Jubilee Road Muncey Ontario, N0L 1Y0

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Chief Roger Thomas,

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to the existing 10-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Chippewa of the Thames First Nation
Leslee Whiteye,
320 Chippewa Rd Muncey Ontario, N0L 1Y0

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Chief Leslee Whiteye,

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to the existing 10-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Chippewa of the Thames First Nation
Rolanda Elijah,
320 Chippewa Rd Muncey Ontario, N0L 1Y0

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Consultation Manager Rolanda Elijah,

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Kettle and Stony Point First Nations
Thomas Bressette,
6247 Indian Lane RR # 2 Forest Ontario, N0N 1J0

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Chief Thomas Bressette,

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to the existing 10-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Kettle and Stony Point First Nations
Lorraine George,
6247 Indian Lane RR # 2 Forest Ontario, N0N 1J0

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Consultation Manager Lorraine George,

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to the existing 10-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Aamjiwnaang First Nation
Chris Plain,
978 Tashmoo Ave. Sarnia Ontario, N7T 7H5

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Chief Chris Plain,

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to the existing 10-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Aamjiwnaang First Nation
Sharilyn Johnston,
979 Tashmoo Ave. Sarnia Ontario, N7T 7H6

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Environmental Coordinator Sharilyn Johnston,

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to the existing 10-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

The study area is located in the County of Essex in the Municipality of Leamington. Please see attached map Figure 1.

To learn more a Public Information Centre regarding the proposed project is scheduled to be held at the **Leamington Kinsmen Recreation Complex**, 249 Sherk Street, Leamington, ON. on **September 16th 2015 between the hours of 5:00 - 8:00 pm**. The purpose of the Information Session is to present all aspects of the project and to provide you with an opportunity for comment on this proposal. Representatives from Union Gas and Azimuth will be present to answer questions.

We are requesting you provide any relevant environmental or socioeconomic information that in your opinion should be included in the assessment of the pipeline route. Information regarding other proposed developments in the study area for incorporation into the ER as a component of a cumulative effects assessment is also requested.

Your response would be appreciated by September 18, 2015. If you have no concerns regarding the proposed project and/or its construction and you do not require any further correspondence regarding the project please indicate that in writing to me.

If you have any questions, regarding the Project, please do not hesitate to contact me at JBonin@uniongas.com or 519-539-8509, extension 5021063.

Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Walpole Island First Nation
Dan Miskokomon,
RR # 3 Stn Main Wallaceburg Ontario, N8A 4K9

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Chief Dan Miskokomon,

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Walpole Island First Nation
Dean Jacobs,
RR # 3 Stn Main Wallaceburg Ontario, N8A 4K10

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Consultation Manager Dean Jacobs,

Azimuth Environmental Consulting, Inc. (Azimuth) has been retained by Union Gas Limited (Union) to prepare an Environmental Report (ER) for the proposed Leamington Line Phase II Pipeline Project. The project will include the construction of a 12-inch diameter natural gas pipeline from the existing Union Gas County Road 14 Station west of Highway 77 south along the abandoned railway/recreational trail to a new station to be constructed north of County Road 18. From the new station approximately 250 metres of 16-inch diameter natural gas pipeline will be built to connect to the existing 10-inch diameter pipeline on County Road 18. The proposed project is needed to help Union Gas meet the increasing demand for natural gas in both the Leamington and Kingsville areas.

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Caldwell First Nation
Louise Hillier,
Box 388 14 Orange St Leamington Ontario, N8H1P5

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Chief Louise Hillier,

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Delaware Nation
Greg Peters,
14760 School House Line, RR # 3 Thamesville Ontario, N0P 2K0

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Chief Greg Peters,

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

August 26th, 2015

Attention: Delaware Nation
Robin King,
14760 School House Line, RR # 3 Thamesville Ontario, N0P 2K0

**RE: Environmental Report Commencement - Union Gas Limited
Leamington Line Phase II Pipeline Project**

Dear Robin King,

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Yours truly,

John Bonin
Manager Economic Development
First Nation & Métis
Union Gas Limited

Bechard, Shelley

From: Bonin, John
Sent: July-21-15 7:28 AM
To: Chief Roger Thomas
Subject: Leamington Expansion Pipeline Project Phase 2

Significant growth in greenhouse agribusiness has made it necessary to provide additional natural gas service to the Leamington, Kingsville, Mersea Township and Gosfield South areas.

As part of this process, Union Gas is seeking expressions of interest in gas distribution service from new and existing commercial and industrial customers in the area to support construction of a proposed 12-inch natural gas pipeline to be built in the Leamington area.

Union Gas last expanded its pipeline capacity in the Leamington area in 2013, which provided incremental natural gas capacity to serve an equivalent of 509 acres of greenhouses.

The proposed pipeline, which will provide additional capacity of 51,800 m³ / h or the equivalent of or 576 acres of greenhouses, would run parallel to Highway 77, between County Road 18, and County Road 14 on the existing abandoned railway line.

An integral part of this project is an Environmental Assessment that will be conducted by an independent third party - Azimuth Environmental Consulting, and consultation with affected landowners, First Nations, the Métis Nation of Ontario, government agencies and others. A project information communication meeting will be held the week of August 24th. More details will be sent to you on the location and time.

The final Environmental Report will be included in an application to the Ontario Energy Board (OEB) whose approval is required before this project can proceed. If approved, construction could take place in the spring and summer of 2016 and is expected to take 3-4 months to complete.

This project is contingent on Union Gas receiving a sufficient level of market interest in gas distribution service and approval of the project by the OEB.

If you have any questions regarding this project, feel free to call or email me.

John Bonin

Manager Economic Development
First Nations and Metis Affairs
Union Gas
519-539-8509 ext 5020163

Bechard, Shelley

From: Bonin, John
Sent: July-21-15 7:26 AM
To: Chief Gregory Peters ; Robin King
Subject: Leamington Expansion Pipeline Project Phase 2

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John Bonin

Manager Economic Development
First Nations and Metis Affairs
Union Gas
519-539-8509 ext 5020163

Bechard, Shelley

From: Bonin, John
Sent: July-21-15 7:27 AM
To: Chief Chris Plain; Sharilyn Johnston
Subject: Leamington Expansion Pipeline Project Phase 2

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Manager Economic Development
First Nations and Metis Affairs
Union Gas
519-539-8509 ext 5020163

Bechard, Shelley

From: Bonin, John
Sent: July-21-15 7:25 AM
To: Joe Miskokomon; Rolanda Elijah
Subject: Leamington Expansion Pipeline Project Phase 2

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John Bonin

Manager Economic Development
First Nations and Metis Affairs
Union Gas
519-539-8509 ext 5020163

Bechard, Shelley

From: Bonin, John
Sent: July-21-15 7:26 AM
To: Chief Dan Miskokomon; Dean Jacobs; Jared Macbeth
Subject: Leamington Expansion Pipeline Project Phase 2

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John Bonin

Manager Economic Development
First Nations and Metis Affairs
Union Gas
519-539-8509 ext 5020163

Bechard, Shelley

From: Bonin, John
Sent: July-21-15 7:24 AM
To: Chief Louise Hillier
Subject: Leamington Expansion Pipeline Project Phase 2

Chief Hillier, significant growth in greenhouse agribusiness has made it necessary to provide additional natural gas service to the Leamington, Kingsville, Mersea Township and Gosfield South areas.

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John Bonin

Manager Economic Development
First Nations and Metis Affairs
Union Gas
519-539-8509 ext 5020163

Bechard, Shelley

From: Bonin, John
Sent: July-21-15 7:29 AM
To: Aly Alibhai; Joanne Meyer
Subject: Leamington Expansion Pipeline Project Phase 2

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John Bonin

Manager Economic Development
First Nations and Metis Affairs
Union Gas
519-539-8509 ext 5020163

Bechard, Shelley

From: Bonin, John
Sent: July-21-15 7:27 AM
To: Chief Tom Bressette; Lorraine George
Subject: Leamington Expansion Pipeline Project Phase 2

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First Nations and Metis Affairs
Union Gas
519-539-8509 ext 5020163

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From: Bonin, John
Sent: July-21-15 7:27 AM
To: Chief Sheri Doxtator
Subject: Leamington Expansion Pipeline Project Phase 2

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