

September 5, 2012

BY RESS & Courier

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

Dear Ms. Walli:

**Re: Union Gas Limited (“Union”)  
Thunder Bay Pipeline Project  
Board File # EB-2012-0226\EB-2012-0227**

Further to the Thunder Bay Terminals Limited’s interrogatories, please find attached two copies of Union’s responses.

Sincerely,

[original signed by]

Mary Jane Patrick  
Administrative Analyst, Regulatory Projects  
:mjp  
Encl.

cc: Neil McKay, Manager Facilities Applications  
Zora Crnojacki, Project Advisor  
All Intervenors

UNION GAS LIMITED  
Response to Interrogatory from  
Thunder Bay Terminals Limited

1. [Reference: Schedule 3] The referenced evidence is a map illustrating the proposed OPG Thunder Bay Pipeline. The proposed NPS 12 portion of the pipeline is shown crossing an island before arriving at a 2<sup>nd</sup> island on which the OPG site is diagramed.
  - (a) Please confirm that the proposed NPS 12 portion of the pipeline is intended to cross McKellar Island. Please explain why a route crossing McKellar Island was chosen, and what alternatives to this route were considered and rejected.
  - (b) Please confirm that the proposed NPS 12 portion of the pipeline is intended to cross the premises on which TBTL operates. Please explain why a route crossing the subject premises was chosen, and what alternatives to this route and running across McKellar Island were considered and rejected.
  - (c) Please describe the operations of the TBTL terminal as Union understands them, including description of the nature and frequency of rail traffic and other activity that will be impacted by construction of the proposed pipeline.

**Response:**

- (a) Yes, the Preferred Route for the pipeline crosses McKellar Island.

The details for selection of the Preferred Route between Union's Belrose Station and the OPG Thunder Bay Generating Station are outlined in Section 4.0, Route Evaluation, of the Environmental Report. As outlined in Section 4.3.1 of the Environmental Report, a southern alignment for the NPS 12 pipeline was considered which would have avoided McKellar Island. As noted on Pages 4.3 and 4.4 of the Environmental Report, a southern alignment would have encountered engineering difficulties in crossing the William's Bog Provincially Significant Wetland and the Kaministiquia River delta, and would have created socio-economic impacts by traversing a densely populated residential area. It was determined that utilization of the Harbour Expressway alignment would be carried forward for further review.

- (b) Yes, the Preferred Route for the pipeline crosses the premises on which TBTL operates.

Stantec Consulting Ltd. did not take into consideration property ownership when generating and evaluating alternative routes. As outlined in Section 4.2 of the

Environmental Report, alternative routes were generated by establishing routing objectives and compiling an environmental inventory of environmental and socio-economic constraints and opportunities.

Environmental and socio-economic constraints included such features as designated natural areas and land use. Environmental and socio-economic opportunities included existing road allowances, pipeline easements and electrical transmission corridors.

As outlined in Section 4.3.2 of the Environmental Report, no alternative routes were considered south of the Neebing-McIntyre Floodway. The Preferred Route in this location parallels an existing electrical transmission corridor. As noted in Section 4.2.1 of the Environmental Report, one of the routing objectives was to utilize existing linear infrastructure to the greatest extent possible. The Preferred Route in this location is also consistent with Section 4.3.3 of the Ontario Energy Board's Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (6th Ed.), which states that 'All reasonable efforts should be made to locate proposed pipeline facilities adjacent to or on existing utility or transportation corridors'.

- (c) Union understands the operations of Thunder Bay Terminals Limited (TBTL) to be that of a link between vessel and rail for the movement of various bulk commodities throughout Ontario, Canada and international markets. The site is serviced by various roads and rail networks that Union would assume are critical to operations.

Union understands the importance of maintaining vehicle access and rail traffic in order for TBTL to carry out daily operations. As a result, Union proposes to directional drill/bore all rail lines and paved roads in order not to disrupt operations. Working with TBTL, Union would propose to open cut any gravel surfaced roads and restore the road back to preconstruction conditions, while maintaining access.

Union is committed to maintaining vehicle and rail traffic throughout all stages of construction and at this time does not anticipate any other construction related impacts to TBTL terminal.

UNION GAS LIMITED  
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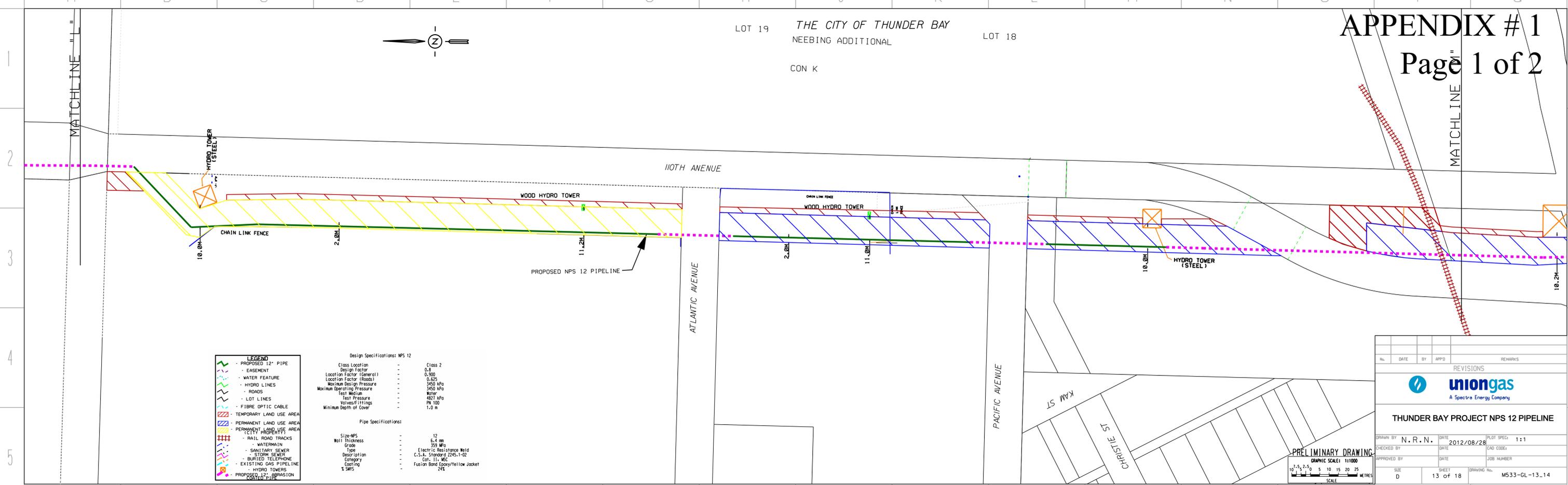
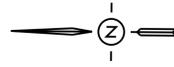
2. [Reference: Schedule 3] Attachment 1 is an aerial map provided by Union Gas to TBTL.
- (a) Please confirm that this map was provided to TBTL by Union Gas, and that the map illustrates the location on McKellar Island of the TBTL terminal.
  - (b) Please provide a copy of this map illustrating precisely where the proposed NPS 12 pipeline is intended to cross the TBTL premises. On this revised map please highlight where the proposed pipeline crosses train rails.
  - (c) Please describe the proposed construction process for the crossing of the train rails, including:
    - (i) What time of year is the crossing of the rail lines expected?
    - (ii) How long will the process of crossing the rail lines take?
    - (iii) Will the rail lines be crossed by trenching or horizontal boring? Will blasting or ramming be required?
    - (iv) Will there be interruption to traffic on either or both of the rail lines? If so, please describe the anticipated length and nature of the disruption.
    - (v) If interruption of TBTL's operations is anticipated, please describe the means proposed to minimize such disruption.
  - (d) Please describe the remediation process proposed to ensure that following construction the rail lines are returned to, and capable of uninterrupted continuation of, operation.
  - (e) Please describe in detail the residual responsibilities that Union will assume following completion of construction of the pipeline and remediation of the site, in the event that there is future disruption to the rail lines and/or other TBTL terminal operations as a direct result of the pipeline crossing.
  - (f) Please detail discussions had with TBTL, and provide copies of all correspondence related to such discussions.

**Response:**

- (a) Confirmed. This map was provided to John Kepes of TBTL in the spring of 2012 to show the general route of the proposed pipeline across McKellar Island.

- (b) Attached as Appendix 1 are maps showing the detailed location of the proposed pipeline on McKellar Island.
- (c)
- (i) The rail crossings will be constructed along with the rest of the 12 inch diameter pipeline, in the summer of 2013.
  - (ii) Each crossing will take 4 to 6 days to construct.
  - (iii) The proposed method of pipe installation is by horizontal directional drill (HDD). Although CPR has not yet granted approval to perform geotechnical investigations adjacent to the two rail lines, the general geological subsurface conditions in the area indicate that blasting or ramming will not be required.
  - (iv) If installed by HDD, there will be no interruption to traffic on either of the rail lines.
  - (v) No interruption of TBTL's operations is anticipated.
- (d) As stated in response (c) above, Union is proposing to horizontal directional drill all of the rail crossing on McKellar Island to minimize impacts to the rail crossing and adjacent areas. These crossings will be completed following the Master Agreement Union has with the Canadian Pacific Railway (CPR) for all railway crossings and the site specific conditions which are attached to individual crossings. The design of the crossing will ensure that the depth of the crossing will not interfere with the integrity of the track bed or any adjacent foundations. Union's agreements with CPR also address the potential for ongoing issues related to pipeline construction, and how they are to be resolved.
- (e) Please see response to (d) above.
- (f) It is Union's understanding that TBTL are lease holders, and not the owners of the property on McKellar Island. As such Union has initiated negotiations with Canadian Pacific Railway for the necessary rights to construct the pipeline across McKellar Island. Union has provided TBTL with information about the project on three occasions. This information was general information regarding the project, including the aerial photo which TBTL attached to it interrogatories to Union.

LOT 19 THE CITY OF THUNDER BAY  
NEEBING ADDITIONAL LOT 18  
CON K



**LEGEND**

- PROPOSED 12" PIPE
- EASEMENT
- WATER FEATURE
- HYDRO LINES
- ROADS
- LOT LINES
- FIBRE OPTIC CABLE
- TEMPORARY LAND USE AREA
- PERMANENT LAND USE AREA
- CITY PROPERTY
- RAIL ROAD TRACKS
- WATERMAIN
- SANITARY SEWER
- BURIED TELEPHONE
- EXISTING GAS PIPELINE
- HYDRO TOWERS
- PROPOSED 12" ABRASION

Design Specifications: NPS 12

Class Location	-	Class 2
Design Factor	-	0.8
Location Factor (General)	-	0.90
Location Factor (Roads)	-	0.625
Maximum Design Pressure	-	3450 kPa
Maximum Operating Pressure	-	3450 kPa
Test Medium	-	Water
Test Pressure	-	4821 kPa
Valves/Fittings	-	PN 100
Minimum Depth of Cover	-	1.0 m

Pipe Specifications:

Size-NPS	-	12
Wall Thickness	-	6.4 mm
Grade	-	358 MPa
Type	-	Electric Resistance Weld
Description	-	C.S.A. Standard Z245.1-02
Category	-	Cat. II, M6C
Coating	-	Fusion Bond Epoxy/Yellow Jacket
% SWS	-	24%

REVISIONS

No.	DATE	BY	APPD	REMARKS

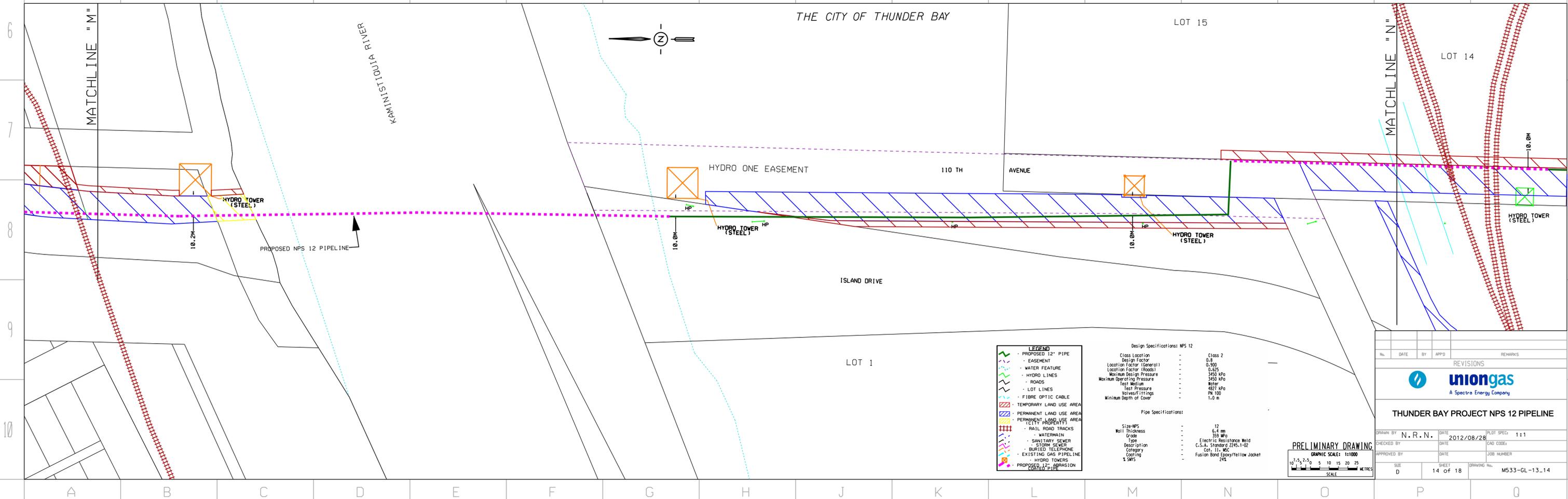
**uniongas**  
A Spectra Energy Company

**THUNDER BAY PROJECT NPS 12 PIPELINE**

DRAWN BY: N. R. N.    DATE: 2012/08/28    PLOT SPEC: 1:1  
 CHECKED BY:    DATE:    CAD CODE:     
 APPROVED BY:    DATE:    JOB NUMBER:   

SIZE: D    SHEET: 13 of 18    DRAWING No.: MS33-GL-13\_14

PRELIMINARY DRAWING  
GRAPHIC SCALE: 1:1000  
SCALE: 10 7.5 5 2.5 0 5 10 15 20 25 METRES



**LEGEND**

- PROPOSED 12" PIPE
- EASEMENT
- WATER FEATURE
- HYDRO LINES
- ROADS
- LOT LINES
- FIBRE OPTIC CABLE
- TEMPORARY LAND USE AREA
- PERMANENT LAND USE AREA
- CITY PROPERTY
- RAIL ROAD TRACKS
- WATERMAIN
- SANITARY SEWER
- BURIED TELEPHONE
- EXISTING GAS PIPELINE
- HYDRO TOWERS
- PROPOSED 12" ABRASION

Design Specifications: NPS 12

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Test Medium	-	Water
Test Pressure	-	4821 kPa
Valves/Fittings	-	PN 100
Minimum Depth of Cover	-	1.0 m

Pipe Specifications:

Size-NPS	-	12
Wall Thickness	-	6.4 mm
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Type	-	Electric Resistance Weld
Description	-	C.S.A. Standard Z245.1-02
Category	-	Cat. II, M6C
Coating	-	Fusion Bond Epoxy/Yellow Jacket
% SWS	-	24%

REVISIONS

No.	DATE	BY	APPD	REMARKS

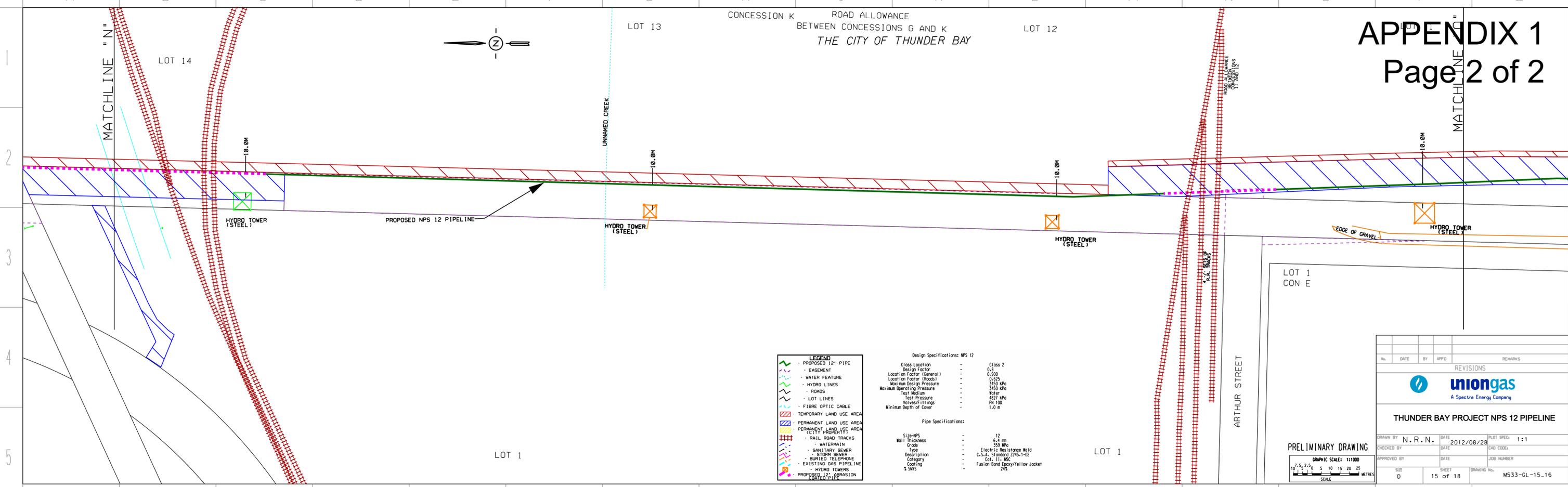
**uniongas**  
A Spectra Energy Company

**THUNDER BAY PROJECT NPS 12 PIPELINE**

DRAWN BY: N. R. N.    DATE: 2012/08/28    PLOT SPEC: 1:1  
 CHECKED BY:    DATE:    CAD CODE:     
 APPROVED BY:    DATE:    JOB NUMBER:   

SIZE: D    SHEET: 14 of 18    DRAWING No.: MS33-GL-13\_14

PRELIMINARY DRAWING  
GRAPHIC SCALE: 1:1000  
SCALE: 10 7.5 5 2.5 0 5 10 15 20 25 METRES



**LEGEND**

- PROPOSED 12" PIPE
- EASEMENT
- WATER FEATURE
- HYDRO LINES
- ROADS
- LOT LINES
- FIBRE OPTIC CABLE
- TEMPORARY LAND USE AREA
- PERMANENT LAND USE AREA
- PERMANENT LAND USE AREA (CITY PROPERTY)
- RAIL ROAD TRACKS
- WATERMAIN
- SANITARY SEWER
- STORM SEWER
- BURIED TELEPHONE
- EXISTING GAS PIPELINE
- HYDRO TOWERS
- PROPOSED 12" ABRASION RESISTANT PIPE

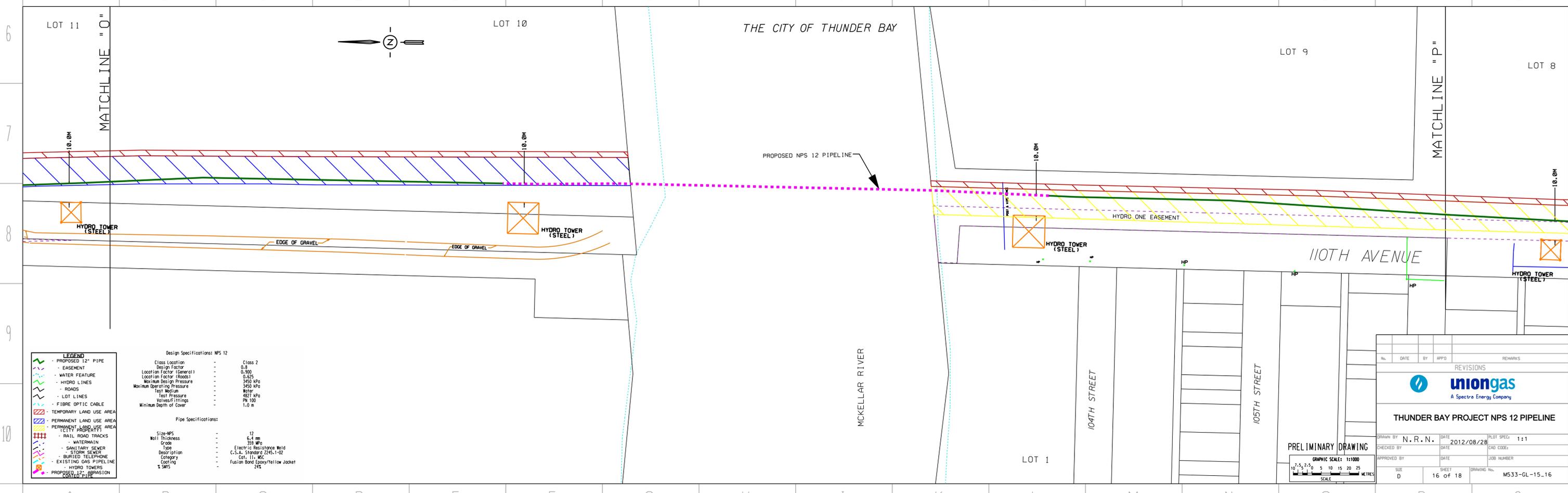
**Design Specifications: NPS 12**

Class Location	Class 2
Design Factor	0.8
Location Factor (General)	0.900
Location Factor (Roads)	0.625
Maximum Design Pressure	3450 kPa
Maximum Operating Pressure	3450 kPa
Test Medium	Water
Test Pressure	4827 kPa
Valves/Fittings	PN 100
Minimum Depth of Cover	1.0 m

**Pipe Specifications:**

Size-NPS	12
Wall Thickness	6.4 mm
Grade	358 MPa
Type	Electric Resistance Weld
Description	C.S.A. Standard Z245.1-02
Category	Cat. 11 - MOC
Coating	Fusion Bond Epoxy/Yellow Jacket
% SMS	2%

No.	DATE	BY	APPD	REVISIONS	REMARKS
 <b>THUNDER BAY PROJECT NPS 12 PIPELINE</b>					
DRAWN BY: N. R. N.		DATE: 2012/08/28		PLOT SPEC: 1:1	
CHECKED BY:		DATE:		JOB CODE:	
APPROVED BY:		DATE:		JOB NUMBER:	
SIZE: D	SHEET: 15 of 18	DRAWING No.:		MS33-GL-15-16	



**LEGEND**

- PROPOSED 12" PIPE
- EASEMENT
- WATER FEATURE
- HYDRO LINES
- ROADS
- LOT LINES
- FIBRE OPTIC CABLE
- TEMPORARY LAND USE AREA
- PERMANENT LAND USE AREA
- PERMANENT LAND USE AREA (CITY PROPERTY)
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Test Medium	Water
Test Pressure	4827 kPa
Valves/Fittings	PN 100
Minimum Depth of Cover	1.0 m

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No.	DATE	BY	APPD	REVISIONS	REMARKS
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DRAWN BY: N. R. N.		DATE: 2012/08/28		PLOT SPEC: 1:1	
CHECKED BY:		DATE:		JOB CODE:	
APPROVED BY:		DATE:		JOB NUMBER:	
SIZE: D	SHEET: 16 of 18	DRAWING No.:		MS33-GL-15-16	

UNION GAS LIMITED  
Response to Interrogatory from  
Thunder Bay Terminals Limited

3. [Reference: Page 13, paragraph 68] The evidence states that construction of the proposed facilities is expected to begin in May 2013 in order to meet the requested in-service date for commissioning of the OPG power plant in November 2013.

Attachment 2 is a copy of an e-mail from Chris Fralick of OPG to certain parties indicating that project activities on the Thunder Bay GS conversion project have recently (on or prior to August 3rd) been suspended, pending progress of negotiations between OPG and the OPA towards a power purchase agreement for the converted facility.

- (a) Please advise whether this recent development affects the assumed in-service date for the facility.
- (b) If not, please indicate the basis upon which Union has concluded that the schedule remains unchanged.
- (c) If the in-service date assumption has changed, please:
  - (i) Describe what impact such change has had on the proposed pipeline construction schedule.
  - (ii) Explain why Union is nonetheless proceeding with this application at this time.

**Response:**

- (a) No.
- (b) Union has executed a Rate 20 distribution contract with OPG for the Thunder Bay coal conversion project. OPG has stated that they are committed to a 2013 in-service and have not exercised its contractual right to terminate the contract. Consequently, Union is proceeding to meet its contractual obligations, including meeting the scheduled in-service date.
- (c) Please refer to response in (b) above.