



**TUNDRA  
ENERGY MARKETING LIMITED**

**3100 – 715 5<sup>th</sup> Ave SW, Calgary, AB T2P 2X6 TEL: 403-536-0800**

Ms. Stacy McBride

Petroleum Branch  
Ministry of Innovation, Energy and Mines  
Box 1359, 227 King Street West  
Virden, Manitoba  
ROM 2C0

February 5, 2016

RE: Pipestone 15-25 Pipeline

Dear Ms. McBride,

Tundra Energy Marketing Limited hereby makes application under section 149 (2) of the Oil and Gas Act for a Pipeline Construction Permit for one pipeline from 15-25-09-29 WPM to 10-25-09-29 WPM.

Documentation requested by Manitoba Innovation, Energy and Mines department for such Pipeline Construction Permit Application is included in the enclosed package.

Sincerely,

Sam Stephenson  
VP, Engineering & Construction  
Tundra Energy Marketing Limited

cc. Petroleum Branch, Winnipeg, MB



**An Application to  
Manitoba Innovation, Energy and Mines  
Petroleum Branch**

**to  
Construct a New Crude Oil Pipeline**

**From  
new TEML LACT Facility at 15-25-09-29 WPM  
To  
a New Pipeline Riser at 10-25-09-29 WPM**

**Prepared by Tundra Energy Marketing Ltd.  
February 5, 2016**

## **Table of Contents**

<b>1. Introduction .....</b>	<b>1</b>
<b>2. Applicant Information .....</b>	<b>1</b>
<b>3. Overview of the Application.....</b>	<b>1</b>
<b>4. Intended Use and Need .....</b>	<b>2</b>
<b>5. Pipeline Description .....</b>	<b>2</b>
<b>6. Proof of Consultation and Access .....</b>	<b>3</b>
<b>7. Environmental Protection Plan.....</b>	<b>4</b>
<b>8. Other Approvals .....</b>	<b>4</b>
<b>9. Environmental Licence .....</b>	<b>5</b>
<b>10. Initial Aboriginal Consultation Assessment.....</b>	<b>5</b>

## **List of Appendices**

<b>Appendix A</b>	<b>System Map</b>
<b>Appendix B</b>	<b>Survey Plan</b>
<b>Appendix C</b>	<b>Plot Plan</b>
<b>Appendix D</b>	<b>Crossing Typical</b>
<b>Appendix E</b>	<b>Process Flow Diagram</b>
<b>Appendix F</b>	<b>Line List</b>

## **1. Introduction**

Tundra Energy Marketing Limited (hereafter referred to as “TEML”) proposes to build, own, and operate one new pipeline between new Lease Automatic Custody Transfer (LACT) unit at 15-25-09-29 WPM and above grade riser site at 10-25-09-29 WPM.

The installation of the pipeline will bring benefit to both the direct users of the pipeline system and to those indirectly affected by system operations. Establishing a pipeline interconnection between TEML’s new LACT at 15-25-09-29 WPM and the existing Cromer Tank Terminal (CTT) facility will enhance safety through the elimination of product trucking.

In accordance with Section 149 (2) of the Oil and Gas Act, TEML hereby makes application to Manitoba Innovation, Energy and Mines - Petroleum Branch, for approval of a pipeline construction permit.

## **2. Applicant Information**

The proposed pipeline will be owned and operated by TEML which is a wholly-owned subsidiary of Winnipeg-based James Richardson & Sons, Limited ("JRSL"). JRSL is a multi-disciplined enterprise with operations in agriculture, food processing, financial services, property management and energy exploration in Manitoba and the prairies.

TEML is experienced in the operation of similar oil pipelines. The proposed pipeline will be operated out of TEML’s Cromer field office.

The pipeline and LACT will be designed by Asher Engineering Ltd. Asher has been in the consulting engineering business since 1993, is licenced to practice engineering in Manitoba, and has specific experience with the design of these types of pipelines.

## **3. Overview of the Application**

This application is for one new pipeline, 97 mm OD section of Flexpipe, from a new TEML LACT facility at 15-25-09-29 WPM (Corex Battery) to a tie in to the TEML Daly pipeline at 10-25-09-29 WPM (Operating Licence 2012–09). Approximate length of the pipeline is 400 meters. The new pipeline will be constructed in a single 25-meter RoW, with environmental disturbance minimized wherever practical.

The items below have been included with this application in accordance with the requirements of Manitoba Petroleum Guideline 1:

- a) A System Map (provided in Appendix A) indicating the entire pipeline route.
- b) A general survey of the pipeline RoW (Appendix B).
- c) Plot Plan for the LACT tie-in location (Appendix C).
- d) Project typical drawing for pipeline/utility crossings (Appendix D).
- e) A Process Flow Diagram (PFD) for the proposed pipeline, showing direction of flow and tie-in points (Appendix E).
- f) A line list of identified landowners along the pipeline route (Appendix F).

#### **4. Intended Use and Need**

The intent of the installation of the pipeline is to connect TEML's concurrently constructed LACT unit at 15-25-09-29 WPM to a new above grade riser site at 10-25-09-29 WPM, thus enabling transportation of crude oil volumes via pipeline to the TEML Cromer Tank Terminal via existing Daly Pipeline (Licence 2012-09)

The installation of the pipeline will reduce future truck traffic in the area that would be associated with fluid transportation from the Producer Battery at 15-25-09-29 WPM.

#### **5. Pipeline Description**

- a) The pipeline will run between:
  - 15-25-09-29 WPM LACT and 10-25-09-29 Riser site,
- b) The pipeline will transport LVP crude oil.
- c) The pipeline will be approximately 400 meters in total length.
- d) The new pipeline will be Flexpipe, a three-layer thermoplastic/fiber material with the following parameters:
  - Outside Diameter: 97 mm
  - Inside Diameter: 77 mm
  - Material: Flexpipe FP301
  - External Coating: Thermoplastic jacket
  - Design Pressure: 5,171 kPag
  - Maximum Operating Pressure: 4,960 kPag
  - Valve Standard: CSA Z245.15-13
  - Flange Standard: CSA Z245.12-13
  - Fitting Standard: CSA Z245.11-13

- e) Corrosion Control: The pipeline will be fabricated with a corrosion-resistant, coiled, continuous three-layer thermoplastic/fiber piping system.

The design will include facilities for routine pigging to remove water and/or sediment that may collect in the pipeline.

Spill Risk Mitigation: The pipeline final destination point, CTT, is designed and equipped with shutdown systems including automated valves and pressure monitoring, metering systems, samplers, pumps, and a SCADA system.

Leak detection will be managed by integrating the new LACT connection into the existing computational leak detection system. Alarms will be triggered in the event of a leak, and TEML operators will be responsible for managing the response.

Operators will receive alarms to issue a shutdown should the pipeline deviate above or below the set points.

Expected Hourly Flow: The peak flow rate is anticipated to be approximately 4 m<sup>3</sup>/hr.

Terminal Storage Capacity: No additional crude oil storage is proposed in association with this application.

- f) No process vessels are a part of this application.
- g) The proposed pipeline will carry LVP liquid product and as such, in the unlikely event of a pipeline rupture, spills would not result in significant vapor dispersion.

## 6. Proof of Consultation and Access

The following confidential information is contained in the Line List, included in this document as Appendix F:

- a) The names and addresses of all landowners, occupants and residents, complete with land location, within the following areas:
- i) 1.5 km radius of each endpoint of the pipeline and
  - ii) a radius of 0.5 km along the length of the proposed line.
- b) A copy of the notice and proof of consultation with all parties listed in 6.a above.
- c) A description of TEML's consultations with all parties listed in 6.a above including a summary of any concerns raised during the consultation process and all actions taken or proposed to be taken by TEML to address concerns, and

- d) Proof of the right to access the proposed surface RoW.

## **7. Environmental Protection Plan**

TEML has developed a general EPP to be used to govern all construction. The TEML EPP can be provided upon request. Matrix Solutions will conduct a pre-development assessment of the RoW and will be monitoring construction to ensure environmentally responsible construction.

TEML will use a corporate level Emergency Response Plan (ERP) which is intended to handle any emergency situations that may arise. TEML's emergency telephone number is 1-844-333-6789. This number is attended 24 hours a day, 7 days a week. The ERP will be amended to include the new pipeline.

## **8. Other Approvals**

- a) **Municipalities**  
The R.M. of Pipestone will be notified of the proposed project. Crossing agreements associated with this project will be obtained as required from the R.M.
- b) **Urban Municipality**  
The pipelines are not located within 1.5 km of an urban municipality.
- c) **Historic Resources Branch**  
Matrix Solutions will complete an environmental pre-development assessment of the proposed RoW. The potential of the pipeline to impact significant heritage resources is considered low.
- d) **Manitoba Infrastructure and Transportation**  
Manitoba Infrastructure and Transportation will be notified of the proposed project. Road crossing agreements associated with this project will be obtained as required from Manitoba Infrastructure and Transportation.
- e) **Railway Crossings**  
There are no railway crossings associated with this project.
- f) **Waterway Crossings**  
There are no major water crossings associated with this project.

- g) **Utility or Foreign Pipeline Crossings**  
Utilities and foreign pipeline companies will be notified of the proposed pipelines and crossing agreements will be obtained.
- h) **Surface Landowners**  
All surface landowners have been notified of the proposed project and agreements are being discussed.
- i) **Indian Bands**  
There are no First Nations, Métis Communities or other Aboriginal communities in the area of the proposed pipelines.
- j) **Pipeline Modifications**  
Pipeline Modification Applications may be required for the interconnecting TEML pipeline tie-in. These applications will be drafted and submitted to the Manitoba Petroleum Branch under separate cover as necessary.

## **9. Environmental Licence**

The proposed pipeline is approximately 400 meters in aggregate length and is to be constructed across one quarter of land. It has been determined that an Environmental License will not be required. Matrix Solutions will complete a pre-construction review of the RoW and will be available for monitoring during critical stages of construction to ensure that no new environmental concerns arise between submission of this document and construction.

## **10. Initial Aboriginal Consultation Assessment**

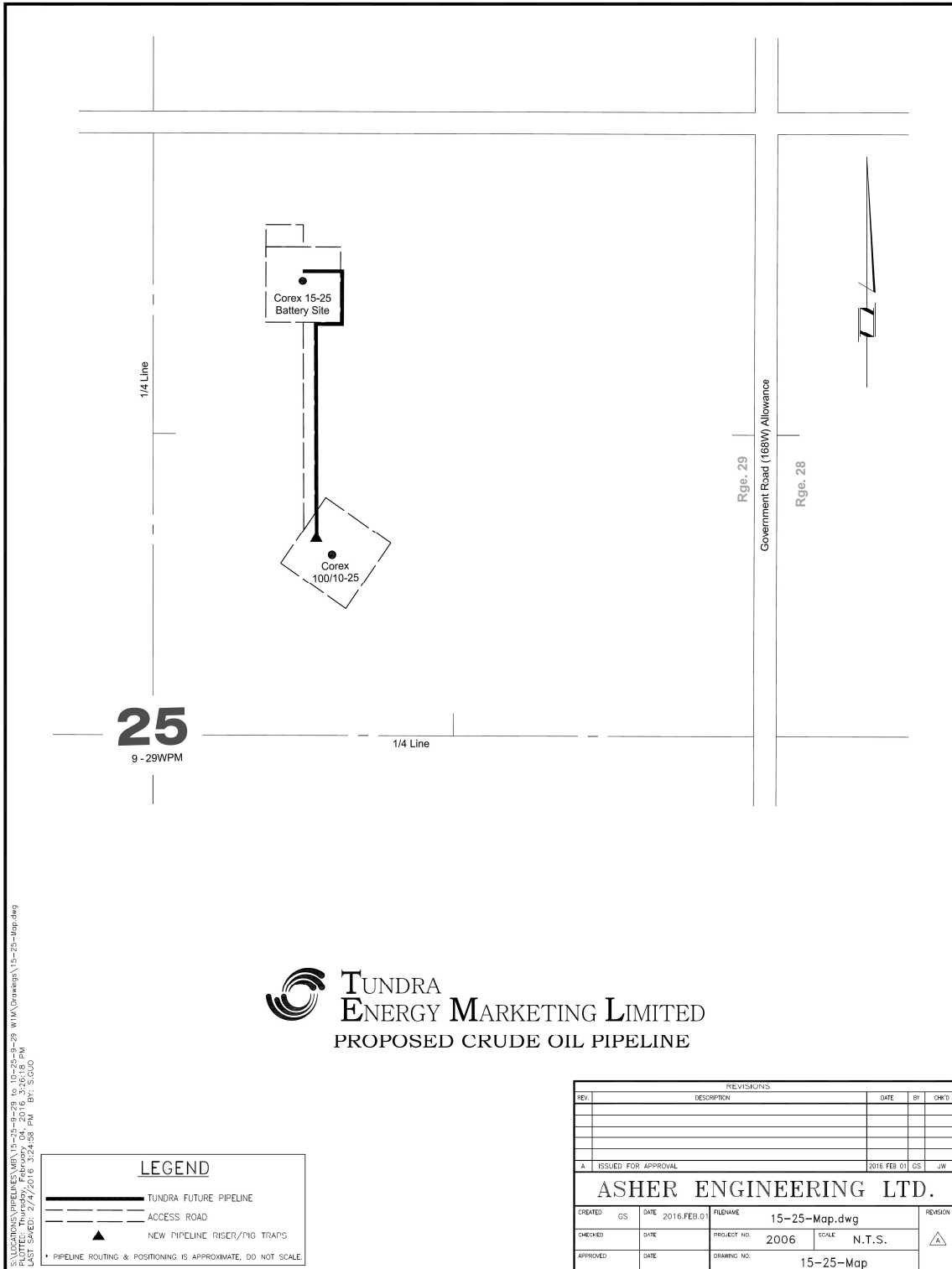
An Initial Aboriginal Consultation Assessment will be sent to Mr. Keith Lowdon, Director of the Petroleum Branch.



# Appendix A

## System Map

Tundra Energy Marketing Limited  
 Pipeline Construction Permit Application



**TUNDRA ENERGY MARKETING LIMITED**  
 PROPOSED CRUDE OIL PIPELINE

S:\DRAWINGS\PIPELINES\MB\15-25-3-25 to 10-28-29 W10\Drawings\15-25-Map.dwg  
 LAST SAVED: 2/4/2016 3:24:58 PM BY: S.G.O.

LEGEND	
	TUNDRA FUTURE PIPELINE
	ACCESS ROAD
	NEW PIPELINE RISER/PIG TRAPS
* PIPELINE ROUTING & POSITIONING IS APPROXIMATE, DO NOT SCALE.	

REVISIONS				
REV.	DESCRIPTION	DATE	BY	CHK'D.
A	ISSUED FOR APPROVAL	2016 FEB 01	GS	JW

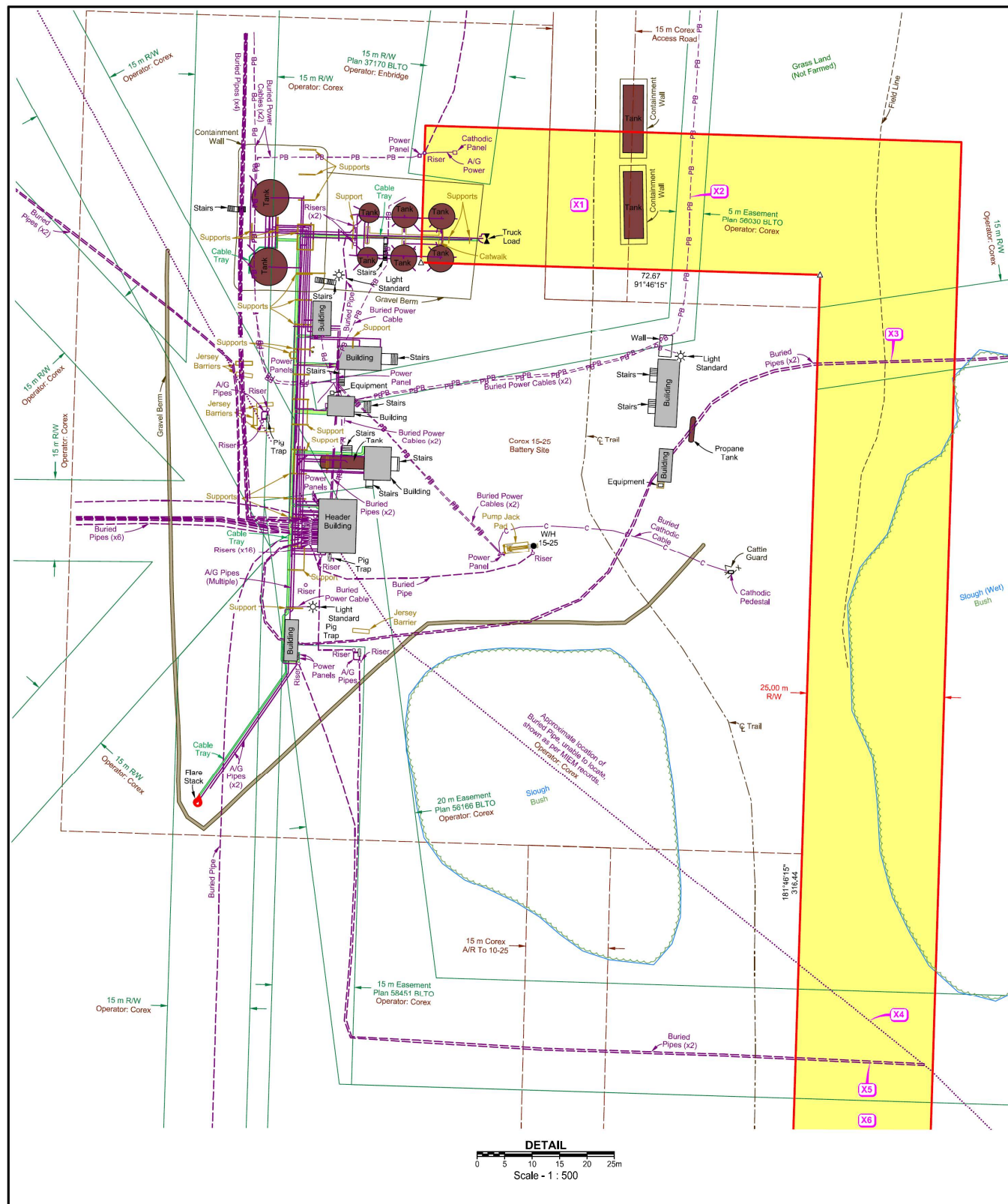
**ASHER ENGINEERING LTD.**

CREATED	GS	DATE	2016.FEB.01	FILENAME	15-25-Map.dwg	REVISION	
CHECKED		DATE		PROJECT NO.	2006	SCALE	N.T.S.
APPROVED		DATE		DRAWING NO.	15-25-Map		

## Appendix B

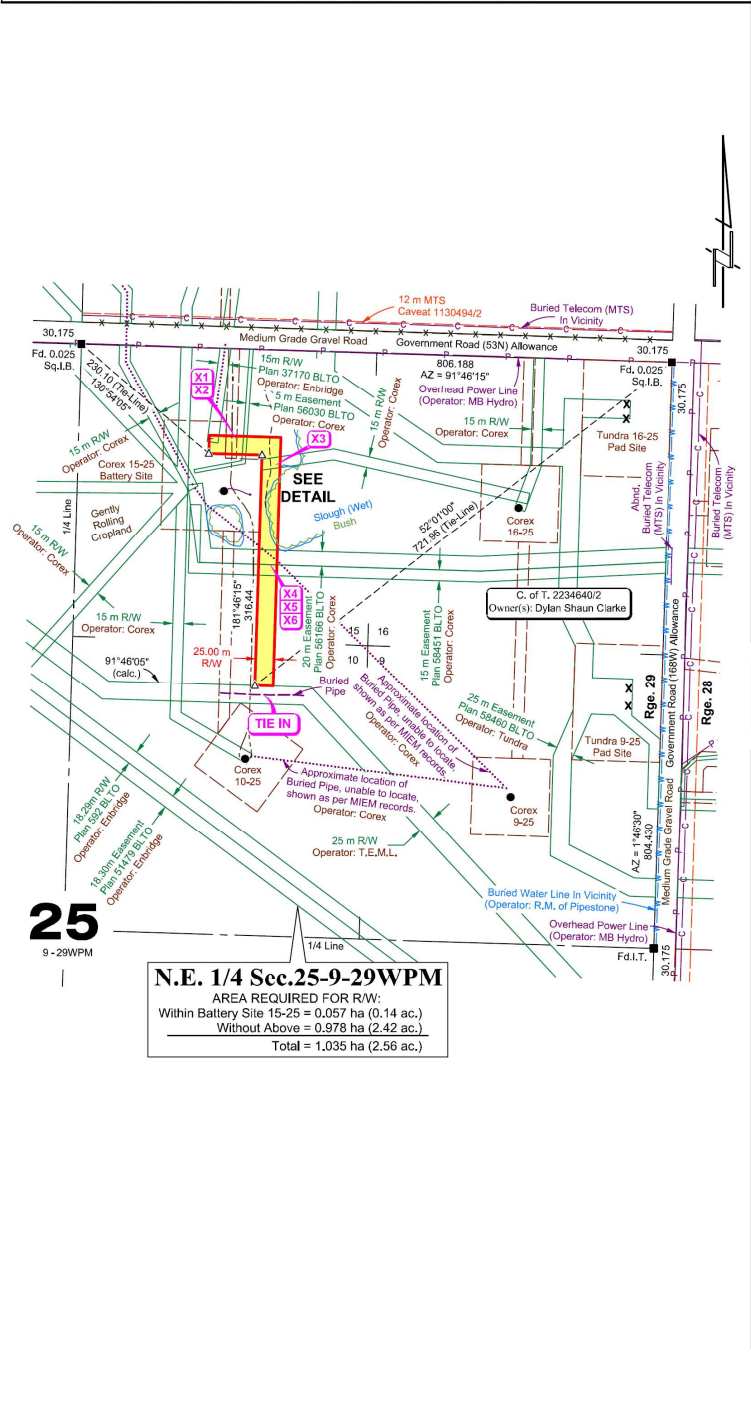
### Survey Plan

Tundra Energy Marketing Limited  
Pipeline Construction Permit Application



CROSSING TABLE			
Drawing No.	Description	Status	Location
X1	15 m Corex Access Road (Trail)	Issued Rev.0	NE 25-9-29WPM
X2	5 m Easement Plan 56030 BLTO - Operator: Corex (Buried Power Cable)	Issued Rev.0	NE 25-9-29WPM
X3	15 m RW - Operator: Corex (Buried Pipes (x2))	Issued Rev.0	NE 25-9-29WPM
X4	Approximate Location of Buried Pipe (Operator: Corex)	Issued Rev.0	NE 25-9-29WPM
X5	20 m Easement Plan 56166 BLTO - Operator: Corex (Buried Pipes (x2))	Issued Rev.0	NE 25-9-29WPM
X6	15 m Easement Plan 58451 BLTO - Operator: Corex	Issued Rev.0	NE 25-9-29WPM

\* The revision stated in the Status column refers to the Construction Plan revision.



MLS AFFIDAVIT	
I certify that the survey represented by this plan is correct to the best of my knowledge.	OPERATOR: TUNDRA ENERGY MARKETING LTD.
<i>K. TODD</i> Manitoba Land Surveyor	<i>[Signature]</i> Witness

Total length of right-of-way along posted boundary :	0.39 km		
Crossings associated with this drawing:	6		
Crossing plans required :	6		
(Crossing plans issued for foreign crossings only)			
<b>LEGEND</b>			
Placed Wooden Hub / Deflection Point shown thus: ---	▲		
Found Survey Monuments shown thus: ---	■		
Right - of - Way boundary shown thus: ---	■		
<b>NOTES</b>			
- All Marker Posts placed are 0.3 metres inside the GRA unless shown otherwise			
- Right-of-way to be filed is 25.00 metres in perpendicular width throughout unless shown otherwise.			
- Azimuths are grid and are referred to UTM projection, NAD 83 (Zone 14) datum and are derived by GNSS.			
<b>DISCLAIMER:</b>			
This plan represents the best information available at the time of survey. Altus Geomatics Manitoba and its employees take no responsibility for the location of any underground pipes, conduits, or facilities, whether shown on or omitted from this plan. Facilities shown on this plan are for informational purposes only. Prior to any construction on lease or access road, TUNDRA ENERGY MARKETING LTD., MTS Communications Inc., Manitoba Hydro, and Manitoba Hydro-Gas Operations MUST be contacted for location of any underground facilities that may exist.			
NO.	ISSUED	AE - BM - PFS	Feb. 2, 2016
	REVISIONS	INITIALS	DATE

**TUNDRA ENERGY MARKETING LTD.**

from 15-25-9-29WPM (battery site) to 10-25-9-29WPM (tie-in)

**CONSTRUCTION PLAN**

of  
**RIGHT-OF-WAY**

Within  
**N.E. 1/4 Sec. 25  
Twp. 9 - Rge. 29WPM**

**Daly Sinclair Area  
Rural Municipality of Pipestone  
2016**

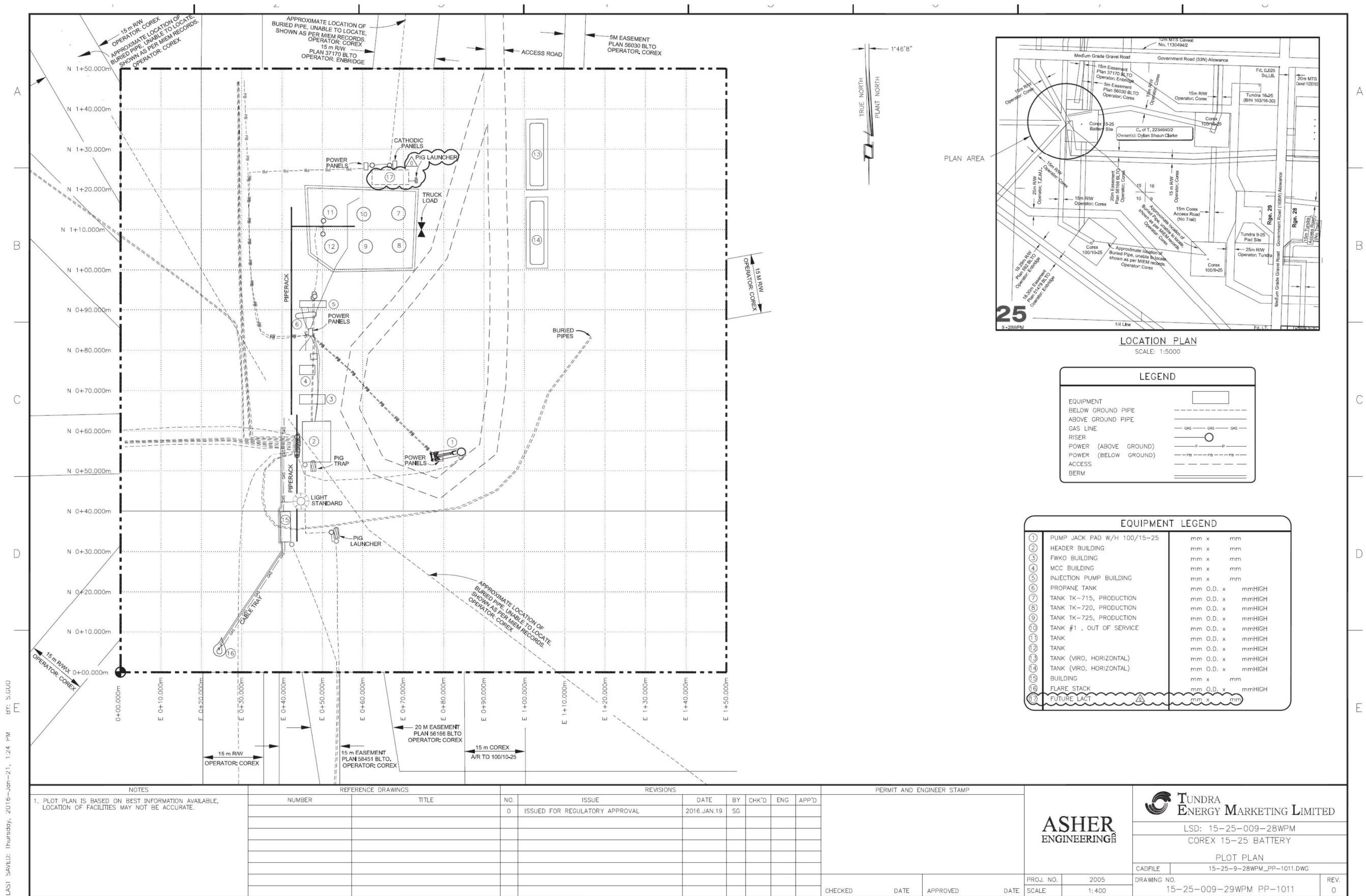
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Altus Geomatics Manitoba	Toll Free: 1-800-465-4333 www.altusgeomatics.com	AFE No.:	SEGMENT:
		Client File No.:	Job: 192021
		REV. File: 192021PL	Survey Date: January 28th, 2016.

## Appendix C

### Plot Plan

Tundra Energy Marketing Limited  
Pipeline Construction Permit Application



LAST SAVE: Thursday, 2016-Jan-21, 1:24 PM  
 BY: S.G.UO

# Appendix D

## Crossing Typical





# Appendix E

## Process Flow Diagram

