



Design and Construction Guidelines for Third Party Crossing Requests

INTRODUCTION

Pipelines are the safest method to transport products such as natural gas, oil, or other commodities. Alliance Pipeline Ltd. is regulated by the National Energy Board and, as such, its Crossings Approval process is based upon the *National Energy Board Act* and the *National Energy Board Pipeline Damage Prevention Regulations, Authorizations and Obligations*.

Anyone proposing to cause a ground disturbance in the prescribed area, which extends 30 metres perpendicularly on either side from the centerline of the pipe; construct a facility across, on, along, or under a pipeline; or cross a pipeline with a vehicle or mobile equipment, are required to notify Alliance Pipeline and to receive written permission prior to commencing such activities.

Notwithstanding the fact that Alliance Pipeline may approve an applicant's proposed crossing, Alliance shall not be responsible for the design of the applicant's facility. The design, at a minimum, shall comply with any and all applicable codes, statutes, laws, regulations, permits, licenses, orders, and directions of any government authority from time to time in force. The minimum applicable technical standards therein shall apply unless more stringent standards are provided for in the Facility Crossing Agreement.

While this document is meant to be inclusive of the information required for all types of crossing applications, by no means is it complete for all cases. This document may be attached to a "supporting document" which will detail additional informational requirements specific to your application. Please note that Alliance Pipeline reserves the right to request additional information as required.

MINIMUM REQUIREMENTS FOR APPLICATION

1. Cover Letter (1 copy)

- General scope of project;
- Anticipated date of construction;
- Anticipated date of completion;
- Information re: facility you are proposing to cross Alliance Pipeline with;
- Contact information for Applicant (if applicable) and Facility Owner

2. Drawings (3 copies)

a) Plan View

- Title block showing Drawing Number, Revision Number, and Date;
- North arrow;
- Legal land description;
- Existing buried facilities, road allowances, and rights-of-way, including those belonging to Alliance Pipeline. Alliance will locate and stake their facilities free of cost to you – contact your local One-Call centre to arrange;
- Tie-in dimensions to property lines, quarter section lines, etc. (preferably along Alliance ROW);
- Angle of proposed crossing (as per CSA Z662, the preferred angle is between 45 and 90 degrees);
- Notation on drawing "MINIMUM OF THREE DAYS NOTIFICATION REQUIRED prior to commencing construction. Contact your area One Call Centre.

b) Profile View

- For surface crossings, the profile shall be taken along the Alliance pipeline;
- For buried crossings, the profile shall be taken along the proposed facility;
- Depth of cover;
- Dimensions (ie: proposed minimum separations between facilities);
- Existing grade / Proposed grade



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TECHNICAL SPECIFICATIONS

| Pipeline Crossings |
|---|
| <ul style="list-style-type: none"> ▪ Construction method (bored, open cut or plow) ▪ Crossing position and proposed separation between facilities (detailed plan and profile) ▪ Line material (steel, plastic, fiberglass) ▪ Material specifications (grade) ▪ Line size (diameter and wall thickness) ▪ Joints (welded, threaded, fused) ▪ Cathodic Protection type ▪ Coating type ▪ Product conveyed ▪ Maximum operating pressure ▪ Maximum test pressure |
| Road or Access Crossings |
| <ul style="list-style-type: none"> ▪ Completion of Alliance's <i>Access Crossing Information Requirements</i> Form (attached), which includes: <ul style="list-style-type: none"> ○ Start Date and Duration of crossing ○ Heaviest loaded vehicle (description/name) <ul style="list-style-type: none"> ▪ <u>Wheeled vehicle:</u> <ul style="list-style-type: none"> • Weight per axle grouping • Total Vehicle Weight • Tire Pressure for each grouping • Sketch ▪ <u>Tracked vehicle:</u> <ul style="list-style-type: none"> • Vehicle make and model • Total Vehicle Weight • Length of track on ground • Width of track shoe • Sketch |
| Cable Crossings |
| <ul style="list-style-type: none"> ▪ Detailed cable description ▪ Crossing position and proposed separation between facilities (detailed plan and profile) ▪ Type of cable (electrical, telecommunications, fibre-optic) ▪ Cable cover (PVC, metal, polyethylene, none) ▪ other information (eg. if electrical, what is the voltage) |
| Railway Crossings |
| <ul style="list-style-type: none"> ▪ Detailed construction plans and engineered drawings ▪ Crossing position and proposed separation between facilities (detailed plan and profile) ▪ Heaviest expected load ▪ Number of trains crossing annually ▪ Number of cars per train ▪ Speed of train ▪ Potential of train parking/stopping overtop of pipeline ▪ Mitigation strategy for Alliance's CP System |



ACCESS CROSSING INFORMATION REQUIREMENTS

Please complete this form and return to crossings@alliancepipeline.com
 As this information is required to conduct an analysis of the crossing, your request will not be processed until this information is received. *Incomplete information will result in delays in issuing your agreement.*

| | | |
|--|--|-----|
| Requesting Company: | | Ph: |
| Legal Location: | | |
| GPS Coordinates (if known): | | |
| Requesting Company File: | | |
| Permanent Road Crossing (greater than 1 year) | | |
| Date Required: | | |
| Road Surface Paved? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Road Embankment Lift < 1.0 m? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Temporary Access Crossing (less than 1 year) | | |
| Start Date and Duration: | | |
| Vehicle is highway legal without permits? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |

WHEELED VEHICLE

| Axle Group | Single | Tandem | Tridem | Weight (kg) |
|--------------|--------|--------|-----------------------|-------------|
| 1 (steering) | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| | | | Total Weight = | |

Make and model of heaviest wheeled vehicle that will cross the pipeline: _____
Sketch of the equipment showing the tire configuration (use another page if necessary)

TRACKED VEHICLE

| Make and Model of heaviest vehicle that will cross the pipeline: _____ | | | | |
|---|------|-------|--------------|-------------|
| Max Vehicle Weight | Make | Model | Track Length | Track Width |
| kg | | | m | m |