CROSSING SPECIFICATIONS
CARRIER PIPE: 75mm STEEL
O.D. PIPE: 88.9 mm
WALL THICKNESS: 4.40 mm
DESIGN PRESSURE: 4140 kPa
MAXIMUM OPERATING PRESSURE: 4140 kPa
MINIMUM YIELD STRENGTH: 38000 kPa
HOOP STRESS: 11%
FIELD TEST PRESSURE: 5175 kPa
MEDIUM CARRIED: SWEET NATURAL GAS
EXTERNAL CORROSION TREATMENT: YELLOW JACKET
CATHODIC PROTECTION: SACRIFICIAL ANODE
CONSTRUCTION: BORE
CASING PIPE: NONE

NOTES:
1. SHUT-OFF VALVE LOCATED
   NW 17-74-15-5.
2. INSTALLATION AND MAINTENANCE TO BE IN ACCORDANCE WITH GENERAL ORDER E-10 AND LATEST EDITION OF APPLICABLE CSA STANDARD.
3. PERMANENT PIPELINE CROSSING SIGNS INSTALLED ON BOTH SIDES OF R/W.

Altime
Engineering
Ltd.

PRAIRIE RIVER GAS CO-OP LTD.
PLAN SHOWING
PIPE LINE CROSSING OF
C.N. RAIL
NW 17-74-15-5
DRAWN BY: DMH DATE: MAR 3/09
PROJECT: [PROJECT NAME]
DRAWING No. 09PRV002_RRX
**Carrier Pipe Specifications**
1. Pipe Size: 60.3 mm D.O. x 5.5 mm W.T.
2. Nominal Pipe Size: 50 PE
3. Test Pressure: 980 kPa
4. Operating Pressure: 550 kPa
5. Hydrostatic Design Basis: 8.6 MPa
6. Pipe Specifications: CAN/CSA B149.4, PE 2406
7. Hoop Stress: 2.6 MPa (Stress Level: 32%)

**Casing Pipe Specifications**
1. Pipe Size: 114.3 mm D.O. x 4.8 mm W.T.
2. Nominal Pipe Size: 100 Sr.
3. Minimum Yield Strength: 359 MPa
4. Pipe Specifications: CAN/CSA 2245.1 Grade 359 Catt. 11. ETW
5. Protective Coating: Yellow Jacket, or equal
6. Cathodic Protection: Sacrificial Zinc Anode

**General Notes**
1. Conveying Natural Gas
2. Nearest Shut-off Valve: SW 16-38-23, WAM
3. Method of Installation: Bore or punch from bor ditches to bor ditches in manner that railway grade is not disturbed.
4. This crossing will be built and maintained in accordance with TC E-150 Standards Respecting Pipeline Crossings under Railways.
5. All work methods and materials shall meet or exceed the requirements of CAN/CSA Standard 2662, latest edition.
6. Coating ends shall be suitably sealed to the outside of the carrier pipe with line seals, Dancy mastic and Dancy tape. Spacers shall be installed at minimum 3.0 m intervals.

**Cross Section of Railway at Crossing**
- Flow
- PE Carrier pipe c/w Steel Casing pipe
- D-9 m
- D-15 m

**Sample Gas/Oil Crossing**
- BASE
- Cased
- Flow
- CASING DECKS

**Crossroads Gas Co-op Ltd.**
- Gasline Crossing CANADIAN NATIONAL RAILWAY in NE 16-38-23, WAM
- Sept. 17, 2009
- Scale: As Shown
- Drawing No.: 214-106