

Bridge Culvert Inspection				
Bridge File Number	78876 -1 Bridge Culvert		Form Type	CUL1
Year Built	1977		Lot No.	3
Bridge or Town Name	MILLARVILLE		Inspector Name	Calvin Roberts
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS B
Located On	549:02 C1 4.291		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	30-Jan-2013
Legal Land Location	SE SEC 4 TWP 21 RGE 4 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-114:29:20, 50:44:51		Data Entry Date	01-Mar-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA27		Review Date	03-Feb-2013
Clear Roadway/Skew	13.5 /		Dept. Reviewer Name	Tim Davies
AADT/Year	200 / 2011 (A)		Dept. Review Date	04-Mar-2013
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	50			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	2100	MP	24.4	68X13	3.5	ROUND
Special Features								
Special Features Comment								

Posting Information											
Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)											
Posted:	Lane	NB	On Bridge (m)	In Advance (Y/N)	No	Lane	SB	On Bridge (m)	In Advance (Y/N)	No	
Remarks		Not required.									

Utilities (Located at)			
Utility Attachments			
Telephone			Gas
Power	50M W-6 wire crosses hwy.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Driveway and gas plant entrance 33m West.
Vertical Alignment		7	7	
Roadway Width (m)	9.100			
Embankment		4	4	2:1 from road to crown. Cut to 1:1 @ sides of pipe @ ends. Side slopes slid causing 1m of fill @ ends of pipe.
Sideslope ( __:1)	2.0			
(Height of Cover(m) : 2)				
Guardrail (Y/N)	Yes			South.
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				North.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	400			
Scour Protection		7	N	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>N</b>	P.R 7.

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2100, Type: MP)</b>				
Barrel Last Accessible Date	30-Jan-2013			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	Unable to measure rise est.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag	3			
Sidewall		7	7	
Measured Span (mm)	2178			
Measured At Ring No.	2			
Deflection (mm)	78			
Percent Deflection	3			
Floor		N	N	(300mm deep water and 400mm silt) Oct 1/09 Approx 500mm ice in pipe.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)	67			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2100, Type: MP)				
Coating		6	6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			(Blockages at end causing 300mm deep ponding) Oct 1/09.
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		X	X	Approx 500mm ice in pipe.
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				South.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	1000			
Scour Protection		7	N	Snow covered.
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>N</b>	P.R 7.
Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		X	X	
Roadway Surface		7	7	
(Type : )				
Icing (Y/N)	Yes			Approx 500mm ice.
Traffic Safety Features		X	X	
Type				

Structure Usage				
		Last	Now	Explanation of Condition
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		5	3	Blockage at D/S end causing ponding.
Structure In Use (Y/N)	No			
<b>Grade Separation General Rating</b>		<b>7</b>	<b>3</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Remove material blocking D/S end.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>82.5/76.0</b>	Est. Repl. Yr	2028	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	30-Apr-2016		Previous Inspection Date	01-Oct-2009			
Inspection Cycle (Default) (months)	39						
Comment							