

Bridge Culvert Inspection				
Bridge File Number	77034 -1 Bridge Culvert		Form Type	CUL1
Year Built	1970		Lot No.	3
Bridge or Town Name	MORLEY		Inspector Name	Garry Roberts
Located Over	TRAIL;TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	1:04 R1 18.027;1:04 L1 18.063		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	12-Feb-2012
Legal Land Location	NE SEC 19 TWP 25 RGE 6 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-114:49:28, 51:08:58		Data Entry Date	14-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	22-Feb-2012
Clear Roadway/Skew	24.8 /		Dept. Reviewer Name	Tim Davies
AADT/Year	18,610 / 2010 (A)		Dept. Review Date	22-Mar-2012
Road Classification	RAD-412.4-120		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	3800	3150	RPP	67.7	152X51	4.0	PIPE ARCH
Special Features		CONC FLOOR						
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)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks		Not required.									

Utilities (Located at)				
Utility Attachments				
Telephone	In South ditch.		Gas	
Power	50.0 m north of c.l. 3 W. MAIN TRANSMISSION LINE.		Municipal	
Others	Fibre Optics Cable @ North ditch.		Problem (Y/N)	No
Remarks				

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	
Vertical Alignment		8	7	
Roadway Width (m)	24.800			
Embankment		7	7	
Sideslope (__:1)	5.0			
(Height of Cover(m) : 0.8)				
Guardrail (Y/N)	Yes			3 broken and 2 split posts at South. Wrong lap at SE and NW.
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

Upstream End				
<b>Culvert Component</b>		Last	Now	Explanation of Condition
Direction		N		North.
End Treatment (Concrete, Steel, Others, None)	STEEL			
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		4	4	Concrete floor extends into bevel.
Heaving (mm)	0			Minor collision damage to NE bevel and roof pushed inward 400mm.
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>4</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3800, Rise (mm): 3150, Type: RPP)				
Barrel Last Accessible Date	12-Feb-2012			
<b>Special Features</b>				
Special Feature		X	6	Isolated wide cracks.
(Type : CONC FLOOR)				
Special Feature				
(Type : )				
Roof		7	7	Rise N/A due to concrete floor.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		5	5	Inward.
Measured Span (mm)	3660			Minor 100mm construction hole in R11 East side.
Measured At Ring No.	4			
Deflection (mm)	140			
Percent Deflection	3			
Floor		N	N	200 mm CONCRETE ON FLOOR.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			4N stagger at roof only.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3800, Rise (mm): 3150, Type: RPP)</b>				
Coating		6	6	Minor alkalai stains @ bolt areas.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
<b>(Type : )</b>				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>5</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		South.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		7	7	Concrete floor extends into bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection (Type : <b>RIP RAP</b> ) (Avg. Rock Size(mm) : <b>250</b> )		7	7	
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		X	X	
Roadway Surface (Type : <b>GRAVEL</b> )		6	6	
Icing (Y/N)	No			
Traffic Safety Features Type		X	X	

Structure Usage				
		Last	Now	Explanation of Condition
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		7	7	
Structure In Use (Y/N)	Yes			
<b>Grade Separation General Rating</b>		<b>7</b>	<b>6</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							
OTHER ACTION	2012	Replace 5 GR Posts at SW. Correct laps at NW and SE.					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>77.8/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>69.9/58.2</b>	Est. Repl. Yr	2027	Maint. Req. (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	12-Nov-2013		Previous Inspection Date	16-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							