

Bridge Culvert Inspection			
Bridge File Number	13317 -1 Bridge Culvert	Form Type	CUL1
Year Built	1982	Lot No.	4
Bridge or Town Name	CARDSTON	Inspector Name	Jason Rusu
Located Over	TRIBUTARY TO LEE CREEK, 2.12.20.8.3, WATERCRS-ST	Inspector Class	BR CLS A
Located On	501:00 C1 18.448	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Jun-2012
Legal Land Location	NW SEC 25 TWP 2 RGE 26 W4M	Data Entry By	Kelsey Roberts
Longitude, Latitude	-113:21:16, 49:09:32	Data Entry Date	20-Jul-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA25	Review Date	10-Jul-2012
Clear Roadway/Skew	8 / -18 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	190 / 2011 (A)	Dept. Review Date	30-Jul-2012
Road Classification	RLU-208-100	Follow-Up By	
Detour Length (km)	4		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	5100	3200	RPE	32.3		4.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	South Row	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	5	5	IN A CURVE BUT 300m of sight distance both ways
Vertical Alignment	7	7	
Roadway Width (m)	10.300		
Embankment	7	7	
Sideslope ( __:1)	3.0		
(Height of Cover(m) : 1.4)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>5</b>	<b>5</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction			
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	7	7	
Collar	7	7	
Wingwalls	X	X	
(Shape : )			
Cutoff Wall	7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	Minor superficial rust on floor
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>350</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 5100, Rise (mm): 3200, Type: RPE)</b>				
Barrel Last Accessible Date	09-Jun-2012			Too large to measure. Shape looks good
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	8	Est.
Measured Rise (mm)	2306			
Measured At Ring No.	3			
Sag (mm)	137			
Percent Sag	4			
Sidewall		8	8	Est.
Measured Span (mm)	5093			
Measured At Ring No.	3			
Deflection (mm)	7			
Percent Deflection	0			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	6	Minor superficial rust on floor
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 5100, Rise (mm): 3200, Type: RPE)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>8</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				NORTH
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		5	5	
Bank Stability		5	5	Some Erosion along the west bank downstream.
HWM (m below Top of Culvert)	1.8			No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>5</b>	<b>5</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							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>88.9/88.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>82.5/82.6</b>	Est. Repl. Yr	2046	Maint. Req. (Y/N)	No
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	09-Sep-2015		Previous Inspection Date	18-Jun-2009			
Inspection Cycle (Default) (months)	39						
Comment							