

Bridge Culvert Inspection				
Bridge File Number	73059 -1 Bridge Culvert		Form Type	CUL1
Year Built	1957		Lot No.	4
Bridge or Town Name	CARDSTON		Inspector Name	Jon Davies
Located Over	LAYTON CREEK, 2.12.22.12, WATERCRS-ST		Inspector Class	BR CLS B
Located On	LOCAL ROAD		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	09-Dec-2012
Legal Land Location	SE SEC 30 TWP 3 RGE 25 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-113:21:04, 49:13:56		Data Entry Date	05-Jan-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA25		Review Date	16-Dec-2012
Clear Roadway/Skew	11 /		Dept. Reviewer Name	Tim Davies
AADT/Year	720 / 1992 (E)		Dept. Review Date	08-Jan-2013
Road Classification	RLU-208-100		Follow-Up By	
Detour Length (km)	5			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1830	1120	FP	20.7	68X13		ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	South ditch.		Gas	
Power	3 line North side.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	Erosion at U/S end, slumping - minor.
Vertical Alignment		9	9	
Roadway Width (m)	11.000			
Embankment		6	6	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 0.9)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		9	9	

Upstream End

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	7	
Beavers (Y/N)	No			
Upstream End General Rating		5	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1830, Rise (mm): 1120, Type: FP)				
Barrel Last Accessible Date	09-Dec-2012			800-900mm ice in barrel
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	7	
Measured Rise (mm)	1090			
Measured At Ring No.	2			Est.
Sag (mm)	30			
Percent Sag	2			
Sidewall		6	6	
Measured Span (mm)	1845			
Measured At Ring No.	2			
Deflection (mm)	15			
Percent Deflection				
Floor		6	N	Ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		4	4	No loss of material.
Separation (mm)	30			2nd seam U/S 90mm gap - this was the extension - slipped into the ends of section 1 & 3 - No changes
Longitudinal Seams		7	7	Riveted.
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)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1830, Rise (mm): 1120, Type: FP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Siltting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	20			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		6	6	Low channel velocity.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	6	Bit of scour D/S end. - rock lined
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	
Bank Stability		8	8	
HWM (m below Top of Culvert)				None visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			D/S
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

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							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	70.4/72.3	Est. Repl. Yr	2020	Maint. Req'd. (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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	09-Sep-2017		Previous Inspection Date	18-Sep-2007			
Inspection Cycle (Default) (months)	57						
Comment							