

Bridge Culvert Inspection			
Bridge File Number	78177 -1 Bridge Culvert	Form Type	CUL1
Year Built	1976	Lot No.	4
Bridge or Town Name	MILLARVILLE	Inspector Name	Calvin Roberts
Located Over	TRIBUTARY TO POTHOLE CREEK, 2.13.27.2.9.4.1, WATERCRS-ST	Inspector Class	BR CLS B
Located On	549:04 C1 0.752	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Feb-2013
Legal Land Location	SW SEC 13 TWP 21 RGE 3 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-114:17:29, 50:46:33	Data Entry Date	09-Mar-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA27	Review Date	16-Feb-2013
Clear Roadway/Skew	9 / -43 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	1,200 / 2011 (A)	Dept. Review Date	13-Mar-2013
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1829	1118	FP	29.8	68X13	2.8	ARCH
Special Features	VERT TIMBER STRUTS							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South ditch.	Gas	
Power	8m North - 3 wires.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	9	9	Field entrance over South invert.
Vertical Alignment	8	8	
Roadway Width (m)	9.000		
Embankment	8	8	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 0.5)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	8	8	

Upstream 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	X	X	
(Shape :)			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		6	N	(well ingrown) Snow covered.
(Type : RIP RAP, NATURAL)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		8	N	
Beavers (Y/N)	No			
Upstream End General Rating		7	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1829, Rise (mm): 1118, Type: FP)				
Barrel Last Accessible Date	09-Feb-2013			
Special Features				
Special Feature		5	5	Vertical miss-align @ center.
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		3	3	Measured rise 970 @ Ring 4.
Measured Rise (mm)	970			
Measured At Ring No.	4			
Sag (mm)	148			
Percent Sag	13			
Sidewall		4	4	Measured Span 1998 @ Ring 4 .
Measured Span (mm)	1998			
Measured At Ring No.	4			
Deflection (mm)	169			
Percent Deflection	9			
Floor		4	4	
Bulge (mm)	150			
Measured At Ring No.	2			
Abrasion (Y/N)	No			
Circumferential Seams		5	5	
Separation (mm)	60			
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)				
Longitudinal Stagger (Y/N)				
Coating		5	5	Loss of galvanizing and moderate rust on floor.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1829, Rise (mm): 1118, Type: FP)				
Fish Passage Adequacy		X	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	(Almost iced closed in Spring/96). Struts appear in good condition. Icing is minor.
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	Raised GR to a 4 due to struts.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North.
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	N	Snow covered. P.R 7.
Heaving (mm)	50			
Invert Above/Below Stream Bed		BELOW		
Above/Below (mm)		100		
Scour Protection		6	N	Snow covered. P.R 6.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		6	N	
Beavers (Y/N)		No		
Downstream End General Rating		7	N	P.R 7.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Ingrown U/S and D/S of culvert.
Bank Stability		7	7	
HWM (m below Top of Culvert)		0.0		Pipe has flown full. Straw caught in struts.
Drift (Y/N)		Yes		
Channel Bottom Degrading/Aggrading		AGGRADING		
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) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	53.0/50.1	Est. Repl. Yr	2020	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	Jason Rusu		Previous Assistant's Name				
Next Inspection Date	09-May-2016		Previous Inspection Date	07-Nov-2009			
Inspection Cycle (Default) (months)	39						
Comment							