

Bridge Culvert Inspection				
Bridge File Number	74512 -1 Bridge Culvert		Form Type	CUL1
Year Built	1955		Lot No.	4
Bridge or Town Name	ELKWATER		Inspector Name	Tom Carey
Located Over	TRIBUTARY TO ROSS CREEK, 2.7.10, WATERCRS-ST		Inspector Class	BR CLS A
Located On	515:02 C1 2.915		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	13-Mar-2012
Legal Land Location	SE SEC 2 TWP 10 RGE 3 W4M		Data Entry By	Erin Roberts
Longitude, Latitude	-110:18:11, 49:47:10		Data Entry Date	08-Apr-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	25-Mar-2012
Clear Roadway/Skew	10.4 /		Dept. Reviewer Name	Tim Davies
AADT/Year	80 / 2011 (A)		Dept. Review Date	17-Apr-2012
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	1737	1920	SPE	28.4	152X51	2.8,2.8,2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	South ditch.		Gas	
Power	1 line crossing road 100m East.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	Poor sight distance to East & road rises to West & East.
Vertical Alignment		5	5	
Roadway Width (m)	10.400			
Embankment		N	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 1.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		5	5	

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		N	4	3 bolts missing on floor. Minor rusting on floor.
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1737, Rise (mm): 1920, Type: SPE)				
Barrel Last Accessible Date	13-Mar-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	7	
Measured Rise (mm)	1845			
Measured At Ring No.	8			
Sag (mm)	75			
Percent Sag	4			
Sidewall		N	7	5th ring from U/S has rock indent and hole and rust on surface.
Measured Span (mm)	1763			
Measured At Ring No.	8			
Deflection (mm)	26			
Percent Deflection	2			
Floor		N	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	5	Some bolts missing or not tight.
Separation (mm)	0			
Longitudinal Seams		N	5	Some not nestled well, 10mm gap D/S ring.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	5	Alkali at bolts. Surface corrosion at floor.
Corrosion By Soil (Y/N)	Yes			
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): 1737, Rise (mm): 1920, Type: SPE)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	5	
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		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Downstream End General Rating		5	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		N	8	
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	70.1/65.9	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	13-Jun-2015		Previous Inspection Date	12-Mar-2009			
Inspection Cycle (Default) (months)	39						
Comment							