

Bridge Culvert Inspection				
Bridge File Number	70093 -1 Bridge Culvert		Form Type	CUL1
Year Built	1974		Lot No.	2
Bridge or Town Name	SLAVE LAKE		Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO UTIKUMA RIVER, 8.10.18.22.4.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	88:06 C1 0.154		Assistant Name	Clem Guenette
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Jun-2012
Legal Land Location	NW SEC 33 TWP 81 RGE 9 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:21:07, 56:04:19		Data Entry Date	16-Oct-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA02		Review Date	08-Oct-2012
Clear Roadway/Skew	12.6 / 8 deg. (RHF)		Dept. Reviewer Name	David Morrison
AADT/Year	760 / 2011 (A)		Dept. Review Date	18-Dec-2012
Road Classification	RAU-210-110		Follow-Up By	
Detour Length (km)	450			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1724	1901	SPE	35.1	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments							
Telephone	10M e OF ROAD			Gas			
Power				Municipal			
Others				Problem (Y/N)	No		
Remarks							

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Superelevated on gradual curve with good sight distance. Intersection SH 750 100 m south with turning lanes starting over pipe. No passing.
Vertical Alignment		8	8	
Roadway Width (m)	10.300			
Embankment		6	6	
Sideslope (:1)	4.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		4	3	Several bends and tears from beaver dam removal. Bevel heaving approx 600mm.
Heaving (mm)	600			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		5	5	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Upstream End General Rating		4	3	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Barrel Last Accessible Date	11-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1827			
Measured At Ring No.	5			
Sag (mm)	74			
Percent Sag	4			
Sidewall		6	6	
Measured Span (mm)	1766			
Measured At Ring No.	5			
Deflection (mm)	42			
Percent Deflection	2			
Floor		N	N	Water covered, 300mm silt/rock on floor.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	1N Stagger
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)	Yes			
Coating		4	4	Pitting & flaking on sidewall.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	5	
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		4	5	Some riprap placed to repair erosion .
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		4	5	
Beavers (Y/N)	No			
Downstream End General Rating		4	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Muskeg u/s & d/s.
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.1			HWM not visible. (Existing water level 1.1m deep.-01-10-20)
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition

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	2012	Repair upstream bevel.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/66.7	Sufficiency Rating (Last/Now) (%)	57.8/63.1	Est. Repl. Yr	2021	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor bevel u/s. Monitor corrosion.		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	Brian Pientsch		Previous Assistant's Name	Lisbeth Medina			
Next Inspection Date	11-Mar-2014		Previous Inspection Date	04-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							