

Bridge Culvert Inspection			
Bridge File Number	77517 -1 Bridge Culvert	Form Type	CUL1
Year Built	1986	Lot No.	2
Bridge or Town Name	RED EARTH CR	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO LOON RIVER, 8.10.18.12.12, WATERCRS-ST	Inspector Class	BR CLS A
Located On	88:08 C1 25.914	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-Jun-2012
Legal Land Location	SW SEC 2 TWP 87 RGE 9 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:19:24, 56:30:45	Data Entry Date	14-Oct-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA02	Review Date	08-Oct-2012
Clear Roadway/Skew	10.8 / -30 deg. (LHF)	Dept. Reviewer Name	David Morrison
AADT/Year	1,350 / 2011 (A)	Dept. Review Date	10-Jan-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	300		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2400	MP	41	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power	6 wire O/H, 30m E r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Loon Lake intersection 120m south.
Vertical Alignment	8	8	Oil lease intersection 100m North.
Roadway Width (m)	10.800		
Embankment	4	4	8m south of U/S end 4m x .75 x .4 settlement. Grassed in. Sloughing banks on East side of road.
Sideslope ( __:1)	4.0		
(Height of Cover(m) : 1.8)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>7</b>	<b>7</b>	

**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 : )			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	N	Crushed from equipment removing beaver dams. Cutting beside the bevel. Beaver dam on bevel end.
Heaving (mm)	100			
Invert Above/Below Stream Bed				Covered with beaver dam.
Above/Below (mm)	0			
Scour Protection		4	5	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		4	5	
Beavers (Y/N)	Yes			
<b>Upstream End General Rating</b>		<b>4</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm):				Rise (mm): 2400, Type: MP)
Barrel Last Accessible Date	15-Jan-2000			(Measured 2480 x 2330 near c/l. 1996/04/23) Water 800mm from crown. Looks good as viewed from the end @ d/s & 300mm from crown @ u/s.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	150mm bulge in roof at inlet from mower - photo. (2.9%. 15/Jan/2000)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	70			
Percent Sag				
Sidewall		N	N	(3.3%. 15/Jan/2000)
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	80			
Percent Deflection				
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	30			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	N	(Minor superficial rusting below springline. 1996/04/23)
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): , Rise (mm): 2400, Type: MP)				
Ponding (Y/N)	Yes			1600mm ponding.
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	General rating was "6" from 15/Jan/2000.
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	Water 1200mm from crown.
Heaving (mm)	100			
Invert Above/Below Stream Bed				End of bevel under water.
Above/Below (mm)	0			
Scour Protection		4	4	
(Type : <b>NONE</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		4	4	Loss of fill on sides 1.5m long x 0.4m wide x 0.3m deep.
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>4</b>	<b>4</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Stable.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>7</b>	<b>7</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2012	Remove beaver dam at inlet.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2012	(Remove U/S bevel. Nov 5, 2008)					
OTHER ACTION	2012	Consider Level 2 inspection due to 5 inspection cycles without being able to access barrel.					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>50.5/51.4</b>	Est. Repl. Yr	2029	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor scour d/s. Monitor settlement 8m South of u/s end.		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							