

Bridge Culvert Inspection			
Bridge File Number	76310 -1 Bridge Culvert	Form Type	CUL1
Year Built	1965	Lot No.	1
Bridge or Town Name	LOGEPOLE	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO PEMBINA RIVER, 8.11.84.65, WATERCRS-ST	Inspector Class	BR CLS B
Located On	620:04 C1 2.100	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	24-Jan-2011
Legal Land Location	NW SEC 32 TWP 47 RGE 9 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:17:24, 53:05:57	Data Entry Date	16-Feb-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA11	Review Date	14-Feb-2011
Clear Roadway/Skew	13.4 / -30 deg. (LHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	1,630 / 2009 (A)	Dept. Review Date	22-Feb-2011
Road Classification	RCU-210-110	Follow-Up By	
Detour Length (km)	10		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2019	2226	SPE	63.4	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	North r/w.	Gas	
Power	3 wires 17 m north.	Municipal	
Others		Problem (Y/N)	No
Remarks	No BF tag installed.		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Passing lane EB, no passing WB. In bottom of sag curve, limited sight distance to East.
Vertical Alignment		7	7	
Roadway Width (m)	10.000			
Embankment		N	7	
Sideslope ( __:1)	3.0			
(Height of Cover(m) : 5.5)				
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		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
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		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Snow covered.
Above/Below (mm)	100			
Scour Protection		4	3	Slope over pipe sloughing into stream due to lack of bevel.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>350</b> )				
Scour/Erosion		4	3	Scoured along side of barrel 200mm x 500 x 200mm - photo. Erosion around top half is vegetated.
Beavers (Y/N)	No			Large rocks & dam in front of opening.
<b>Upstream End General Rating</b>		<b>4</b>	<b>3</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE)				
Barrel Last Accessible Date	24-Jan-2011			400mm ice along floor.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		3	3	Separated seam at South end - photo.
Measured Rise (mm)				
Measured At Ring No.				est
Sag (mm)	100			
Percent Sag	5			
Sidewall		5	5	At mid span.
Measured Span (mm)	2120			
Measured At Ring No.				
Deflection (mm)	101			
Percent Deflection	5			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	3	Separated seam @ u/s.
Separation (mm)	0			
Longitudinal Seams		3	3	U/S end separated @ east wall & bolts are deformed @ west wall, 1st ring @ U/S end rest of barrel rated "6" - photo. Probably damaged during removal of bevel.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				1N
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Superficial rust lower half.
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): 2019, Rise (mm): 2226, Type: SPE)				
Ponding (Y/N)	Yes			200mm.
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	(Iced to within 300mm of roof. 2001/04/18)
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	G.R. increased by 1 point to reflect the overall condition of culvert is good except for ring 1.
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)	0			
Invert Above/Below Stream Bed	ABOVE			(A 300mm drop off at outlet has been ripped. 99/04/26) Snow/ice covered.
Above/Below (mm)	600			
Scour Protection		N	N	Snow covered.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>350</b> )				
Scour/Erosion		N	N	Iced over, no sign of problem.
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	G.R. carried forward from 03/Sept/2004.
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		5	5	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>5</b>	<b>5</b>	

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	2011	Remove dam/rock @ U/S opening.					
OTHER ACTION	2011	Extend pipe @ u/s.					
OTHER ACTION	2011	Repair embankment erosion/scour around bevel.					
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>52.1/51.8</b>	Est. Repl. Yr	2018	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor u/s end ring @ longitudinal seams for further separation until culvert replaced.		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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	24-Apr-2014		Previous Inspection Date	18-Dec-2007			
Inspection Cycle (Default) (months)	39						
Comment							