

Bridge Culvert Inspection			
Bridge File Number	77448 -1 Bridge Culvert	Form Type	CUL1
Year Built	1985	Lot No.	4
Bridge or Town Name	RICH LAKE	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO BEAVER RIVER, 7.20, WATERCRS-ST	Inspector Class	BR CLS A
Located On	55:14 C1 41.620	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Apr-2012
Legal Land Location	NW SEC 28 TWP 63 RGE 10 W4M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-111:27:29, 54:29:02	Data Entry Date	25-Apr-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA08	Review Date	25-Apr-2012
Clear Roadway/Skew	11 / 33 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	940 / 2011 (A)	Dept. Review Date	04-May-2012
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2877	SPE	87.8	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	1 wire OH 35 m North of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag installed on top of North end roof.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Curve to east. Crest curve to east, no passing.
Vertical Alignment		7	7	
Roadway Width (m)	11.000			
Embankment		4	4	Ditch erosion NW & SW corners. File 79639 cattlepass installed immediately west. NW gully 600 x 600 x 200m, well vegetated.
Sideslope (__:1)	3.0			
(Height of Cover(m) : 9.2)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	Silt deposited on floor of bevel opening growing brush.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		8	7	Not much visible. Well vegetated
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
Upstream End General Rating		8	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 2877 , Type: SPE)				
Barrel Last Accessible Date	14-Jul-2010			Ice too thin to enter Shape looks good from ends
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Near c/l. Estimated
Measured Rise (mm)	2870			
Measured At Ring No.				
Sag (mm)	7			
Percent Sag	1			
Sidewall		7	7	Near c/l. Estimated
Measured Span (mm)	2557			
Measured At Ring No.				
Deflection (mm)	53			
Percent Deflection	2			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	N	
Separation (mm)	0			
Longitudinal Seams		7	7	50% seams are correctly lapped while the rest are incorrect. Roof plates nested poorly at U/S end.
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)	No			
Coating		8	8	No visible corrosion.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): , Rise (mm): 2877, Type: SPE)				
Fish Passage Adequacy		6	4	Silt @ opening
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	6	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		7	N	GR previously 7 from July 2010
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		8	7	Not much visible rock
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
Downstream End General Rating		8	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		9	9	
Bank Stability		9	9	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		9	9	

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) (%)	77.8/55.6	Sufficiency Rating (Last/Now) (%)	83.1/58.2	Est. Repl. Yr	2045	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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	09-Jan-2014		Previous Inspection Date	14-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							