

Bridge Culvert Inspection				
Bridge File Number	70373 -1 Bridge Culvert		Form Type	CUL1
Year Built	1977		Lot No.	1
Bridge or Town Name	CHERRILL		Inspector Name	Melanie Johnson
Located Over	TRIBUTARY TO PEMBINA RIVER, 8.11.84.39, WATERCRS-ST		Inspector Class	BR CLS B
Located On	764:02 C1 16.531		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	27-Aug-2011
Legal Land Location	SW SEC 34 TWP 57 RGE 5 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:40:17, 53:58:05		Data Entry Date	12-Sep-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA12		Review Date	01-Sep-2011
Clear Roadway/Skew	8 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	390 / 2010 (A)		Dept. Review Date	15-Sep-2011
Road Classification	RCU-208-110		Follow-Up By	
Detour Length (km)	29			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1500	MP	22.6	68X13		ROUND
Special Features	VERT STEEL STRUTS							
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	West r/w.		Gas	
Power	2 wires east r/w.		Municipal	
Others			Problem (Y/N)	No
Remarks	BF tag installed @ top of West end roof.			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	From entrance to North.
Vertical Alignment		7	7	
Roadway Width (m)	8.000			
Embankment		4	5	Wide crack (up to 25mm) in asphalt over pipe. -Breaking up creating dip/bump.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1.4)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		6	6	Rocks washed into bevel floor.
Heaving (mm)	150			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		5	5	Well grassed over.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 1500 , Type: MP)				
Barrel Last Accessible Date	27-Aug-2011			
Special Features				
Special Feature		7	7	
(Type : VERT STEEL STRUTS)				
Special Feature				
(Type :)				
Roof		2	2	3/5 length.
Measured Rise (mm)	1260			
Measured At Ring No.	9			
Sag (mm)	240			
Percent Sag	16			
Sidewall		2	2	3/5 length. 18.3%
Measured Span (mm)	1775			
Measured At Ring No.	9			
Deflection (mm)	275			
Percent Deflection	18			
Floor		5	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	First seam has infiltration at 4:00. -09-May-2008 Under water.
Separation (mm)	230			
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		3	3	Pitting, scaling, rust lower 1/2.
Corrosion By Soil (Y/N)	Yes			
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): 1500, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		4	4	Pipe above D/S end.
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	G.R. increased 2 points due to struts.
Downstream 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	
Bevel End		6	6	
Heaving (mm)	75			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	5	Well grassed over.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	Bend D/S, parallels roadway. HWM not visible.
Bank Stability		6	6	
HWM (m below Top of Culvert)				
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		6	6	

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	2013	Program replacement within 5 years or next roadway upgrades.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	47.2/46.7	Est. Repl. Yr	2013	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Continue to monitor shape and infiltration and corrosion. Inspect @ 24 month cycle and after each high water event.		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	27-Nov-2014		Previous Inspection Date	09-May-2008			
Inspection Cycle (Default) (months)	39						
Comment							