

Bridge Culvert Inspection			
Bridge File Number	75784 -1 Bridge Culvert	Form Type	CUL1
Year Built	1964	Lot No.	4
Bridge or Town Name	DRUMHELLER	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO ROSEBUD RIVER, 3.33.2, WATERCRS-ST	Inspector Class	BR CLS A
Located On	841:02 C1 11.957	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-May-2011
Legal Land Location	SW SEC 16 TWP 28 RGE 20 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-112:46:15, 51:23:29	Data Entry Date	25-May-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA21	Review Date	17-May-2011
Clear Roadway/Skew	9.2 / -2 deg. (LHF)	Dept. Reviewer Name	Chris Black
AADT/Year	190 / 2010 (A)	Dept. Review Date	27-May-2011
Road Classification	RLU-209-110	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	1724	1901	SPE	42.7	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments							
Telephone	West side.			Gas	38m North.		
Power				Municipal			
Others				Problem (Y/N)	No		
Remarks	Gas-Canterra Energy 938-6643						

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Land access on NE/NW.
Vertical Alignment		8	8	
Roadway Width (m)	9.200			
Embankment		7	7	Sideslopes steeper at South side of D/S end. Erosion from ditch drain.
Sideslope (__:1)	2.5			
(Height of Cover(m) : 4.6)				
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		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
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-May-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1890			
Measured At Ring No.	8			
Sag (mm)	11			
Percent Sag	0			0.6%
Sidewall		7	7	Minor dents during installation.
Measured Span (mm)	1735			
Measured At Ring No.	8			
Deflection (mm)	11			
Percent Deflection	0			0.6%
Floor		N	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		7	7	Poorly nested plates on U/S extensions except for first and last plates in the barrel.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Corrosion along strip of floor with scaling.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

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)				
Fish Passage Adequacy		4	4	Invert slightly above S/B.
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
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		4	4	Bevel unsupported for 500mm. Bevel pushed sideways, minor.
Heaving (mm)	200			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	50			
Scour Protection		4	4	Scour hole formed (3m X 8m). Outlet re-armoured.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 450)				
Scour/Erosion		4	4	
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	Pipe on too steep a grade resulting in too high a velocity on outlet scouring streambed. 700mm ditch drainage pipe on NE corner running from land access road to the side of bevel end. (E)
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			At d/s.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	67.0/67.0	Est. Repl. Yr	2034	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	Bryan Wai		Previous Assistant's Name				
Next Inspection Date	11-Aug-2014		Previous Inspection Date	25-Mar-2008			
Inspection Cycle (Default) (months)	39						
Comment							