

Bridge Culvert Inspection			
Bridge File Number	07012 -1 Bridge Culvert	Form Type	CUL1
Year Built	1990	Lot No.	3
Bridge or Town Name	WATER VALLEY	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO STONY CREEK, 3.89.21.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	579:02 C1 41.539	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Aug-2011
Legal Land Location	SW SEC 26 TWP 29 RGE 5 W5M	Data Entry By	Marcia Chavez
Longitude, Latitude	-114:36:08, 51:30:14	Data Entry Date	13-Sep-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA28	Review Date	15-Aug-2011
Clear Roadway/Skew	9 / -13 deg. (LHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year	1,020 / 2010 (A)	Dept. Review Date	15-Sep-2011
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2134	SP	92.1	152X51	4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South r/w.	Gas	
Power	3 wires North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	Phone in South slope over pipe.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Numerous farm entrances. No passing. Both directions. Bottom of vertical sag with limited sight distance.
Vertical Alignment		8	7	
Roadway Width (m)	9.000			
Embankment		4	4	Erosion 25 long x 1m x 1m @ NW West of pipe.
Sideslope (__:1)	2.5			
(Height of Cover(m) : 10.2)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2134, Type: SP)				
Barrel Last Accessible Date	09-Aug-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)	2110			At mid span.
Measured At Ring No.				
Sag (mm)	54			
Percent Sag	2			
Sidewall		8	8	
Measured Span (mm)	2130			At mid span.
Measured At Ring No.				
Deflection (mm)	46			
Percent Deflection	2			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Superficial corrosion @ floor.
Corrosion By Soil (Y/N)	No			
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): , Rise (mm): 2134, Type: SP)				
Fish Passage Adequacy		3	3	Outlet perched 0.5m - photo.
Baffle (Type :)		X	X	
Waterway Adequacy		6	6	
Icing (Y/N)		No		
Siltting (Y/N)		No		
Drift (Y/N)		No		
Barrel General Rating		8	8	
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 (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)		0		
Invert Above/Below Stream Bed		BELOW		
Above/Below (mm)		200		
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		4	4	Outlet perched 0.5m - photo.
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		8	8	
Bank Stability		5	5	Cutbanks D/S.
HWM (m below Top of Culvert)		2.0		(HWM to crown. 03/Oct/2002)
Drift (Y/N)		No		(Grass in trees @ U/S. 01Oct2009).
Channel Bottom Degrading/Aggrading				Unknown.
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2012	25m3 Class II @ NW dtich erosion.					
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) (%)	88.9/88.9	Sufficiency Rating (Last/Now) (%)	68.8/68.8	Est. Repl. Yr	2046	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2006.07.28 With normal maintenance culvert should be good until 2050. Consider liner.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Dave Lam		Previous Assistant's Name				
Next Inspection Date	09-Nov-2014		Previous Inspection Date	01-Oct-2009			
Inspection Cycle (Default) (months)	39						
Comment							