Bridge Culvert Inspection

Bridge File Number	71609 -1 Bridge Culvert	Form Type	CUL1
Year Built	1998	Lot No.	4
Bridge or Town Name	HANNA	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO BULLPOUND CREEK, 3.17.10, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	9:10 C1 0.369	Assistant Class	
Water Body Cl./Year		Inspection Date	03-Nov-2011
Navigabil. Cl./Year		Data Entry By	Marcia Chavez
Legal Land Location	SW SEC 6 TWP 31 RGE 13 W4M	Data Entry Date	28-Nov-2011
Longitude, Latitude	-111:50:32, 51:37:12	Reviewer Name	John O'Brien
Road Authority	Alberta Transportation (AIT)	Review Date	14-Nov-2011
Contract Main. Area	CMA21	Dept. Reviewer Name	Andrew Smikles
Clear Roadway/Skew	13.4 / -22 deg. (LHF)	Dept. Review Date	02-Dec-2011
AADT/Year	2,980 / 2010 (A)	Follow-Up By	
Road Classification	RAU-213.4-120		
Detour Length (km)	67		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1800	MP	68.6	125X26	3.5	ROUND
Special Features		, Cathodic Protection System						
Special Features Comment		13.0m E to pole; not in service.						

Utilities (Located at)

Utility Attachments			
Telephone	South ditch.	Gas	
Power	1 wire OH North along fenceline.	Municipal	
Others	Fibre optics North r/w.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Jct. Hwy 36 North, 300m West.
Vertical Alignment		8	8	
Roadway Width (m)	12.500			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **4.8**)				
Guardrail (Y/N)	No			
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		7	7	Superficial corrosion on floor, very minor.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP**)				
Barrel Last Accessible Date	03-Nov-2011			
Special Features				
Cathodic Protection System		N	N	
(Cathodic Protection System Type : **PASSIVE**)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1788			At mid point.
Measured At Ring No.				
Sag (mm)	12			0.7%
Percent Sag	1			
Sidewall		7	7	
Measured Span (mm)	1817			At mid point.
Measured At Ring No.				
Deflection (mm)	17			0.9%
Percent Deflection	1			
Floor		8	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
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		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 1800, Type: MP**)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
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		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	Hinged cattle guard at outlet.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	S curves U/S & D/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Unknown.
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) (%)**	**77.5/77.5**	Est. Repl. Yr	2048	Maint. Reqd. (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	Jason Saly	Previous Assistant's Name			
Next Inspection Date	03-Aug-2013	Previous Inspection Date	12-Mar-2010		
Inspection Cycle (Default) (months)	21				
Comment					