

Bridge Culvert Inspection			
Bridge File Number	74121 -1 Bridge Culvert	Form Type	CUL1
Year Built	1953	Lot No.	4
Bridge or Town Name	HANNA	Inspector Name	Owen Salava
Located Over	2ND ORDER TRIBUTARY TO BERRY CK, 3.14.10.3, WATERCRS-ST	Inspector Class	BR CLS A
Located On	9:10 C1 7.111	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	03-Nov-2011
Legal Land Location	SW SEC 2 TWP 31 RGE 13 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-111:44:42, 51:37:12	Data Entry Date	29-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA21	Review Date	14-Nov-2011
Clear Roadway/Skew	10.2 /	Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,030 / 2010 (A)	Dept. Review Date	02-Dec-2011
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	27		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2000	2000	BP	19.5			RECTANGLE
Special Features	, Cathodic Protection System							
Special Features Comment								

Utilities (Located at)

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

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Local road int 500m East.
Vertical Alignment		8	8	
Roadway Width (m)	10.200			Transverse ACP crack over pipe & West of pipe.
Embankment		6	6	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 1.6)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	
Collar		X	X	
Wingwalls		7	7	Wings attached to cell, typical.
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	400			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
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): 2000, Rise (mm): 2000, Type: BP)				
Barrel Last Accessible Date	03-Nov-2011			
Special Features				
Cathodic Protection System		N	N	Filled open spots with foam insulation.
(Cathodic Protection System Type : PASSIVE)				
Special Feature				
(Type :)				
Roof		7	7	Rise measured at South end = 2008mm, 8mm. North end = 2008mm, 8mm.
Measured Rise (mm)	2009			
Measured At Ring No.				At mid point.
Sag (mm)	9			0.5%
Percent Sag	1			
Sidewall		5	5	Longitudinal chamfer crack @ roof/wall interface both sides of U/S cell. Narrow vertical cracks @ end location along sidewalls. Span measured @ mid point = 2001, 1mm. North end = 1999mm, 1mm. At South end.
Measured Span (mm)	2009			
Measured At Ring No.				
Deflection (mm)	9			0.5%
Percent Deflection	1			
Floor		5	5	4 - 5mm wide cracks & medium scaling. 75mm gap at mid span seam on floor.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	At floor. Fill infiltration at floor.
Separation (mm)	65			
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 2000, Rise (mm): 2000, Type: BP)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	
Collar		X	X	
Wingwalls		7	7	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	5	Waste concrete in streambed filling scour hole.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	5	Small scour hole off end of outlet, filled with rock. Not affecting bevel end. 10 x 8m scour hole beyond riprap.
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	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Not visible.
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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	58.2/58.2	Est. Repl. Yr	2025	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	Jason Saly		Previous Assistant's Name				
Next Inspection Date	03-Aug-2013		Previous Inspection Date	12-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							