

Bridge Culvert Inspection			
Bridge File Number	71608 -1 Bridge Culvert	Form Type	CULM
Year Built	1953	Lot No.	4
Bridge or Town Name	HANNA	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO BERRY CREEK, 3.14.10, WATERCRS-ST	Inspector Class	BR CLS A
Located On	9:10 C1 9.114	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	03-Nov-2011
Legal Land Location	SE SEC 1 TWP 31 RGE 13 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-111:42:58, 51:37:12	Data Entry Date	28-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 /	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)	67		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4000	2000	BP	20.7			RECTANGLE
Special Features	, Cathodic Protection System							
Special Features Comment	Steel circumferential plates.							

Utilities (Located at)

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

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	
Vertical Alignment	8	8	
Roadway Width (m)	10.000		ACP crack over structure.
Embankment	7	7	
Sideslope (__:1)	2.5		
(Height of Cover(m) : 2)			
Guardrail (Y/N)	Yes		Incorrect lap @ SE corner.
Approach Road / Embankment General Rating	8	8	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		West cell.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	5	5	Medium scaling on top of bevel crown.
Collar	X	X	
Wingwalls	5	5	Wings cast into box, typical.
(Shape :)			
Cutoff Wall	N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		6	6	Minimal rock, overgrown.
(Type : RIP RAP)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	6	
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, Cell Sequence: 1)				
Barrel Last Accessible Date	03-Nov-2011			West cell.
Special Features				
Cathodic Protection System		N	N	Gap between plates @ top corner @ West. Plate @ center joint. Not on seam between pipes. Plates do not extend to floor. No evidence of passive cathodic protection.
(Cathodic Protection System Type : PASSIVE)				
Special Feature				
(Type :)				
Roof		7	7	Midspan. 0.3%
Measured Rise (mm)	2005			
Measured At Ring No.				
Sag (mm)	5			
Percent Sag	0			
Sidewall		6	6	Minor pop-outs @ West side of North end. 0.3%
Measured Span (mm)	1995			
Measured At Ring No.				
Deflection (mm)	5			
Percent Deflection	0			
Floor		N	5	Shows wear, scaling present, light to medium.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	Repaired with steel plates. Some scaling at collar. Minor infiltration at West sidewall.
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, Cell Sequence: 1)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)		No		
Siltting (Y/N)		No		
Drift (Y/N)		No		
Barrel General Rating		6	6	

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, Cell Sequence: 2)				
Barrel Last Accessible Date		03-Nov-2011		East cell.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)		2005		
Measured At Ring No.				
Sag (mm)		5		0.3%
Percent Sag		0		
Sidewall		7	7	
Measured Span (mm)		2005		
Measured At Ring No.				
Deflection (mm)		5		0.3%
Percent Deflection		0		
Floor		N	5	Medium to light scaling.
Bulge (mm)		0		
Measured At Ring No.				
Abrasion (Y/N)		No		
Circumferential Seams		5	5	
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)		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): 2000, Rise (mm): 2000, Type: BP, Cell Sequence: 2)				
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)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls		5	5	Crack & scaled @ SE end.
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	Minimal rock overgrown.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	Scour hole @ D/S end, 4m x 6m x .4m deep, rock covered. No problem.
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) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	67.2/67.2	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							