

Bridge Culvert Inspection			
Bridge File Number	71869 -1 Bridge Culvert	Form Type	CULM
Year Built	1998	Lot No.	4
Bridge or Town Name	HANNA	Inspector Name	Owen Salava
Located Over	BULLPOUND CREEK, 3.17, WATERCRS-ST	Inspector Class	BR CLS A
Located On	9:08 C1 49.976	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	02-Nov-2011
Legal Land Location	NE SEC 12 TWP 31 RGE 15 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-112:00:02, 51:38:42	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	12.8 / 8 deg. (RHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,620 / 2010 (A)	Dept. Review Date	02-Dec-2011
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	7		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	3000	MP	51.2	125X26	3.5	ROUND
2	MAIN	-	3000	MP	51.2	125X26	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South r/w.	Gas	
Power	4 wire North of RR tracks, North of pipes.	Municipal	
Others	Old telegraph lines.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	Grade to the West.
Vertical Alignment	7	7	
Roadway Width (m)	12.800		
Embankment	6	6	Ditch erosion at SW now vegetated.
Sideslope (__:1)	4.0		
(Height of Cover(m) : 3.2)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	N		East pipe.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	8	8	
Collar	8	8	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		N	N	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		N	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	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): 3000, Type: MP)				
Barrel Last Accessible Date	11-Mar-2010			Thin ice, 1.3m water; viewed from ends, shape looks good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	N	(Unable to measure rise. 11Mar2010).
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			(Estimate 1%. 11Mar2010).
Sidewall		7	N	(Span measured @ South end = 2981mm, 19mm. Mid point = 2991mm, 9mm. 11Mar2010).
Measured Span (mm)	2967			
Measured At Ring No.				(At North end. 11Mar2010).
Deflection (mm)	33			(1.1%. 11Mar2010).
Percent Deflection	1			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	N	
Separation (mm)	15			
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		6	6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
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	N	GR was 7 from 11Mar2010.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		East pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	8	
Beavers (Y/N)	No			
Downstream End General Rating		8	8	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		West pipe.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		N	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: MP)				
Barrel Last Accessible Date	10-Mar-2010			West pipe. Thin ice, 1.3m water; viewed from ends, shape looks good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	N	(Rise could not be measured due to ice. 10Mar2010).
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				(Estimate 1%. 10Mar2010).
Percent Sag	0			
Sidewall		7	N	(Span measured @ mid point = 2979mm, 21mm. North end = 3009mm, 9mm. At South end. 10Mar2010).
Measured Span (mm)	2954			
Measured At Ring No.				
Deflection (mm)	46			(1.5%. 10Mar2010).
Percent Deflection	2			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	N	
Separation (mm)	10			
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		6	6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: MP)				
Ponding (Y/N)	No			
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	N	GR was 7 from 10Mar2010.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		West pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	8	
Beavers (Y/N)	No			
Downstream End General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Rail bridge 40m u/s.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			(23/Mar/2007)
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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) (%)	77.8/55.6	Sufficiency Rating (Last/Now) (%)	80.5/68.5	Est. Repl. Yr	2045	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	02-Aug-2013		Previous Inspection Date	11-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							