

Bridge Culvert Inspection				
Bridge File Number	74371 -1 Bridge Culvert		Form Type	CUL1
Year Built	1954		Lot No.	3
Bridge or Town Name	HARDISTY		Inspector Name	Owen Salava
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	13:16 C1 39.802		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	28-Jun-2012
Legal Land Location	NE SEC 35 TWP 42 RGE 10 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-111:19:43, 52:39:51		Data Entry Date	15-Jul-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA16		Review Date	05-Jul-2012
Clear Roadway/Skew	11.2 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	1,730 / 2011 (A)		Dept. Review Date	19-Jul-2012
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	3			

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	17.7			RECTANGLE
Special Features								
Special Features Comment								

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)			No									
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks		Not required.										

Utilities (Located at)			
Utility Attachments			
Telephone	North r/w.		Gas
Power			Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 250m East.
Vertical Alignment		7	7	
Roadway Width (m)	11.200			
Embankment		7	7	
Sideslope (___:1)	3.0			
(Height of Cover(m) : 0.5)				
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		6	6	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape : FLARE)		6	6	A wide vertical crack between wingwall and the main barrel @ SE.
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection (Type : NATURAL) (Avg. Rock Size(mm) :)		6	6	
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End 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)				
Barrel Last Accessible Date	28-Jun-2012			Culvert also handles ditch drainage flowing from South to North.
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		6	6	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		6	6	SW corner has a wide vertical crack.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	50 mm dirt - no evidence of problems.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
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		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (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)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		6	6	NE wingwall has 1mm wide diagonal crack.
(Shape : FLARE)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			A 400mm drop @ North end is a hazard to the public.
Above/Below (mm)	400			
Scour Protection		6	6	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		5	5	Adequate for use.
Roadway Surface		6	6	
(Type : SOIL)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type	None			
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Drainage		6	6	
Structure In Use (Y/N)	Yes			Appears to be used only as ATV crossing.
Grade Separation General Rating		5	5	

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	2012	Fill low area at northend 0.5m3 pitrun or loam.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	67.3/67.3	Est. Repl. Yr	2024	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2007.07.04 Structure can be removed or remediated at the convenience of the department.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Owen Salava		Previous Assistant's Name				
Next Inspection Date	28-Mar-2014		Previous Inspection Date	31-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							