

Bridge Culvert Inspection				
Bridge File Number	76244 -1 Bridge Culvert		Form Type	CUL1
Year Built	1965		Lot No.	4
Bridge or Town Name	TWO HILLS		Inspector Name	Jason Saly
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	45:08 C1 6.775		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	23-Jan-2013
Legal Land Location	NW SEC 36 TWP 54 RGE 12 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-111:38:44, 53:42:42		Data Entry Date	01-Mar-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA14		Review Date	13-Feb-2013
Clear Roadway/Skew	9.2 /		Dept. Reviewer Name	Chris Black
AADT/Year	660 / 2011 (A)		Dept. Review Date	14-Mar-2013
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	2			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1724	1901	MPE	20.1	68X13	3.5	ELLIPSE
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)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks	Not required; cattle crossing.										

Utilities (Located at)

Utility Attachments											
Telephone	Plowed in South ditch.					Gas					
Power	2 wire OH across road 180m West.					Municipal					
Others						Problem (Y/N)		No			
Remarks											

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection with local road 200m west. Curve 300m west. Near top of blind crest curve. No passing EB.
Vertical Alignment		6	6	
Roadway Width (m)	9.200			
Embankment		8	N	Snow covered, but no signs of problems.
Sideslope (___:1)	3.0			
(Height of Cover(m) : 1.1)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	Squared end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection (Type : NATURAL) (Avg. Rock Size(mm) :)		7	N	Snow covered.
Scour/Erosion		7	X	
Beavers (Y/N)	No			
Upstream End General Rating		7	N	GR was 7 from 07Jun2011.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: MPE)				
Barrel Last Accessible Date	23-Jan-2013			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		6	6	Minor damage to roof at South end.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		7	7	Span at N end=1696=28mm Span at midpipe=1705=19mm Span at S end=1695=29mm=1.7%
Measured Span (mm)	1695			
Measured At Ring No.				
Deflection (mm)	29			Inwards 1.7%
Percent Deflection	2			
Floor		N	N	Dirt covered over concrete floor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	Riveted.
Total No. of Cracked Rings	0			
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			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: MPE)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Siltng (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	Squared end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		7	N	Snow covered.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	X	
Beavers (Y/N)	No			
Downstream End General Rating		7	N	GR was 7 from 07Jun2011.

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	
Roadway Surface		7	7	
(Type :)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Drainage		7	7	
Structure In Use (Y/N)	Yes			
Grade Separation 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) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	78.1/74.3	Est. Repl. Yr	2039	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)	Y						
Proposed Action	2007.12.29 Review in two years time for continued usage. Brownlee & Associates						
Previous Inspector's Name	Jason Saly		Previous Assistant's Name				
Next Inspection Date	23-Oct-2014		Previous Inspection Date	06-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							