

Bridge Culvert Inspection				
Bridge File Number	76428 -1 Bridge Culvert		Form Type	CUL1
Year Built	1966		Lot No.	4
Bridge or Town Name	ERSKINE		Inspector Name	Owen Salava
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	12:12 C1 38.327		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	31-Aug-2012
Legal Land Location	SW SEC 5 TWP 39 RGE 20 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-112:51:18, 52:19:14		Data Entry Date	04-Oct-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA20		Review Date	06-Sep-2012
Clear Roadway/Skew	13.4 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	4,530 / 2011 (A)		Dept. Review Date	16-Oct-2012
Road Classification	RAU-213.4-120		Follow-Up By	
Detour Length (km)	18			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1778	2311	RPP	26.2	152X51	3.5	PIPE ARCH
Special Features		CONC FLOOR						
Special Features Comment								

Posting Information											
Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)											
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks		Not required.									

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	
Power	Crosses 100m West.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	In a curve.
Vertical Alignment		7	7	Superelevated with crest curve to West, limited sight distance.
Roadway Width (m)	13.400			Transverse crack over pipe.
Embankment		6	6	
Sideslope (___:1)	3.5			
(Height of Cover(m) : 0.5)				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>5</b>	<b>5</b>	

Upstream End				
<b>Culvert Component</b>		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>
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	Square end. Gate across barrel. Mower damage to roof.
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		5	5	
Scour/Erosion		5	5	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1778, Rise (mm): 2311, Type: RPP)				
Barrel Last Accessible Date	31-Aug-2012			
<b>Special Features</b>				
Special Feature (Type : <b>CONC FLOOR</b> )			N	Concrete floor. Covered by dirt.
Special Feature (Type : )				
Roof		N	4	Construction damage with localized bulge and tears in roof both ends - minor.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	6	Bent at South end in approx 150mm (photo).  Inward.
Measured Span (mm)	1760			
Measured At Ring No.	6			
Deflection (mm)	18			
Percent Deflection	1			
Floor		N	N	Covered by concrete floor & dirt. No sign of problems.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	5	
Separation (mm)	0			
Longitudinal Seams		N	5	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		N	5	Calcium staining on top seam both ends under sideslope.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1778, Rise (mm): 2311, Type: RPP)</b>				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			Low point collecting ditch run-off.
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			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	

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	Square end bent at W side.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		5	5	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		5	5	South end has been bent restricting the opening by 150mm.
Roadway Surface		7	7	
(Type : <b>CONCRETE</b> )				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type	None			
Lighting		X	X	
Barrel Leakage (Y/N)	No			

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>
Drainage		4	4	Collecting point for surface drainage.
Structure In Use (Y/N)	Yes			
<b>Grade Separation General Rating</b>		<b>4</b>	<b>4</b>	

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							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>57.5/57.5</b>	Est. Repl. Yr	2028	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)	N						
Proposed Action	2006.10.25 Review site again in 2 years for continued usage.						
Previous Inspector's Name	Owen Salava	Previous Assistant's Name					
Next Inspection Date	31-May-2014	Previous Inspection Date	26-Aug-2010				
Inspection Cycle (Default) (months)	21						
Comment							