

Bridge Culvert Inspection				
Bridge File Number	76213 -1 Bridge Culvert		Form Type	CUL1
Year Built	1965		Lot No.	3
Bridge or Town Name	CASTOR		Inspector Name	Owen Salava
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	36:14 C1 16.176		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	16-Jul-2012
Legal Land Location	NE SEC 5 TWP 39 RGE 13 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-111:49:51, 52:19:50		Data Entry Date	02-Aug-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA21		Review Date	31-Jul-2012
Clear Roadway/Skew	10.8 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	950 / 2011 (A)		Dept. Review Date	07-Aug-2012
Road Classification	RAU-210-110		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	1725	1981	RPE	22	152X51	2.8	PIPE ARCH
Special Features								
Special Features Comment								

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

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

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	In a curve, superelevated, limited sight distance, mild undulations, no passing.
Vertical Alignment		6	6	
Roadway Width (m)	10.800			
Embankment		N	6	
Sideslope (___:1)	3.0			
(Height of Cover(m) : 1.2)				
Guardrail (Y/N)	Yes			1 broken guardrail post along the E rail.
<b>Approach Road / Embankment General Rating</b>		<b>5</b>	<b>5</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Construction dents at this end galvanizing flaked off with minor rust spots.
Above/Below (mm)	200			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		N	6	Well grassed.
Scour/Erosion		N	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1725, Rise (mm): 1981, Type: RPE)				
Barrel Last Accessible Date	16-Jul-2012			
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		6	6	Hole through East crown, mower damage.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	25			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	1761			
Measured At Ring No.	9			
Deflection (mm)	36			2.1%
Percent Deflection	2			
Floor		N	N	Concrete floor, dirt covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		6	6	6 bolts, South wall, shoulder seam pulling into metal. Still functional.
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		5	5	On two minor spots near West end beginning to rust. Construction dents. Also rust on exposed crown @ East end due to mower damage.
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): 1725, Rise (mm): 1981, Type: RPE)</b>				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		X	6	Minor flow from W.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>6</b>	<b>6</b>	

Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
Direction		E			
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.	
Heaving (mm)	0				
Invert Above/Below Stream Bed	BELOW				
Above/Below (mm)	200				
Scour Protection		N	7	Well grassed.	
(Type : <b>RIP RAP</b> )					
(Avg. Rock Size(mm) : <b>300</b> )					
Scour/Erosion		N	7		
Beavers (Y/N)	No				
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>		

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		7	7	Dirt covered.
Roadway Surface		N	N	
(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		7	7	
Structure In Use (Y/N)	Yes			
<b>Grade Separation General Rating</b>		<b>7</b>	<b>7</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	2012	Replace broken guardrail post, 1 on E side.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>66.7/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>76.6/67.2</b>	Est. Repl. Yr	2040	Maint. Req. (Y/N)	Yes
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	2007.05.21 Revisit site again in two years to determine continued usage.						
Previous Inspector's Name	Jason Saly		Previous Assistant's Name				
Next Inspection Date	16-Apr-2014		Previous Inspection Date	09-Mar-2011			
Inspection Cycle (Default) (months)	21						
Comment							