

Bridge Culvert Inspection			
Bridge File Number	74755 -1 Bridge Culvert	Form Type	CUL1
Year Built	1957	Lot No.	4
Bridge or Town Name	FORT SASK	Inspector Name	Shane Hall
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	15:04 C1 1.247	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	13-Dec-2011
Legal Land Location	SE SEC 35 TWP 54 RGE 23 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:16:47, 53:42:21	Data Entry Date	29-Jan-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA09	Review Date	19-Jan-2012
Clear Roadway/Skew	13.7 / -27 deg. (LHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	8,790 / 2010 (A)	Dept. Review Date	02-Feb-2012
Road Classification	RAU-213.4-120	Follow-Up By	
Detour Length (km)	3		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	2400	2400	BP	28			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						Gas						
Power	4 O/H line in N row					Municipal						
Others						Problem (Y/N)	No					
Remarks												

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		8	8	
Roadway Width (m)	13.700			
Embankment		8	8	
Sideslope (___:1)	3.0			
(Height of Cover(m) : <b>0.4</b> )				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>8</b>	<b>8</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	6	6	Scaling on top edge.
Collar	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape : )		6	6	Minor scaling, wide diagonal crack North wingwall. Light scaling. Wide diagonal crack NW wall & SW wall. Cold joint on West & East side between wingwall and barrel has spalled and rebar is exposed.
Cutoff Wall		N	2	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		X	X	
Scour/Erosion		X	X	
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
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2400, Rise (mm): 2400, Type: BP)</b>				
Barrel Last Accessible Date	13-Dec-2011			
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		7	7	Random hairline cracks. U/S - silt. At c/l of box.
Measured Rise (mm)	2424			
Measured At Ring No.				
Sag (mm)	24			
Percent Sag	1			
Sidewall		6	6	Longitudinal narrow cracks both sidewalls. Wide vertical crack both sidewalls and floor at center of box, crack is narrow in roof. At c/l of box.
Measured Span (mm)	2438			
Measured At Ring No.				
Deflection (mm)	38			
Percent Deflection	2			
Floor		5	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	Vertical cracking @ cold pour joints.
Separation (mm)	3			
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2400, Rise (mm): 2400, Type: BP)</b>				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
<b>(Type : )</b>				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Siltting (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)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls (Shape : )		5	4	Diagonal cracking in walls. Wide cracks at cold joint to barrel. Rebar exposed in spalled cold joint.
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		X	X	
Scour/Erosion		X	X	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>4</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		7	7	Rebar guardrail on west side is flattened and bent.  Not in use, no fences.
Roadway Surface		5	5	
<b>(Type : )</b>				
Icing (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Traffic Safety Features		X	X	
Type	Rebar guardrail			
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		6	6	
Structure In Use (Y/N)	No			
<b>Grade Separation General Rating</b>		<b>7</b>	<b>5</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>66.7/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>72.6/70.0</b>	Est. Repl. Yr	2035	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	Arnold Assenheimer		Previous Assistant's Name				
Next Inspection Date	13-Sep-2013		Previous Inspection Date	16-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							