

Bridge Culvert Inspection				
Bridge File Number	74290 -1 Bridge Culvert		Form Type	CUL1
Year Built	1954		Lot No.	4
Bridge or Town Name	CARSTAIRS		Inspector Name	Owen Salava
Located Over	ROSEBUD RIVER, 3.33, WATERCRS-ST		Inspector Class	BR CLS A
Located On	2:20 R1 13.763;2:20 L1 13.761		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Mar-2013
Legal Land Location	SE SEC 26 TWP 30 RGE 1 W5M		Data Entry By	Marcia Chavez
Longitude, Latitude	-114:01:31, 51:35:54		Data Entry Date	26-Mar-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA29		Review Date	16-Mar-2013
Clear Roadway/Skew	42 / 0 deg.		Dept. Reviewer Name	Chris Black
AADT/Year	27,560 / 2011 (A)		Dept. Review Date	28-Mar-2013
Road Classification	RFD-412.4-130		Follow-Up By	
Detour Length (km)	1			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	4460	7770	AP	198			ARCH
Special Features								
Special Features Comment								

**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		9	9	Steep grades both sides - outside standards. Est. 5% both sides. Good sight.
Vertical Alignment		5	5	
Roadway Width (m)	42.000			9m wide service Roads at @ E & W
Embankment		7	7	Installed @ service roads.
Sideslope ( _ :1)	3.0			
(Height of Cover(m) : 6.5)				
Guardrail (Y/N)	Yes			
<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)	CONCRETE			
Headwall		9	9	Several cracks headwall.
Collar		X	X	
Wingwalls		X	9	
(Shape : <b>FLARE</b> )				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		9	9	class 3 @ banks
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>400</b> )				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>8</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4460, Rise (mm): 7770, Type: AP)				
Barrel Last Accessible Date	14-Mar-2011			Ice melting in culvert. Viewed from ends; looks good.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	(New sections @ ends rate 8. 18Mar2004).
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		N	N	(Spalls @ old center section repaired. 18Mar2004).
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
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)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4460, Rise (mm): 7770, Type: AP)				
Fish Passage Adequacy		7	7	
Baffle		7	N	(Turbulence block at outlet. 10Aug2011).
(Type : )				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	GR was 7 from 18Mar2004.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	9	
Collar		X	X	
Wingwalls		X	X	
(Shape : <b>FLARE</b> )				
Cutoff Wall		N	N	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		9	9	Some class 3 mixed in.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>400</b> )				
Scour/Erosion		9	9	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>9</b>	<b>9</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		8	8	
HWM (m below Top of Culvert)	1.0			
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel 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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>74.1/74.1</b>	Est. Repl. Yr	2055	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	11-Dec-2014		Previous Inspection Date	10-Aug-2011			
Inspection Cycle (Default) (months)	21						
Comment							