

Bridge Culvert Inspection			
Bridge File Number	07278 -1 Bridge Culvert	Form Type	CUL1
Year Built	1964	Lot No.	3
Bridge or Town Name	CARBON	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO KNEEHILLS CREEK, 3.46.7, WATERCRS-ST	Inspector Class	BR CLS A
Located On	836:02 C1 11.794	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-May-2011
Legal Land Location	NE SEC 15 TWP 29 RGE 23 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-113:08:59, 51:29:19	Data Entry Date	25-May-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA21	Review Date	17-May-2011
Clear Roadway/Skew	9.2 / -22 deg. (LHF)	Dept. Reviewer Name	Chris Black
AADT/Year	470 / 2010 (A)	Dept. Review Date	27-May-2011
Road Classification	RCU-209-110	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	-	1500	MP	34.1	68X13	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	North ditch.	Gas	
Power	Cross rd over pipe 3 wire O/H, then 4 wires OH to S.	Municipal	
Others		Problem (Y/N)	No
Remarks	3 wire O/H-north r/w 20m from centerline.		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Intersection 5m W - E end of Carbon. (Parkland ave). Gravel sidewalk on South with metal rail on South.
Vertical Alignment		7	7	
Roadway Width (m)	9.300			
Embankment		7	4	Bank failure to SE at or near old 900 culvert location. No threat to road at this time.
Sideslope ( __:1)	3.0			
(Height of Cover(m) : 1.8)				
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		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		5	5	Superficial rust on bevel.
Heaving (mm)	100			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		6	6	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		6	6	
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): , Rise (mm): 1500, Type: MP)				
Barrel Last Accessible Date	11-May-2011			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		5	5	
Measured Rise (mm)	1410			
Measured At Ring No.	2			
Sag (mm)	90			
Percent Sag	6			
Sidewall		4	4	Minor 30mm bulge under SBL.
Measured Span (mm)	1610			
Measured At Ring No.	2			
Deflection (mm)	110			7.3%
Percent Deflection	7			
Floor		N	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	60			
Longitudinal Seams		7	7	Riveted seams.
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)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	Evidence of soil side corrosion.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: MP)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (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)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		6	6	Minor superficial rust.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	3000			
Scour Protection		7	7	
(Type : <b>GABION</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	U/S ditch bend 80 degree to inlet.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
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>6</b>	<b>6</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	2011	20m3 pitrun to repair SE bank slide. Excavate and palce with compaction.					
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>55.4/55.4</b>	Est. Repl. Yr	2024	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2004.05.29 Culvert should be good until 2024.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Bryan Wai		Previous Assistant's Name				
Next Inspection Date	11-Aug-2014		Previous Inspection Date	25-Mar-2008			
Inspection Cycle (Default) (months)	39						
Comment							