

Bridge Culvert Inspection			
Bridge File Number	00415 -1 Bridge Culvert	Form Type	CUL1
Year Built	1986	Lot No.	4
Bridge or Town Name	MIRROR	Inspector Name	Owen Salava
Located Over	PARLBY CREEK, 3.65.2.1.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	21:20 C1 12.875	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	19-Sep-2012
Legal Land Location	SW SEC 34 TWP 40 RGE 22 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-113:05:59, 52:29:05	Data Entry Date	02-Oct-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA20	Review Date	27-Sep-2012
Clear Roadway/Skew	11 / -40 deg. (LHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year	1,460 / 2011 (A)	Dept. Review Date	16-Oct-2012
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	15		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	7000	5300	RPE	54.3	152X51	5.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	West r/w.	Gas	
Power	3 wires 20m East of c/l.	Municipal	
Others	Fibreoptic E r/w.	Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	5	5	Horizontal curve & sag crest, limited sight distance, both directions.
Vertical Alignment	5	5	Field approach at NE. No passing both directions.
Roadway Width (m)	10.700		
Embankment	7	7	Crack in ACP @ both sides - sealed.
Sideslope (__:1)	3.0		
(Height of Cover(m) : 1.5)			
Guardrail (Y/N)	Yes		Minor damage on guardrail and posts on SB lane (W.side).
<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	7	7	Patched.
Collar	6	6	1mm wide transverse cracks.
Wingwalls	X	X	
(Shape : )			
Cutoff Wall	N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	Inspected what is visible.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		5	5	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		5	5	Small erosion gully at SW & NW ditch leading into river.
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
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 7000, Rise (mm): 5300, Type: RPE)</b>				
Barrel Last Accessible Date	08-Feb-2008			Not accessible due to deep water. Viewed from both ends. Shape appears good.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	(Not able to measure rise due to ice on floor. 08Feb2008).
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	(Inward. 08Feb2008).
Measured Span (mm)	6970			
Measured At Ring No.	6			
Deflection (mm)	30			
Percent Deflection	1			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	Not staggered @ 2 o'clock & 10 o'clock 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)	No			
Coating		6	6	White stains on sidewalls and roof. Localized (spot) corrosion @ 1 o'clock near West end.
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): 7000, Rise (mm): 5300, Type: RPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	Previous GR was 7 from 08Feb2008.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	Large chip in headwall. Honeycombing (photo).
Collar		6	6	Minor cracks.
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	
Bevel End		6	6	Inspected what was visible.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
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>Channel (U/S and D/S)</b>				
Alignment		8	8	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Unknown.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>8</b>	<b>8</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>59.8/59.9</b>	Est. Repl. Yr	2037	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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	19-Jun-2014		Previous Inspection Date	09-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							