

Bridge Culvert Inspection				
Bridge File Number	01729 -1 Bridge Culvert		Form Type	CULE
Year Built	1976		Lot No.	4
Bridge or Town Name	RED EARTH CR		Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO WABASCA RIVER, 8.10.18.11, WATERCRS-ST		Inspector Class	BR CLS A
Located On	88:12 C1 15.063		Assistant Name	Clem Guenette
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	12-Jun-2012
Legal Land Location	NE SEC 36 TWP 94 RGE 8 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:07:55, 57:12:04		Data Entry Date	05-Nov-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA02		Review Date	01-Nov-2012
Clear Roadway/Skew	10.6 / -25 deg. (LHF)		Dept. Reviewer Name	David Morrison
AADT/Year	180 / 2011 (A)		Dept. Review Date	15-Jan-2013
Road Classification	RAU-210-110		Follow-Up By	
Detour Length (km)	300			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	U/S	-	3670	SP	8.534	125X51	3.0	ROUND
1	MAIN	-	2700	MP	68.4	125X51	3.5	ROUND
1	D/S	-	3670	SP	7.924	152X51	3.0	ROUND
Special Features	BARREL DEICING PIPE							
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	8	8	Bottom sag curve.
Vertical Alignment	7	6	
Roadway Width (m)	13.000		
Embankment	6	6	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 7)			
Guardrail (Y/N)	Yes		
<b>Approach Road / Embankment General Rating</b>	<b>7</b>	<b>6</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	9	9	
Collar	9	9	
Wingwalls	9	9	
(Shape : )			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		7	7	Embankment fill and rock riprap installed to low. Top of rock approx. 300mm below top of culvert. collar.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>450</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : <b>1</b> , Primary Span, Location Code: <b>U/S</b> , Span (mm): , Rise (mm): <b>3670</b> , Type: <b>SP</b> )				
Barrel Last Accessible Date	11-Jun-2012			Ratings are for 3670 spcsp extensions at u/s and d/s ends.
<b>Special Features</b>				
Special Feature				Barrel deing pipe
(Type : )				
Special Feature				
(Type : )				
Roof		9	8	u/s
Measured Rise (mm)	3709			Deflection upward.
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		9	8	u/s
Measured Span (mm)	3639			Deflection inward.
Measured At Ring No.	1			
Deflection (mm)	2			
Percent Deflection	0			
Floor		N	N	Covered with silt.
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	No			
Circumferential Seams		9	9	
Separation (mm)				
Longitudinal Seams		9	9	2N
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		8	8	
Corrosion By Soil (Y/N)				
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: U/S, Span (mm): , Rise (mm): 3670, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	(Spring fed - ices up every year. Nov 14, 2008)
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel Extension General Rating</b>		<b>9</b>	<b>8</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP)				
Barrel Last Accessible Date	11-Jun-2012			
<b>Special Features</b>				
Special Feature		7	7	
(Type : <b>BARREL DEICING PIPE</b> )				
Special Feature				
(Type : )				
Roof		5	5	@ CL
Measured Rise (mm)	2603			
Measured At Ring No.				
Sag (mm)	97			
Percent Sag	4			
Sidewall		5	5	@ CL
Measured Span (mm)	2870			
Measured At Ring No.				
Deflection (mm)	170			
Percent Deflection	6			
Floor		N	N	Under water.
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)				
Longitudinal Seams		7	7	1N
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		6	6	
Corrosion By Soil (Y/N)	No			
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): 2700, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	Spring fed-ices up every year.-14-Nov-2008
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>5</b>	<b>5</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 450)				
Scour/Erosion		7	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>Channel (U/S and D/S)</b>				
Alignment		7	7	
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 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<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>61.2/61.2</b>	Est. Repl. Yr	2028	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	Brian Pientsch		Previous Assistant's Name				
Next Inspection Date	12-Mar-2014		Previous Inspection Date	05-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							