

Bridge Culvert Inspection			
Bridge File Number	13797 -1 Bridge Culvert	Form Type	CUL1
Year Built	1988	Lot No.	2
Bridge or Town Name	PEACE RIVER	Inspector Name	Brian Pientsch
Located Over	2ND ORDER TRIBUTARY TO PEACE RIVER, 8.10.57.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	2:62 R1 3.103;2:62 L1 3.106;743:02 C1 0.003	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	06-Dec-2011
Legal Land Location	NW SEC 25 TWP 83 RGE 22 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:20:49, 56:13:59	Data Entry Date	31-Jan-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA04	Review Date	29-Jan-2012
Clear Roadway/Skew	25.8 / 22 deg. (RHF)	Dept. Reviewer Name	David Morrison
AADT/Year	12,680 / 2011 (A)	Dept. Review Date	04-Apr-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	4436	2915	RPE	191.4	152X51	4.0,4.0,4.0	ELLIPSE
Special Features	BARREL DEICING PIPE, BARREL ELBOW							
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	Pedestal SW corner int.	Gas	
Power	4 wire OH, 20m N.	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	5	5	Major intersection with overhead lights.
Vertical Alignment	8	8	
Roadway Width (m)	25.800		
Embankment	3	5	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 1.5)			
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	N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	6	6	Med crack beside deicing pipe. Narrow cracks approx. 0.70m long -front of deicing pipe.
Collar	N	5	Spall @ bottom of west side. Hole exposed behind steel. Wide cracking both sides.
Wingwalls	X	X	
(Shape : )			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	Ice covered
Bevel End		7	7	Covered with ice.
Heaving (mm)	150			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	350			
Scour Protection		4	4	NW ditch minor scour through rock.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>400</b> )				
Scour/Erosion		4	4	NW ditch erosion/scour.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>4</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4436, Rise (mm): 2915, Type: RPE)</b>				
Barrel Last Accessible Date	06-Dec-2011			Water drain connected to pipe in middle section (between elbows.)
<b>Special Features</b>				
Special Feature		7	7	
(Type : <b>BARREL DEICING PIPE</b> )				
Special Feature		7	7	
(Type : <b>BARREL ELBOW</b> )				
Roof		5	5	(near c/l Hwy 2-June19, 2008) Floor covered with ice.
Measured Rise (mm)	2740			
Measured At Ring No.	12			
Sag (mm)	175			
Percent Sag	6			
Sidewall		7	7	Ring 5 past elbow 1, construction dent. 150mm x 200mm Galvanized. Deflection inward.
Measured Span (mm)	4428			
Measured At Ring No.	25			
Deflection (mm)	8			
Percent Deflection	0			
Floor		N	N	Covered with ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	Seam dented j@ 3'oclock, ring 10. Seam dented @ 12 o'clock, ring 17
Separation (mm)	0			
Longitudinal Seams		6	6	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		6	N	Minor superficial rust on floor.-19-Jun-2008
Corrosion By Soil (Y/N)	Yes			Alkaling deposits through roof bolts.
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4436, Rise (mm): 2915, Type: RPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		4	4	Steep at outlet & above streambed. Channel stepped @ d/s end for 15m due to gabions.
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	throughout pipe.
Icing (Y/N)	Yes			
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		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		4	4	Bevel undermining 1m from end.-photo
Heaving (mm)	50			
Invert Above/Below Stream Bed	ABOVE			(Est) Covered with snow & ice.
Above/Below (mm)	2000			
Scour Protection		6	6	Gabion baskets in place.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>4</b>	<b>4</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	u/s 50 deg. bend 10m u/s.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			At u/s channel
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<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	2012	Repair concrete collar on NW corner.					
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>49.8/50.5</b>	Est. Repl. Yr	2036	Maint. Req. (Y/N)	Yes
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	Lisbeth Medina			
Next Inspection Date	06-Sep-2013		Previous Inspection Date	09-Feb-2010			
Inspection Cycle (Default) (months)	21						
Comment							