

Bridge Culvert Inspection			
Bridge File Number	77751 -2 Bridge Culvert	Form Type	CUL1
Year Built	2003	Lot No.	4
Bridge or Town Name	FT VERMILION	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO PEACE RIVER, 8.10.25, WATERCRS-ST	Inspector Class	BR CLS A
Located On	88:18 C1 24.965	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	14-Jun-2012
Legal Land Location	NW SEC 15 TWP 108 RGE 13 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:04:48, 58:23:02	Data Entry Date	05-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA01	Review Date	04-Nov-2012
Clear Roadway/Skew	9 / 22 deg. (RHF)	Dept. Reviewer Name	David Morrison
AADT/Year	840 / 2011 (A)	Dept. Review Date	15-Jan-2013
Road Classification	RAU-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	-	3050	SP	79.86	152X51	4.0	ROUND
Special Features	BARREL ELBOW							
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power	25m in North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Land access 150m east.
Vertical Alignment		7	7	Bottom of a shallow vertical sag curve.
Roadway Width (m)	9.000			
Embankment		7	7	
Sideslope ( __:1)	3.0			
(Height of Cover(m) : <b>9.2</b> )				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	6	Medium to wide cracks on West and East sides.
Collar		X	X	
Wingwalls		6	6	Minor erosion behind SW wingwall.
(Shape : )				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	750			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>500</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : <b>1</b> , Primary Span, Location Code: <b>MAIN</b> , Span (mm): , Rise (mm): <b>3050</b> , Type: <b>SP</b> )				
Barrel Last Accessible Date	14-Jun-2012			
<b>Special Features</b>				
Special Feature		N	N	(4.38 vertical elbow. 07/Nov/2007) Water approx 1.8m deep at elbow location.
(Type : <b>BARREL ELBOW</b> )				
Special Feature				
(Type : )				
Roof		8	8	Upward defl.
Measured Rise (mm)	3064			
Measured At Ring No.	10			
Sag (mm)				
Percent Sag	0			
Sidewall		8	8	Inward defl.
Measured Span (mm)	3014			
Measured At Ring No.	10			
Deflection (mm)				
Percent Deflection	0			
Floor		8	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	9	
Separation (mm)	0			
Longitudinal Seams		9	9	2N. Stagger
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		8	8	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			D/S of elbow.

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3050, Type: SP)				
Fish Passage Adequacy		4	4	8.55% grade in first 60.1m.
Baffle		8	8	D/S of elbow
(Type : WEIR)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>8</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	Water & silt 1.8m deep at D/S end.
Bevel End		8	8	
Heaving (mm)	75			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1500			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>8</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	Sloughing at east side of U/S end.
Bank Stability		5	5	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)		No		Silting in.
Channel Bottom Degrading/Aggrading		AGGRADING		
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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>88.9/88.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>81.7/81.7</b>	Est. Repl. Yr	2048	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	Lisbeth Medina			
Next Inspection Date	14-Mar-2014		Previous Inspection Date	06-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							