

Bridge Culvert Inspection			
Bridge File Number	75715 -1 Bridge Culvert	Form Type	CUL1
Year Built	1965	Lot No.	1
Bridge or Town Name	Fort Vermilion	Inspector Name	Brian Pientsch
Located Over	2ND ORDER TRIBUTARY TO PEACE RIVER, 8.10.22.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	58:10 C1 4.958	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	13-Jun-2012
Legal Land Location	SW SEC 2 TWP 110 RGE 13 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:03:53, 58:30:53	Data Entry Date	20-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA01	Review Date	04-Nov-2012
Clear Roadway/Skew	11.2 /	Dept. Reviewer Name	David Morrison
AADT/Year	230 / 2011 (A)	Dept. Review Date	11-Jan-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	10		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2400	SP	22.6	152X51	3.0	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power	3 wire o/h South r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Approach 75m west.
Vertical Alignment		9	9	
Roadway Width (m)	11.200			
Embankment		4	4	SLOUGHING AROUND U/S & D/S OF PIPE. Encroaching on road u.s.photo
Sideslope ( :1)	3.0			
(Height of Cover(m) : 0.2)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>4</b>	<b>4</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	3	Bevel peeled back & perforations evident.-photo
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		4	4	Scour beside pipe (photo)
(Type : <b>NONE</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		4	4	Scour 1m longx0.7m deep along sides of bevel.
Beavers (Y/N)	Yes			Dam in culvert photo.
<b>Upstream End General Rating</b>		<b>4</b>	<b>3</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: SP)				
Barrel Last Accessible Date	10-Jan-2000			Water 1.0m deep. ROOF AND TOP OF SIDEWALLS - GOOD SHAPE
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		3	3	2 RIPS (1m and 0.4m long) @ D/S END OF BARREL (photo) dent and rip u/s.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	RUSTING
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)				
Longitudinal Seams		N	N	
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		4	4	SIDEWALLS RUSTING PITTING.
Corrosion By Soil (Y/N)	No			
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): , Rise (mm): 2400, Type: SP)				
Ponding (Y/N)	Yes			1.0m deep.
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		4	4	B/D inside barrel 5m from u/s end. 40% blocked (photo).
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
<b>Barrel General Rating</b>		<b>3</b>	<b>3</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		N	N	(Projects from fill 300 mm. SUBMERGED 05/05/11)
Heaving (mm)				Under water-only 5% visible.
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		4	4	Erosion on both sides.
(Type : <b>NONE</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		4	4	(SCOUR HOLE - 2001/10/15) Erosion 2.5m x 1m x 1.2m SW side. 2nd 1m x 3m x2m wide SE side.
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		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	NONE			Beaver dam in barrel & dam u/s 80m.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<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	2012	Remove beaver dams from inside barrel					
OTHER ACTION	2016	Recommend replacement					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>33.3/33.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>33.0/31.9</b>	Est. Repl. Yr	2016	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor tears in pipe.-EDC 04-Nov-2012		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	13-Mar-2014		Previous Inspection Date	06-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							