

Bridge Culvert Inspection			
Bridge File Number	78195 -1 Bridge Culvert	Form Type	CUL1
Year Built	1987	Lot No.	
Bridge or Town Name	FT VERMILION	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO BEAR RIVER, 8.10.18.1.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	88:16 C1 45.671	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	12-Jun-2012
Legal Land Location	NE SEC 9 TWP 106 RGE 11 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:44:58, 58:11:34	Data Entry Date	06-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	
Contract Main. Area	CMA01	Review Date	
Clear Roadway/Skew	11.5 /	Dept. Reviewer Name	David Morrison
AADT/Year	310 / 2011 (A)	Dept. Review Date	14-Jan-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	200		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	6170	SP	45.7	152X51	5.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	3 wire OH along East ditch.	Municipal	
Others		Problem (Y/N)	No
Remarks	Water gage 20m East		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	ROADSIDE TURNOUT CONSTRUCTED 150m N OF CROSSING.
Vertical Alignment	8	8	
Roadway Width (m)	12.000		
Embankment	7	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 1.4)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		Typical hairline vertical cracks.
Headwall	6	6	
Collar	6	6	Transverse wide cracks every approx 800 mm. Collar projects up from fill 400 mm.
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	Yes			Cuttings near bevel.
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 6170, Type: SP)				
Barrel Last Accessible Date	17-Jan-2007			Water 4.9m to crown. Viewed from ends, shape looks good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	No rise measured due to ice on floor.2007-01-17
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		8	N	
Measured Span (mm)	6185			
Measured At Ring No.	5			
Deflection (mm)	15			
Percent Deflection	1			
Floor		N	N	Water covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	0			
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)	Yes			
Coating		7	N	Alkaline stains through roof and upper sidewall seams. Visible from ends. Staining.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 6170, Type: SP)				
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		N	N	GR 8 -17-Jan-2007
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		Typical hairline vertical cracks.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	Transverse wide cracks every approx 800 mm.
Collar		6	6	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	AGGRADING			B/D 100 m U/S
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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	Unable to access barrel last two inspections cycles, recommend Level 2 inspection as per bim manual.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	62.4/62.3	Est. Repl. Yr	2031	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	12-Mar-2014		Previous Inspection Date	05-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							