

Bridge Culvert Inspection			
Bridge File Number	74289 -1 Bridge Culvert	Form Type	CUL1
Year Built	1984	Lot No.	2
Bridge or Town Name	BRETON	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO BUCKLAKE CREEK, 6.132.2.5, WATERCRS-ST	Inspector Class	BR CLS B
Located On	616:02 C1 8.312	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	14-Feb-2011
Legal Land Location	SW SEC 2 TWP 48 RGE 6 W5M	Data Entry By	Janie Assenheimer
Longitude, Latitude	-114:46:46, 53:06:19	Data Entry Date	25-Feb-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA11	Review Date	22-Feb-2011
Clear Roadway/Skew	9 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	750 / 2009 (A)	Dept. Review Date	02-Mar-2011
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	5		

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2019	2226	SPE	73.8	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment		BF tag on S crown.						

Utilities (Located at)			
Utility Attachments			
Telephone	South r/w.	Gas	
Power	3 lines North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Range road intersection to west.
Vertical Alignment		7	7	No passing EB due to crest curve to east.
				Well grassed.
Roadway Width (m)	9.000			
Embankment		4	N	(Minor undulations North embankment 21-Nov-2007)
Sideslope (__:1)	3.0			
(Height of Cover(m) : 5.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream 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 :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		5	5	Dented from drift.
Heaving (mm)	300			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		4	4	
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	Eroded on both sides up to 600 mm wide.
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE)				
Barrel Last Accessible Date				0.5 - 0.8m ice along floor.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Minor dent at inlet crown. (2125 - 4th ring from outlet, 3.0%. 01/Sept/2004)
Measured Rise (mm)	2125			
Measured At Ring No.				est.
Sag (mm)	100			
Percent Sag	6			
Sidewall		6	6	Minor superficial rust but no pitting.
Measured Span (mm)	2120			
Measured At Ring No.				
Deflection (mm)	101			
Percent Deflection	6			
Floor		7	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	6	Superficial rust lower 1/2.
Corrosion By Soil (Y/N)	Yes			
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): 2019, Rise (mm): 2226, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		4	5	Steep inlet.
Baffle		X	X	
(Type :)				
Waterway Adequacy		4	4	Scouring D/S shows opening should be larger to reduce velocities.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	
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		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		4	4	Bevel unsupported for 2.4 m.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		3	3	Most rocks are washed D/S.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		3	3	(Scour is 12m wide x 15m long x 2.m deep.
Beavers (Y/N)	No			
Downstream End General Rating		3	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	Creek meanders through wide valley with gentle hilly slopes.
Bank Stability		5	5	
HWM (m below Top of Culvert)				
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2011	30m3 class 1.					
REMOVE DRIFT ACCUMULATION	2011	At u/s.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2011	Add clay around both bevels.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	47.8/54.1	Est. Repl. Yr	2024	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	Jacob Oresile		Previous Assistant's Name				
Next Inspection Date	14-May-2014		Previous Inspection Date	21-Nov-2007			
Inspection Cycle (Default) (months)	39						
Comment							