

Bridge Culvert Inspection			
Bridge File Number	80699 -1 Bridge Culvert	Form Type	CUL1
Year Built	1986	Lot No.	4
Bridge or Town Name	GRANDE CACHE	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO SMOKY RIVER, 8.10.58.28, WATERCRS-ST	Inspector Class	BR CLS B
Located On	40:36 C1 29.778	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	23-Aug-2012
Legal Land Location	NE SEC 2 TWP 59 RGE 7 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:56:11, 54:04:41	Data Entry Date	25-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA05	Review Date	24-Sep-2012
Clear Roadway/Skew	10.2 / -22 deg. (LHF)	Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,220 / 2011 (A)	Dept. Review Date	07-Jan-2013
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	60		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1829	SP	170.7	152X51	5.0	ROUND
Special Features	FLOOR ABR PLATES, BARREL ELBOW							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Steep grades (est 6%). Crest east. Curve west 75m No passing. 2 berms (3.0 m) on d/s side with 3:1 at top.
Vertical Alignment	4	4	
Roadway Width (m)	10.200		
Embankment	7	7	
Sideslope (__:1)	1.5		
(Height of Cover(m) : 13.9)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	4	4	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	6	6	Honeycombing.
Collar	X	X	
Wingwalls	7	7	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 1829 , Type: SP)				
Barrel Last Accessible Date	23-Aug-2012			
Special Features				
Special Feature		7	7	@ ring 15
(Type : FLOOR ABR PLATES)				
Special Feature		7	7	
(Type : BARREL ELBOW)				
Roof		4	7	Assume 50mm floor plates. May 25, 2007
Measured Rise (mm)	1758			Estimated sag
Measured At Ring No.	20			
Sag (mm)	71			
Percent Sag	4			
Sidewall		7	7	
Measured Span (mm)	1881			
Measured At Ring No.	20			
Deflection (mm)	52			
Percent Deflection	3			
Floor		6	N	Abrasion plates
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				Each seam has a double row of bolts.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	Some staining at D/S end.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: SP)					
Ponding (Y/N)	No				
Fish Passage Adequacy		4	7	Steep grade likely doesn't allow fish passage.	
Baffle		X	X		
(Type :)					
Waterway Adequacy		4	4	Can't handle icing. Solid ice to top of culvert.-25-Feb-2010	
Icing (Y/N)	Yes				
Silting (Y/N)	No				
Drift (Y/N)	No				
Barrel General Rating		4	7		
Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
Direction		S			
End Treatment (Concrete, Steel, Others, None)	CONCRETE				
Headwall		7	7	Diagonal cracks.	
Collar		X	X		
Wingwalls		7	7	Medium diagonal cracks.	
(Shape :)					
Cutoff Wall		N	N		
Bevel End		X	X		
Heaving (mm)	0				
Invert Above/Below Stream Bed					
Above/Below (mm)	0				
Scour Protection		N	7	Grown over.	
(Type : RIP RAP)					
(Avg. Rock Size(mm) : 300)					
Scour/Erosion		N	7		
Beavers (Y/N)	No				
Downstream End General Rating		7	7		
Structure Usage					
		Last	Now	Explanation of Condition	
Channel (U/S and D/S)					
Alignment		8	8		
Bank Stability		8	8	Vertical banks.	
HWM (m below Top of Culvert)				Hwm not visible.	
Drift (Y/N)	No				
Channel Bottom Degrading/Aggrading	DEGRADING				
Beavers (Y/N)	No				
(Fish Compensation Measure 1 : NONE)					
(Fish Compensation Measure 2 : NONE)					
Channel General Rating		8	8		

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	2013	Install de-icing line. Carry over 25-Feb-2009					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/77.8	Sufficiency Rating (Last/Now) (%)	32.3/54.5	Est. Repl. Yr	2031	Maint. Req'd. (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	Russel Vanderschaaf		Previous Assistant's Name				
Next Inspection Date	23-May-2014		Previous Inspection Date	19-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							