

Bridge Culvert Inspection			
Bridge File Number	76531 -1 Bridge Culvert	Form Type	CUL1
Year Built/Lined	1968/1990	Lot No.	4
Bridge or Town Name	GRANDE CACHE	Inspector Name	Russel Vanderschaaf
Located Over	SUSA CREEK, 8.10.58.31.2, WATERCRS-ST	Inspector Class	BR CLS B
Located On	40:34 C1 20.520	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	22-Aug-2012
Legal Land Location	SE SEC 16 TWP 57 RGE 7 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:58:31, 53:55:36	Data Entry Date	24-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA05	Review Date	24-Sep-2012
Clear Roadway/Skew	8 /	Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,590 / 2011 (A)	Dept. Review Date	04-Jan-2013
Road Classification	RAU-209-110	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
2	MAIN FULL LINER	-	3600	MP	56.7	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	S r/w	Gas	
Power	4 wire o/h N r/w	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	No passing westbound, crest curve with limited sight distance.
Vertical Alignment		6	6	
Roadway Width (m)	8.000			
Embankment		8	8	
Sideslope ( :1)	3.0			
(Height of Cover(m) : 4.5)				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

**Upstream End**

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	6	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	6	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		N	6	
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>2</b> , Secondary Span, Location Code: <b>MAIN</b> , Span (mm): , Rise (mm): <b>3600</b> , Type: <b>MP</b> )				
Barrel Last Accessible Date	22-Aug-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	
Measured Rise (mm)	3596			@ c/l.
Measured At Ring No.				Floor covered in rock 150mm.
Sag (mm)	1			
Percent Sag	1			
Sidewall		7	7	
Measured Span (mm)	3623			@ c/l
Measured At Ring No.				
Deflection (mm)	23			
Percent Deflection	1			
Floor		N	N	Under rock.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	7	Welded
Separation (mm)				
Longitudinal Seams		N	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	4	Minor superficial rust on floor.
Corrosion By Soil (Y/N)	No			
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 # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3600, Type: MP)				
Fish Passage Adequacy		4	4	outfall at end of D/S RIPRAP.
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	25-Feb-2009
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>7</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		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	5	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	1000			
Scour Protection		N	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		5	5	Vertical bank downstream.
HWM (m below Top of Culvert)	2.0			HWM(98/06/20)
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>5</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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>49.2/61.5</b>	Est. Repl. Yr	2030	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Scheduled for extension with Hwy 40 upgrading.		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	22-May-2014		Previous Inspection Date	18-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							