

Bridge Culvert Inspection				
Bridge File Number	76747 -1 Bridge Culvert		Form Type	CUL1
Year Built	1969		Lot No.	2
Bridge or Town Name	GRANDE CACHE		Inspector Name	Russel Vanderschaaf
Located Over	MITAYIMIN CREEK, 8.10.58.31.2.5, WATERCRS-ST		Inspector Class	BR CLS B
Located On	40:34 C1 23.063		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	22-Aug-2012
Legal Land Location	SW SEC 17 TWP 57 RGE 7 W6M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-119:00:40, 53:55:14		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	8 /		Dept. Reviewer Name	David Morrison
AADT/Year	1,590 / 2011 (A)		Dept. Review Date	18-Dec-2012
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	425			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1500	SP	38.4	152X51	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

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

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	No passing east bound. ON GRADE TO EAST.
Vertical Alignment		6	6	
Roadway Width (m)	8.000			
Embankment		8	8	
Sideslope (:1)	3.0			
(Height of Cover(m) : 3)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

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 :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		N	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	7	
Beavers (Y/N)	Yes			0.7m high beaverdam on bevel.-photo
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): 1500, Type: SP)				
Barrel Last Accessible Date	22-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1571			Upward
Measured At Ring No.	6			
Sag (mm)	71			
Percent Sag	5			
Sidewall		7	7	
Measured Span (mm)	1423			Inward
Measured At Ring No.	6			
Deflection (mm)	77			
Percent Deflection	5			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.	7			
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			1N Stagger
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	Pitting rust on 450mm wide strip of 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 # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: SP)				
Fish Passage Adequacy		4	4	Hanging outlet.
Baffle		X	X	
(Type :)				
Waterway Adequacy		3	3	Beaver dam blocking pipe @ U/S. photo 75-150mm @ drift at d/s end.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		7	7	
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		N	X	
Bevel End		N	5	Protruding 300mm from fill.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		N	5	1-1.5m dia. rock at outlet.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		N	5	
Beavers (Y/N)		Yes		Cuttings present.
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Several bends coming into the pipe
Bank Stability		8	8	Sloughin banks d/s dam @ inlet.
HWM (m below Top of Culvert)	3.0			(@ U/S END -LATH & DEBRIS ON SIDESLOPE 2000.01.03)
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading		DEGRADING		D/S only.
Beavers (Y/N)		Yes		
(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							
REMOVE DRIFT ACCUMULATION	2013	@ u/s end.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Remove beaver dam.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	50.9/50.8	Est. Repl. Yr	2025	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	Russel Vanderschaaf		Previous Assistant's Name				
Next Inspection Date	22-May-2014		Previous Inspection Date	18-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							