

Bridge Culvert Inspection			
Bridge File Number	71295 -1 Bridge Culvert	Form Type	CUL1
Year Built	1955	Lot No.	1
Bridge or Town Name	CROOKED CREE	Inspector Name	Russel Vanderschaaf
Located Over	3RD ORDER TRIBUTARY TO CORNWALL CK, 8.10.58.17.2.2.1.1, WATERCRS-ST	Inspector Class	BR CLS B
Located On	43:06 C1 11.988	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	03-Dec-2012
Legal Land Location	SW SEC 19 TWP 71 RGE 25 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:50:44, 55:09:40	Data Entry Date	20-Jan-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA03	Review Date	09-Jan-2013
Clear Roadway/Skew	12.2 /	Dept. Reviewer Name	David Morrison
AADT/Year	5,020 / 2011 (A)	Dept. Review Date	18-Mar-2013
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	275		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1524	MP	42.7	68X13	3.5	ROUND
Special Features	VERT TIMBER STRUTS							
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	West r/w	Gas	
Power	2 W o/h East r/w and 2 W o/h over pipe crossing road.	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Home entrance 30 m East of pipe.
Vertical Alignment		8	8	Field entrance just west of pipe.
Roadway Width (m)	12.200			Currently abandoning old pipe & installing new 1000 SWL. (Augering) Couldn't inspect as was under construction.
Embankment		8	7	
Sideslope ( _ :1)	3.0			
(Height of Cover(m) : 2)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

**Upstream End**

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	N	Floor rusted through & water flowing under bevel.-05-May-2009
Heaving (mm)	300			Snow covered
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	400			
Scour Protection		N	N	Willows growing around end of pipe.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>3</b>	<b>3</b>	GR carried over- 05-May-2009
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP)				
Barrel Last Accessible Date	08-Mar-2011			
<b>Special Features</b>				
Special Feature		5	N	U/S 2/3 only.
(Type : <b>VERT TIMBER STRUTS</b> )				
Special Feature				
(Type : )				
Roof		2	N	Near d/s bevel, roof is dented in 200mm.
Measured Rise (mm)	1200			14m from u/s end.
Measured At Ring No.				photo
Sag (mm)	324			Couldn't measure due to ice/struts.
Percent Sag	21			
Sidewall		2	N	photo
Measured Span (mm)	1800			14m from u/s end.
Measured At Ring No.				
Deflection (mm)	276			
Percent Deflection	18			
Floor		2	N	Extensive perforations on floor (photo). (Largest 200mm x 100mm).
Bulge (mm)	0			Partly ice covered.
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		2	N	Fill exposed, coupler perforation @R1 (photo).
Separation (mm)	140			
Longitudinal Seams		5	N	Riveted.
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		2	N	Extensive perforations on floor (photo).
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
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP)</b>				
Fish Passage Adequacy		3	3	OUTLET 1m ABOVE S/B-05-May-2009 Snow covered.
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	N	
Icing (Y/N)	No			
Siltng (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>2</b>	<b>2</b>	GR carried fwd from 08-Mar-2011
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		Couldn't access under construction
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	N	Snow covered.
Heaving (mm)	50			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	1000			
Scour Protection		N	N	Snow covered.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	GR carried over-05-May-2009
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		5	5	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Stable
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<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	2013	Replace.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>22.2/22.2</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>31.0/38.8</b>	Est. Repl. Yr	2013	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	AT advised of low rating.-09-Mar-2011 Scheduled for replacement 2011/2012 with hwy upgrade. Notify construction consultant to update BIMS's and BIS/CIS coding sheets.		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	03-Sep-2014		Previous Inspection Date	08-Mar-2011			
Inspection Cycle (Default) (months)	21						
Comment							