Bridge Culvert Inspection

Bridge File Number	74456 -2 Bridge Culvert	Form Type	CUL1
Year Built	2001	Lot No.	2
Bridge or Town Name	CROOKED CREE	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO CORNWALL CREEK, 8.10.58.17.2.2, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	43:06 L1 8.855;43:06 R1 8.831	Assistant Class	
Water Body Cl./Year		Inspection Date	03-Dec-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NE SEC 26 TWP 71 RGE 26 W5M	Data Entry Date	20-Jan-2013
Longitude, Latitude	-117:52:59, 55:10:46	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	09-Jan-2013
Contract Main. Area	CMA03	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	33.6 / 24 deg. (RHF)	Dept. Review Date	19-Mar-2013
AADT/Year	5,210 / 2011 (A)	Follow-Up By	
Road Classification	RAD-412.4-120		
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3000	MP	170	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North r/w	Gas	North r/w
Power	S. - 3 line & 4 wire	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 250m West.
Vertical Alignment		9	9	
Roadway Width (m)	33.600			EBL 12.0m, WBL 14.1m, Service Rd 7.5m.
Embankment		9	9	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **3**)				
Guardrail (Y/N)	Yes			2 posts & 1 section damaged NE. 1 post broken SE.-05-May-2009 Snow covered.
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall		N	N	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		N	N	Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	Yes			Beaverdam in fornt of bevel.-photo
Upstream End General Rating		**8**	**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: MP**)				
Barrel Last Accessible Date	08-Mar-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Estimated due to ice.
Measured Rise (mm)				Near c/l EBL
Measured At Ring No.	16			Upward
Sag (mm)	91			
Percent Sag	3			
Sidewall		7	7	
Measured Span (mm)	2909			Near c/l EBL
Measured At Ring No.	16			Inward
Deflection (mm)	91			
Percent Deflection	3			
Floor		N	N	Ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	Seam between section 6-7 has inward
Separation (mm)	30			75 mm dent @ 9 o'clock. Construction damage. Majority of span, have minor damage from install.
Longitudinal Seams		X	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		8	8	
Corrosion By Soil (Y/N)	No			
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): , Rise (mm): 3000, Type: MP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		9	9	BOULDERS BETWEEN FISH BAFFLES.-Under ice
Baffle		8	8	
(Type : **SPOILER**)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**7**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		N	N	Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	Snow covered
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		8	8	
HWM (m below Top of Culvert)	1.5			(14-Oct-2005)
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Stable
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**7**	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION	2013	Remove beaverdam u/s.				
INSTALL CONCRETE/STEEL LINING						
INSTALL STRUTS						
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS						
OTHER ACTION	2013	Replace broken guardrail posts.-carried over 05-May-2009				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**85.3/85.3**	Est. Repl. Yr	2049	Maint. Reqd. (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	03-Sep-2014	Previous Inspection Date	08-Mar-2011
Inspection Cycle (Default) (months)	21		
Comment			