Bridge Culvert Inspection

Bridge File Number	77311 -1 Bridge Culvert	Form Type	CUL1
Year Built	1971	Lot No.	4
Bridge or Town Name	FOX CREEK	Inspector Name	Russel Vanderschaaf
Located Over	IOSEGUN RIVER, 8.10.58.7.32, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	947:12 C1 12.488	Assistant Class	
Water Body Cl./Year		Inspection Date	24-Aug-2010
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SE SEC 10 TWP 61 RGE 18 W5M	Data Entry Date	07-Oct-2010
Longitude, Latitude	-116:36:16, 54:15:27	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	20-Sep-2010
Contract Main. Area	CMA03	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	13 /	Dept. Review Date	18-Nov-2010
AADT/Year	1,000 / 2009 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	999		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	5500	SP	79.3	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Buried west r/w.	Gas	
Power	E. SIDE - 5w, 100M EAST	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Bottom of long grandual sag.
Vertical Alignment		7	7	
Roadway Width (m)	13.000			
Embankment		5	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **6.9**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	Med. vert. cracks.
Collar		4	4	Wide crack both sides.
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall		N	N	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		4	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		4	7	
Beavers (Y/N)	No			
Upstream End General Rating		**4**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 5500, Type: SP**)				
Barrel Last Accessible Date	14-Jan-2004			Water too deep 1.0m + and fast flowing viewed from ends - does not appear to have changed.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		3	3	(EST. 10% DEFL INWARD, deformation Rings 1 & 2 (photo).@ c/l, span =5015, 4.9% defl. Sidewall flattening deforming Jan 14/04)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	580			
Percent Sag				
Sidewall		4	4	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	261			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)				
Longitudinal Seams		N	N	(RING 2, 12:00. 35mm Estimated Jan 14/04)
Total No. of Cracked Rings	2			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		N	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 5500, Type: SP**)				
Camber POS/ZERO/NEG				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		N	N	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**3**	**3**	Cracks & deformation occurred during construction, suspect it will not get worse. GR carried forward

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	Narrow cracks.
Collar		4	4	Wide crack south bevel.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		4	6	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	6	
Beavers (Y/N)	No			
Downstream End General Rating		**4**	**4**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		4	4	U/S bank sloughing.
HWM (m below Top of Culvert)				HWM not visible. CONCRETE DEBRIS 10M D/S
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Degrading u/s, stable d/s.
Beavers (Y/N)	No			

Structure Usage			
	Last	Now	Explanation of Condition
(Fish Compensation Measure 1 : **NONE**)			
(Fish Compensation Measure 2 : **NONE**)			
Channel General Rating	**4**	**4**	

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						

Structural Condition Rating (Last/Now) (%)	**33.3/33.3**	**Sufficiency Rating (Last/Now) (%)**	**44.6/47.5**	Est. Repl. Yr	2029	Maint. Reqd. (Y/N)	No

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	Eric Carcoux	Previous Assistant's Name			
Next Inspection Date	24-Nov-2013	Previous Inspection Date	29-May-2007		
Inspection Cycle (Default) (months)	39				
Comment					