Bridge Culvert Inspection

Bridge File Number	81169 -1 Bridge Culvert	Form Type	CUL1
Year Built	1989	Lot No.	4
Bridge or Town Name	RED EARTH CR	Inspector Name	Brian Pientsch
Located Over	REDEARTH CREEK, 8.10.18.12.11, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	686:08 C1 4.059	Assistant Class	
Water Body Cl./Year		Inspection Date	10-Jan-2013
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 29 TWP 87 RGE 8 W5M	Data Entry Date	02-Feb-2013
Longitude, Latitude	-115:14:18, 56:34:11	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	23-Jan-2013
Contract Main. Area	CMA02	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	13.2 /	Dept. Review Date	21-Mar-2013
AADT/Year	460 / 2011 (A)	Follow-Up By	
Road Classification	RCU-209G-90		
Detour Length (km)	300		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	4920	SP	40.8	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	Sign "CP D261" South shoulder		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		9	9	
Roadway Width (m)	13.200			
Embankment		N	N	Snow covered
Sideslope (__:1)	4.5			
(Height of Cover(m) :)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**8**	**8**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		N	N	Snowcovered.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	Snow covered.

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		N	N	Snow covered.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	N	No evident problems.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**7**	(GR carried forward)

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4920, Type: SP**)				
Barrel Last Accessible Date	10-Jan-2013			Ice to crown 2.4m shape appears good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	No rise or span measurements due to ice above midpoint.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	200			Est. - ice.
Percent Sag	4			
Sidewall		7	7	Rated above ice.
Measured Span (mm)	5128			
Measured At Ring No.	5			
Deflection (mm)	208			
Percent Deflection	4			
Floor		N	N	Approx. 2.6m ice.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	Rated above ice.
Separation (mm)				
Longitudinal Seams		7	7	Rated above ice.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				1N Stagger
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	Rated above ice.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4920, Type: SP**)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	No silt visible through ice.
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		N		(North)
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		N	N	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		N	N	Snow covered.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	N	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	GR carried forward.

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	
Bank Stability		5	5	
HWM (m below Top of Culvert)				NO HWM VISIBLE
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Dam 5m u/s.
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						
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) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**74.0/73.8**	Est. Repl. Yr	2039	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	Brian Pientsch	Previous Assistant's Name	Jordan Evans		
Next Inspection Date	10-Apr-2016	Previous Inspection Date	02-Feb-2009		
Inspection Cycle (Default) (months)	39				
Comment					