

Bridge Culvert Inspection				
Bridge File Number	77150 -1 Bridge Culvert		Form Type	CUL1
Year Built	1970		Lot No.	1
Bridge or Town Name	CEREAL		Inspector Name	Jason Saly
Located Over	TRIBUTARY TO SOUNDING CREEK, 4.4.11, WATERCRS-ST		Inspector Class	BR CLS A
Located On	886:06 C1 19.880		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	23-Nov-2010
Legal Land Location	SW SEC 28 TWP 30 RGE 6 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-110:48:07, 51:35:41		Data Entry Date	07-Jan-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA22		Review Date	11-Dec-2010
Clear Roadway/Skew	9.4 /		Dept. Reviewer Name	Chris Black
AADT/Year	220 / 2009 (A)		Dept. Review Date	12-Jan-2011
Road Classification	RCU-210-110		Follow-Up By	
Detour Length (km)	40			

Bridge Culvert Information								
Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2744	2007	RPP	33.6	152X51	3.0	PIPE ARCH
Special Features	VERT TIMBER STRUTS							
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	West ditch.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		9	8	Bottom of sag, crest curve both directions with fair sight distance.
Vertical Alignment		7	7	
Roadway Width (m)	9.400			
Embankment		8	N	
Sideslope (: :1)	4.5			
(Height of Cover(m) :)				
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)	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		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Upstream End General Rating		7	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2744, Rise (mm): 2007, Type: RPP)				
Barrel Last Accessible Date	23-Nov-2010			
Special Features				
Special Feature		6	6	150 x 200 TT struts @ 1.2 m O/C
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		6	6	Measured next to struts.
Measured Rise (mm)	1949			
Measured At Ring No.	8			
Sag (mm)	58			
Percent Sag	3			
Sidewall		2	2	Patch on N side of sidewall. Span measured at R3=2775 - 31mm; R5=2799 - 55mm=2%; R7=2790 - 46mm; R9=2757 - 13mm.
Measured Span (mm)	2799			
Measured At Ring No.	5			
Deflection (mm)	55			
Percent Deflection	2			
Floor		5	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		2	2	#5 - 13 cracks - 85mm of steel remains. #8 - 7 cracks - 47mm of steel remains. All cracked seams in N side.
Total No. of Cracked Rings	2			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	47			No stagger at sidewall seam where cracks are present - 9 o'clock position. Roof only - 1N
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Superficial corrosion.
Corrosion By Soil (Y/N)	Yes			
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): 2744, Rise (mm): 2007, Type: RPP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	3	G.R. increased by 1 pt due to strut.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	250			
Scour Protection		7	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	N	Riprap 1992.
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		9	8	
HWM (m below Top of Culvert)				No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

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) (%)	44.4/33.3	Sufficiency Rating (Last/Now) (%)	63.5/54.9	Est. Repl. Yr	2019	Maint. Req. (Y/N)	No			
Special Comments for Next Inspection	Ck'ng remains unchanged. Struts are in good condition.									
Maintenance Reviewed By								Estimated Total	0	
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Garry Roberts	Previous Assistant's Name								
Next Inspection Date	23-Feb-2014	Previous Inspection Date	29-Jan-2009							
Inspection Cycle (Default) (months)	39									
Comment										

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) (%)	44.4/33.3	Sufficiency Rating (Last/Now) (%)	63.5/54.9	Est. Repl. Yr	2019	Maint. Req. (Y/N) No
Special Comments for Next Inspection	Ck'ng remains unchanged. Struts are in good condition.		Department Comments	Continue to monitor the cracks in rings # 5 & 8 on regular BIM cycle. Pipe appears to be static since being strutted.		
Maintenance Reviewed By	Andrew Smikles		Date	13-Dec-2011	Estimated Total	0
Proposed Long-Term Strategy						
On 3-Year Program (Y/N)						
Proposed Action						
Previous Inspector's Name	Garry Roberts		Previous Assistant's Name			
Next Inspection Date	23-Feb-2014		Previous Inspection Date	29-Jan-2009		
Inspection Cycle (Default) (months)	39					
Comment						