

Bridge Culvert Inspection			
Bridge File Number	09026 -1 Bridge Culvert	Form Type	CUL1
Year Built	1988	Lot No.	4
Bridge or Town Name	COCHRANE	Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO ELBOW RIVER, 2.13.33.9, WATERCRS-ST	Inspector Class	BR CLS A
Located On	22:14 C1 38.873	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	24-May-2012
Legal Land Location	SW SEC 26 TWP 24 RGE 4 W5M	Data Entry By	Kelsey Roberts
Longitude, Latitude	-114:28:01, 51:04:12	Data Entry Date	20-Jun-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA27	Review Date	07-Jun-2012
Clear Roadway/Skew	13.7 / -28 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	9,690 / 2011 (A)	Dept. Review Date	29-Jun-2012
Road Classification	RAU-213-120	Follow-Up By	
Detour Length (km)	16		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3353	SP	42.1	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West end.	Gas	200m North
Power	East end - 3 wire.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		8	8	
Roadway Width (m)	13.700			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1.8)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		8	8	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		West
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	6.0 mm wide crack @ top.
Collar		6	6	Wide cracks in 3 locations. Collar has minor spall @ SW.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		6	6	Settlement of rock along collar
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3353, Type: SP)				
Barrel Last Accessible Date	29-Sep-2010			Water too deep, could only enter from U/S end to R1.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	Est roof
Measured Rise (mm)				P.R. 8
Measured At Ring No.				
Sag (mm)	10			
Percent Sag				
Sidewall		8	N	P.R. 8
Measured Span (mm)	3363			
Measured At Ring No.	6			
Deflection (mm)	10			
Percent Deflection	0			
Floor		7	N	50% silt covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	N	P.R. 8
Separation (mm)	0			
Longitudinal Seams		8	N	P.R. 8
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	N	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): , Rise (mm): 3353, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		8	8	
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		7	7	
HWM (m below Top of Culvert)	2.2			(2000/02/25) 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		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							
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) (%)	88.9/55.6	Sufficiency Rating (Last/Now) (%)	80.5/62.5	Est. Repl. Yr	2040	Maint. Req. (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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	24-Feb-2014		Previous Inspection Date	29-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							