Bridge Culvert Inspection

Bridge File Number	76182 E-1 Bridge Culvert	Form Type	CUL1
Year Built	1998	Lot No.	3
Bridge or Town Name	COCHRANE	Inspector Name	Garry Roberts
Located Over	MUNICIPAL	Inspector Class	BR CLS A
Located On	1:06 R1 13.648	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	12-Feb-2012
Legal Land Location	NE SEC 36 TWP 24 RGE 5 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-114:33:38, 51:05:29	Data Entry Date	14-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA28	Review Date	22-Feb-2012
Clear Roadway/Skew	13.1 /	Dept. Reviewer Name	Tim Davies
AADT/Year	18,200 / 2010 (A)	Dept. Review Date	22-Mar-2012
Road Classification	RFD-412.4-130	Follow-Up By	
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	8000	4700	PCB	31			RECTANGLE
Special Features								
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)			UNDER: MUNICIPAL 4.4m								
Posted Vertical Clearance (Y/N)			Yes								
Posted:	Lane	NB	On Bridge (m)	4.6	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)		In Advance (Y/N)	Yes
Remarks	S/B posting is on W/B bridge.										

Utilities (Located at)

Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	SOUTH R/W.	Gas	
Power	South.	Municipal	
Others	FIBRE OPTICS North R/W.	Problem (Y/N)	No
Remarks	Vacant conduit at both curbs.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Ridge road.
Vertical Alignment		6	6	
Roadway Width (m)	13.000			
Embankment		6	6	
Sideslope (__:1)	2.0			
(Height of Cover(m) : **0.3**)				
Guardrail (Y/N)	Yes			1 broken post at Southeast. Galvanized bridge rail over culvert.
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				North end-common wall with 76182W through median.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	Narrow vertical cracks.
Collar		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Wingwalls		8	8	Narrow vertical cracks.
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		X	X	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
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): 8000, Rise (mm): 4700, Type: PCB**)				
Barrel Last Accessible Date	12-Feb-2012			
Special Features				
Special Feature				Safety rail mounted on wingwalls.
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	Narrow to med vertical crack in sidewall @ pile locations.
Measured Rise (mm)	4700			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		8	8	
Measured Span (mm)	8000			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		7	7	Wide trans cracks in concrete floor @ median.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	35			
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		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 8000, Rise (mm): 4700, Type: PCB**)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				South end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	Med vertical cracks @ post locations.
Collar		X	X	
Wingwalls		8	8	Safety railing on wingwall. Wingwall @ S end only. North end is common wall with 76182W. Narrow vert cracks.
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		X	X	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		5	5	Local road access to Hwy 1.
Roadway Surface		5	5	Intersection @ South 90 degree curve to North.
(Type :)				Gravel approaches.
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Drainage		6	6	
Structure In Use (Y/N)	Yes			
Grade Separation 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	2012	Replace 1 T.T post at SE approach.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**88.9/88.9**	**Sufficiency Rating (Last/Now) (%)**	**84.9/84.9**	Est. Repl. Yr	2068	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	Garry Roberts	Previous Assistant's Name			
Next Inspection Date	12-Nov-2013	Previous Inspection Date	14-Sep-2010		
Inspection Cycle (Default) (months)	21				
Comment					