Bridge Culvert Inspection

Bridge File Number	78366 -1 Bridge Culvert	Form Type	CUL1
Year Built	1980	Lot No.	4
Bridge or Town Name	COUNTESS	Inspector Name	Tom Carey
Located Over	TRIBUTARY TO MATZHIWIN CREEK, 3.15.7, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	862:02 C1 5.458	Assistant Class	
Water Body Cl./Year		Inspection Date	10-Feb-2010
Navigabil. Cl./Year		Data Entry By	Erin Roberts
Legal Land Location	SW SEC 36 TWP 21 RGE 17 W4M	Data Entry Date	08-Mar-2010
Longitude, Latitude	-112:14:37, 50:49:32	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	24-Feb-2010
Contract Main. Area	CMA23	Dept. Reviewer Name	Lorenz Bohnert
Clear Roadway/Skew	10.4 /	Dept. Review Date	09-Mar-2010
AADT/Year	240 / 2008 (A)	Follow-Up By	
Road Classification	RCU-208-110		
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1800	MP	21	152X51	4.2	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	west	Gas	
Power	3 wide @ East R/W	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	(1.1 over pipe, some erosion)
Vertical Alignment		7	7	
Roadway Width (m)	10.400			
Embankment		5	N	Snow
Sideslope (__:1)	2.0			
(Height of Cover (m) : **2.3**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		WEST U/S
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		N	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	900			
Scour Protection		6	N	Completely snowed in
(Type : **NATURAL**)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**N**	General rating carried forward

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): - , Rise (mm): 1800, Type: MP**)				
Barrel Last Accessible Date	19-Apr-1998			
Special Features				
Special Feature				Pipe completely snowed in @ both ends
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	(from april 19/98 measurements)
Measured Rise (mm)	1715			
Measured At Ring No.				
Sag (mm)	85			
Percent Sag	4			
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	((suspect dirt infiltration 170H 35V)980419)
Separation (mm)	170			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	N	(pitted rust & heavy white stains on couplers) 980419
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
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): 1800, Type: MP**)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	N	(d/s end 1m deep)
Icing (Y/N)	Yes			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**N**	**N**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		EAST D/S
End Treatment (Concrete, Steel, Others, None)				
Headwall		X	X	Completely snowed in
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	N	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1200			
Scour Protection		6	N	
(Type : **NATURAL**)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**N**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	N	Snow
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**7**	GR carried

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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**59.4/70.0**	Est. Repl. Yr	2025	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	Tim Davies	Previous Assistant's Name			
Next Inspection Date	10-May-2013	Previous Inspection Date	02-Feb-2007		
Inspection Cycle (Default) (months)	39				
Comment					