

Bridge Culvert Inspection			
Bridge File Number	71403 -1 Bridge Culvert	Form Type	CUL1
Year Built	1968	Lot No.	1
Bridge or Town Name	COUNTESS	Inspector Name	Jason Rusu
Located Over	TRIBUTARY TO MATZHIWIN CREEK, 3.15.6, WATERCRS-ST	Inspector Class	BR CLS B
Located On	550:02 C1 6.421	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	24-Oct-2010
Legal Land Location	SE SEC 17 TWP 21 RGE 17 W4M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-112:18:57, 50:46:35	Data Entry Date	10-Dec-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA23	Review Date	07-Nov-2010
Clear Roadway/Skew	9.8 / -45 deg. (LHF)	Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	760 / 2009 (A)	Dept. Review Date	13-Dec-2010
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	5		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1830	MP	32.9	68X13	3.5	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	NORTH R/W	Gas	
Power	3-WIRE SOUTH	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	CURVES 100m W.
Vertical Alignment		8	8	Minor slumping @ NE 1:1 OVER PIPE, CULVERT TOO SHORT
Roadway Width (m)	9.400			
Embankment		4	4	Steep side slopes - gaurdrail rcommended for W.B traffic
Sideslope (__:1)	2.0			
(Height of Cover(m) : 2.6)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>4</b>	Gaurdrail needed for west bound traffic

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		S		SOUTH
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		7	4	Large perforations. 2, 500m long X 50m wide
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		6	6	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>250</b> )				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1830, Type: MP)				
Barrel Last Accessible Date	24-Nov-2010			
<b>Special Features</b>				
Special Feature				Flattening of roof sidewall starting to crimp
(Type : )				
Special Feature				
(Type : )				
Roof		2	2	23% sag at ring 4
Measured Rise (mm)	1405			
Measured At Ring No.	4			
Sag (mm)	425			
Percent Sag	23			
Sidewall		2	2	20% deflection at sidewall
Measured Span (mm)	2190			
Measured At Ring No.	4			
Deflection (mm)	360			
Percent Deflection	20			
Floor		N	4	Moderate corrosion along floor
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	6	
Separation (mm)	30			
Longitudinal Seams		7	X	Riveted MP
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)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	PITTED RUST ON floor
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1830, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>2</b>	<b>2</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		NORTH
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		5	5	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	700			
Scour Protection		5	5	(SCOUR HOLE FILLED WITH ROCK '94)
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	Ditch drainage pipes @ d/s 2m above SBED Minor canal enters from W @ d/s
Bank Stability		4	4	NE & SE BANK IS SLUMPING SE bank grassed in D/S instability from cow grazing
HWM (m below Top of Culvert)				No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>6</b>	<b>4</b>	

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 or line					
OTHER ACTION	2012	Install GR or flatten embankment over outlet					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>22.2/22.2</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>48.8/35.4</b>	Est. Repl. Yr	2012	Maint. Req. (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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	24-Jan-2014		Previous Inspection Date	29-Jan-2007			
Inspection Cycle (Default) (months)	39						
Comment							