

Bridge Culvert Inspection			
Bridge File Number	71462 -1 Bridge Culvert	Form Type	CUL1
Year Built	1961	Lot No.	1
Bridge or Town Name	TAYLORVILLE	Inspector Name	Jason Rusu
Located Over	TRIBUTARY TO ROLPH CREEK, 2.12.20.10.5, WATERCRS-ST	Inspector Class	BR CLS A
Located On	501:02 C1 20.265	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Jun-2012
Legal Land Location	SW SEC 14 TWP 1 RGE 24 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-113:07:06, 49:01:42	Data Entry Date	19-Jul-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA25	Review Date	10-Jul-2012
Clear Roadway/Skew	10 /	Dept. Reviewer Name	Tim Davies
AADT/Year	280 / 2011 (A)	Dept. Review Date	30-Jul-2012
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	-	1500	MP	25.2	68X13	3.5,3.5,3.5	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	
Remarks	None visible.		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	
Vertical Alignment		8	8	
Roadway Width (m)	8.000			
Embankment		4	4	0.5 x 1.0 hole over pipe North side.
Sideslope ( __:1)	4.0			
(Height of Cover(m) : 1.3)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>8</b>	<b>8</b>	

**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 : )				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		3	3	Bevel floor is ripped 0.5 m
Heaving (mm)	120			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		3	3	SCOUR HOLE STARTING UNDER INVERT and both SIDES
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		3	3	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>3</b>	<b>3</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: MP)				
Barrel Last Accessible Date	09-Jun-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		4	4	Less than 10% sag.
Measured Rise (mm)	1361			
Measured At Ring No.	2			
Sag (mm)	139			
Percent Sag	9			
Sidewall		3	3	Greater than 10% deflection.
Measured Span (mm)	1697			
Measured At Ring No.	2			
Deflection (mm)	197			
Percent Deflection	13			
Floor		4	4	RUSTING SOME PITTED RUST - NO PERFORATIONS
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		3	3	2ND FROM U/S WATER GETTING IN BEHIND COUPLER & PIPE, SEPERATION 100 x 40 CAVITY ALONG PIPE.
Separation (mm)	100			
Longitudinal Seams		5	5	Rivetted
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		4	4	SOIL AND WATER CORROSION and moderate pitting to mid sidewall
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
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): 1500, Type: MP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		5	5	((WATER OVER HIGHWAY IN 1986/SCOUR D/S 02/07/03))
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>3</b>	<b>3</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	BELOW			
Above/Below (mm)	600			
Scour Protection		3	3	Scour hole does not affect bevel - used as cattle water hole. Erosion along top of pipe going in 0.6m - 16mx8mx1.2m
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		3	3	(SCOUR 10M x 8M)
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>3</b>	<b>3</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	Curves 600 u/s
Bank Stability		7	7	
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>6</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2012	10 m³ Cl. 1 at U/S					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION	2012	Repair erosion at top and sides of D/S bevel. Seal coupler.					
OTHER ACTION	2012	Use spray foam in the opening of the seams @ second coupler					
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>33.3/33.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>42.8/42.9</b>	Est. Repl. Yr	2020	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	09-Sep-2015		Previous Inspection Date	17-Jun-2009			
Inspection Cycle (Default) (months)	39						
Comment							