

Bridge Culvert Inspection				
Bridge File Number	07411 -1 Bridge Culvert		Form Type	CUL1
Year Built	1968		Lot No.	2
Bridge or Town Name	COUTTS		Inspector Name	Jason Rusu
Located Over	2ND ORDER TRIBUTARY TO MACDONALD CREEK, 1.6.2.1, WATERCRS-ST		Inspector Class	BR CLS A
Located On	500:04 C1 27.222		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	08-Jun-2012
Legal Land Location	SW SEC 17 TWP 1 RGE 11 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-111:27:05, 49:01:42		Data Entry Date	16-Jul-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA24		Review Date	10-Jul-2012
Clear Roadway/Skew	11.1 / 25 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	100 / 2011 (A)		Dept. Review Date	17-Jul-2012
Road Classification	RLU-208-100		Follow-Up By	
Detour Length (km)	4			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1451	1600	SPE	122.5	152X51	3.5	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments							
Telephone	West			Gas			
Power				Municipal			
Others				Problem (Y/N)	No		
Remarks							

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	4:1 TO BERM
Vertical Alignment		7	7	
Roadway Width (m)	9.000			
Embankment		7	7	
Sideslope (__:1)	2.5			
(Height of Cover(m) : 10)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

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		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1451, Rise (mm): 1600, Type: SPE)				
Barrel Last Accessible Date	08-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	
Measured Rise (mm)	1510			
Measured At Ring No.	30			
Sag (mm)	90			
Percent Sag	6			
Sidewall		4	4	Longitudinal seams rating
Measured Span (mm)	1500			
Measured At Ring No.	30			
Deflection (mm)	49			
Percent Deflection	3			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		4	4	Some loose bolts. 2 cracked rings with 120mm remaining steel at R29 East. No change.
Total No. of Cracked Rings	2			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	120			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	1 rock tear done when installed.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			MINOR CORROSION on the floor

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1451, Rise (mm): 1600, Type: SPE)				
Fish Passage Adequacy		4	4	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	1000			
Scour Protection		3	3	1 meter deep scour hole - hanging bevel - photo.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		3	3	
Beavers (Y/N)	No			
Downstream End General Rating		3	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		5	5	
HWM (m below Top of Culvert)	1.2			HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2012	Approx. 30m 3 Cl. 1 @ D/S (medium)					
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) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	51.7/52.3	Est. Repl. Yr	2026	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor marked cracks for growth in R29- 30 East SW.		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	08-Sep-2015		Previous Inspection Date	16-Jun-2009			
Inspection Cycle (Default) (months)	39						
Comment							