

Bridge Culvert Inspection			
Bridge File Number	74788 -1 Bridge Culvert	Form Type	CUL1
Year Built	1958	Lot No.	4
Bridge or Town Name	ELKWATER	Inspector Name	Tom Carey
Located Over	TRIBUTARY TO MACKAY CREEK, 28.6, WATERCRS-ST	Inspector Class	BR CLS A
Located On	515:02 C1 19.522	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	12-Mar-2012
Legal Land Location	SW SEC 3 TWP 10 RGE 1 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-110:04:21, 49:47:10	Data Entry Date	08-Apr-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA23	Review Date	24-Mar-2012
Clear Roadway/Skew	10 /	Dept. Reviewer Name	Tim Davies
AADT/Year	80 / 2011 (A)	Dept. Review Date	17-Apr-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	22		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2030	2240	SPE	34.7	152X51	3.5,3.5,3.5	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South ditch.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	Bottom of a sag.
Vertical Alignment		6	6	
Roadway Width (m)	10.800			
Embankment		N	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 2)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		South end
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	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		N	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): 2030, Rise (mm): 2240, Type: SPE)				
Barrel Last Accessible Date	12-Mar-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	2175			
Measured At Ring No.	5			
Sag (mm)	65			
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	2065			
Measured At Ring No.	5			
Deflection (mm)	35			
Percent Deflection	1			
Floor		N	N	Ice covered- for 50% at D/S.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	A few bolts missing at ring 3.
Separation (mm)	0			
Longitudinal Seams		5	5	A few bolts missing at ring 3.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	(Surface rust on floor)
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2030, Rise (mm): 2240, Type: SPE)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North end
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	Some minor bends seen.
Bevel End		N	5	(Has tear in edge, missing bolts on floor.) 2005/10/13 Ice covered.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	8	New class 2 rock.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 600)				
Scour/Erosion		N	8	
Beavers (Y/N)	No			
Downstream End General Rating		4	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Dugout just D/S.
Bank Stability		N	7	
HWM (m below Top of Culvert)	0.5			[HWM 1.5m ((0.45m f.b.(top of bevel)) 02/05/30)] Grass 500mm higher than roof at U/S end at fence.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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) (%)	64.5/59.7	Est. Repl. Yr	2027	Maint. Req. (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	12-Jun-2015		Previous Inspection Date	12-Mar-2009			
Inspection Cycle (Default) (months)	39						
Comment							