

Bridge Culvert Inspection			
Bridge File Number	78553 -1 Bridge Culvert	Form Type	CUL1
Year Built	1976	Lot No.	4
Bridge or Town Name	ELKWATER	Inspector Name	Tom Carey
Located Over	2ND ORDER TRIBUTARY TO MACKAY CREEK, 28.6.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	515:02 C1 12.669	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	13-Mar-2012
Legal Land Location	SE SEC 2 TWP 10 RGE 2 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-110:10:03, 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	9.1 /	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)	3		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1524	MP	20.1	68X13		ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	3 wires North.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	9	9	1.1km East of file 78554.
Vertical Alignment	9	9	
Roadway Width (m)	11.600		
Embankment	N	8	
Sideslope (:1)	4.0		
(Height of Cover(m) : 0.5)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	9	9	

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	N	Submerged and ice covered.
Heaving (mm)	150			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		6	N	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP)				
Barrel Last Accessible Date	12-Mar-1992			
Special Features				
Special Feature				Average 1.0m deep water in pipe unable to enter. Shape is adequate - viewed from ends.
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	Roof is bent at South end, probably by grass cutting. Bent in 200mm at roof at this location. Est.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	75			
Percent Sag	5			
Sidewall		N	N	Est.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	75			
Percent Deflection	5			
Floor		N	N	(Up to 500mm silt.)
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	(((Dirt infiltration)) 02/07/08)
Separation (mm)				
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
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): 1524, Type: MP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	5	(Up to 500 mm silt.)
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		N	N	
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	
Bevel End		N	N	Submerged.
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	7	
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	5	Enters at 45° angle.
Bank Stability		N	7	
HWM (m below Top of Culvert)				HWM not visible.
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	5	

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) (%)	72.1/56.8	Est. Repl. Yr	2020	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	13-Jun-2015		Previous Inspection Date	12-Mar-2009			
Inspection Cycle (Default) (months)	39						
Comment							