

Bridge Culvert Inspection				
Bridge File Number	79494 -1 Bridge Culvert		Form Type	CUL1
Year Built	2003		Lot No.	2
Bridge or Town Name	MACKAY		Inspector Name	Kris Bosters
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	751:02 C1 15.210		Assistant Name	Brian Cote
Water Body Cl./Year			Assistant Class	BR CLS B
Navigabil. Cl./Year			Inspection Date	18-Apr-2013
Legal Land Location	SW SEC 17 TWP 55 RGE 11 W5M		Data Entry By	Lisa Fairhurst
Longitude, Latitude	-115:35:58, 53:44:42		Data Entry Date	24-Apr-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA12		Review Date	21-Apr-2013
Clear Roadway/Skew	9.4 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	200 / 2012 (A)		Dept. Review Date	01-May-2013
Road Classification	RLU-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	PI./Slab Thickness	Shape
1	MAIN	-	2000	MP	23.4	75X25	2.8	ROUND
Special Features								
Special Features Comment								

Posting Information											
Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)											
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks	Not required.										

Utilities (Located at)			
Utility Attachments			
Telephone	North r/w.		Gas
Power	1 wire South r/w.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Location is incorrect. Located 250m North of BF 70113. In "S" curve, limited sight distance.
Vertical Alignment		7	7	
Roadway Width (m)	9.400			
Embankment		7	7	Large crack reflecting through ACP overpipe
Sideslope (___:1)	3.0			
(Height of Cover(m) : 1.8)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		Culvert has ID tag in place West end.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		8	8	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2000, Type: MP)				
Barrel Last Accessible Date	18-Apr-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	4	Damage to roof by mover, restricts animal movement 6m from D/S end.
Measured Rise (mm)	1924			
Measured At Ring No.				
Sag (mm)	76			
Percent Sag	4			
Sidewall		6	6	6m from D/S end.
Measured Span (mm)	2053			
Measured At Ring No.				
Deflection (mm)	53			
Percent Deflection	3			
Floor		7	N	Covered with ice/mud
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	125			
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		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2000, Type: MP)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			Water ponds due to heaving
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	4	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	
Roadway Surface		X	4	Ice on mud, water ponds in barrel
(Type : SOIL)				
Icing (Y/N)	Yes			
Traffic Safety Features		X	X	
Type	None			
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Drainage		6	4	Water ponds
Structure In Use (Y/N)	No			
Grade Separation General Rating		6	4	

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	2013	Bend roof back into shape					
OTHER ACTION	2013	Change location on BF map					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/44.4	Sufficiency Rating (Last/Now) (%)	79.2/67.9	Est. Repl. Yr	2043	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	Kris Bosters		Previous Assistant's Name	Sara Wadlow			
Next Inspection Date	18-Jul-2016		Previous Inspection Date	19-Nov-2009			
Inspection Cycle (Default) (months)	39						
Comment							