

Bridge Culvert Inspection				
Bridge File Number	79508 -1 Bridge Culvert		Form Type	CUL1
Year Built	1987		Lot No.	1
Bridge or Town Name	DRUMHELLER		Inspector Name	Owen Salava
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	838:02 C1 12.226		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-May-2011
Legal Land Location	NW SEC 26 TWP 29 RGE 21 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-112:51:22, 51:30:45		Data Entry Date	27-May-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA21		Review Date	17-May-2011
Clear Roadway/Skew	12 /		Dept. Reviewer Name	Chris Black
AADT/Year	290 / 2010 (A)		Dept. Review Date	01-Jun-2011
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	10			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	2200	MP	25	125X26	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											

Utilities (Located at)			
Utility Attachments			
Telephone	South r/w.		Gas
Power	1/2 km South.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment					
		Last	Now	Explanation of Condition	
Horizontal Alignment		6	6	Located in curves. No passing WB. Superelevated. 6.8km from Royal Tyrrell Museum. Located 12.1km N of Hwy 9 jct. There is a 1200mm dia x 34.0m MP located 12.0m N of cattlepass for drainage, not included in this file.	
Vertical Alignment		6	6		
Roadway Width (m)		9.200		Trans. crack over pipe, sealed.	
Embankment		7	7		
Sideslope (___:1)		4.0			
(Height of Cover(m) : 1)					
Guardrail (Y/N)		Yes			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>		

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)		NONE		

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	7	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	

**Bridge Culvert Barrel**

Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)</b>				
Barrel Last Accessible Date	11-May-2011			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		6	3	Hole in roof R1 & R2 & embankment starting to leak but repaired with piece of wood. Large perforation at d/s end. Heavy scaling on exposed roof.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		7	7	Small dents caused during installation.  1.6%
Measured Span (mm)	2235			
Measured At Ring No.	5			
Deflection (mm)	35			
Percent Deflection	1			
Floor		N	N	100mm mud. Minor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	Dents on culvert ends & some spaces. Joints present. Polyurethane foam insulation @ 1st seam from N.
Separation (mm)	50			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)				
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		5	3	Corroded on outside of crown. Superficial rust with some perforation on lower sidewall (minor). Heavy scaling with perforations at d/s roof (photo).
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	Doubles as a watercourse.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>6</b>	<b>3</b>	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
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)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		6	6	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>6</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		7	7	
Roadway Surface		7	7	
(Type : <b>ACP</b> )				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type	NONE			
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		6	6	
Structure In Use (Y/N)	Yes			S end closed off with barbed wire.
<b>Grade Separation 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							
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>66.7/33.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>73.5/58.6</b>	Est. Repl. Yr	2020	Maint. Req'd. (Y/N)	No
Special Comments for Next Inspection	This pipe is mainly a cattlepass, but doubles as a watercourse. No action for roof or corrosion at this time.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2006.10.25 Remove cattlepass when expedient to do so.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Bryan Wai		Previous Assistant's Name				
Next Inspection Date	11-Aug-2014		Previous Inspection Date	25-Mar-2008			
Inspection Cycle (Default) (months)	39						
Comment							