

Bridge Culvert Inspection			
Bridge File Number	80738 -1 Bridge Culvert	Form Type	CUL1
Year Built	1984	Lot No.	4
Bridge or Town Name	MANNVILLE	Inspector Name	Jason Saly
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	16:28 L1 9.856;16:28 R1 9.858	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	18-Jul-2012
Legal Land Location	SE SEC 22 TWP 50 RGE 9 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-111:13:48, 53:19:41	Data Entry Date	31-Jul-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA15	Review Date	28-Jul-2012
Clear Roadway/Skew	26.3 /	Dept. Reviewer Name	Andrew Smikles
AADT/Year	6,300 / 2011 (A)	Dept. Review Date	02-Aug-2012
Road Classification	RFD-412.4-130	Follow-Up By	
Detour Length (km)	1		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2000	MP	70	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Posting Information**

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)	No										
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	South r/w.					Gas					
Power						Municipal					
Others						Problem (Y/N)	No				
Remarks											

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Road 100 m East.
Vertical Alignment		7	7	
Roadway Width (m)	26.300			
Embankment		7	7	
Sideslope (___:1)	6.0			
(Height of Cover(m) : 1.7)				
Guardrail (Y/N)	Yes			Only on rt. shoulder in each direction - max. length 46 m.
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

**Upstream End**

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	Square end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		N	7	
Scour/Erosion		N	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
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2000, Type: MP)				
Barrel Last Accessible Date	18-Jul-2012			
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		6	6	Roof sag estimated.
Measured Rise (mm)	1910			
Measured At Ring No.				
Sag (mm)	90			
Percent Sag	5			
Sidewall		6	6	Span at S end=1996=4mm Span at 1/3pt.=2096=96mm=4.8% Span at 2/3pt.=1952=48mm Span at N end=1956=44mm
Measured Span (mm)	2096			
Measured At Ring No.				
Deflection (mm)	96			4.8%
Percent Deflection	5			
Floor		N	N	Covered with granular material.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	2 seams allowing infiltration. Minor dents @ several locations. Leaking @ centerline seam under median ditch.
Separation (mm)	20			
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)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Siltng (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>6</b>	<b>6</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	Square end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		N	7	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		7	7	
Roadway Surface		6	6	Dirt on concrete.
(Type : <b>CONCRETE</b> )				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>
Drainage		6	6	
Structure In Use (Y/N)	No			Fences in poor repair.
<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>66.7/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>77.0/77.0</b>	Est. Repl. Yr	2034	Maint. Reqd. (Y/N)	No
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2003.11.20 Cattlepass may no longer be used. Consider removal or small culvert liner for drainage if necessary when replacement required. Approx 2030.						
On 3-Year Program (Y/N)	Y						
Proposed Action	2008.01.08 Check in two years time for continued usage. Brownlee & Associates						
Previous Inspector's Name	Owen Salava		Previous Assistant's Name				
Next Inspection Date	18-Apr-2014		Previous Inspection Date	17-Dec-2010			
Inspection Cycle (Default) (months)	21						
Comment							