

Bridge Culvert Inspection			
Bridge File Number	82174 -1 Bridge Culvert	Form Type	CUL1
Year Built	2008	Lot No.	4
Bridge or Town Name	WATERCOURSE CULVERT ON HWY 9, 17km SW OF DRUMHELLER	Inspector Name	Jason Saly
Located Over	TRIBUTARY TO ROSEBUD RIVER, 3.33.3, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	9:04 C1 24.796	Assistant Class	
Water Body Cl./Year		Inspection Date	18-Oct-2012
Navigabil. Cl./Year		Data Entry By	Marcia Chavez
Legal Land Location	NE SEC 16 TWP 28 RGE 21 W4M	Data Entry Date	02-Nov-2012
Longitude, Latitude	-112:53:27, 51:23:40	Reviewer Name	John O'Brien
Road Authority	Alberta Transportation (AIT)	Review Date	25-Oct-2012
Contract Main. Area	CMA29	Dept. Reviewer Name	Andrew Smikles
Clear Roadway/Skew		Dept. Review Date	05-Nov-2012
AADT/Year	2,560 / 2011 (A)	Follow-Up By	
Road Classification	RAU-212.0-110		
Detour Length (km)			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	1600	MP	39	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	W property line.	Gas	
Power		Municipal	
Others		Problem (Y/N)	
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment		6	Located on a curve.
Vertical Alignment		7	
Roadway Width (m)	15.000		
Embankment		7	
Sideslope ( _ :1)	3.0		
(Height of Cover(m) : 2)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall		X	
Collar		X	
Wingwalls		X	
(Shape : )			
Cutoff Wall		X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End			8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection			8	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion			8	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>			<b>8</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : <b>1</b> , Primary Span, Location Code: <b>MAIN</b> , Span (mm): , Rise (mm): <b>1600</b> , Type: <b>MP</b> )				
Barrel Last Accessible Date	18-Oct-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof			7	
Measured Rise (mm)	1613			Rise at W end=1613=13mm=0.8% Rise at Midpipe=1598=2mm Rise at E end=1602=2mm
Measured At Ring No.				Upwards
Sag (mm)	13			
Percent Sag	1			
Sidewall			7	
Measured Span (mm)	1578			Span at W end=1578=22mm=1.4% Span at Midpipe=1585=15mm Span at E end=1588=12mm
Measured At Ring No.				Inwards
Deflection (mm)	22			
Percent Deflection	1			
Floor			7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams			7	
Separation (mm)	35			
Longitudinal Seams			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			6	Minor
Corrosion By Soil (Y/N)	No			
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): , Rise (mm): 1600, Type: MP)				
Fish Passage Adequacy			7	
Baffle			X	
(Type : )				
Waterway Adequacy			7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>			<b>7</b>	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape : )				
Cutoff Wall			X	
Bevel End			8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	50			
Scour Protection			8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion			8	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>			<b>8</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment			8	
Bank Stability			7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Unknown
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>			<b>8</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>/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>/77.5</b>	Est. Repl. Yr	2055	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			Previous Assistant's Name				
Next Inspection Date	18-Jul-2014		Previous Inspection Date				
Inspection Cycle (Default) (months)	21						
Comment							